



## **Blockchain in BFSI – Looking Beyond the Hype**

Banking, Financial Services, and Insurance (BFSI)  
IT Services Thematic Report – March 2016  
Preview Deck

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<sup>1</sup> Banking, financial services, and insurance

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# Background and scope of the research

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## Background of the research

In 2015, no industry conference or trends forecast in the BFSI sector was complete without the mention of Blockchain technology and its potential benefits to revolutionize the BFSI industry by reducing costs of transactions and infrastructure while driving efficiencies, and financial inclusion. In the last two years, we witnessed major banks, financial institutions, technology companies, and even governments & international bodies presenting their views on whether they consider this technology as revolutionary and on their investment plans about adopting it.

We attempt to cut through all the hype surrounding the technology and present a fact-based assessment of the state of the market, detailing investments made by participants such as financial services companies, technology companies, and FinTech startups. The content of this report is the result of a comprehensive study featuring online sources and literary works, as well as our interactions with service providers and enterprises. The aim is to identify the opportunities, challenges, and key success factors for BFSI enterprises looking to leverage the Blockchain technology and the implications for service providers. The research also captures evolving trends, market dynamics, and emerging priorities of enterprises in the last 12-18 months.

**In this research, we analyze the current trends and the future outlook of Blockchain technology on the global BFSI sector. We focus on:**

- Market trends and activity for Blockchain technology
- Priorities of BFSI enterprises and key investment themes
- Service providers' play in the Blockchain ecosystem
- Role of FinTech startups in the Blockchain ecosystem
- Future outlook and how enterprises can drive faster adoption of the technology

## Scope of this report

- **Industry:** Banking, Financial Services, and Insurance
- **Geography:** Global

Note: In this report we use "Blockchain" to refer to any form of distributed ledger technology that can store encrypted transactions and maintain trust through any form of consensus mechanisms. Whenever we need to refer to the Blockchain platform for the Bitcoin currency, we refer to it as the "Bitcoin Blockchain"

# Our research methodology is based on four pillars of strength to produce actionable and insightful research for the industry

- Market thought leadership
- Actionable and insightful research
- Syndicated and custom research deliverables

**1 Robust definitions and framework**  
(PEAK Matrix, market maturity, and technology adoption/investment)

**2 Primary sources of information**  
(Annual, contractual and operational RFIs, service provider briefings and buyer interviews, and web-based surveys)

**3 Diverse set of market touchpoints**  
(Ongoing interactions across key stakeholders, input from a mix of perspectives and interests, supports both data analysis and thought leadership)

**4 Fact-based research**  
(Data-driven analysis with expert perspectives, trend-analysis across market adoption, contracting, and service providers)

- Proprietary contractual database of 600+ large active BFSI AO contracts (updated annually)
- Year-round tracking of 25+ BFSI AO service providers
- Dedicated team for BFSI IT outsourcing research, spread over two continents
- Over 20 years of advising BFSI clients on ITO and BPO decisions
- Executive-level relationships with buyers, service providers, technology providers, and industry associations

# How to read this document

## Information desired

## Where/how to locate the information

### Summary of key messages

- This section summarizes key messages along the following dimensions:
  - Definition of Blockchain
  - Evolution of the Blockchain technology
  - Current activity and investments in the Blockchain market
  - Use cases in BFSI and beyond BFSI vertical
  - Exploring the potential of this technology for the BFSI industry
  - Blockchain technology trends
  - Implications on enterprises and service providers

### Detailed fact base and analysis

- The following four sections of the report present a detailed analysis of the dimensions mentioned in the summary of key messages (listed above):
  - Blockchain – definition
  - Blockchain technology landscape
  - Blockchain use cases – BFSI and beyond
  - Trends and implications
- Each section contains detailed fact base on relevant topics within a specific dimension
- Refer to the table of contents (page 3) to identify relevant topics covered within each section

### Definitions of unfamiliar terms and related research

- Acronyms or technical outsourcing terms are defined in the glossary of terms (Appendix)
- Refer to the related Everest Group BFSI IT Outsourcing research publications listed in references (Appendix)

# Overview and abbreviated summary of key messages

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This report provides an overview of the Blockchain technology market in the BFSI industry, through an in-depth analysis and comprehensive study featuring online sources and literary works, as well as our interactions with service providers and enterprises. The report analyzes key trends in the Blockchain market, demand drivers, adoption trends, emerging themes, key areas of investment, and implications for enterprises and service providers.

## **Some of the findings in this report, among others, are:**

- Applications of the Blockchain technology, beyond the currency use cases of Bitcoin and other cryptocurrency, are garnering heightened interest from the financial services industry
- Industry consortiums are on the rise and are driving increased cooperation aiming for standardization to drive interoperability, reduce cost of experimentation, and accelerate adoption of technology through resource pooling
- More than 60 global banks and financial institutions are researching, experimenting, or working on some Blockchain-based applications & use cases such as international remittances, trade finance, and trading, among others
- IBM is leading the service provider community in terms of investments and market visibility in the Blockchain technology space. Deloitte is also well-positioned with its Rubix offering that enables enterprises to experiment with the technology
- IoT & Blockchain and analytics & Blockchain are combinations of technology that have great synergy potential in terms of solving existing business issues, creating new business & revenue models, and driving efficiency in existing processes
- Blockchain-as-a-Service (BaaS) offerings such as Azure, IBM, and Rubix are driving experimentation at reduced costs, while abstracting the complexity of the technology
- Several government bodies, regulators, and technology companies have evinced a keen interest in the technology and have published several research/thought papers encouraging further exploration of the technology



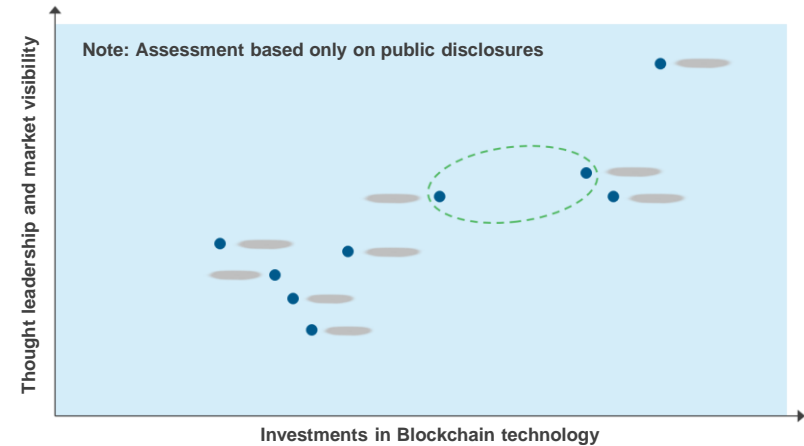
# This study offers a deep dive into key aspects of Blockchain technology market; below are four charts to illustrate the depth of the report

## Summary | What is a Blockchain?

Blockchain is a structure of a series of linked blocks, in which each block contains a set of transactions. Blocks are created by solving complex cryptographic problems (also called mining in the case of Bitcoins). It provides the following features:

<b>No double spending</b>		Transactions in one block do not conflict with each other or with any of the previous blocks in the chain
<b>Disinter-mediation</b>		The ledger or the chain of blocks containing the transactions are stored in a distributed manner, which removes the need for a central authority to validate a transaction
<b>Validation</b>		Blockchain does validates the transaction through a consensus mechanism (also called proof-of-work, which is a computationally heavy cryptographic task in case of Bitcoin mining)
<b>Immutability of transactions</b>		The distributed nature of Blockchain preserves the entire history of transaction and is tamper proof
<b>Removal of single node of failure</b>		The shared and replicated nature of Blockchain removes the possibility of a single node of failure in a transaction processing system

## Service provider assessment



## Service providers play in the Blockchain ecosystem

- Consulting services for financial services firms that want to explore Blockchain
- Partnership with Blockchain-based product companies and consortiums
- Articulate value and develop pilots (use cases) for Blockchain technology
- Collaborate with / invest in Blockchain startups
- Partner with banks & financial services firms for joint innovation labs
- Thought leadership and drive discussions on standards & regulations

## Exploring the Blockchain use cases for BFSI

NOT EXHAUSTIVE

In addition to the traditional Bitcoin Blockchain, asset-centric cryptotechnology and its advanced state "smart contracts" will form the basis for most applications of Blockchain technology in the BFSI industry

- Asset-centric technologies such as Ripple, Stellar, and Hyperledger focus on the exchange of digital representations of existing assets (e.g., currencies, metals, stock, bonds, etc.) on a shared ledger (but not on a public ledger)
- Trust is built between participants directly, and not through mining as is the case with Bitcoin
- Use cases for asset-centric cryptotechnologies include foreign exchange/remittance, real-time payments, documentary trade, and asset servicing
- A smart contract is an event-driven program with state, which runs on a distributed, shared ledger that can verify or enforce contracts
- In time, distributed ledgers will support "smart contracts". This will lead to a wide variety of potential uses in securities, syndicated lending, trade finance, swaps, or derivatives
- For example, smart contracts could automate pay-outs by the counterparties to swap contracts

FX settlement	Real-time payments	OTC derivatives clearing	P2P lending
Cross-border payments	Compliance reporting / audit	Securities issuance	P2P insurance
Trade finance / Lines of credit	KYC as a shared service	Event-driven insurance	Core banking

Source: Everest Group (2016)

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## Glossary of key terms used in this report (page 1 of 2)

Term	Definition
ACV	Annualized Contract Value is calculated by dividing the Total Contract Value (TCV) by the term of the contract
AO	Applications Outsourcing
ADM	Application Development and Maintenance is the development and upkeep of the software code for systems, applications, and products
BFSI	Banking, Financial Services, and Insurance industry
BPO	Business Process Outsourcing refers to the purchase of one or more processes or functions from a company in the business of providing such services at large or as a third-party provider
Buyer	The company/entity that purchases outsourcing services from a provider of such services
CAGR	Compound Annual Growth Rate refers to the year-over-year growth rate over a multiple-year period. CAGR is calculated as: $CAGR = (current\ value / base\ value)^{(1/number\ of\ years)} - 1$
ERP	Enterprise Resource Planning is a computer-based system to manage internal and external resources of an organization including assets, financial resources, materials, and human resources
FAO	Finance & Accounting Outsourcing is the transfer of ownership of some or all finance & accounting processes or functions to a service provider. This could include administrative, delivery, or management-related processes or functions. Everest Group's analyses include FAO contracts with a minimum of two F&A processes, over US\$1 million in annualized contract value (ACV), and a minimum contract term of three years
FTEs	Full-time Employees on the rolls of the company

## Glossary of key terms used in this report (page 2 of 2)

Term	Definition
Global sourcing / offshoring	Transferring business process activities or its complete ownership to a different country from where the company receiving the services is located, is referred to as offshoring or global sourcing
HRO	Human Resource Outsourcing is the transfer of ownership of some or all of human resource processes or functions to a service provider. This could include administrative, delivery, or management-related processes or functions
ITO	Information Technology Outsourcing is the transfer of ownership of some or all information technology processes or functions to a service provider. This could include administrative, delivery, or management-related processes or functions
KPIs	Key Performance Indicators
M&A	Mergers and Acquisitions
Nearshore	Nearshoring is the sourcing of service activities to a foreign, lower-wage country that is close in some dimension of distance
Onshore	Onshore outsourcing is the obtaining of services from outside a company but in the same country
PoC	Proof of Concept
Service provider	A company/entity that supplies outsourcing services to another company/entity
SI	Systems Integration
TCV	Total Contract Value is the potential revenue associated with the contract and estimated at the commencement of the contract (e.g., sum total of revenue accrued to the service provider from the contract over the entire contract term, usually measured in millions of dollars)

# BFSI ITS research calendar

■ Published
 ■ Current

Topic	Release date
IT Applications Outsourcing in Insurance – Service Provider Profiles Compendium – 2015 .....	January 2016
Blockchain in BFSI – Looking Beyond the Hype .....	March 2016
IT Outsourcing in Banking – Service Provider Landscape with PEAK Matrix™ Assessment 2016 .....	Q2 2016
IT Outsourcing in Banking – Annual Report 2016 .....	Q2 2016
Digital Effectiveness in U.S. Retail Banking –APEX Matrix™ to Identify the Digital Banking Leaders 2016 .....	Q2 2016
Digital Effectiveness in UK Retail Banking –APEX Matrix™ to Identify the Digital Banking Leaders 2016 .....	Q2 2016
IT Outsourcing in Capital Markets – Annual Report 2016 .....	Q2 2016
IT Outsourcing in Global Capital Markets – Service Provider Landscape with PEAK Matrix™ Assessment 2016 .....	Q2 2016
IT Outsourcing in Insurance – Annual Report 2016 .....	Q3 2016
Analytics in Banking– Service Provider Landscape with PEAK Matrix™ Assessment 2016 .....	Q4 2015
Mobility in Banking– Service Provider Landscape with PEAK Matrix™ Assessment 2016 .....	Q4 2015
Mobility in Insurance – Service Provider Landscape with PEAK Matrix™ Assessment 2016 .....	Q4 2015
Analytics in Insurance – Service Provider Landscape with PEAK Matrix™ Assessment 2016 .....	Q4 2015

# Additional research references

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

1. **IT Outsourcing in Insurance – Annual Report 2015** ([EGR-2015-11-R-1611](#)); 2015. . This report provides an overview of the Application Outsourcing (AO) market for the insurance industry through an in-depth analysis of large-sized AO contracts (i.e., contracts over US\$25 million in TCV and over three years in duration). The report analyzes key trends in market size & growth, demand drivers, adoption & scope trends, emerging priorities of buyers, key investment themes, and future outlook for 2015 with regards to such large insurance AO deals
2. **IT Outsourcing in Capital Markets – Annual Report 2015: Steering Through the Chaos** ([EGR-2015-11-R-1532](#)); 2015. This report provides an overview of the Application Outsourcing (AO) market for the capital markets industry through an in-depth analysis of large-sized AO contracts (i.e., contracts over US\$25 million in TCV and over three years in duration). The report analyzes key trends in market size & growth, demand drivers, adoption & scope trends, emerging priorities of buyers, key investment themes, and future outlook for 2015 with regards to such large capital markets AO deals
3. **IT Outsourcing in Banking – Annual Report 2015: Riding The Digital Wave** ([EGR-2015-11-R-1496](#)); 2015. This report provides an overview of the Application Outsourcing (AO) market for the banking industry through an in-depth analysis of large-sized AO contracts (i.e., contracts over US\$25 million in TCV and over three years in duration). The report analyzes key trends in market size & growth, demand drivers, adoption & scope trends, emerging priorities of buyers, key investment themes, and future outlook for 2015 with regards to such large banking AO deals

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## About Everest Group

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