NEAT EVALUATION FOR TECH MAHINDRA:

Blockchain Services

Market Segment: Telecom & Media Capability

Introduction

This is a custom report for Tech Mahindra presenting the findings of the NelsonHall NEAT vendor evaluation for *Blockchain Services* in the *Telecom & Media Capability* market segment. It contains the NEAT graph of vendor performance, a summary vendor analysis of Tech Mahindra 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
(Telecom & Media Capability)

Blockchain Services 2021
Telcom & Media Capability
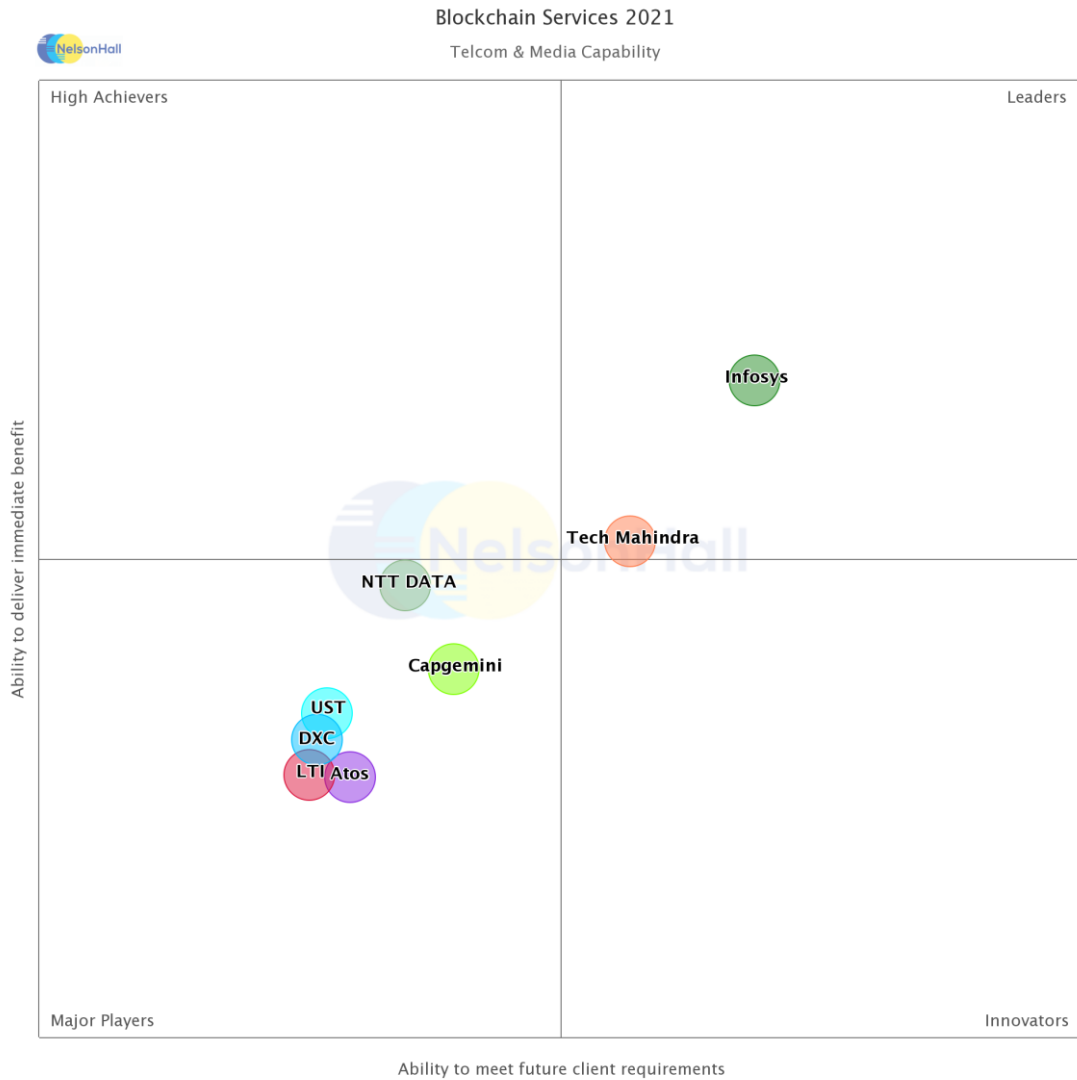
NelsonHall has identified Tech Mahindra as a Leader in the *Telecom & Media Capability* market segment, as shown in the NEAT graph. This market segment reflects Tech Mahindra's ability to meet future client requirements as well as delivering immediate benefits to its blockchain services clients in the telecom & media sector.

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 (*Telecom & Media Capability*) here.

Vendor Analysis Summary for Tech Mahindra

Overview

Tech Mahindra's Blockchain Business Unit houses the firm's innovation and commercial development efforts surrounding blockchain. It works closely with the company's digital transformation units, strategic business units, and with its Startup Connect alliance network. The company drives its blockchain strategy using a holistic framework of seven levers: Block Studio, Block Engage, Block Talk, Block Geeks, Block Accelerate, Block Access, and Block Value.

Key components of Tech Mahindra's blockchain services offerings are:

- *Blockchain Platform-as-a-Service* (Block Studio marketplace): providing plug-and-play and multi-tenant platforms that focus on using permissioned blockchain across sectors

- *System Integration*: developing applications on blockchain that connect with underlying legacy IT assets, e.g., ERPs and CRMs, of client organizations

- *Professional Services*: providing consulting support and product development services for clients exploring blockchain or clients already investing in implementing blockchain

- *Sandbox Environment*: providing platform sandboxes to encourage client initiatives to be bold and innovative. Sandbox implementations currently supported are domestic letter of credit, loan securitization, contracts and rights management system, and consent-as-a-service.

Tech Mahindra partners with clients in blockchain initiatives in four principal modes: co-innovation, ecosystem buildout, technology implementation, and marketplace development.

Supporting the operations across these four principal modes, Tech Mahindra has ~100 dedicated blockchain experts and 250 "Block Geeks". Block Geeks are upskilled employees that are trained in blockchain to support the core blockchain team in implementing blockchain solutions across client locations.

Tech Mahindra has a diverse portfolio of partners that include general and niche vendors at both the application and protocol levels. Its platform partners include ChromaWay, Eleven01, Hyperledger, IBM, IOTA, R3, Samsung SDS, TradeIX, and Uplink. And its business partners notably include Dell, IBM, Intel, Microsoft, Oracle, Pega, and SAP. The company also has a growing network of startups it works with. Tech Mahindra's consortia memberships include BiTA (transportation), IDRBT (banking), MOBI (public and government), NASSCOM, and R3.

Tech Mahindra previously targeted enterprises with revenues of $1bn or more, but with its growing COTS offerings, the company now targets the spectrum of large and medium enterprises across industry verticals.

Tech Mahindra's engagements continue to be predominantly in India, but its expansion plans for the U.S. and Europe are starting to bear fruit. The company established its Toronto blockchain CoE in February 2018 to serve as the primary base in the Americas. It also set up Blockchain Design Studios in the Munich and Dallas Makers Labs in October 2018.

The company has ~250 global blockchain engagements, of which 40 are in production (MVP or at-scale); this is up from the 25 live client engagements it had in 2018.

Financials

Tech Mahindra does not disclose its blockchain-specific revenues, but NelsonHall estimates its revenue from blockchain projects to be between $5m and $7m for 2020.

Strengths

- Access to broad client opportunities through Mahindra corporate family of companies
- Diverse engagement models for multiple levels of client blockchain maturity
- Focus on processes with high-value yield, including P2P, remittance, and SCM
- Evolving technology partner ecosystem is a focus for company management.

Challenges

- Lacks Quorum relationship among its major blockchain platform projects
- Maturity of assets for provenance in supply chains trails leaders in the blockchain services segment
- Engagements and brand strength outside India continue to be limited.

Strategic Direction

Tech Mahindra will continue to drive increased revenues for FY2022 in four areas:

- *Platforms*: annuity revenues through utility-based pricing on its platforms – Blockchain Platform-as-a-Service. The company has identified bCRMS in media and entertainment, Port-to-Store traceability in manufacturing, retail, and healthcare and life sciences, vaccine tracking in healthcare, and Consent-as-a-Service in telecommunications as major areas of growth
- *Alliances & Startups*: tapping innovations from startups and selling its platform and system integration services through alliances and global partners
- *Product Engineering*: co-development of IP and offshore product engineering projects
- *Professional Services/Consulting*: revenue triggering (leads) through thought leadership and positioning in the global blockchain space.

Tech Mahindra sees explosive interest in its Stablecoin-as-a-Service in the next 12-18 months. Regulators have begun approving stablecoins for banking transactions as regulated stablecoins provide an option for better rollout and implementation of central bank digital currency (CBDC). Stablecoins will be an integral part of payment ecosystems that will provide greater public-private partnerships as more banks participate in and start using blockchain networks. In particular, the company sees public retail adoption of stablecoins occurring more rapidly in countries with poor banking infrastructure as P2P payments without intermediaries (bank accounts) are possible.

Outlook

Tech Mahindra's engagement model can support clients at multiple levels of maturity to meet their specific transformation journey needs. Its diverse portfolio of blockchain-enabled platforms and accelerators will reduce the cost of adopting specific solutions as indicated by the range of client organizations the company targets. NelsonHall believes this could be a source of competitive differentiation over time.

The company was previously focused on high-value targets in the blockchain market within India, but it laid the groundwork to break into the North American and European markets two years ago, a move that looks to be bearing some, but limited, fruit. The company's next 12-18 months seem focused on the BFS market with investments in stablecoins and CBDC, which is curious considering the company lacks relationships with one of the major blockchain platforms in BFS, i.e., Quorum.

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	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	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	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.

research.nelson-hall.com

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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