Background of the research

- Blockchain technology had been signaling enterprise-readiness and moving beyond the hype phase, where it had captured the attention of visionaries, technologists, governments, and enterprises alike. The pandemic has had a lasting impact on the adoption of blockchain. Enterprises have prioritized high impact use cases of blockchain for adoption during the pandemic, thereby rationalizing the traction and accelerating the usage in value-generating use cases.

- The market continues to see the movement of Proof of Concepts (PoCs) into the deployment stages. It is increasingly apparent to businesses that blockchain is the technology that can break traditional industry boundaries and unlock shared value. Alongside emerging themes such as multi-party systems and confidential computing, blockchain has the capability to create new ecosystems and subsequent business.

- Enterprise blockchain technology has presented an opportunity for service providers to reinvent their services delivery model. Considering the nature of technology, it demands an ecosystem play, and thus the role of service providers as orchestrators of business outcomes enabled by digital levers (including blockchain) becomes more prominent.

This report includes the profiles of the following 23 leading blockchain service providers featured on the enterprise blockchain services PEAK Matrix®:

- **Leaders**: Accenture, Cognizant, HCL Technologies, IBM, Infosys, NTT DATA, TCS, and Wipro
- **Major Contenders**: Birlasoft, Capgemini, Chainyard, Deloitte, EY, GFT, LTI, Mphasis, PwC, Tech Mahindra, and UST
- **Aspirants**: Coforge, GAVS Technologies, Mindtree, and Zensar

Scope of this report:

- **Geography**: Global
- **Service providers**: 23 leading enterprise blockchain service providers
- **Services**: Enterprise blockchain services
Enterprise blockchain services PEAK Matrix® characteristics

Leaders:
Accenture, Cognizant, HCL Technologies, IBM, Infosys, NTT DATA, TCS, and Wipro

- Leaders have accelerated the enterprise blockchain adoption journey by positioning themselves beyond the traditional realm of IT and consulting system integrators to create value within business ecosystems. There is a varying degree of maturity across the Leaders in this area; however, they have all expanded their vision and strategy to become blockchain network/platform operators with highly productized offerings.
- Leaders are investing in ecosystem building capabilities that help with network creation, governance, and monetization. They consider production-readiness a major priority and ensure the feasibility of an implementation that is critical for delivering high impact.
- Leaders are active contributors to open source blockchain solutions and are working closely with the blockchain technology ecosystem to address industry-wide adoption challenges. They are also investing in the exploration of innovative emerging technologies such as multi-party systems, confidential computing, and digital identity among others.

Major Contenders:
Birlasoft, Capgemini, Chainyard, Deloitte, EY, GFT, LTI, Mphasis, PwC, Tech Mahindra, and UST

- Major Contenders have accelerated their investments in technology partnerships and collaboration with the broader blockchain ecosystem. They stand out for their investments in building accelerators or point solutions for specific blockchain use cases.
- Major Contenders consist of a range of service providers with varying focus from certain industries to certain geographies. They have been quick in building solutions around identified use cases.
- Major Contenders are beginning to use blockchain beyond driving cost optimization and process efficiency. They are building capabilities to drive ecosystem value and helping build and operate consortia for clients.

Aspirants:
Coforge, GAVS Technologies, Mindtree, and Zensar

- Aspirants have been building blockchain services practices and are investing in scaling their talent pool to manage the clients’ demand for minimum viable blockchain solutions as well as supporting enterprises via staff augmentation for product engineering talent. Some are also looking at internal implementations to demonstrate expertise and commitment to the development of the technology.
- They are investing in building a GTM strategy for blockchain technologies and creating dedicated leadership and thought assets.
Everest Group PEAK Matrix®
Enterprise Blockchain Services PEAK Matrix® Assessment 2022 | IBM positioned as Leader

1 Assessments for Capgemini, Coforge, Deloitte, EY, PwC, and LTI of service provider inputs and are based on Everest Group’s proprietary Transaction Intelligence (TI) database, service provider public disclosures, and Everest Group’s interactions with insurance buyers.

Vision for blockchain services

IBM’s vision for blockchain accelerates as a team sport whether the network/ecosystem is within a single enterprise and industry or across multiple enterprises, industries, and geographies. IBM is looking at delivering value to clients by rewiring the enterprise using hybrid cloud, multi-cloud, IoT, AI, machine learning, and blockchain. IBM continues to expand its service capabilities in other non-Hyperledger-based platforms by continuing to collaborate with other service and software providers. Blockchain will be an integral part of the digital transformation journey of clients as they make their way to a more cognitive enterprise.

Engagement characteristics (2020)

<table>
<thead>
<tr>
<th>Number of engagements</th>
<th>Not disclosed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage of live/deployments</td>
<td>Not disclosed</td>
</tr>
</tbody>
</table>

Adoption by geography

<table>
<thead>
<tr>
<th>Industry</th>
<th>BFSI</th>
<th>Energy and utilities</th>
<th>Hi-tech</th>
<th>Healthcare and life sciences</th>
<th>Travel and transport</th>
<th>Retail, distribution, and CPG</th>
<th>Public sector</th>
<th>Manufacturing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of client engagements (2020):</td>
<td>None</td>
<td>(1-5)</td>
<td>(6-15)</td>
<td>(16-30)</td>
<td>(&gt;30)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Adoption by service segments

<table>
<thead>
<tr>
<th>Consulting services</th>
<th>Implementation services</th>
<th>Managed services</th>
</tr>
</thead>
</table>

Adoption by use case

<table>
<thead>
<tr>
<th>Use case</th>
<th>Clearing and settlement</th>
<th>Dispute management</th>
<th>Identity management</th>
<th>Trade finance</th>
<th>Supply chain tracking</th>
</tr>
</thead>
</table>
Case study 1: A global trade platform with Maersk

Business challenge
Maersk faced issues with container traceability

Solution and impact
The solution is a global interconnected ecosystem of supply chain partners (cargo owners, ocean and inland carriers, freight forwarders and logistics providers, ports and terminals, customs authorities, and more) that share directly from the source data covering over 50% of the global container shipping volume.

Case study 2: Food traceability & transparency solution using blockchain for The Avril Group

Business challenge
The client wanted to trace information across its wide selection of eggs

Solution and impact
Avril Group joined IBM Food Trust where the solution provides traceability from farm to conditioned product arrival to store through each step, gathering information about nutrition, breeding location & conditions, transport, etc. Consumer can access information via a QR code placed on product packaging.

Thought leadership (representative list)

Website link | Description
--- | ---
https://www.ibm.com/thought-leadership/institute-business-value/report/blockchain-global-trade# | Insights from IBM Institute for Business Value on how blockchain can unlock value in global supply chains through trusted, interconnected marketplaces
https://www.ibm.com/blogs/blockchain/2021/07/making-permissioned-blockchains-interoperable-with-weaver/ | Article that explores the need for interoperability between permissioned blockchains and the use of Hyperledger Labs’ Weaver to solve the same

Proprietary blockchain platforms (representative list)

<table>
<thead>
<tr>
<th>Platform</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hyperprotect</td>
<td>It provides blockchain and digital asset solutions a confidential computing environment for safekeeping and key management. The platform is generalized to support deployment of any DLT or digital asset workload.</td>
</tr>
<tr>
<td>IBM Blockchain Platform</td>
<td>It is an enterprise-ready blockchain application development platform powered by Hyperledger Fabric.</td>
</tr>
</tbody>
</table>
IBM | enterprise blockchain services profile (page 3 of 5)
Solutions, tools, accelerators, and other investments

### Blockchain investments (representative list)

<table>
<thead>
<tr>
<th>Investment theme</th>
<th>Details</th>
</tr>
</thead>
</table>
| Blockchain solutions and accelerators | • IBM Food Trust (Provenance Engine): Food provenance using track & trace on the blockchain to ensure products are safe for consumers  
• IBM Blockchain Trusted Identity: A decentralized approach to identity management built on top of open standards in combination with Decentralized Identity Foundation (DIF), W3C, and other standard groups  
• IBM WorldWire: Blockchain banking solution to help financial institutions address the processes of universal cross-border payments. It is designed to reduce the settlement time and lower the cost of completing global payments for businesses and consumers  
• IBM consortium launch methodology: Drives consensus between network participants and focuses on building a right-sized governance and commercial framework to assist in accelerating the consortium journey and promoting adoption of the network  
• IBM Enterprise Design Thinking framework and IBM Garage: Allows consortium members to collaboratively decide on an outcome-based roadmap for the network and create a business value design that can guide them toward a proper business strategy  
• Digital Health Pass: Solution to manage a controlled reopening that encourages mass participation, preserves an individual’s privacy, and adheres to regulations from NYS Dept of Health and CDC. This solution was rolled out with clients across the globe, tailored to their specific regulatory needs |
| Partnerships and consortiums | • Maersk and IBM collaborate on TradeLens, built on the IBM Blockchain Platform, to improve global trade and digitize supply chains  
• We.Trade: Twelve major European banks selected IBM to bring blockchain-based trade finance to small and medium enterprises – the digital trade chain network  
• Health utility network: Aetna, Anthem, Health Care Service Corporation (HCSC), PNC Bank, and IBM are in a new collaboration to design and create a network using blockchain technology to improve transparency and interoperability in the healthcare industry  
• Trust Your Supplier: Trust Your Supplier (TYS) blockchain simplifies and accelerates supplier onboarding and lifecycle management. TYS allows users to identify, verify, and maintain supplier information in a secure, decentralized network  
• IBM partnered with Moderna in 2021 to drive public health solutions in blockchain, AI, and hybrid cloud |
| Others | IBM actively invests in the blockchain ecosystem through contributions such as those in Hyperledger Foundation and the Blockchain Solution Reference Architecture (BSRA). |

### Blockchain innovation labs / CoEs (representative list)

<table>
<thead>
<tr>
<th>Location</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multiple locations</td>
<td>IBM has established garages around the world, including San Francisco, London, Toronto, Tokyo, Singapore, Nice, New York, Austin, Melbourne, and Brazil, where clients can get hands-on experience in setting up blockchain networks.</td>
</tr>
</tbody>
</table>
IBM | enterprise blockchain services profile (page 4 of 5)

Experience with blockchain platforms

<table>
<thead>
<tr>
<th>Blockchain protocols</th>
<th>No. of client engagements</th>
<th>Leading business use cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hyperledger</td>
<td>Not disclosed</td>
<td>Supply chain provenance, clearing and settlement, dispute management, and trade finance</td>
</tr>
<tr>
<td>Ethereum</td>
<td>Not disclosed</td>
<td>Public networks for tokenization use cases in financial services and supply chains</td>
</tr>
<tr>
<td>Hyperledger Aeris / Indy</td>
<td>Not disclosed</td>
<td>Decentralized identity solutions</td>
</tr>
<tr>
<td>Corda</td>
<td>Not disclosed</td>
<td>Financial domain use cases with strong Corda-to-Corda interoperability</td>
</tr>
<tr>
<td>Ripple</td>
<td>Not disclosed</td>
<td>Financial use cases focused on banks, exchanges, and payment gateways</td>
</tr>
<tr>
<td>Stellar</td>
<td>Not disclosed</td>
<td>Cross-border currency exchange; fast and low-cost transactions; IBM World Wire</td>
</tr>
<tr>
<td>Quorum</td>
<td>Not disclosed</td>
<td>Use case with good throughput and benefits of both public and private networks</td>
</tr>
<tr>
<td>BigChain DB</td>
<td>Not disclosed</td>
<td>Low-latency use cases in identity, supply chain, and IoT</td>
</tr>
<tr>
<td>Bitcoin</td>
<td>Not disclosed</td>
<td>Tokenization use cases across financial services</td>
</tr>
</tbody>
</table>
**IBM | enterprise blockchain services profile** (page 5 of 5)

Everest Group assessment – Leader

<table>
<thead>
<tr>
<th>Market impact</th>
<th>Vision &amp; capability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Market Adoption</td>
<td>Vision and strategy</td>
</tr>
<tr>
<td>Portfolio mix</td>
<td>Scope of services</td>
</tr>
<tr>
<td>Value delivered</td>
<td>Innovation &amp; investments</td>
</tr>
<tr>
<td>Overall</td>
<td>Delivery Footprint</td>
</tr>
</tbody>
</table>

**Strengths**

- IBM has developed credible expertise and gained experience outside of its traditional strengths in implementing the Hyperledger Fabric and IBM Blockchain Platform. It is also strengthening its strong technical talent base with complementary industry expertise to serve clients better.
- Building intra- and inter-industry ecosystems continues to be one of its core tenets. It continues to lead the market with a focus on multi-party systems and efforts to improve network governance and business viability.
- It continues to improve its market perception by evangelizing key use cases particularly around supply chain visibility and digital identity.
- IBM continues to invest heavily in developing industry and use case-specific IPs to improve the ease of adoption for its clients.

**Limitations**

- Although IBM continues to be a dominant player in key use cases within Supply Chain Management (SCM) and trade finance, it needs to reinvigorate its efforts within other emerging areas such as digital identity and sustainability. IBM must invest further to explore emerging use cases to differentiate itself from its peers.
- Clients mention IBM’s account and project management to be cumbersome and inflexible at times, and cite some delivery challenges at the start of engagements.
- Enterprise clients also cite occasional deficiencies in the vision and planning for consortia, creating mid-project shifts that affect implementation and final value.

Measure of capability: High
Appendix
**Everest Group PEAK Matrix® is a proprietary framework for assessment of market impact and vision & capability**

![Everest Group PEAK Matrix](image-url)
Everest Group PEAK Matrix® for Enterprise Blockchain Service Provider 2022

Services PEAK Matrix® evaluation dimensions

Measures impact created in the market – captured through three subdimensions

**Market adoption**
Number of clients, revenue base, YOY growth, and deal value/volume

**Portfolio mix**
Diversity of client/revenue base across geographies and type of engagements

**Value delivered**
Value delivered to the client based on customer feedback and transformational impact

---

Vision and strategy
Vision for the client and itself; future roadmap and strategy

Scope of services offered
Depth and breadth of services portfolio across service subsegments/processes

Innovation and investments
Innovation and investment in the enabling areas, e.g., technology IP, industry/domain knowledge, innovative commercial constructs, alliances, M&A, etc.

Delivery footprint
Delivery footprint and global sourcing mix
Everest Group PEAK Matrix® for Enterprise Blockchain Service Provider 2022

Everest Group confers the Star Performers title on providers that demonstrate the most improvement over time on the PEAK Matrix®

Methodology

Everest Group selects Star Performers based on the relative YOY improvement on the PEAK Matrix.

In order to assess advances on market impact, we evaluate each service provider’s performance across a number of parameters including:
- Yearly ACV/YOY revenue growth
- # of new contract signings and extensions
- Value of new contract signings
- Improvement in portfolio mix
- Improvement in value delivered

In order to assess advances on vision and capability, we evaluate each service provider’s performance across a number of parameters including:
- Innovation
- Increase in scope of services offered
- Expansion of delivery footprint
- Technology/domain specific investments

We identify the service providers whose improvement ranks in the top quartile and award the Star Performer rating to those service providers with:
- The maximum number of top-quartile performance improvements across all of the above parameters AND
- At least one area of top-quartile improvement performance in both market success and capability advancement

The Star Performers title relates to YOY performance for a given vendor and does not reflect the overall market leadership position, which is identified as Leader, Major Contender, or Aspirant.
FAQs

Does the PEAK Matrix® assessment incorporate any subjective criteria?
Everest Group’s PEAK Matrix assessment adopts an unbiased and fact-based approach (leveraging service provider / technology vendor RFIs and Everest Group’s proprietary databases containing providers’ deals and operational capability information). In addition, these results are validated / fine-tuned based on our market experience, buyer interaction, and provider/vendor briefings.

Is being a “Major Contender” or “Aspirant” on the PEAK Matrix, an unfavorable outcome?
No. The PEAK Matrix highlights and positions only the best-in-class service providers / technology vendors in a particular space. There are a number of providers from the broader universe that are assessed and do not make it to the PEAK Matrix at all. Therefore, being represented on the PEAK Matrix is itself a favorable recognition.

What other aspects of PEAK Matrix assessment are relevant to buyers and providers besides the “PEAK Matrix position”?
A PEAK Matrix position is only one aspect of Everest Group’s overall assessment. In addition to assigning a “Leader”, “Major Contender,” or “Aspirant” title, Everest Group highlights the distinctive capabilities and unique attributes of all the PEAK Matrix providers assessed in its report. The detailed metric-level assessment and associated commentary is helpful for buyers in selecting particular providers/vendors for their specific requirements. It also helps providers/vendors showcase their strengths in specific areas.

What are the incentives for buyers and providers to participate/provide input to PEAK Matrix research?
- Participation incentives for buyers include a summary of key findings from the PEAK Matrix assessment.
- Participation incentives for providers/vendors include adequate representation and recognition of their capabilities/success in the market place, and a copy of their own “profile” that is published by Everest Group as part of the “compendium of PEAK Matrix providers” profiles.

What is the process for a service provider / technology vendor to leverage their PEAK Matrix positioning and/or “Star Performer” status?
- Providers/vendors can use their PEAK Matrix positioning or “Star Performer” rating in multiple ways including:
  - Issue a press release declaring their positioning. See citation policies.
  - Customized PEAK Matrix profile for circulation (with clients, prospects, etc.)
  - Quotes from Everest Group analysts could be disseminated to the media
  - Leverage PEAK Matrix branding across communications (e-mail signatures, marketing brochures, credential packs, client presentations, etc.)
- The provider must obtain the requisite licensing and distribution rights for the above activities through an agreement with the designated POC at Everest Group.

Does the PEAK Matrix evaluation criteria change over a period of time?
PEAK Matrix assessments are designed to serve present and future needs of the enterprises. Given the dynamic nature of the global services market and rampant disruption, the assessment criteria are realigned as and when needed to reflect the current market reality as well as serve the future expectations of enterprises.