

IDC MarketScape

IDC MarketScape: Worldwide Blockchain Services 2020 Vendor Assessment

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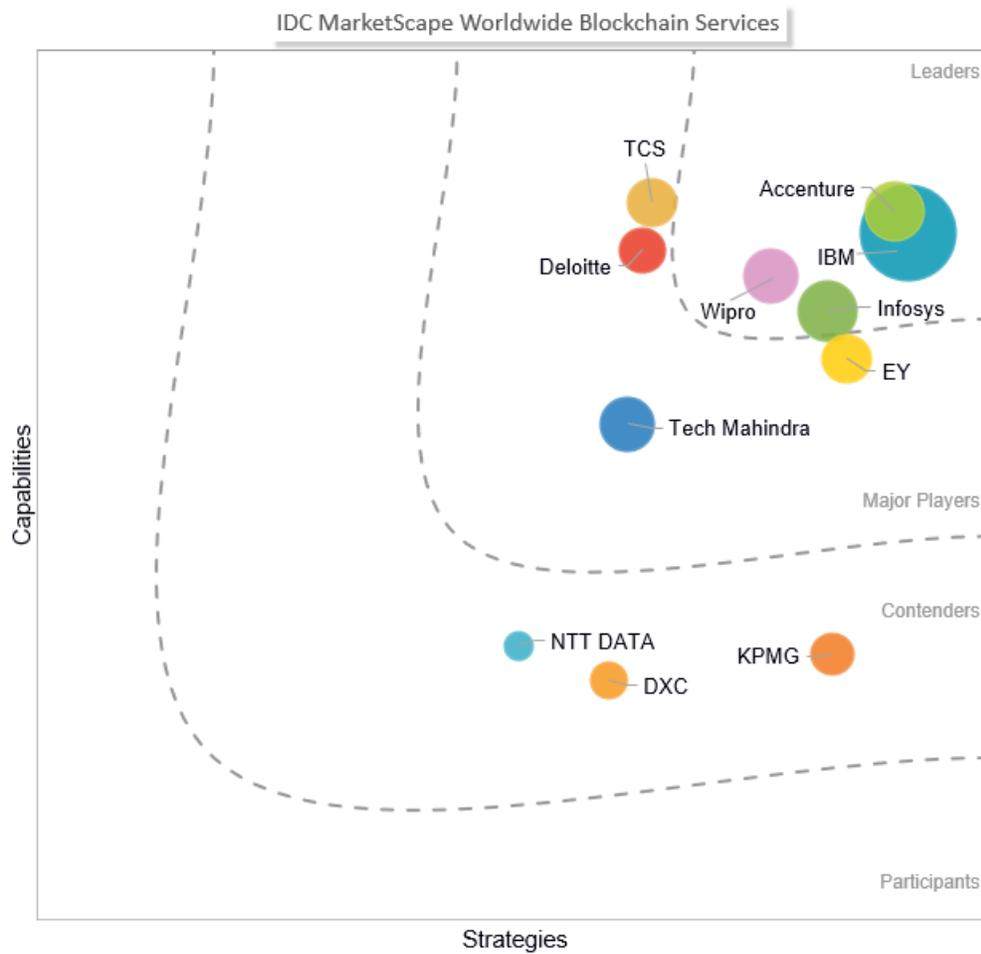
James Wester

THIS IDC MARKETSCAPE EXCERPT FEATURES IBM

IDC MARKETSCAPE FIGURE

FIGURE 1

IDC MarketScape Worldwide Blockchain Services Vendor Assessment



Source: IDC, 2020

Please see the Appendix for detailed methodology, market definition, and scoring criteria.

IDC OPINION

This IDC MarketScape offers an assessment of vendors providing professional services supporting blockchain technologies. This study uses the IDC MarketScape model to assess multiple quantitative and qualitative criteria that can be used to evaluate a vendor's offerings and position in the marketplace. The evaluation is based on a standardized set of parameters, which IDC uses to produce a comparative analysis of blockchain services vendors.

As part of this evaluation process, these technology vendors provided an assessment of their current capabilities and strategies, responses to an extensive questionnaire, an in-depth briefing, and access to reference clients to appraise their ability to meet the needs of technology buyers looking for professional services to use blockchain technologies.

Key findings from the research of these professional services vendors include:

- **Blockchain requires real vision and insight across multiple disciplines.** The professional services providers evaluated in this document have weathered the initial hype over blockchain's potential. They have remained invested in the technology for the long term across technology, business development, management, and so forth. They are committed to the vision of how blockchain, distributed ledgers, and decentralized systems can improve processes, increase efficiencies, and create entire new markets. That has helped them build a strategy around service offerings that are founded on sustainable business models for both themselves and their customers.
- **Blockchain for services providers is about realizing value, not about technology.** As a technology, blockchain remains an exciting space, and there is still a lot of white space to be filled in around protocols, governance models, and business models. However, the professional services providers that are building blockchain strategies – and that are evaluated in this document – have transitioned from discussions with clients about the technology – how it works and what the building blocks are – to demonstrating how blockchain supports value creation through increasing efficiencies, unlocking new revenue, and developing new ecosystems.
- **There is still plenty of development and education about blockchain required at this stage.** While discussions on value are an important sign that the market has matured, professional services vendors are still key promoters and educators on the technology as well as how it works and how it fits with legacy technology. Every vendor evaluated in this document is dedicating resources to innovation and research and development (R&D) efforts that are designed to educate its customers, and the market in general, about blockchain. In addition, these vendors are all involved with consortiums and industry organizations in developing the standards, code bases, and best practices in the space. None of this is necessarily altruistic, since the faster these education and development efforts happen, the faster the market develops in earnest, but these are still important efforts.
- **Professional services providers are using their own networks to encourage the adoption of the technology.** Along with building the technology, code, governance models, and so forth, professional services vendors are also actively building the networks and ecosystems that will be important for the long-term development of blockchain. As a decentralized technology, blockchain and distributed systems benefit from multiple members running nodes or participating in consensus models. The vendors in this document are stitching together these networks, often through their own professional and client relationships. That comes at some

risk if those efforts do not come to fruition, and many of the initiatives being pursued may take years to become fully optimized. But the vendors in this document are putting their own reputations and capabilities at risk to ensure the development of blockchain technology.

IDC MARKETSCOPE VENDOR INCLUSION CRITERIA

Vendors assessed in this document are professional services and IT consulting providers that are considered "full stack" providers offering professional, advisory, and/or IT consulting services that address every layer of the "blockchain stack." Vendors included in the assessment have demonstrated a standalone blockchain practice or business unit and are actively working with clients to build blockchain implementations that have been deployed outside of a test environment, including proofs of concept (POCs) and/or pilot programs. *It is important to emphasize that inclusion in this document indicates a vendor has met the criteria as being a professional services vendor capable of helping clients exploit blockchain technology fully.* (A more extensive description of the types of vendors included in the assessment, as well as the market they serve, is included in the Appendix.)

ADVICE FOR TECHNOLOGY BUYERS

The relative immaturity of blockchain, along with the immense hype that accompanied the topic initially, often overshadows the benefits of blockchain. Many technology leaders either have taken a "wait and see" approach or have been openly skeptical of the technology's ability to deliver on the disruption promised by early boosters. While both are understandable strategies, the vendors evaluated in this document have offered similar best practices to their customers when beginning an exploration and implementation of blockchain technologies. This advice is not only intended to assist companies as they start working with blockchain, it is also helpful in dealing with skepticism concerning blockchain's potential. Their guidance includes:

- **Start with the goal in mind.** Instead of looking at blockchain as an innovative or emerging technology, blockchain vendors recommend starting with a problem that needs a solution – an inefficiency that has proven difficult to eliminate or a process that is fraught with complexity. Once a problem has been identified, look at how a distributed approach might produce a better result. It is possible that even then the solution may not necessarily be blockchain, but identifying a problem eliminates discussions of technology for the sake of technology.
- **Incremental improvements are better than big schemes.** A result of the initial inflated expectations surrounding blockchain was the expectation that every blockchain project would be transformational – or at the very least "disruptive." The advice of technology vendors to their customers is to begin modestly; look for incremental gains. The goal of this best practice is to underpromise and overdeliver. Blockchain projects with large ambitions may take years to reach lofty goals, but they can show incremental improvements immediately.
- **It isn't about the technology.** Even incremental gains are about blockchain's ability to rethink processes and eliminate inefficiencies. To "sell" blockchain internally, vendors advise not focusing on the technology but instead on the benefits. Process improvements, lower costs, new revenue, and such are always more important than the technologies that make them happen. Thus enterprises should always focus on "what" and "why" versus "how." In addition, the advice helps blockchain proponents avoid discussions based on misconceptions about blockchain and pay attention to the technology's benefits.
- **Find partners that can build business cases.** A key part of what professional services vendors should deliver to their enterprise blockchain clients is assistance in building the business cases

around blockchain implementations. The vendors included in this document all offer that type of consultation as a part of their engagements, but that service is not necessarily a given. It is an important consideration since blockchain does not always lend itself well to easy ROI calculations. Enterprises often need help in building the justifications for their blockchain projects.

- **Consider a partner's partners.** As mentioned, the vendors profiled in this document are actively building large blockchain networks and ecosystems their clients and partners can join. It is an important consideration for enterprises when they are evaluating vendors: How large are their partner's partner networks? How widely connected are vendors? The power of blockchain comes from wide participation and distribution, and vendors should be able to demonstrate their ability to support large networks of partners.

VENDOR SUMMARY PROFILES

This section briefly explains IDC's key observations resulting in a vendor's position in the IDC MarketScape. While every vendor is evaluated against each of the criteria outlined in the Appendix, the description here provides a summary of each vendor's strengths and challenges.

IBM

IBM is positioned in the Leaders category in the 2020 IDC MarketScape for worldwide blockchain services.

IBM Blockchain Services has introduced methods and best practices to bring blockchain ecosystem players together quickly and effectively for a business return producing network of networks, incorporating blockchain in combination with transformational capabilities such as IoT, AI, automation, and advanced analytics. IBM's full suite of services includes consulting, design, development, implementation, and operation services for various industries focusing on applying blockchain to rewire business processes across key industry verticals and serving as the "general contractor" for end-to-end blockchain solutions.

IBM is investing in several foundational and horizontal capabilities that solve challenges across several industries. These solutions/capabilities are at multiple layers – integrating blockchain and IoT to enable companies to seamlessly benefit from the merging of the digital and physical world, as well as perfecting AI and advanced analytics to enable users to see trends and anomalies and create better prediction models. IBM also continues to expand its service capabilities in other non-Hyperledger-based platforms by collaborating with other service, solution, and technology providers.

Strengths

- IBM has the deepest experience, broadest geographic reach, and largest organizational commitment to blockchain across the vendors included in the document. This experience and commitment include a large services organization as well as productized blockchain networks and enterprise strength IBM Blockchain Platform, an open, multicloud offering with global scale.
- IBM's blockchain services has expertise with the "BLT" of blockchain – the business, legal, and technical aspects. IBM begins with business value and desired outcomes, and its offerings include assisting enterprises with the task of building and validating business models, establishing consortiums and governance, integrating adjacent technologies (such as IoT, AI,

advanced analytics, and automation), member onboarding, and interoperability with other networks.

- IBM has a broad range of production-level networks currently adding members and partners, including Food Trust for food traceability, TradeLens for shipping and logistics, Trust Your Supplier for supplier onboarding and life-cycle management, and World Wire for cross-border payments.

Challenges

- The company's commitment and investment with Hyperledger has established an enterprise strength platform, at times overshadowing its services capabilities, which extend across other protocols.
- IBM's ecosystem products, especially TradeLens and World Wire, are struggling to build the necessary participation by partners to reach critical mass. These are long-term efforts, so slow and steady growth is to be expected, but World Wire in particular has languished.
- The departure of Ginni Rometty as CEO of IBM (a staunch supporter of the company's blockchain efforts), as well as other senior leaders in IBM's blockchain organization, may affect the company's dedication to the technology.

Consider IBM When

IBM's long commitment to, and large investment in, blockchain technology means the company offers mature ecosystems across multiple use cases and verticals – notably food tracing, supply chain and logistics, payments, and identity. This gives companies looking for a vendor the immediate ability to exploit these established business models and networks.

APPENDIX

Reading an IDC MarketScape Graph

For the purposes of this analysis, IDC divided potential key measures for success into two primary categories: capabilities and strategies.

Positioning on the y-axis reflects the vendor's current capabilities and menu of services and how well aligned the vendor is to customer needs. The capabilities category focuses on the capabilities of the company and product today, here and now. Under this category, IDC analysts will look at how well a vendor is building/delivering capabilities that enable it to execute its chosen strategy in the market.

Positioning on the x-axis, or strategies axis, indicates how well the vendor's future strategy aligns with what customers will require in three to five years. The strategies category focuses on high-level decisions and underlying assumptions about offerings, customer segments, and business and go-to-market plans for the next three to five years.

An important idea to note when looking at the professional services providers included in this document regarding the strategies axis is that strategies are particularly challenging to develop for a new or emerging technology such as blockchain.

The size of the individual vendor markers in the IDC MarketScape represents the market share of each individual vendor within the specific market segment being assessed.

IDC MarketScape Methodology

IDC MarketScape criteria selection, weightings, and vendor scores represent well-researched IDC judgment about the market and specific vendors. IDC analysts tailor the range of standard characteristics by which vendors are measured through structured discussions, surveys, and interviews with market leaders, participants, and end users. Market weightings are based on user interviews, buyer surveys, and the input of IDC experts in each market. IDC analysts base individual vendor scores, and ultimately vendor positions on the IDC MarketScape, on detailed surveys and interviews with the vendors, publicly available information, and end-user experiences in an effort to provide an accurate and consistent assessment of each vendor's characteristics, behavior, and capability.

Customer Telephone Interviews

As part of the evaluation, and as a required element of the IDC MarketScape research process, the participating service providers were asked to provide customer references that could offer quantitative and qualitative insights into the performance and relationship with their chosen vendor. From September through December 2019, IDC completed 12 one-on-one telephone interviews to gauge clients on vendor selection criteria, vendor strengths and weaknesses, and the ability to deliver on business outcomes. Learnings from the telephone interviews were leveraged as part of the vendor scoring and to establish weighting scales.

Market Definition

IDC defines blockchain as a digital, distributed ledger of transactions or records. The ledger, which stores the information or data, exists across multiple participants in a peer-to-peer network. There is no single central repository that stores the ledger. A blockchain, which is a type of distributed ledger technology (DLT), allows new transactions to be added to an existing chain of transactions using a secure, digital, or cryptographic signature. It is designed to be a tamper-resistant, decentralized network with enhanced security properties, allowing data and transactions to be transparent to members of the distributed ledger.

For ease of writing, IDC often uses the term *blockchain* as an umbrella term for technologies including distributed ledgers, cryptocurrencies, tokens, and related technologies. Since the assessment is of vendors offering their services supporting blockchain technologies, and not the technologies themselves, the definition of blockchain is defined broadly to include distributed ledgers, tokenization, cryptocurrencies, and related technologies.

In addition, IDC has defined common blockchain services that align to IDC services foundation markets:

- **Business consulting:** Services that define enterprise strategy, goals, and metrics for blockchain adoption and include business model design, value stream analysis and journey mapping, partners and governance, information architecture, risk assessment, and network and membership rules and also includes organizational change management
- **IT consulting:** Services that advise on platform selection (e.g., Ethereum, Hyperledger Fabric, and Copa), data architecture, system architecture, application performance, and capacity and business continuity planning and include infrastructure supplier analysis, IT infrastructure performance engineering, IT process development, and change management

- **Systems integration:** The planning, design, implementation, and project management of a blockchain that include compute and storage hardware, application software, and internal and external services and are consumed on-premises, on demand, or in cloud environments
- **Custom application development:** The blockchain application development life cycle that include requirements gathering and design, solution build, testing and QA, and solution acceptance and also include all blockchain custom codesets, custom applications, and enhancements to enterprise applications
- **Key horizontal BPO:** Blockchain BPO that involves execution of key business activities, business processes, or entire functions by an external (third-party) services provider or outsourcer (Specific activities could include finance and procurement functions [smart contract management], accounting operations [e.g., invoice processing and supplier management], and dispute/resolution. Horizontal blockchain BPO segments, often referred to as "cross-industry" BPO, include membership services, identity management, and key management. Blockchain business process as a service [BPaaS] is an asset-based delivery model that enables horizontal blockchain outsourced processes to be deployed using a cloud services model [aka blockchain as a service] supporting, for example, smart contract and smart compliance applications.)
- **IT outsourcing:** Outsourcing services that include blockchain application and hosted application management, blockchain infrastructure outsourcing, and blockchain hosted infrastructure services
- **Hardware/software deploy and support:** Services that include hardware and software deployment and support services (primarily private cloud implementations)
- **IT education and training:** Training services that include content development, workshop, and training processes to support enterprise, member, and end-user adoption of blockchain networks and technologies

For inclusion in this document, vendors performing these services were expected to be "full stack" providers that can offer their professional, advisory, and/or IT consulting services across every layer of the blockchain stack. That stack includes the following layers:

- **Application layer:** The presentation layer is for enterprise software and applications. Services offered here can include the applications or APIs and/or integrations into existing software that utilize blockchains and distributed ledgers.
- **Service layer:** The "use case" layer is where blockchain is leveraged to accomplish specific tasks such as payments, identity, or supply chain. Services at this layer can include designing and building use cases and solutions and business cases.
- **Protocol layer:** The governance layer is where protocols, frameworks, data governance, and compliance are determined. Services can include advising on which protocols to use, data models, and so forth. Supported protocols can include permissioned or permissionless and can include any framework or platform (e.g., Hyperledger and Ethereum).
- **Infrastructure layer:** This layer represents the base of the stack where blockchain applications are deployed. Services can include providing or provisioning networking and storage solutions as well as advisory and consulting services to determine deployment models (e.g., cloud and hybrid) and optimal infrastructure requirements to affect scalability and reliability of the implementations being designed and built.

LEARN MORE

Related Research

- *IDC TechScape: Worldwide Blockchain Token Use Cases, 2019* (IDC #US44951719, January 2020)
- *Understanding Applications of Blockchain for Finance and Accounting: Use Cases, Investments, and Ecosystem Challenges* (IDC #US45666719, December 2019)
- *IDC FutureScape: Worldwide Blockchain 2020 Predictions* (IDC #US44538119, October 2019)
- *2019 U.S. Blockchain Services: Buyer Network and Platform Preferences* (IDC #US44651319, October 2019)
- *What Are Service Buyers' Top Concerns with Blockchain Governance?* (IDC #US45430019, August 2019)
- *Blockchain: Worldwide Technology Market Update and Spending Outlook, 2Q19* (IDC #US45461319, August 2019)
- *Accenture's Blockchain Analyst Event 2019: No More Digitizing the Pigeon* (IDC #US45328719, July 2019)
- *IDC Market Glance: Blockchain, 1Q19* (IDC #US44837919, February 2019)

Synopsis

This IDC study presents a vendor assessment of worldwide blockchain services through the IDC MarketScape model. This assessment discusses both quantitative and qualitative characteristics that explain success in the ecosystem. The evaluation is based on a comprehensive and rigorous framework that assesses vendors relative to the criteria and to one another and highlights the factors expected to be the most influential for success in the market during both the short term and the long term.

"Success for blockchain services providers today will be building industry expertise in the sectors where they choose to go deep and a good mix of technical skills and bench to support engagements versus leading with blockchain as a technology 'answer,'" said Ali Close, research manager, Digital Business Operations and Analytics Services at IDC. "In the long term, as the blockchain services market matures, looking to blockchain as a new delivery model for enterprise software and applications and integrating blockchain with other 3rd Platform technologies will be the next dimension of showing how blockchain drives value."

"As blockchain and distributed ledgers have evolved, a market built around the technologies has slowly begun to emerge, one that includes software vendors, hardware, and services," said James Wester, research director, Worldwide Blockchain Strategies at IDC. "At this point, professional services providers are the most mature in delivering a true product to the market, one that allows their clients to use the technologies to recognize real value. Assessing that market and providing technology buyers with a tool to evaluate their potential partners in this new but very disruptive area is an important task for the development of blockchain and distributed ledger technologies."

About IDC

International Data Corporation (IDC) is the premier global provider of market intelligence, advisory services, and events for the information technology, telecommunications and consumer technology markets. IDC helps IT professionals, business executives, and the investment community make fact-based decisions on technology purchases and business strategy. More than 1,100 IDC analysts provide global, regional, and local expertise on technology and industry opportunities and trends in over 110 countries worldwide. For 50 years, IDC has provided strategic insights to help our clients achieve their key business objectives. IDC is a subsidiary of IDG, the world's leading technology media, research, and events company.

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