

Bringing Enterprise to the Blockchain

Moving from Science Experiment to Practical Business Mainstream

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Consider 132 Enterprise Use cases

Global Blockchain
Benchmarking Study 2017
Cambridge University, EY, Visa.

GLOBAL BLOCKCHAIN BENCHMARKING STUDY

Dr Garrick Hileman & Michel Rauchs
2017



Cambridge
Centre
for Alternative
Finance
UNIVERSITY OF
CAMBRIDGE
Judge Business School

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Note: This figure is based on a list of 132 use cases, grouped into industry segments, that have been frequently mentioned in public discussions, reports, and press releases.³³

Barriers to Enterprise Adoption

NO PLUG N PLAY FOR ENTERPRISES

Closed ERPs, one-off integrations, complex APIs

INSUFFICIENT PRODUCTION READINESS

Performance, Resilience, security, recoverability, global reach

CONTINUOUS PLATFORM EVOLUTION

Rapid technology changes, lack of backward compatibility

BUSINESS & IT OPERATIONAL CHALLENGES

Member on-boarding, monitoring, supportability, lifecycle management, and limited scalability



Effort Required To Deliver Enterprise-Grade Blockchain

 Validating Nodes/ Peers

 Distributed Ledger
(Single Version of Truth)

 Smart Contract
(aka Chaincode)

 Ordering Service

 Membership Service

Bring your own...

 Identity Management
(for member enrollment)

 Fault Tolerant Event Hub
(for ordering event mgmt.)


 Container Lifecycle Management
(for system and chaincode containers)

 Configuration & Monitoring Tools

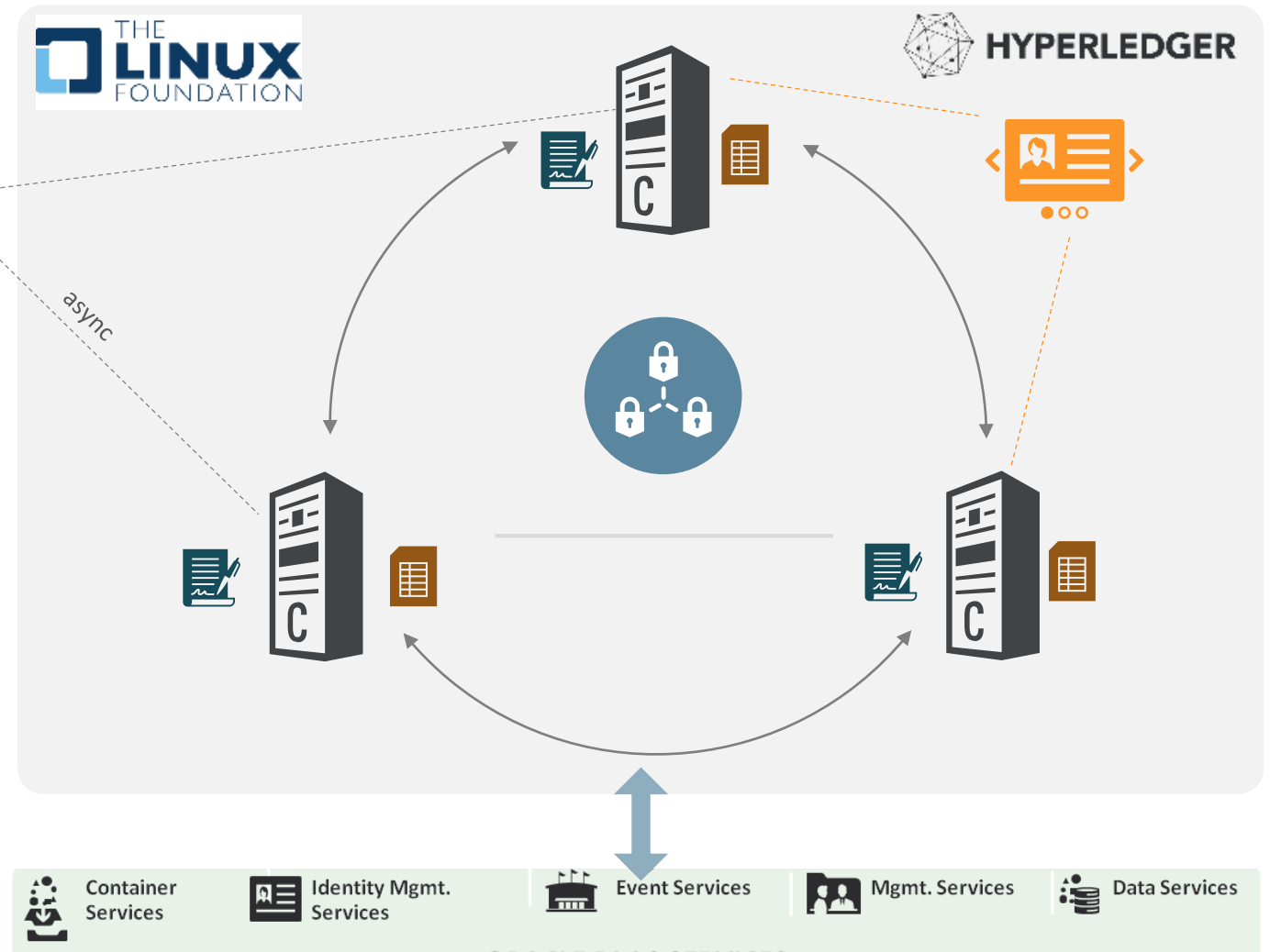
 Autonomous Recovery
(when components fail)

 Managed Patching & Upgrades

 Elastic scaling on demand

 Multi-datacenter DR
(with backup of ledger and config info)

Applications
(Client SDK)





Oracle Blockchain Strategy

Securely, reliably extend business processes and accelerate B2B transactions

PRE-ASSEMBLED, ENTERPRISE-GRADE MANAGED PAAS

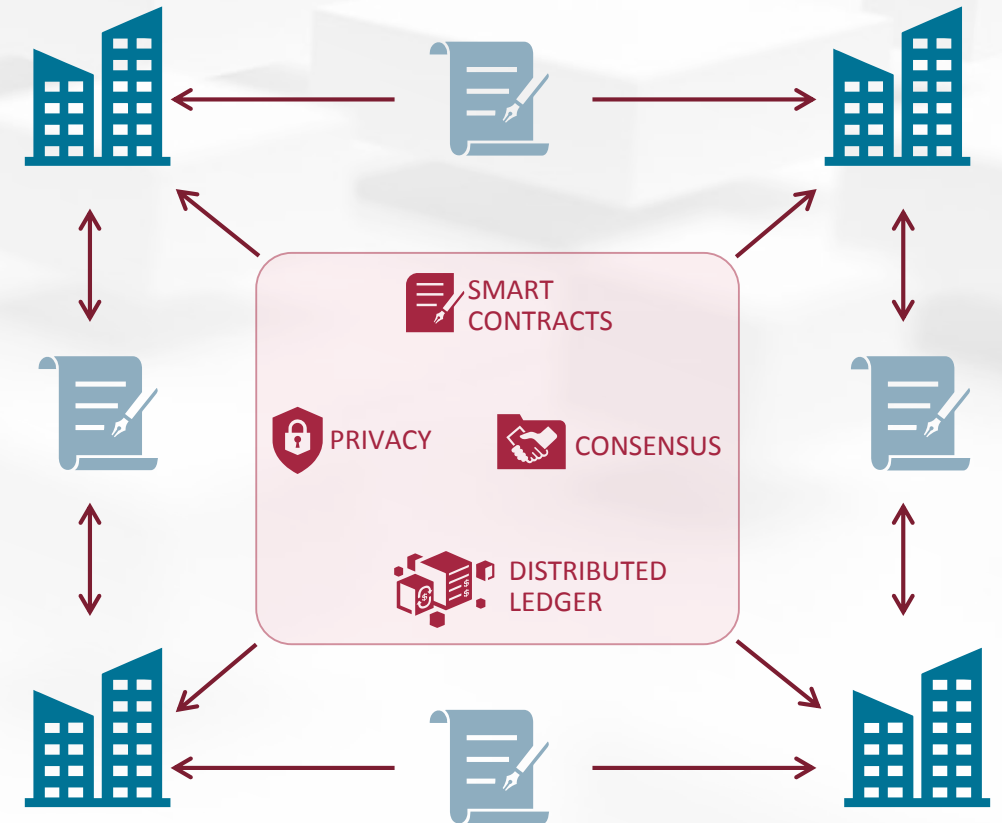
- Rapid, global provisioning & simplified operations
- Secure and confidential permissioned blockchain
- Built-in monitoring, IdM, HA, autonomous recovery

EXTENDS ENTERPRISE BOUNDARIES

- Plug-n-Play integration with Oracle SaaS and PaaS, and custom/3rd party cloud and on premises apps
- Out-of-the-box API access in Netsuite ERP, Flexcube core banking, Open Banking API Platform

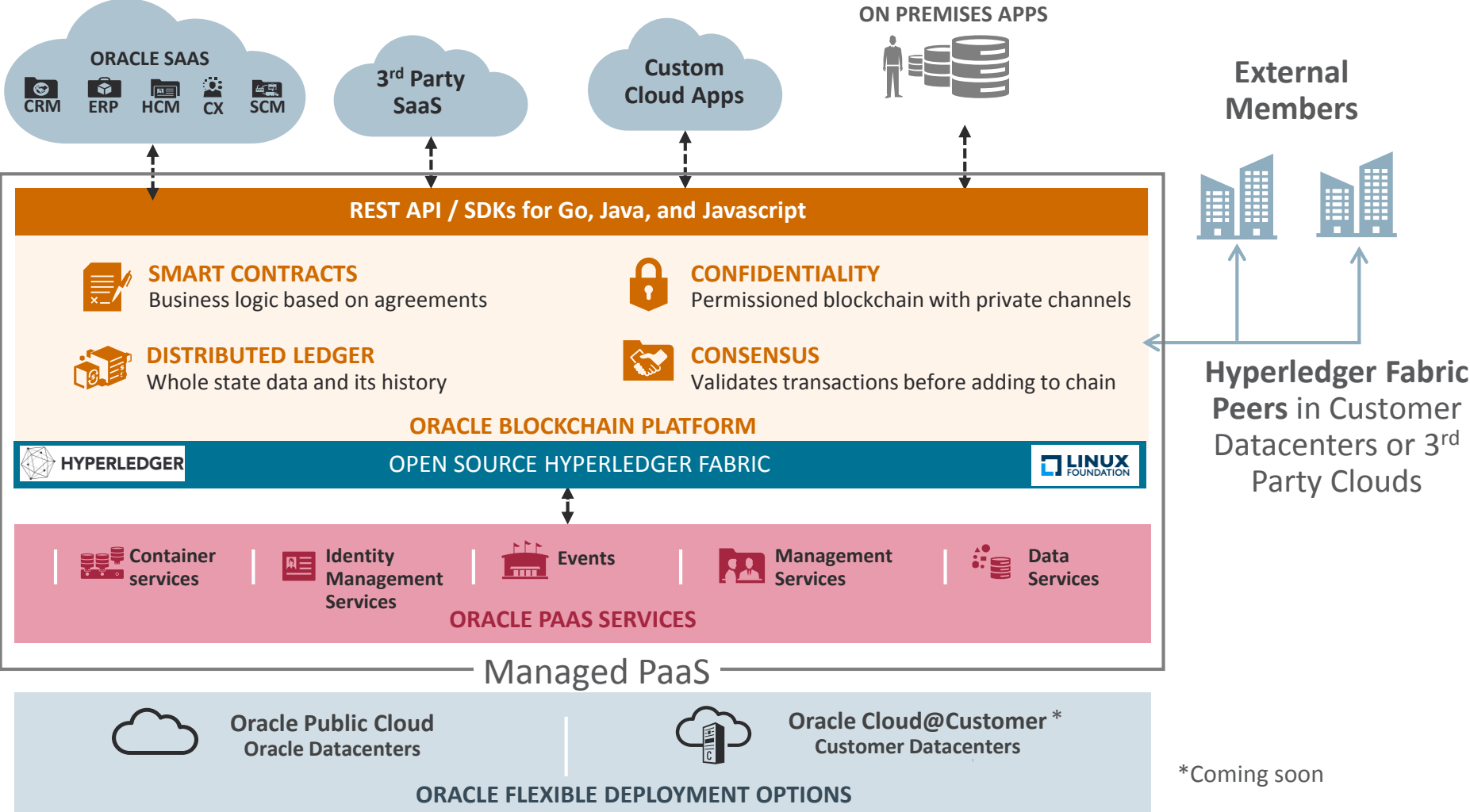
SAAS BLOCKCHAIN APPLICATIONS

- Supply chain track & trace use cases and more



Oracle Blockchain Cloud Service

Pre-assembled | Managed service | Production-ready | Public or private cloud



*Coming soon



Oracle Blockchain Cloud Service

Delivering Enterprise Grade Capabilities

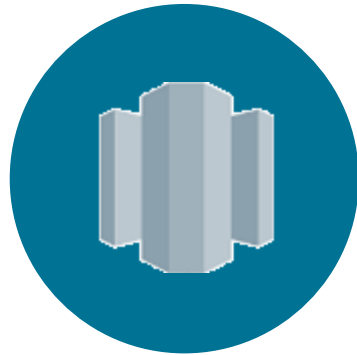


Performance at Scale

Parallel execution
Elastic scale-out
Faster world-state DB

Operational Resilience

High availability VMs
Autonomous recovery agents
Continuous backup to object store



Security & Confidentiality

Integrated identity management
Data encryption at-rest
Certificate revocation management



Supportability & Operations

Dynamic configuration
Monitoring dashboards
Zero-downtime managed patching



Development & Integration

Offline dev/test support
SQL-based rich queries
REST APIs
Java, GO, and Node.js SDKs
Enterprise App Adapters

Autonomous Blockchain Cloud Service

- Self-Driving
 - Auto provisions all components & dependencies
 - Integrated identity management
 - Embedded back up, auto-recovery, monitoring
 - Automatically scales out without downtime*
 - Auto tunes performance settings to goals*
- Self-Securing
 - Adaptive intelligence-enabled cyber threat detection and remediation through Identity Management Cloud integration
 - Automatic data encryption in-transit and at-rest
 - Automatic zero-downtime security patching
- Self-Repairing
 - Automated downtime protection – HA, auto-recovery
 - Zero-downtime patching and upgrades



*Coming soon

Sample Customer Use Cases Across Industries



LOGISTICS



Maritime shipping documentation



CORP. FINANCE & FINANCIAL SERVICES



IndianOil

Bank Guarantee



PROJECT MANAGEMENT



Solar Energy Project Tracking & Rewards Solution



GLOBAL TRADE



FEDERAL GOVERNMENT OF NIGERIA
FEDERAL MINISTRY OF FINANCE
NIGERIA CUSTOMS SERVICE (NCS)

Excise Licensing and Taxes



E-COMMERCE



Multi-brand loyalty network



SUPPLY CHAIN



Food Provenance & Quality Tracking

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Porsche becomes the first automotive manufacturer to implement and successfully test blockchain inside of a car

[Read case study](#)




<https://xain.io/>

TRADEFIN PROTOCOL

TradeFin is building a decentralized, blockchain-based, and open-source protocol and technology stack for business-to-business payments and supply chain finance.

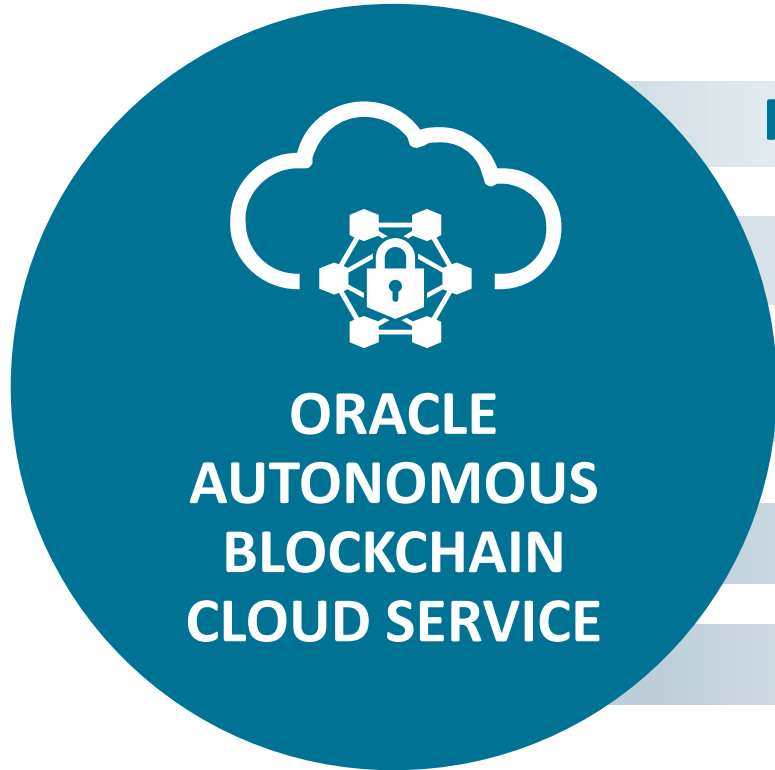
[WATCH THE VIDEO TO LEARN MORE](#)



<https://www.tradefin.com/>



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Pre-Assembled

Open

Plug and Play Integrations

Enterprise-Grade

Autonomous

**Oracle's
Experience and
Expertise**



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Next Steps




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