Guidebook for Blockchain Adoption in Banking and Financial Services: A Compilation of Insights from 130+ Projects

ITS | Banking & Financial Services
Annual Report – March 2019: Executive Summary
Our research offerings for global services

- Market Vista™
  Global services tracking across functions, sourcing models, locations, and service providers – industry tracking reports also available
- Application Services
- BPS | Banking & Financial Services
- BPS | Healthcare & Life Sciences
- BPS | Insurance
- Catalyst™
- Cloud & Infrastructure
- Customer Experience Management Services
- Data & Analytics
- Digital Services
- Engineering Services
- Enterprise Platform Services
- Finance & Accounting
- Human Resources
  - ITS | Banking & Financial Services
  - ITS | Healthcare
  - ITS | Insurance
  - IT Services Executive Insights™
- Locations Insider™
  - ITS | Life Sciences
  - PricePoint™
  - Procurement
  - Recruitment & Talent Acquisition
  - Service Optimization Technologies

More about membership
In addition to a suite of published research, a membership may include
- Accelerators™
- Analyst access
- Data cuts
- Pinnacle Model® reports
- PriceBook
- Virtual Roundtables
- Workshops

Custom research capabilities
- Benchmarking | Pricing, delivery model, skill portfolio
- Peer analysis | Scope, sourcing models, locations
- Locations | Cost, skills, sustainability, portfolio – plus a tracking tool
- Tracking services | Service providers, locations, risk
- Other | Market intelligence, service provider capabilities, technologies, contract assessment

Membership information
- This report is included in the following research program(s)
  - ITS | Banking & Financial Services
- If you want to learn whether your organization has a membership agreement or request information on pricing and membership options, please contact us at info@everestgrp.com
# Table of contents

<table>
<thead>
<tr>
<th>Topic</th>
<th>Page no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Background and scope</td>
<td>4</td>
</tr>
<tr>
<td>Summary of key messages</td>
<td>6</td>
</tr>
<tr>
<td>Everest Group &quot;BINGO&quot; framework for blockchain adoption</td>
<td>8</td>
</tr>
<tr>
<td>• B: Business value articulation</td>
<td>10</td>
</tr>
<tr>
<td>• I: Invest in the right use case</td>
<td>16</td>
</tr>
<tr>
<td>• N: Network effect for scaling blockchain</td>
<td>24</td>
</tr>
<tr>
<td>• G: Guide to technology investments</td>
<td>30</td>
</tr>
<tr>
<td>• O: Overcome challenges</td>
<td>37</td>
</tr>
<tr>
<td>Blockchain use case compendium</td>
<td>41</td>
</tr>
<tr>
<td>Appendix</td>
<td>63</td>
</tr>
<tr>
<td>• Glossary of terms</td>
<td>64</td>
</tr>
<tr>
<td>• Research calendar</td>
<td>65</td>
</tr>
<tr>
<td>• References</td>
<td>66</td>
</tr>
</tbody>
</table>
Background and scope of the research

Everest Group’s Banking and Financial Services (BFS) IT services research team tracking the enterprise blockchain adoption journey brings a guidebook for enterprise executives leading blockchain initiatives in BFS firms to:

1. Build a fact-based business case for blockchain investments by presenting an analysis of 130+ blockchain case studies
2. Guide investments to extract the maximum value by studying the value delivered and building pragmatic hypothesis on potential value
3. Demystify the blockchain technology landscape and identify the right set of partners for your business use case
4. Identify challenges that enterprises face on their blockchain journey to guide the blockchain adoption strategy
5. Identify data and network participants to support scaling of blockchain ecosystems to gain from the network effect

In this report, we studied 130+ blockchain case studies to identify the blockchain adoption journey for lead steers in the industry and build a guidebook for adoption

Scope of this report

Industry
Banking and financial services

Companies
Market activity and investments by 200+ global enterprises

Geography
Global

Use cases
30+ distinct blockchain use cases

BINGO framework for blockchain adoption

The 4Ts of blockchain benefits

Build competitive advantage via blockchain initiatives
A summary of findings from the blockchain adoption story so far in the BFS industry

- The blockchain hype is dying and the real business use cases are gaining steam
- Study of 135 blockchain projects in BFS shows that 24% are in the production stage
- Adopting a strategic view powered by ecosystem thinking helps scale beyond POCs
- Identifying data and network participants to reimagine processes leads to higher ROI
- Hyperledger Fabric, Ethereum, and Quorum are the key blockchain technology platforms
Everest Group has identified a five-step structured framework to guide enterprise blockchain adoption journey.

**B** - Business value articulation

**I** - Invest in the right use case

**N** - Network effect for scaling blockchain

**G** - Guide to technology investments

**O** - Overcome challenges

---

Everest Group

Research
Blockchain’s 4T features are used to drive efficiency in existing business processes and enable new business models

- **Trust and security**
  Blockchain drives trust and security in transactions between multiple parties through its iron clad data validation technique

Example of use cases:
- Cross-border payments and remittances
- Trade finance

- **Transparency and auditability**
  Blockchain offers transparency and auditability through its distributed ledger structure, offering users complete control over the information being shared

Example of use cases:
- Fund administration
- KYC
- Auditing

- **Traceability and insights**
  Blockchain strengthens traceability by replacing slow and complex data sets for processes

Example of use cases:
- Check fraud detection
- Clearing and settlement

- **Transaction and automation**
  Blockchain is streamlining processes by removing intermediaries, resulting in smooth transactions

Example of use cases:
- Inter-bank payments
- Loyalty and reward points management
Current blockchain initiatives look to optimize costs; focus on growth and experience will accelerate ROI realization

Examples of enterprises witnessing business benefits

- End-to-end transactional process for private company securities
- Direct access to global payments from exchange’s platform using the bank’s DLT platform
- Ability to discover a customer across entities without revealing existing business relationships
- Enter new markets – enable SME receivables financing programs efficiently
- Customer-centric self-service process working across multiple banks
- Share real-time status updates (or audit) with all stakeholders
- Single source of information for customer

Examples of use cases

- KYC / Digital identity
- Trade finance

Clearing and settlement of securities

- Loyalty and reward points management
- International remittances

Copyright © 2020, Everest Global, Inc.
Alpha in the room use cases are natural early adopters, other types of use cases will pick up as the network effect kicks in.

**Alpha in the room**

Use cases driven by market leaders/authorities, who have disproportionate advantage over their partner firms, with an objective to drive efficiency and experience.

**Example of use cases:**
- Trade finance
- Cross-border payments
- Loyalty and reward points management

**Bottom line collaborators**

Use cases are driven by peer firms with the prime objective to defend margins and drive innovation in the business model.

**Example of use cases:**
- Inter-bank payments
- KYC
- Settlement and reconciliation

**Disintermediation avoiders**

Use cases are driven by enterprises which act as intermediaries to protect their playing field and leverage blockchain to deliver value-added services.

**Example of use cases:**
Integration of digital platforms between two trading nations

**Disruptors**

Use cases are leveraging blockchain to disrupt existing processes and drive new business models.

**Example of use cases:**
Equity crowd funding
BFS firms need to invest in developing blockchain talent, as demand-supply gap is going to get wider

<table>
<thead>
<tr>
<th>Region</th>
<th>Demand-supply gap in 2018 as percentage of supply in 2018</th>
<th>Estimated demand-supply gap in 2021 as percentage of supply in 2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>North America</td>
<td>70-80%</td>
<td>90-110%</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>80-90%</td>
<td>50-60%</td>
</tr>
<tr>
<td>Europe</td>
<td>90-100%</td>
<td>80-90%</td>
</tr>
<tr>
<td>Australia &amp; New Zealand</td>
<td>30-40%</td>
<td>20-30%</td>
</tr>
<tr>
<td>Others(^1)</td>
<td>30-40%</td>
<td>50-60%</td>
</tr>
<tr>
<td>Overall</td>
<td>60-70%</td>
<td>80-90%</td>
</tr>
</tbody>
</table>

- Demand for resources skilled on blockchain technologies is expected to grow at a CAGR of 40-45% during 2018-2021
- Dubai, Singapore, China, Switzerland, and Japan have emerged as the major hubs for large scale adoption of blockchain use cases and are expected to witness higher than 50% demand growth in the near term
- Financial services segment accounts for nearly two-thirds of the total demand for blockchain technology; however, the manufacturing segment is expected to witness the highest demand growth in the near term
- Hyperledger Fabric implementation and smart contract development are currently the most sought-after skills. Demand is expected to grow for cross-functional experts to drive use cases related to integration of AI and IoT
- Compared to onshore countries, supply for blockchain resources is expected to grow at a higher pace in offshore geographies (e.g., India and Israel) in the near term

\(^1\) Includes Asia Pacific (excluding the ANZ region), Middle East and Africa, and Latin America

Source: Everest Group
In this report we also list down 36 use cases across BFS industry to bring out proof points of blockchain adoption

Guide to read case study section

<table>
<thead>
<tr>
<th>Driver: Alpha in the room</th>
<th>Ecosystem: Inter-enterprise (across industry)</th>
<th>Production readiness: 63%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Defines the dominant driver for the use case (refer to page 9 for definition)</td>
<td>Defines the dominant type of ecosystem for the use case</td>
<td>Provides a comparative score measuring the extent of projects moving toward production readiness or already live</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Blockchain properties leveraged</th>
<th>Business benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trust &amp; security</td>
<td>Process optimization / cost reduction</td>
</tr>
<tr>
<td>Transparency &amp; auditability</td>
<td>Increase revenue</td>
</tr>
<tr>
<td>Traceability &amp; insights</td>
<td>Experience for stakeholders</td>
</tr>
<tr>
<td>Transactions &amp; automation</td>
<td></td>
</tr>
</tbody>
</table>

Color of the icon defines the level of activity of the feature in this use case

Color of the icon defines level of the business benefit in this use case

Top platforms

Hyperledger Fabric

Defines the top three platforms leveraged for this use case

Insurance record management

A blockchain-based solution to provide a single access point for all the participants such as admin node, reinsurer, broker, bank, and client

Defines the name of blockchain use case along with a short description

Driver: Alpha in the room

Ecosystem: Inter-enterprise (across industry)

Production readiness: 63%
Additional research references

The following documents are recommended for additional insight on the topic covered in this report. The recommended documents either provide additional details or complementary content that may be of interest.

1. **Blockchain Services PEAK Matrix™ Assessment 2019: Race to Make Enterprise Blockchain Real** *(EGR-2018-31-R-2836)*; 2019. In this research, we assess the vision & capability and market impact generated by 27 service providers for blockchain services capabilities. These providers were mapped on the Everest Group PEAK Matrix™, which is a composite index of a range of distinct metrics related to each provider’s vision & capability and market impact to identify Leaders, Major Contenders, and Aspirants.

2. **Blockchain: Is It the Silver Bullet?** *(EGR-2018-27-V-2567)*; 2018. Analyzes high-potential use cases for blockchain – the major ones in banking and financial services include trade finance, KYC, syndicated loans, and corporate action.

3. **Unblocking Blockchain Adoption – A Prioritization Framework for Business Processes** *(EGR-2017-3-V-2418)*; 2017. In this research, we lay out a prioritization framework that is intended to assist enterprises as they navigate the tricky terrain of blockchain in business processes.

For more information on this and other research published by Everest Group, please contact us:

- **Ronak Doshi**, Practice Director: ronak.doshi@everestgrp.com
- **Nitish Mittal**, Practice Director: nitish.mittal@everestgrp.com
- **Rahbare Islam Nayyer**, Senior Analyst: rahbare.nayyer@everestgrp.com

Website: [www.everestgrp.com](http://www.everestgrp.com) | Phone: +1-214-451-3000 | Email: info@everestgrp.com
About Everest Group

Everest Group is a consulting and research firm focused on strategic IT, business services, and sourcing. We are trusted advisors to senior executives of leading enterprises, providers, and investors. Our firm helps clients improve operational and financial performance through a hands-on process that supports them in making well-informed decisions that deliver high-impact results and achieve sustained value. Our insight and guidance empower clients to improve organizational efficiency, effectiveness, agility, and responsiveness. What sets Everest Group apart is the integration of deep sourcing knowledge, problem-solving skills and original research. Details and in-depth content are available at www.everestgrp.com.

Dallas (Headquarters)
info@everestgrp.com
+1-214-451-3000

Bangalore
india@everestgrp.com
+91-80-61463500

Delhi
india@everestgrp.com
+91-124-496-1000

London
unitedkingdom@everestgrp.com
+44-207-129-1318

New York
info@everestgrp.com
+1-646-805-4000

Toronto
canada@everestgrp.com
+1-416-388-6765

Stay connected

Website
www.everestgrp.com

Social Media

@EverestGroup
@Everest Group

Blog
www.everestgrp.com/blog/

This document is for informational purposes only, and it is being provided “as is” and “as available” without any warranty of any kind, including any warranties of completeness, adequacy, or fitness for a particular purpose. Everest Group is not a legal or investment adviser; the contents of this document should not be construed as legal, tax, or investment advice. This document should not be used as a substitute for consultation with professional advisors, and Everest Group disclaims liability for any actions or decisions not to act that are taken as a result of any material in this publication.