

NEAT EVALUATION FOR NTT DATA:

Blockchain Services

Market Segment: Overall

Introduction

This is a custom report for NTT DATA presenting the findings of the NelsonHall NEAT vendor evaluation for *Blockchain Services* in the *Overall* market segment. It contains the NEAT graph of vendor performance, a summary vendor analysis of NTT DATA for blockchain services, and the latest market analysis summary.

This NelsonHall Vendor Evaluation & Assessment Tool (NEAT) analyzes the performance of vendors offering blockchain services. The NEAT tool allows strategic sourcing managers to assess the capability of vendors across a range of criteria and business situations and identify the best performing vendors overall, and with specific capability in the banking, manufacturing & supply chain, and telcom & media sectors.

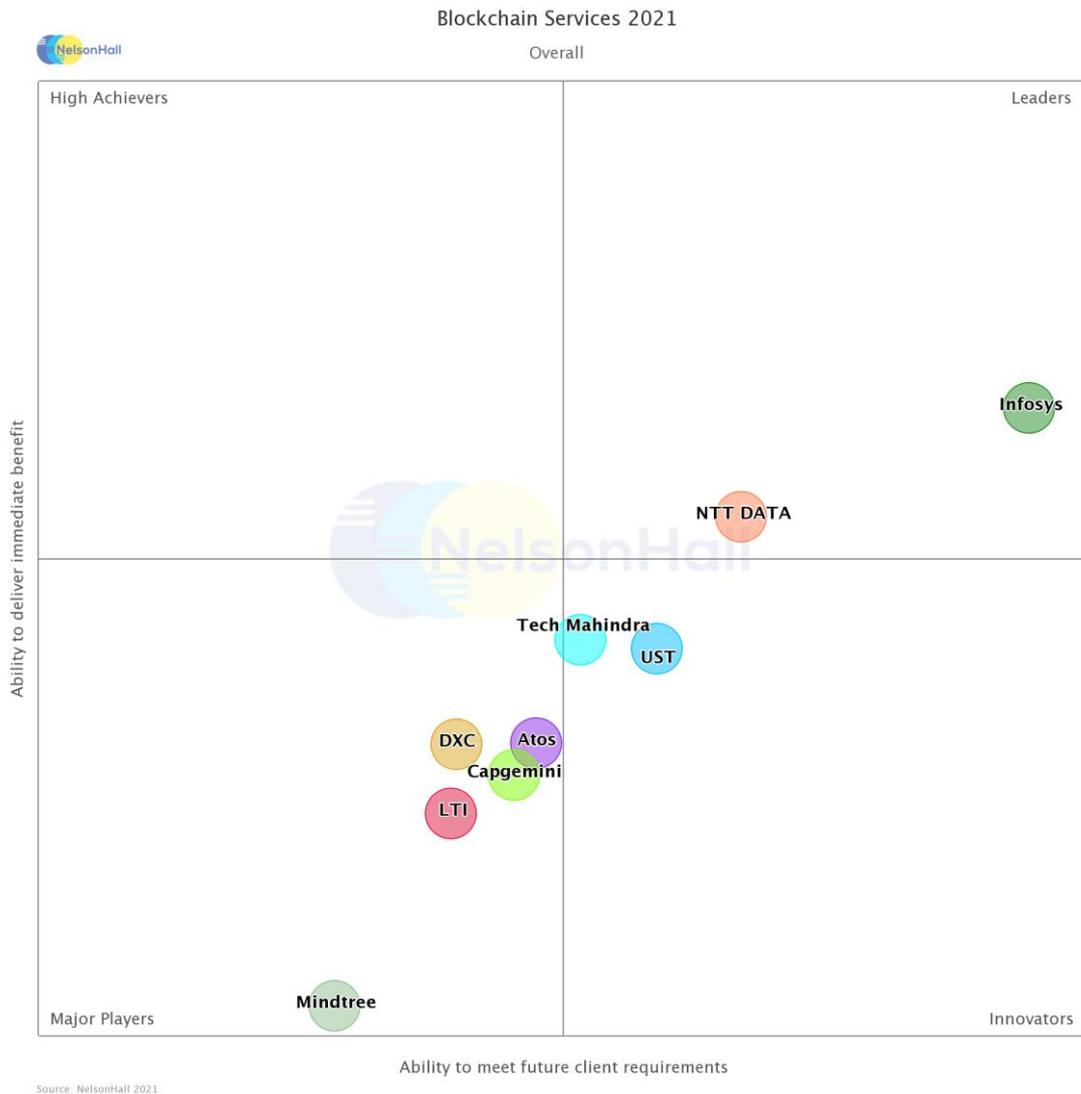
Evaluating vendors on both their 'ability to deliver immediate benefit' and their 'ability to meet client future requirements', vendors are identified in one of four categories: Leaders, High Achievers, Innovators, and Major Players.

Vendors evaluated for this NEAT are: Atos, Capgemini, DXC Technology, Infosys, LTI, Mindtree, NTT DATA, Tech Mahindra, and UST.

Further explanation of the NEAT methodology is included at the end of the report.



NEAT Evaluation: Blockchain Services (Overall)



NelsonHall has identified NTT DATA as a Leader in the *Overall* market segment, as shown in the NEAT graph. This market segment reflects NTT DATA’s overall ability to meet future client requirements as well as delivering immediate benefits to its blockchain services clients.

Leaders are vendors that exhibit both a high capability relative to their peers to deliver immediate benefit and a high capability relative to their peers to meet future client requirements.

Buy-side organizations can access the *Blockchain Services* NEAT tool (*Overall*) [here](#).

Vendor Analysis Summary for NTT DATA

Overview

NTT DATA divides its blockchain offerings into services around its proprietary blockchain assets and services surrounding technologies in industry partnerships and consortia.

Services are delivered through the eXponential Universe, the company's strategic framework that brings:

- *The Garage*: a space for creation and prototyping to understand how business challenges can be solved through blockchain technologies
- *Proprietary assets*: development utilities and prebuilt platforms for major blockchain architectures
- *Consortia*: ecosystems built from geographic and industry use case collaborations between private and public organizations, e.g., LACChain in Latin America, TradeWaltz in ASEAN, and Spunta in Italy.

The company's proprietary blockchain offerings include:

- BlockTrace, NTT DATA's supply chain object tracing platform
- BlockTrace4Sharing, NTT DATA's sustainability platform for managing, tracking, and validating food donations
- StampChain, everis' GDPR-compliant document certification platform
- KayTrust, an everis framework for organizations to manage end-to-end customer identities using self-sovereign digital customer identity and authentication management services
- NTT DATA has partnered with Skuchain, via investment, on a combined blockchain/IIoT system that combines Skuchain's EC3 blockchain platform and NTT DATA's iQuattro platform.

NTT DATA's blockchain CoE is part of its digital services unit that houses centers of excellence for seven areas including AI, DevOps, digital design, IoT, intelligent automation, and software engineering automation. The company operates a centralized CoE that houses most of its blockchain staff, with blockchain liaisons placed in each of its business units. The liaison places work with CoE staff to bring together NTT DATA's technical and vertical-specific skills in blockchain solution development.

As of January 2021, the company has ~500 dedicated blockchain personnel to support its blockchain operations across 24 countries.

NTT DATA targets enterprises with \$1bn+ revenue and large public entities for its blockchain offerings. The company's engagements are dominated by Europe and APAC, making up 95% of its current revenue. The company's engagements are heavily skewed towards BFSI, followed by public and government; the two segments combined make up 80% of its revenue.

NTT DATA currently has ~40 projects that have gone live at scale with ~25 cross-industry prototypes in its library.



Financials

NTT DATA does not disclose its blockchain-specific revenues, but NelsonHall estimates its revenue from blockchain projects at \$15.6m.

Strengths

- eXponential Universe framework to identify, develop, and evaluate ideas and take them to production
- Integrated vision of AI, IoT, and blockchain as transformation agents provides clients a compelling roadmap
- Experience in building on multiple platforms to date – Ethereum, Hyperledger, Corda
- Mix of blockchain work across industry verticals and use cases.

Challenges

- Traction in the North American market lags the company's successes in Europe and APAC
- Traction in life sciences lags the company's successes in other verticals for SCM use cases.

Strategic Direction

NTT DATA's general strategy over the next 12-18 months involves supporting high-value clients through their key transformational projects of building out ecosystems driven by trusted data and collaboration. The company has identified the following areas of focus:

- Greater investment into blockchain consortia, e.g., LACChain and Spunta, where the company has memberships to help them mature their infrastructure and communities to strengthen ecosystem collaboration. One goal is to develop more reference assets that enable future projects to reach production and be launched at scale faster
- The company will continue to innovate and strengthen its solutions in financial services and in supply chain to maintain its position in the market
- Within the public sector, NTT DATA is positioning itself to work closely with governments to rethink their current economic and productive models – defining new digital and national strategies will require the use of emerging technologies, including blockchain. The company sees Europe and Latin America as significant regions of interest.

Outlook

NTT DATA offers a portfolio that spans across multiple sectors and is supported by its eXponential Universe framework that brings its integrated vision of emerging technologies as transformation agents to its practice. The company's involvement in half a dozen consortia demonstrates its cross-industry portfolio is backed by substantial experience.

Geographically, the company has made significant ground in Europe since our previous blockchain report in 2018, but has lost ground in North America during the same period, which seems curious given its acquisition of Dell Services in 2016.



The company's strategy to double down on its strengths with plans to invest in public and government use cases and consortia will serve the company well in the future, as many ecosystems are driven by transparency and traceability for regulatory compliance.

Blockchain Services Market Summary

Overview

Many Fortune 1000 organizations have already used leading BPS vendors and consultancies to undertake digital transformations using blockchain solutions on a minor scale. As solutions continue to grow and mature into robust enterprise-ready offerings, these same organizations are looking to undertake more fundamental and widespread operations digitalization programs involving blockchain. These programs often involve process reimagination, ensuring a single view of information, monitoring the movement of goods and payments, and improving settlement processes and speed.

Primary drivers for blockchain adoption focus on building networks for trusted data exchanges that enable transparency, auditability, and resilience, and to support new business models through ecosystem collaboration. Deployments are being led by organizations in the banking and manufacturing sectors, where cross-border remittances, document verification, and order reconciliation have been frequent areas of focus for blockchain implementations.

Looking ahead, the primary drivers for blockchain adoption will be transitioning from standalone individual networks towards 'networks of networks' – so, food provenance blockchain networks will communicate with cargo transport blockchain networks and retail ERP blockchain networks in a larger, more holistic ecosystem.

By this point, blockchain will have demonstrated reliable enterprise ROI, and most vendors will have packaged their use cases into COTS blockchain-enabled solutions that price-sensitive buyers will look to adopt.

Buy-Side Dynamics

Drivers for the adoption of blockchain services include:

- Single-source trusted data exchange: eliminating data sync and integrity issues, standardizing data collection and sharing, and providing proof of authenticity
- Data resilience: the decentralization of, and the immutability of, data stored on blockchain networks
- Automation: programmable smart contracts ensure transactions are automatically executed per pre-defined rules and checks to ensure data quality that improves operational efficiency
- New business models: building new marketplaces and digital processes for business opportunities
- Data foundation on which to implement emerging technology solutions, especially AI/ML
- Pressures from regulators and end-consumers for transparency and traceability for regulatory compliance and social responsibility.

Improved operational transparency and auditability is the most important target benefit for buyers and most are satisfied with improved data trust and transparency from adopting blockchain.



Roadblocks to blockchain adoption centers on its nascent state with unclear ROI in many use cases, technological immaturity of solutions and DevOps tools, and shortage of skilled resources.

Market Size & Growth

The global blockchain services market is worth \$496m (2020), with a CAAGR of 53.3% through 2025.

The blockchain implementation and management market is led by the North American and Europe regions. However, Asia Pacific will have the strongest growth over the next five years.

BFSI, telecom & media, and public & government sectors will see the fastest growth in blockchain services. BFSI will be the fastest growing sector stemming from operational efficiencies and new services around digital currency. Low transaction fees enabled by digital currencies will especially drive growth in the media sector. Digital identity will be a major driver for government adoption of blockchain for identity management and for real-time document issuance and verification, including licenses and certification.

Success Factors

The key success factors for blockchain service vendors include:

- New business models: use of design thinking to reimagine processes with blockchain to take clients beyond operational efficiencies to realize new business models and revenue streams
- Mature business frameworks: provision of mature blockchain business frameworks – supported by technical accelerators – to take clients through the journey from idea/concept to at-scale deployment
- Rapid deployment: ability to offer COTS solutions and technical accelerators for rapid deployment that support multiple blockchain platforms
- Ease of solution development: continued investment in developing DevOps tools that encapsulate blockchain-specific capabilities to enable non-blockchain experts to streamline development and customization of solutions
- Innovation: established programs to curate a deep pool of partners, especially startups, to bring innovative best-in-class blockchain technologies to clients
- Proven experience: ability to demonstrate (e.g., referenceable clients) proven experience and leadership in blockchain transformation in client-specific use cases and with quantifiable impact.

The challenge in business transformation using blockchain is helping clients understand the true value of collaborative ecosystems over short-term incentives.

Outlook

Over the next few years, expect the following developments:

- Primary drivers for blockchain adoption will be transitioning from standalone individual networks towards ‘networks of networks’ – so, food provenance blockchain networks will communicate with cargo transport blockchain networks and retail ERP blockchain networks in a larger, more holistic ecosystem
- By this point, blockchain will have demonstrated reliable ROI for over 30 enterprise use cases, and most vendors will have packaged these use cases into COTS blockchain-enabled solutions that price-sensitive buyers will look to adopt
- DevOps tools will mature to where non-blockchain development professionals can completely take over building and deploying blockchain solutions for simpler use cases, and will be able to do ~70% of the work for complex use cases
- With blockchain implementation commonplace, interoperability between networks will now be a top business requirement
- Deployments will continue to be led by the banking and manufacturing sectors with government and media sectors having grown the fastest during the forecast period. The adoption by governments for the issuance of digital identities aimed at privacy and security of citizens and businesses will trigger growth in other sectors
- The blockchain implementation and management market will continue to be led by the North American and European regions with Asia-Pacific close behind and experiencing the fastest growth of the three.



NEAT Methodology for Blockchain Services

NelsonHall's (vendor) Evaluation & Assessment Tool (NEAT) is a method by which strategic sourcing managers can evaluate outsourcing vendors and is part of NelsonHall's *Speed-to-Source* initiative. The NEAT tool sits at the front-end of the vendor screening process and consists of a two-axis model: assessing vendors against their 'ability to deliver immediate benefit' to buy-side organizations and their 'ability to meet client future requirements'. The latter axis is a pragmatic assessment of the vendor's ability to take clients on an innovation journey over the lifetime of their next contract.

The 'ability to deliver immediate benefit' assessment is based on the criteria shown in Exhibit 1, typically reflecting the current maturity of the vendor's offerings, delivery capability, benefits achievement on behalf of clients, and customer presence.

The 'ability to meet client future requirements' assessment is based on the criteria shown in Exhibit 2, and provides a measure of the extent to which the supplier is well-positioned to support the customer journey over the life of a contract. This includes criteria such as the level of partnership established with clients, the mechanisms in place to drive innovation, the level of investment in the service, and the financial stability of the vendor.

The vendors covered in NelsonHall NEAT projects are typically the leaders in their fields. However, within this context, the categorization of vendors within NelsonHall NEAT projects is as follows:

- **Leaders:** vendors that exhibit both a high capability relative to their peers to deliver immediate benefit and a high capability relative to their peers to meet future client requirements
- **High Achievers:** vendors that exhibit a high capability relative to their peers to deliver immediate benefit but have scope to enhance their ability to meet future client requirements
- **Innovators:** vendors that exhibit a high capability relative to their peers to meet future client requirements but have scope to enhance their ability to deliver immediate benefit
- **Major Players:** other significant vendors for this service type.

The scoring of the vendors is based on a combination of analyst assessment, principally around measurements of the ability to deliver immediate benefit; and feedback from interviewing of vendor clients, principally in support of measurements of levels of partnership and ability to meet future client requirements.

Note that, to ensure maximum value to buy-side users (typically strategic sourcing managers), vendor participation in NelsonHall NEAT evaluations is free of charge and all key vendors are invited to participate at the outset of the project.



Exhibit 1

'Ability to deliver immediate benefit': Assessment criteria

Assessment Category	Assessment Criteria
Offerings	<ul style="list-style-type: none"> Breadth of applications of blockchain Breadth of blockchain platforms Application to supply chain Application to retail banking Application to capital markets Application to insurance Application to healthcare and life sciences Application to telecoms and media Application to government Application to manufacturing Application to retail Application to travel, transport, logistics Application to energy and utilities Application to drive new digital process models Blockchain consulting capability
Delivery Capability	<ul style="list-style-type: none"> Scale of blockchain delivery capability Maturity of accelerator - overall Maturity of accelerator - supply chain Maturity of accelerator - retail banking Maturity of accelerator - capital markets Maturity of accelerator - insurance Maturity of accelerator - healthcare and life sciences Maturity of accelerator - telecoms and media Maturity of accelerator - government Maturity of accelerator - manufacturing Maturity of accelerator - retail Maturity of accelerator - travel, transport, logistics Maturity of accelerator - energy and utilities Extent of blockchain tech partnerships Ability to offer blockchain interoperability
Client Presence	<ul style="list-style-type: none"> Overall blockchain client presence BFSI presence Healthcare presence Telecom and media presence Government presence Manufacturing presence Retail presence Travel, transport, logistics presence Energy and utilities presence



Exhibit 2

‘Ability to meet client future requirements’: Assessment criteria

Assessment Category	Assessment Criteria
Level of Investments	Level of investment in proprietary blockchain tools
Sector Investments	Supply chain process emphasis Retail banking process emphasis Capital market process emphasis Insurance process emphasis Healthcare and life sciences process emphasis Telecom and media process emphasis Government process emphasis Manufacturing process emphasis Retail process emphasis Travel, transport, logistics process emphasis Energy and utilities process emphasis
Client Perceptions of Suitability	Client likelihood to recommend Perceived strength of partnership Perceived ability to transform processes with blockchain

For more information on other NelsonHall NEAT evaluations, please contact the NelsonHall relationship manager listed below.



Sales Enquiries

NelsonHall will be pleased to discuss how we can bring benefit to your organization. You can contact us via the following relationship manager:
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