

IBM and the Future of Technology



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Mitie Technology Day | June 2018

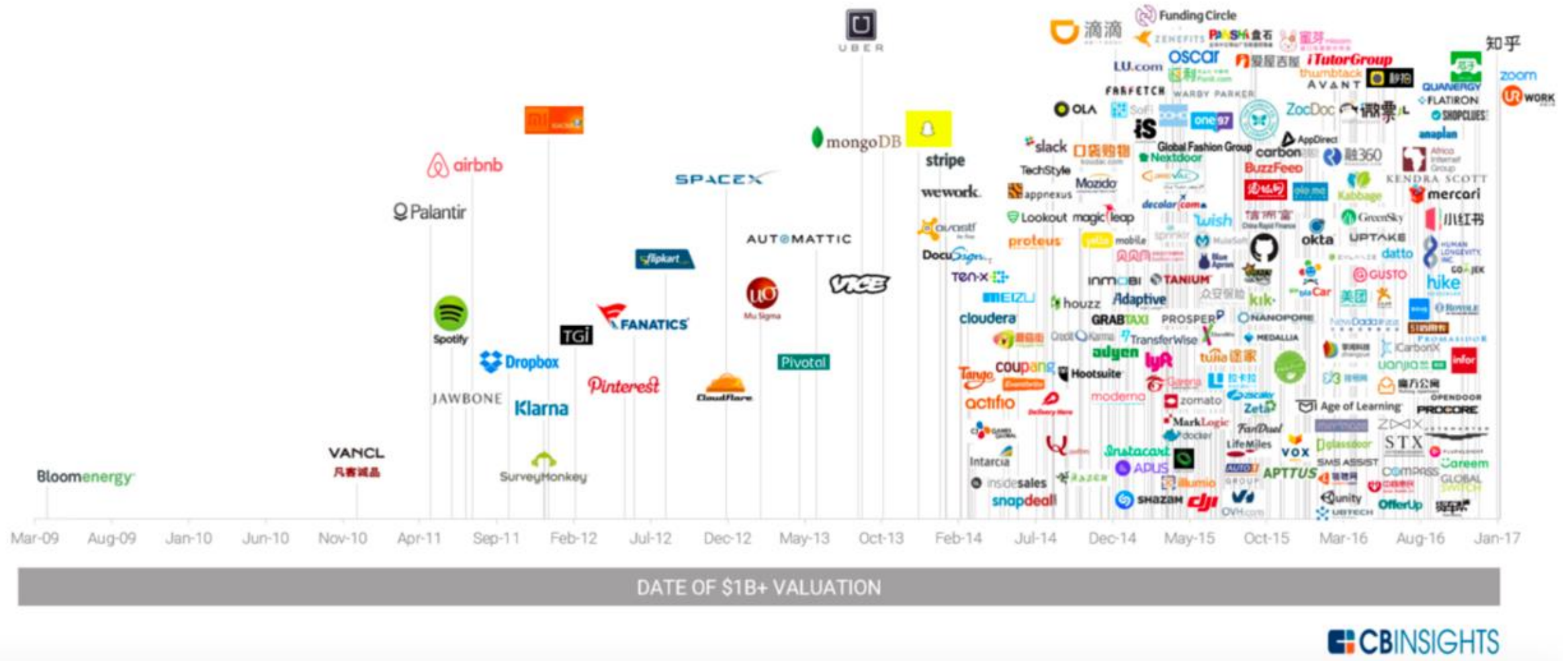


INDUSTRIES are DISRUPTING

Industries are disrupting

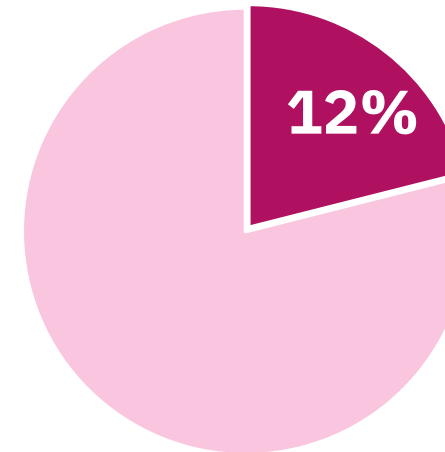
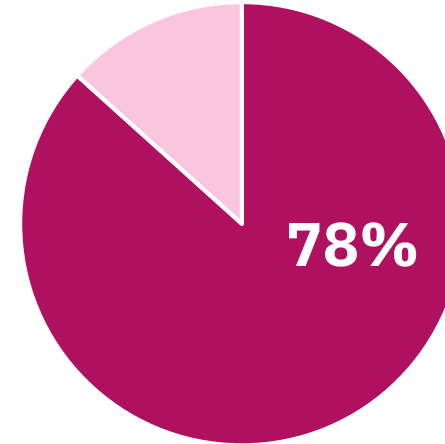
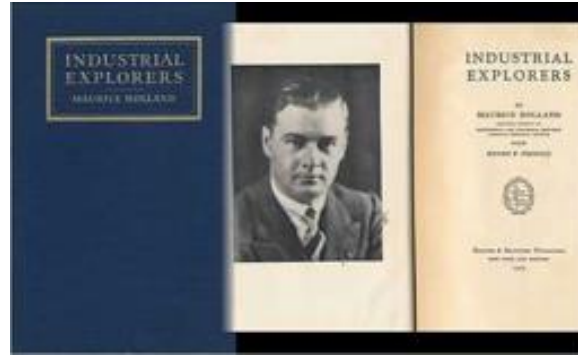
- different velocities in different sectors and in different geos... for lots of reasons
- but common themes
- and happening in industrial sector
- and UK
- and 'Engineering, Construction and Operation/ FM'

Scaling ahead of the Unicorns



INNOVATION is CRITICAL to
address/ deal with this DISRUPTION

What's it take to shift to scaled solution?



WHAT is DISRUPTING exactly?

WHAT is DISRUPTING exactly?

1

Value Chain Component

- Individual elements of the value chain seeing new entrants, niche players, changes in how current capabilities are delivered/provisioned.
- i.e. Customer Service in Operations

2

End to End Value Chain

- A rearrangement of activities across the value chain in how they connect together and where value is created, and who does what in each phase.
- i.e. Vertical Integration – one organisation owning, designing, programme managing, building, operating.

3

Expanded Value Chain

- A clustering of capabilities that extends scope of products and services into new areas (increasing scope of value chain)... but also bringing new players from other industries in!
- i.e. Facilities Management offering transit services to occupants

The Digital Reinvention of the FM Industry



Existing Value Chain of Participants



1

Value Chain Component

- Individual elements of the value chain seeing new entrants, niche players, changes in how current capabilities are delivered/ provisioned.
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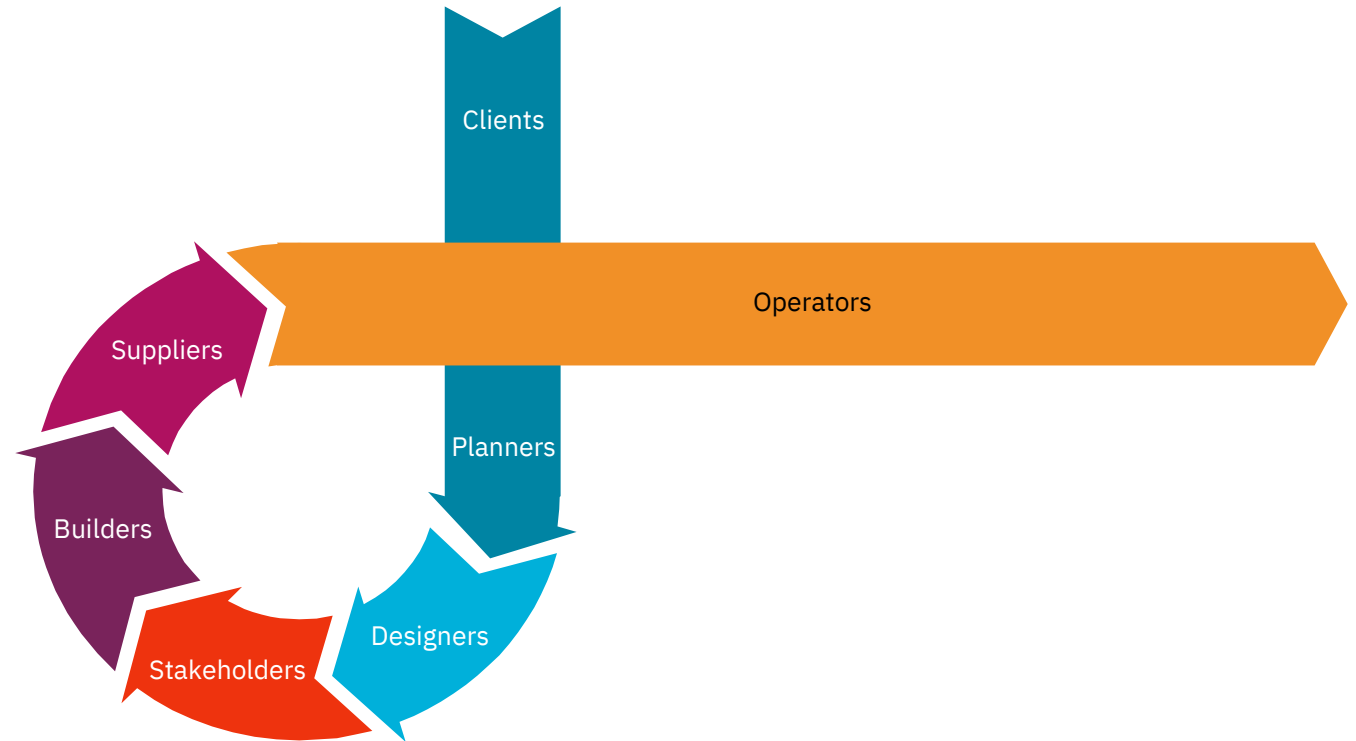


The Digital Reinvention of the FM Industry

2

End to End Value Chain

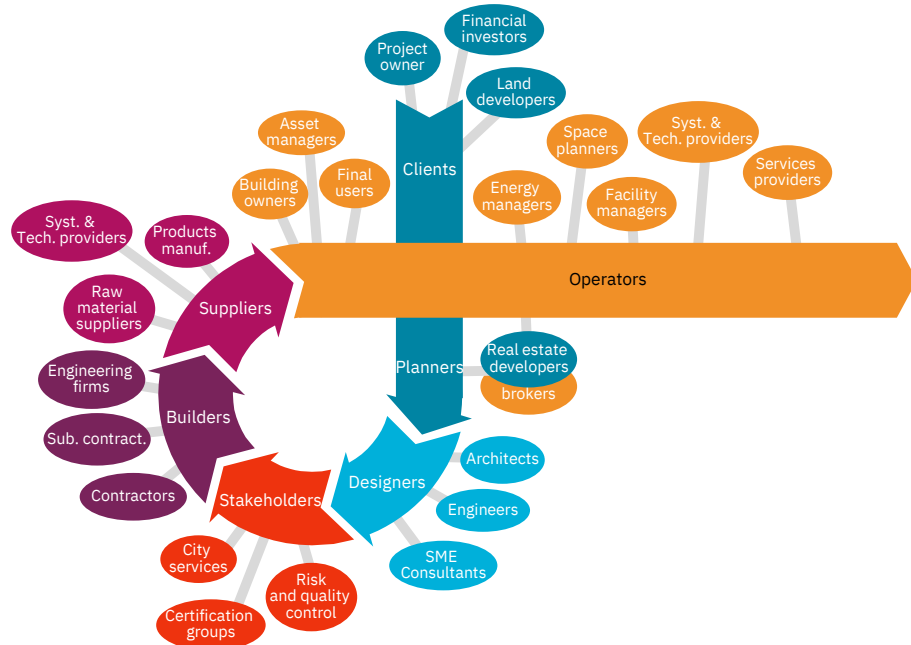
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The Digital Reinvention of the industry

3

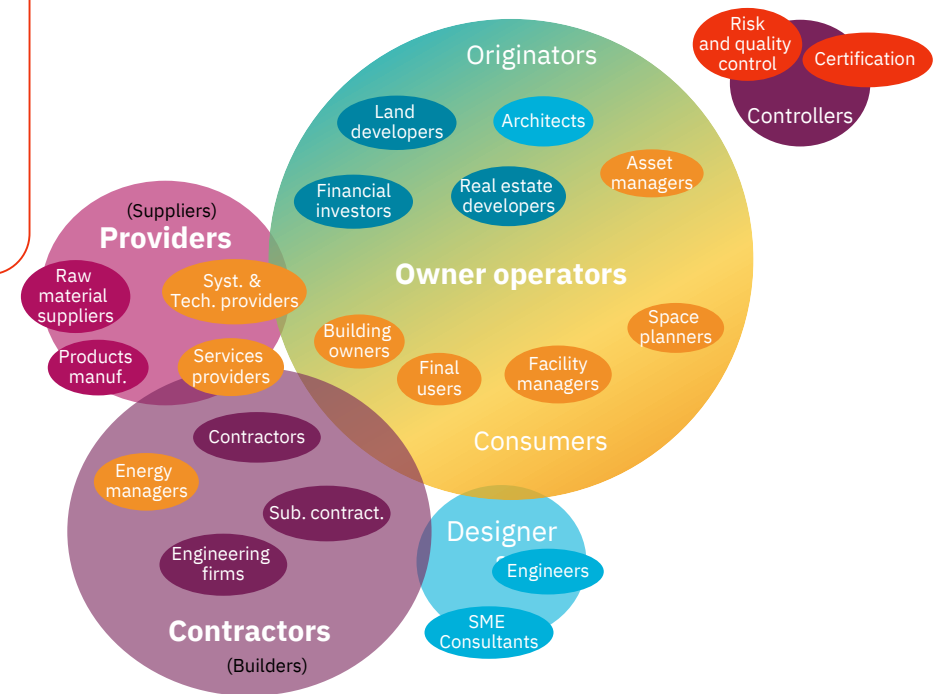
Existing Ecosystem



Expanded Value Chain

- A clustering of capabilities that extends scope of products and services into new areas (increasing scope of value chain)... but also bringing new players from other industries in!
- i.e. Facilities Management offering transit services to occupants

Redefined Ecosystem



WHAT are STRATEGIC RESPONSES by Organisations to Address each of these Disruption types?

Responses?

1

Value Chain Component

2

End to End Value Chain

3

Expanded Value Chain

A

“4 walls” – protect and grow current business

- Customer centricity
- Safety, security, reliability
- Ruthless efficiency/automation
- Prevent becoming a commodity

B

“Redesigned Industry Value Chains”

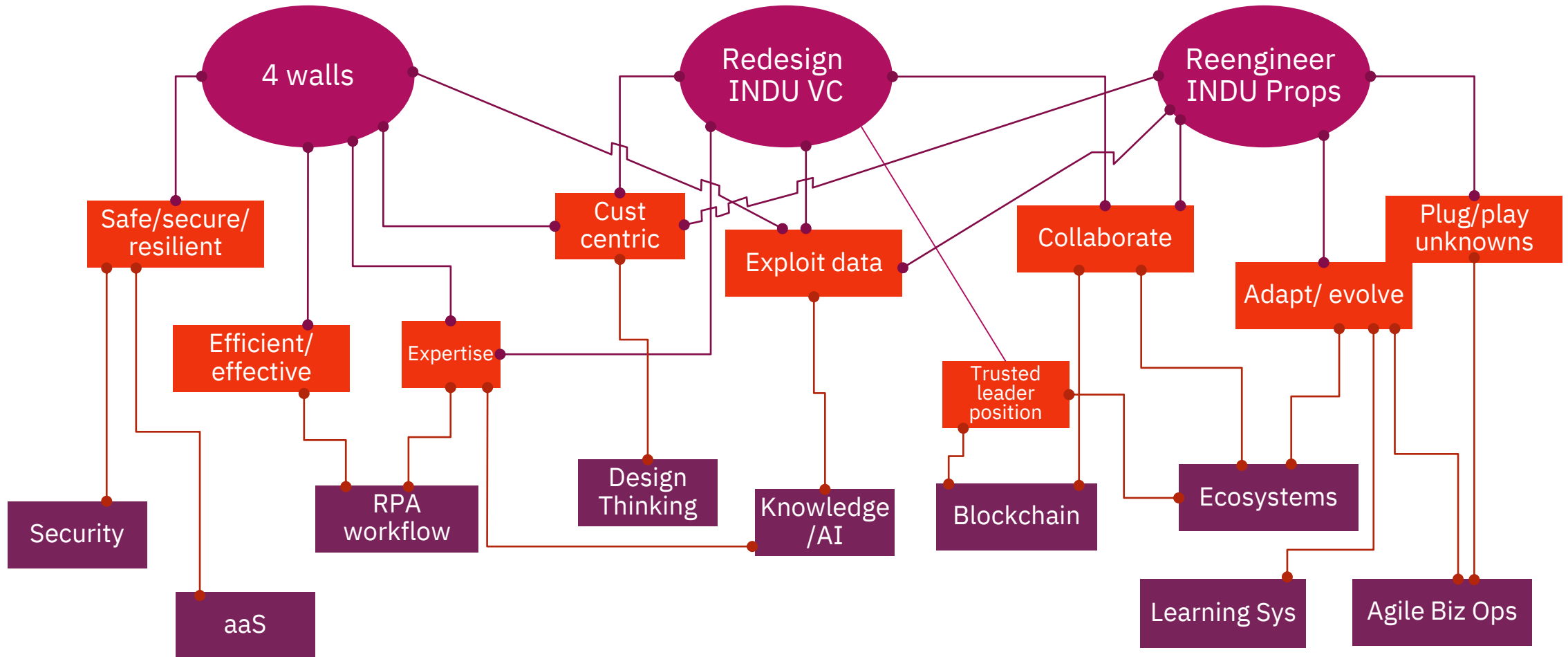
- Business networks
- Collaboration
- Ecosystem plays within industry
- Exploiting owned data
- Using expertise
- Digital reinvention

C

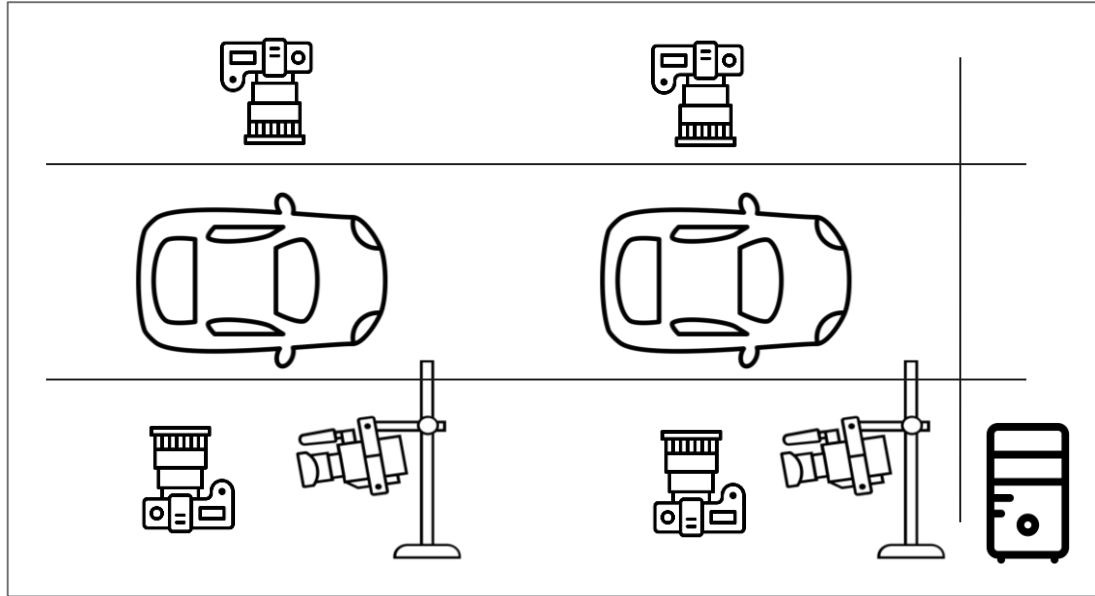
“Reengineered Industry Propositions”

- New business models
- New capabilities
- Ecosystems outside industry ‘norms’
- New data
- Digital transformation

Strategic Capability Network



Machine Learning in Operations – 4 Walls



VIABILITY

- >95% accuracy visual inspection

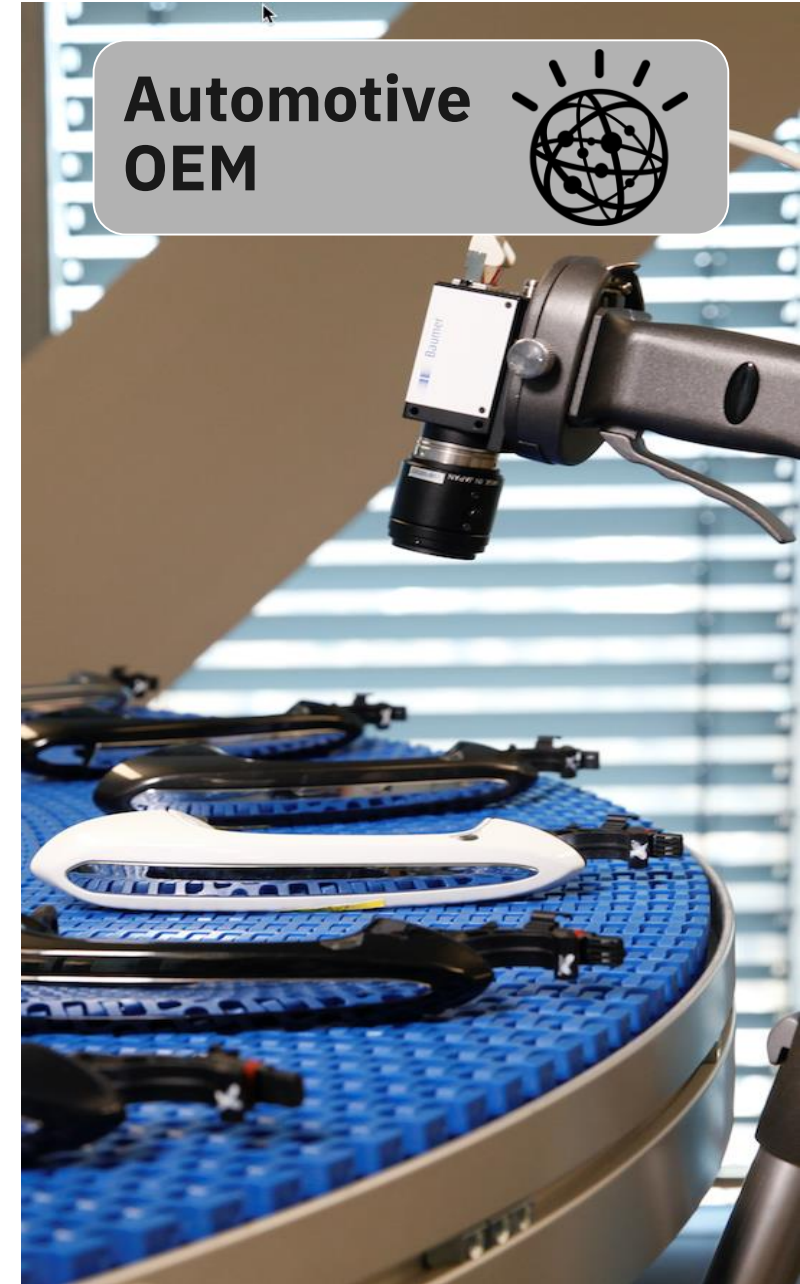
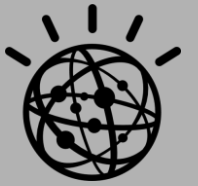
INTEGRITY

- Re-purpose large Data sets

EXTENSIBILITY

- Just 3.5days to train up new use case

Automotive
OEM



Supply Chain and Logistics – Redesign Value Chain



VIABILITY

- Access... Open and Neutral
- Multiple parties

INTEGRITY

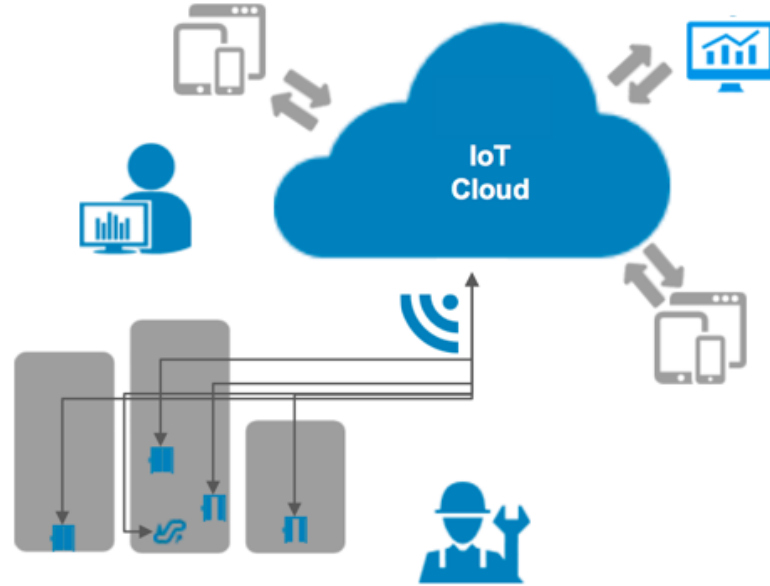
- Blockchain -trusted and secure data
- Smart Contracts

EXTENSIBILITY

- Hyperledger Platform for full supply chain
- Joint Venture backing



Connected Product in Aftermarket – Reengineer Industry Proposition



VIABILITY

- 1.1million elevators and escalators

INTEGRITY

- KONE owned Data

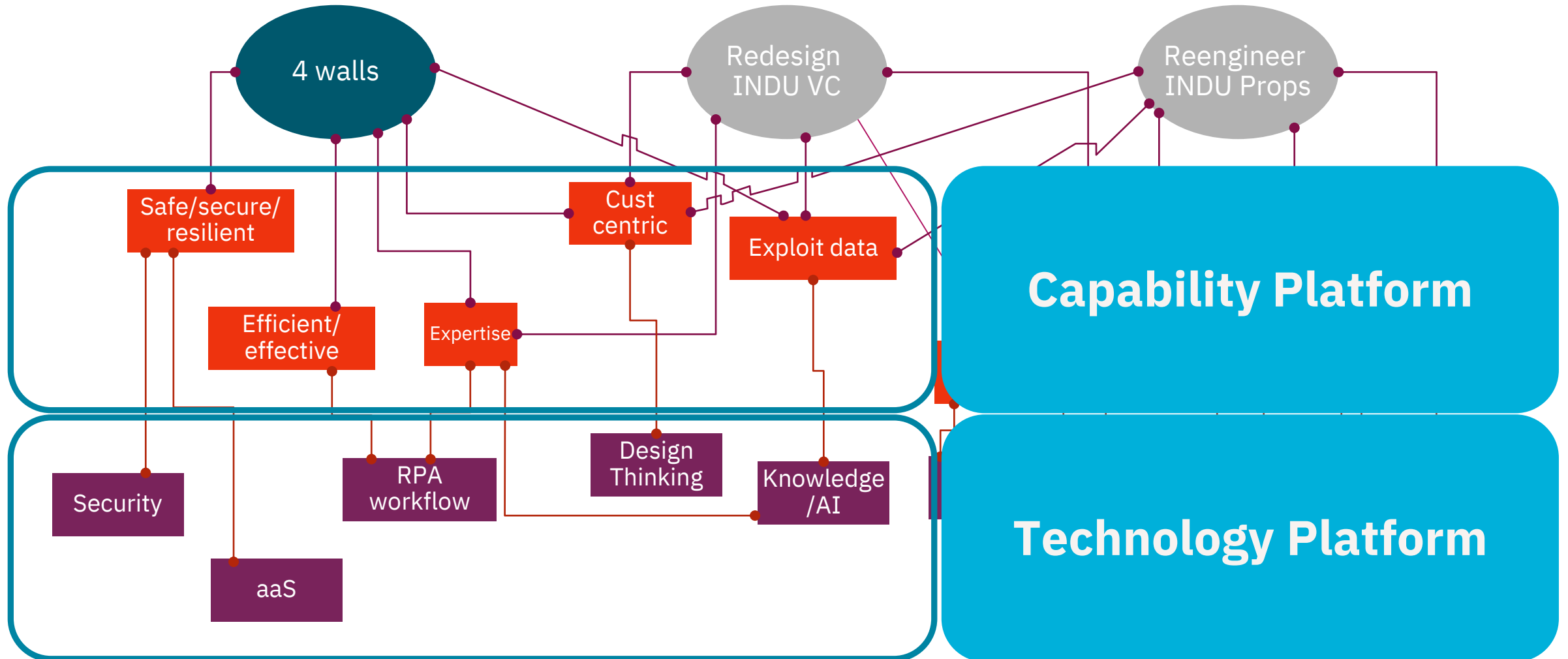
EXTENSIBILITY

- New services – API Ecosystem (e.g. cab hailing)

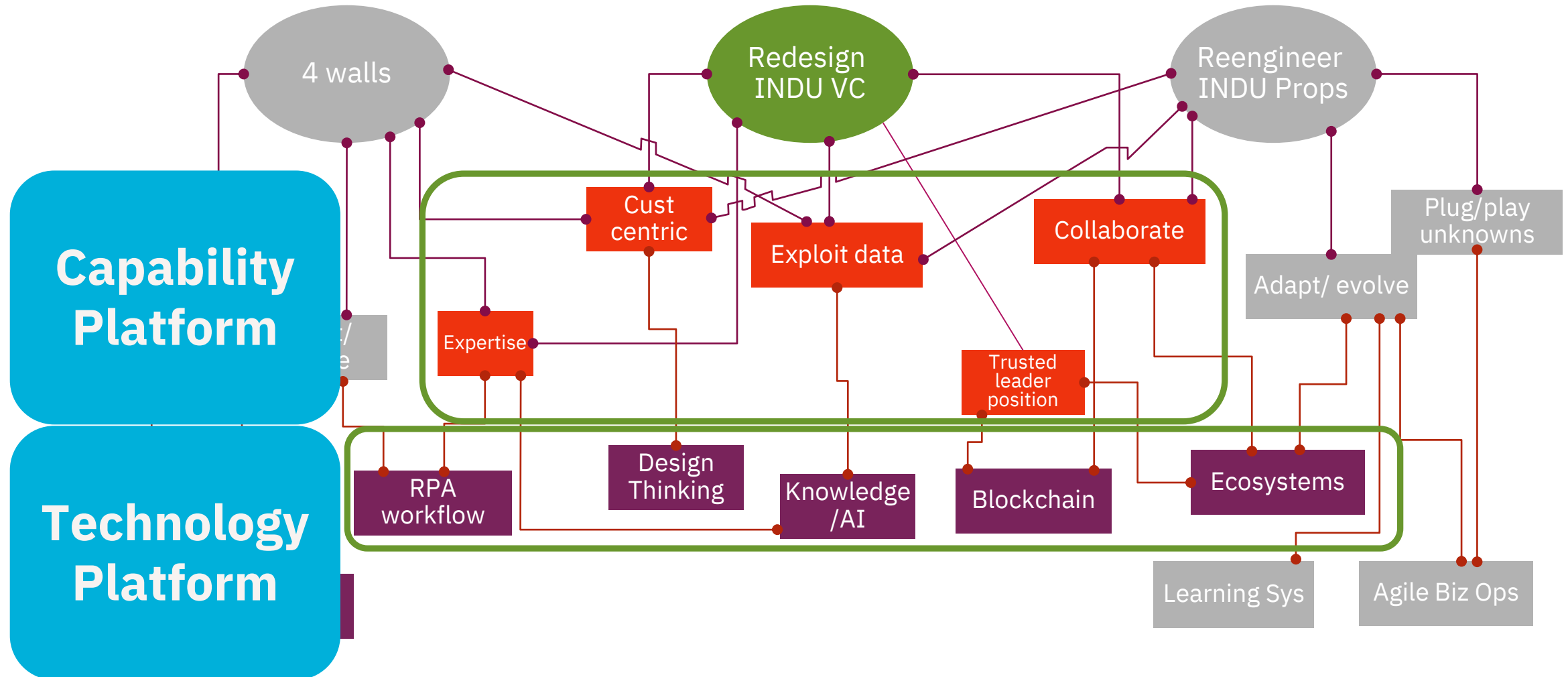


How PLATFORMS help with this?

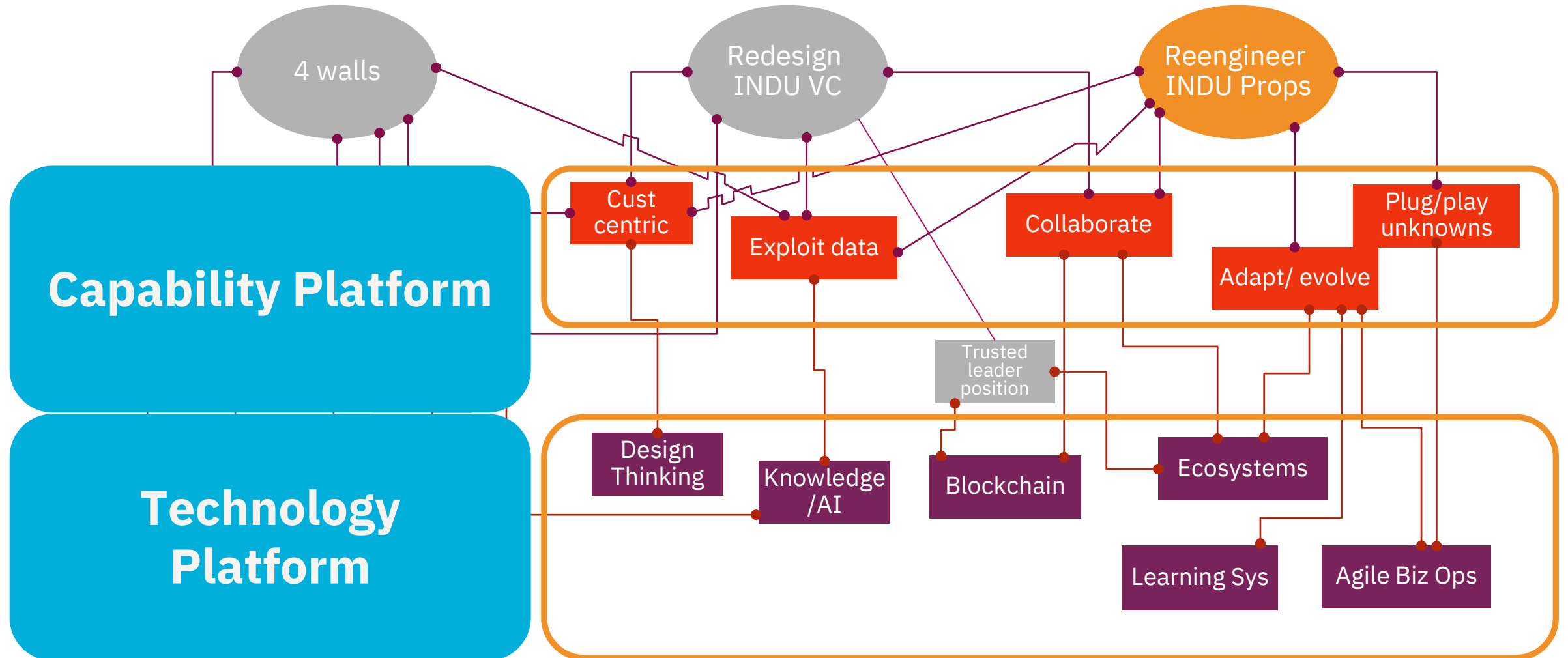
4 Walls – protect and grow business



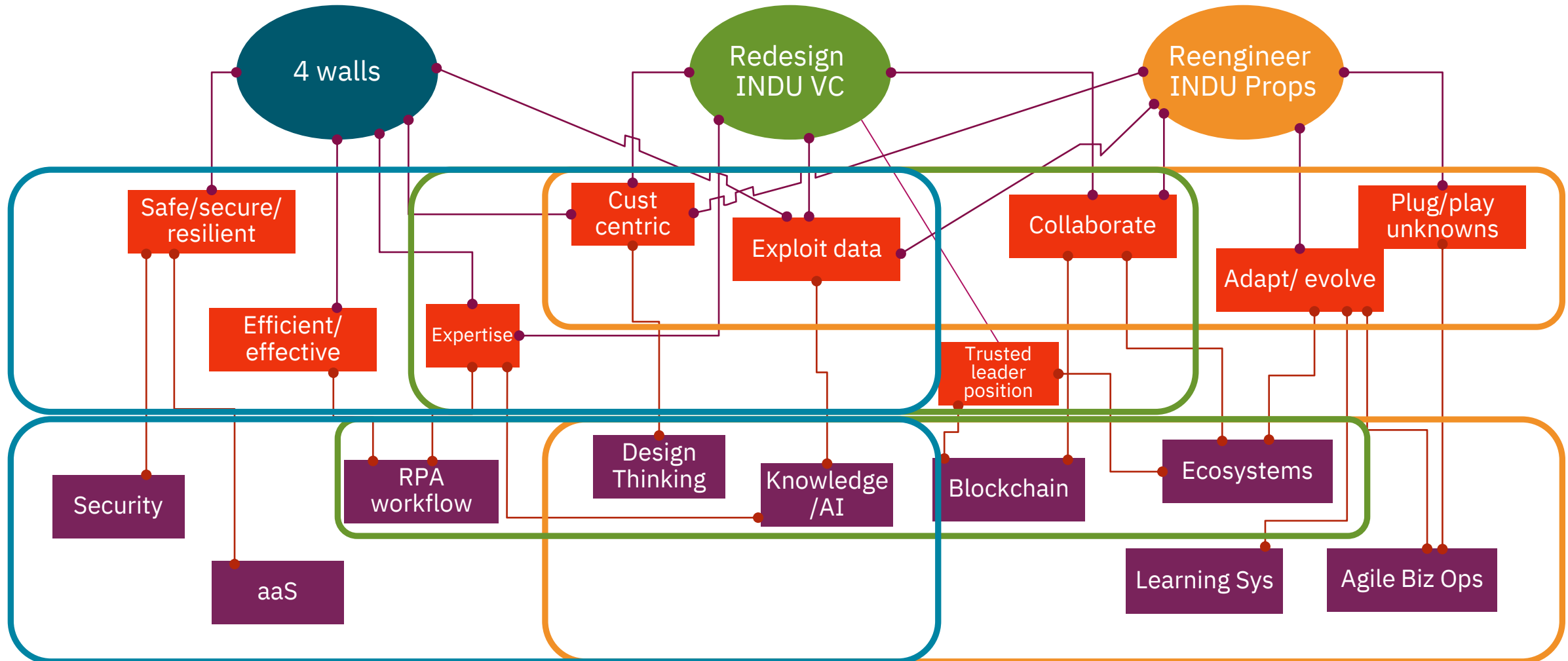
Redesign INDU Value Chain



Re-Engineer Industry Propositions



Share enablers and capabilities... so need to compose PLATFORMs



What Architecture Decisions do each
of these STRATEGIC RESPONSES/
PLATFORMS require?

Strategic Architecture Decisions

A

“4 walls”

- Multiple capability platforms
- Decide what compete on
- What commoditise on
- How integrate
- How keep ‘agile/adaptable’

B

“Redesigned Industry Value Chains”

- What offer as industry platform to others (including traditional competitors)
- What Industry platforms to join in on
- How ensure sufficient integration but enough detachment
- How maintain destiny (able to get in/out)

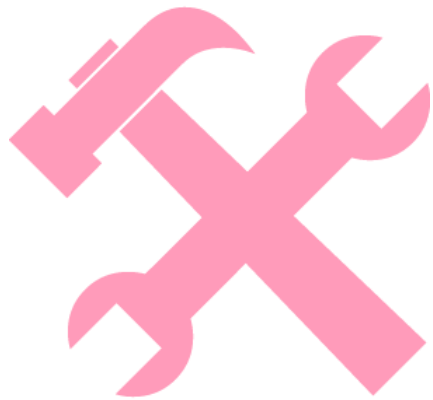
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“Reengineered Industry Propositions”

- What industries extending into
- How extend platform coupling to experiment and scale, without sacrifice

What's it take to **support** the shift to scaled solution?

ARCHITECTURE



VIABILITY

- Integration
- Location



INTEGRITY

- Data
- Analytics
- Security



EXTENSIBILITY

- Platform
- Ecosystems

