



IoT Business Model Playbook



Best Practices & Approach



The most valuable companies in the world today leverage digital technologies to disrupt conventional markets and create new markets.

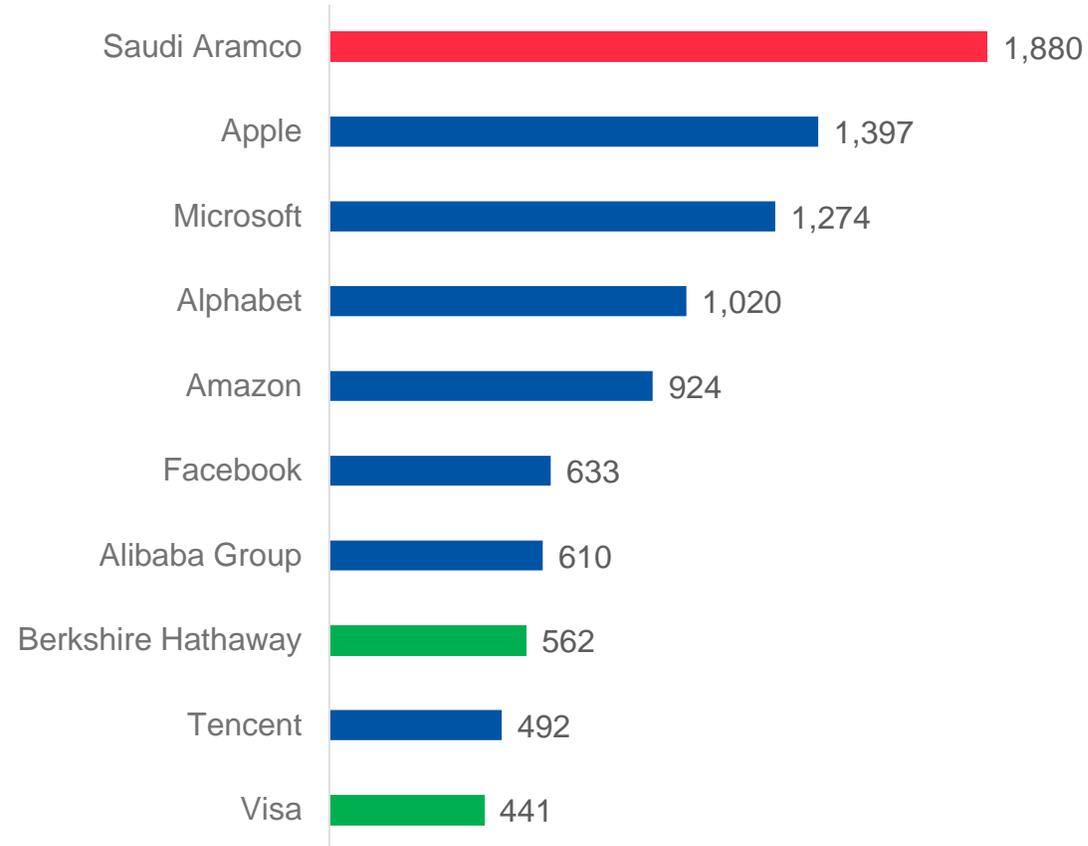
Most Valuable Public Companies, 2010

Total Value : 2.3 Trillion USD



Most Valuable Public Companies, 2020

Total Value : 9.2 Trillion USD



Source of Value

- Cheap oil monopoly
- Consumer IoT + PaaS model
- Cloud IaaS + PaaS + SaaS
- IaaS + big data
- E-commerce + cloud
- Social media + big data
- E-commerce + cloud
- World's top investor
- Social media + big data
- Financial innovation

Business model innovation enable corporates to disrupt conventional markets, yet opportunities are often ignored or pursued slowly for three reasons...

1

Big companies ignore small opportunities (that are tomorrow's high growth businesses).

2

A company's accounting metric pull resources toward incremental growth in known markets.

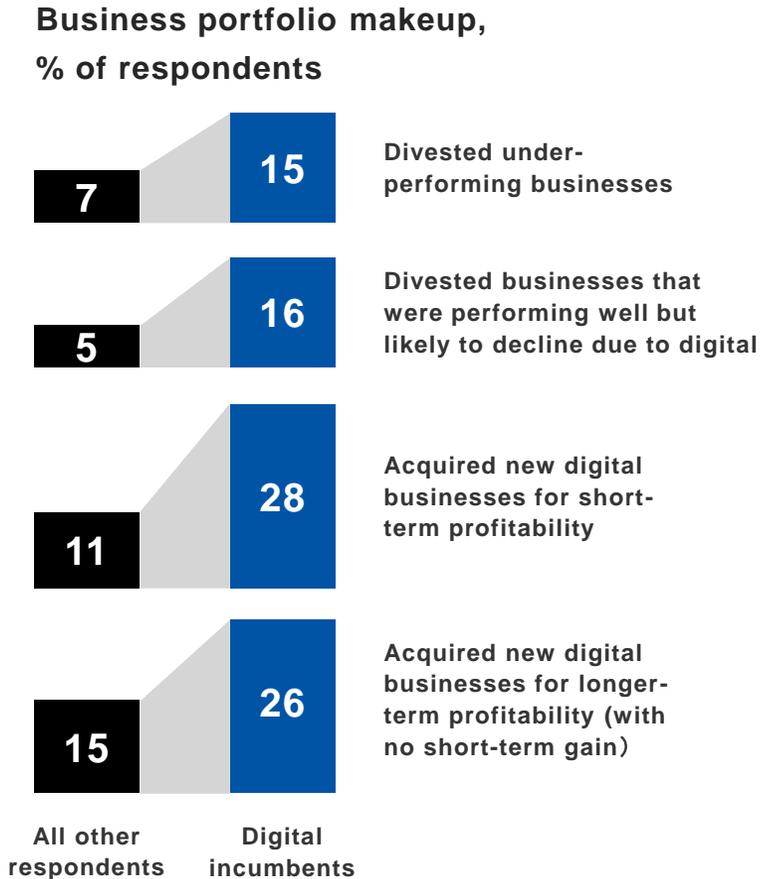
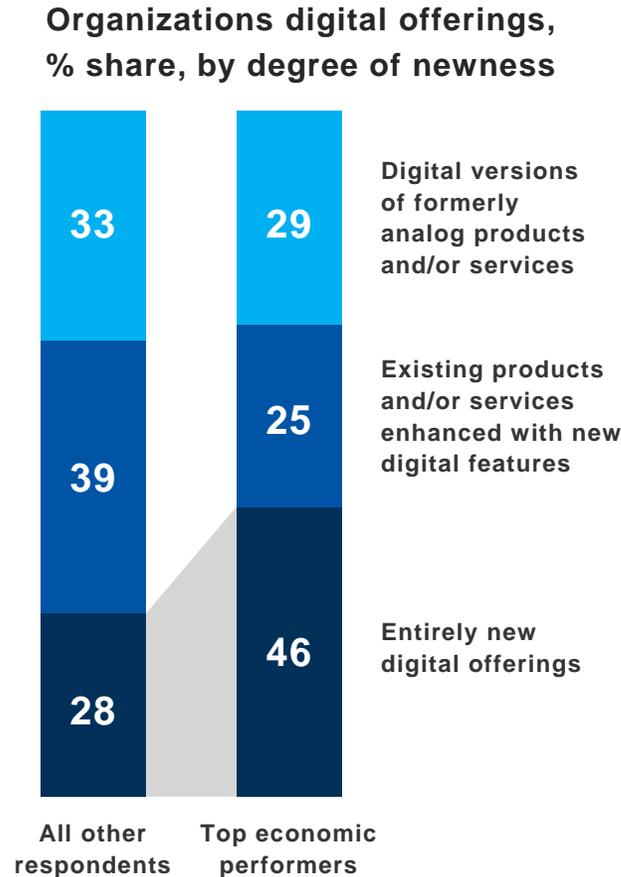
3

Emergent opportunities often have limited market data. Big companies are risk-averse to invest without clear market intelligence.

... But developing a data-driven revenue streams is increasingly urgent.

70%
of executives say the pandemic is likely to accelerate the pace of their Digital Transformation.

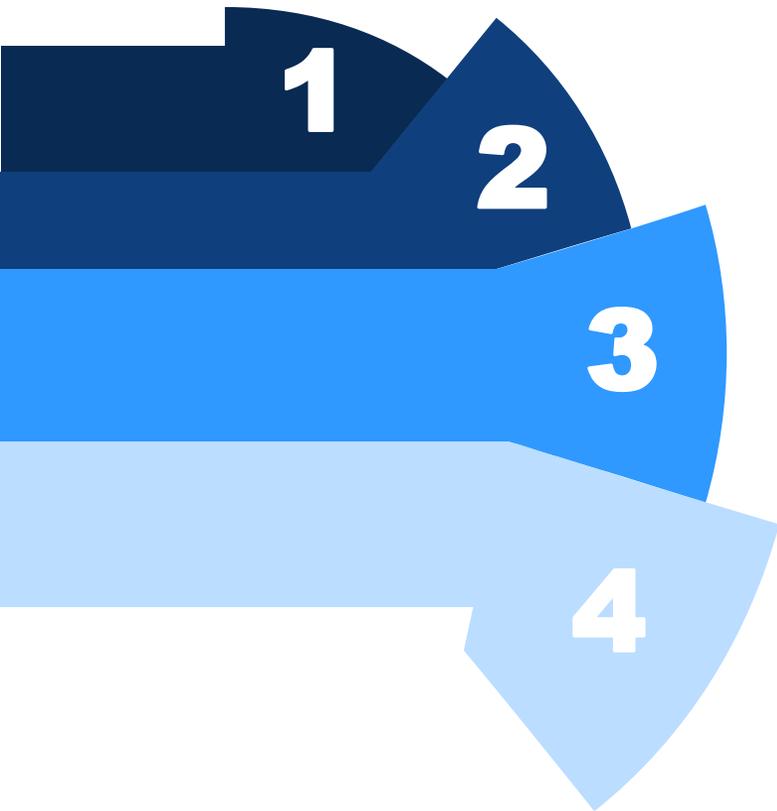
150%
cumulative Shareholder Return lead of the best performers in 2007 over the rest by 2017.



Source: McKinsey



This playbook provides an overview of IoT ONE insights on data-driven business value and best practices for developing IoT business models.



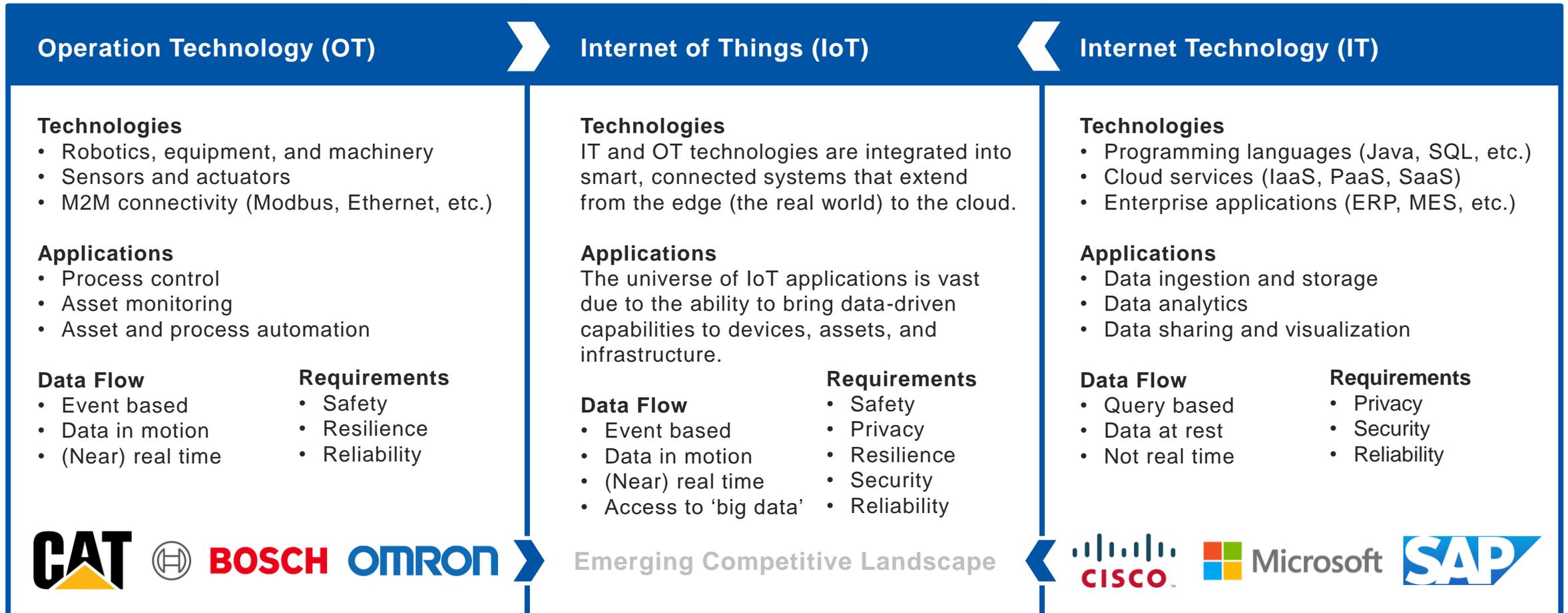
The IoT business model playbook...

- 1** Illustrates the differences between IoT and traditional product offerings and business models
- 2** Maps the landscape of IoT business model configurations
- 3** Provides a roadmap for IoT business model innovation
- 4** Introduces practical tools to support digital business growth

Understanding IoT Business Value



IoT solutions integrate the applications, technologies, and requirements of IT and OT domains into unified online-offline systems.



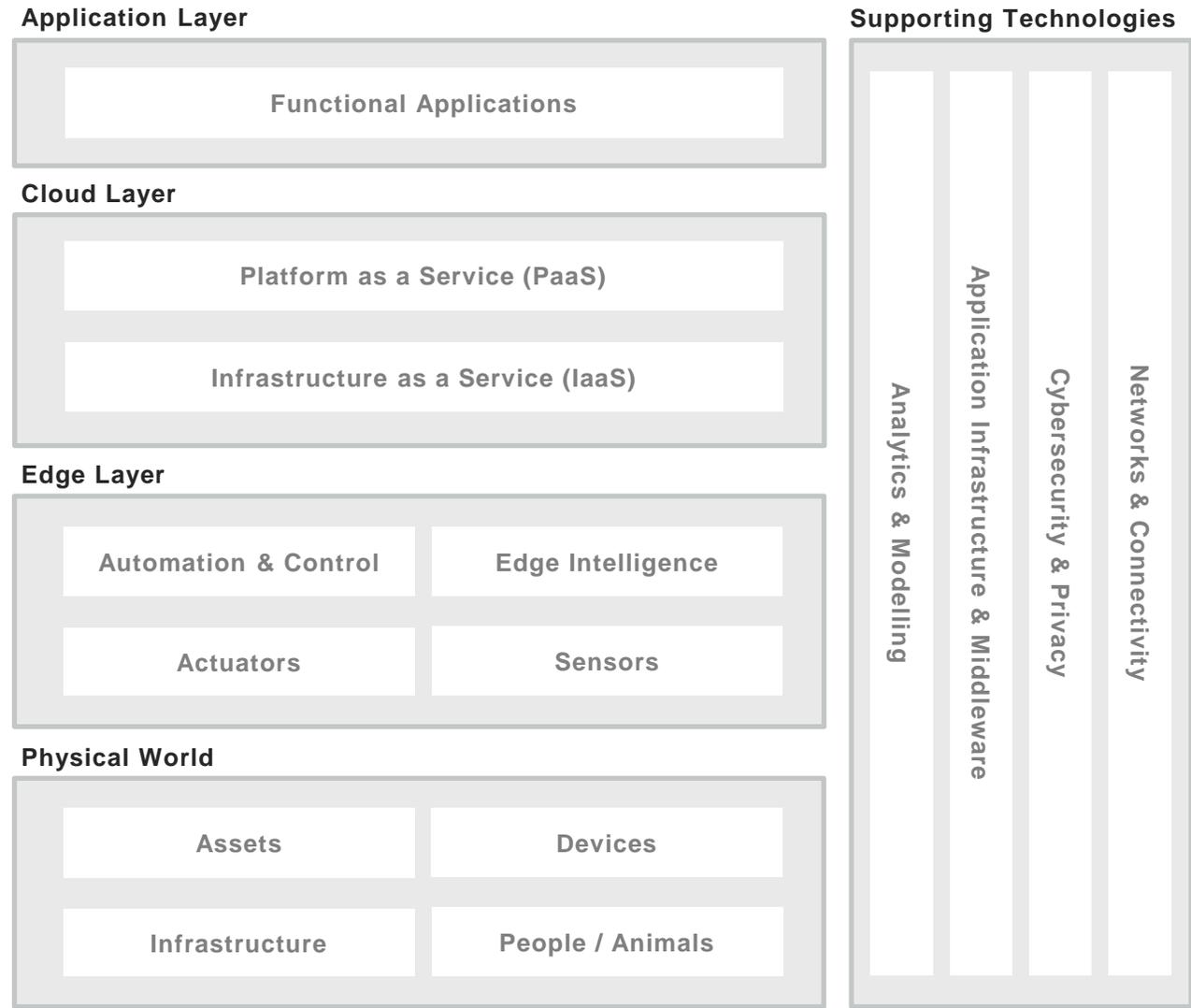
The IoT tech stack is composed of three layers that interface with the physical world and are enabled by supporting technologies.

Applications are the level of the technology stack that typical users interact with on mobile, wearable, or desktop devices.

The cloud layer aggregates data from multiple IT and OT systems and provides access to a wide range of services.

The edge layer is integrated into the physical world, where it obtains and processes data and initiates action.

Integration of IT capabilities into the physical world are central to all value created by IoT systems.



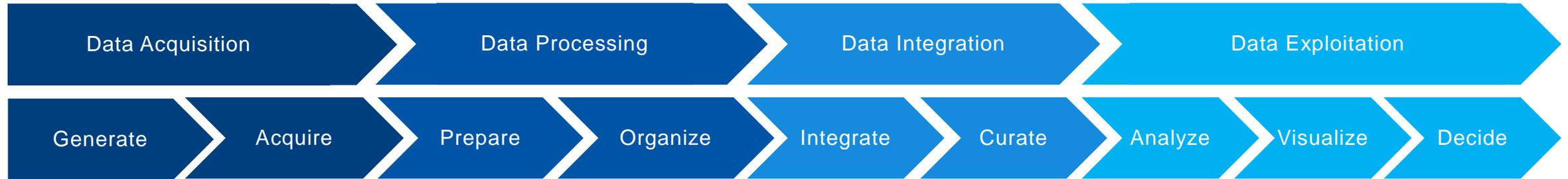
Analytics and models can be performed on the edge or cloud layers and is managed and visualized in the application layer.

Application infrastructure and middleware link components of a system together and enable the development of complex systems from individual components.

Cybersecurity and privacy solutions must be deployed at all levels to minimize the risk of the intentional or accidental misuse of data or physical assets in the real world.

Networks and connectivity technologies move data in and between the layers of the technology stack.

Data are the fuel for all IoT systems. All incremental value of an IoT product or offering is related to data acquisition, processing, integration or exploitation.



- Obtain data from internal and /or external source

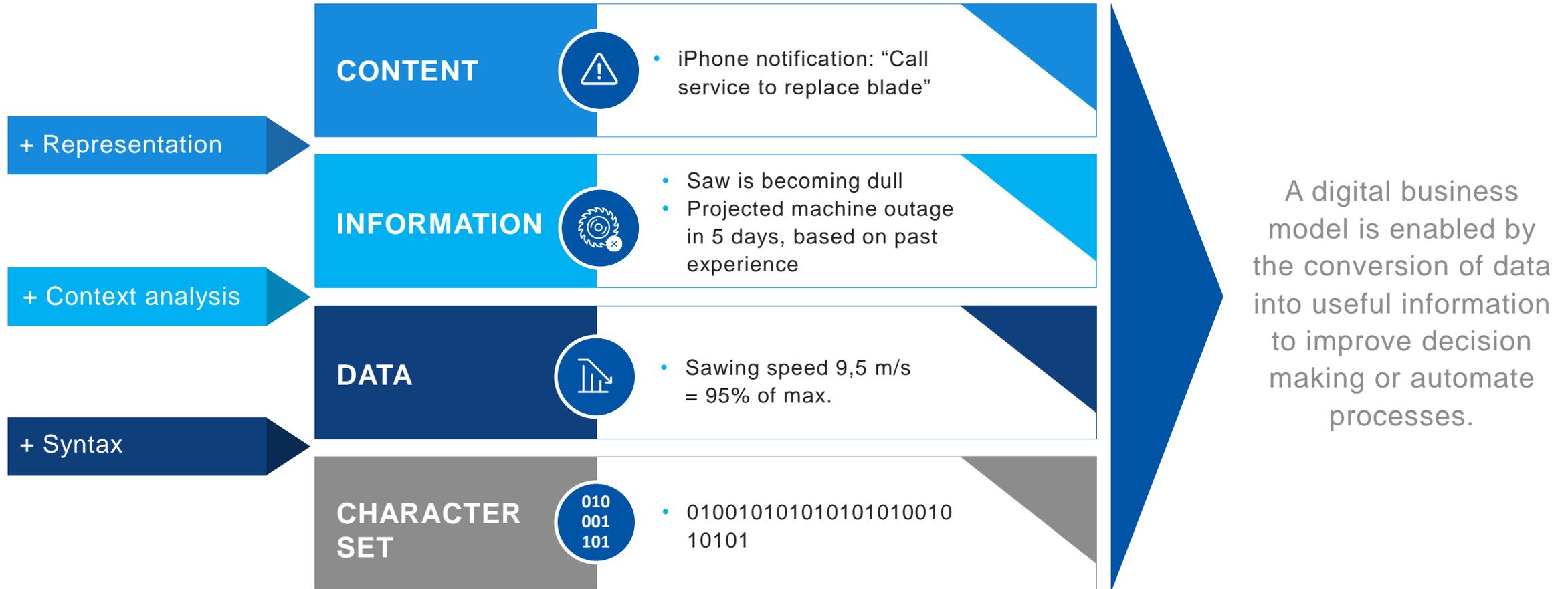
- Create inventory of data sources
- Enable access to sources
- Set up access-control rules
- Identify syntax, structure and semantics for each data source

- Interpret data
- Establish a common data representation
- Maintain data provenance

- Analyze integrated data
- Present analytic results to a decision maker
- Determine actions to take

Source: This methodology was developed by IoT ONE's strategic partner Excubate GmbH.

What do we actually mean with “data-driven”? We often need the context or “meta data” to convert raw data into usable information.



Sources: Definition of data and information as per semiotics; Definition of Content: <https://www.econstor.eu/obitstream/10419/60078/1/719690889.pdf>

The Internet of Things requires a mindset shift in order to leverage new ways to create, capture and distribute value.

		Traditional Product Mindset	IoT Product Mindset
Value Creation	Customer Needs	Solve for existing needs and lifestyle in a reactive manner	Address real-time and emergent needs in a predictive manner
	Offerings	Stand alone product that becomes obsolete over time	Product refreshes through over-the-air updates and has portfolio synergy value
	Role of Data	Isolated point data is used for future product requirements	Information convergence creates the product experience and enables services
Value Capture	Path to Profit	Sell the next product or device	Enable recurring revenue
	Control Points	Potentially includes commodity advantages, IP ownership, & brand	Adds personalization and context; network effects between products
	Capability Development	Leverage core competencies, existing resources & processes	Understand how other ecosystem partners make money
Value Distribution	Financial Flow	One-directional flow of financial value from buyers to suppliers	Complex flow of financial value between a network of solution contributors
	Timing	Fixed payments for pre-determined sums at pre-determined times	Flexible payments that differ based on market conditions and real-time transactions

Source: SMART DESIGN, IoT ONE



Why is a specific business model development approach required for IoT solutions?

IoT offers unique growth opportunities in many industries.

At the same time, a complex technology stack and value chain must be developed in order to realize those possibilities. This presents specific requirements for the design of IoT business models.

Business model development begins with understanding customer needs and deriving a compelling value proposition.

However, in many cases a specific context already exists. These very context-driven cases require a structured approach to eliminate blind spots. Three domains need to be bridged: the operational technologies (OT), information technologies (IT), and the business.

Source: Bosch IoT Lab

1

Extend scope beyond the company level to the ecosystem level

In most IoT scenarios, value creation happens within an ecosystem with multidirectional value and service streams between various stakeholders. It is necessary to obtain a holistic view of all relevant stakeholders, their contributions, and their goals.

2

Track and visualize complex value streams within the stakeholder network

Traditional approaches to illustrate value chains fall short of capturing value added in the context of IoT because they assume linear value chains from suppliers down to customers. Synergies and dependencies between nodes are critical drivers of value creation.

3

Explicitly consider the value proposition for all key stakeholders

To foster sustainable value creation within a stakeholder network, it is crucial that all contributing parties have incentives to participate in the network. This requires considering the value proposition for key stakeholders in early phases of business model development.

4

Consider data as an asset within and beyond the actual opportunity

Connected devices can capture a wide variety of data. This data can be leveraged either as value adding services within the existing business model or in new business models. This may include direct data monetization, value-added services, or other offerings.

IoT Business Model Configurations



All IoT business model configurations involve the servitization of data, processes, and / or products.

IoT business models can be highly differentiated but they all involve iterations of one or more of the three common business model variants.



DATA as a SERVICE

Data-as-a-Service solutions enable new insights by bundling both data and the algorithms needed to interpret it into a single package. For example, predictive maintenance solutions monitor industrial equipment and alert operators when algorithms indicate that maintenance is required.



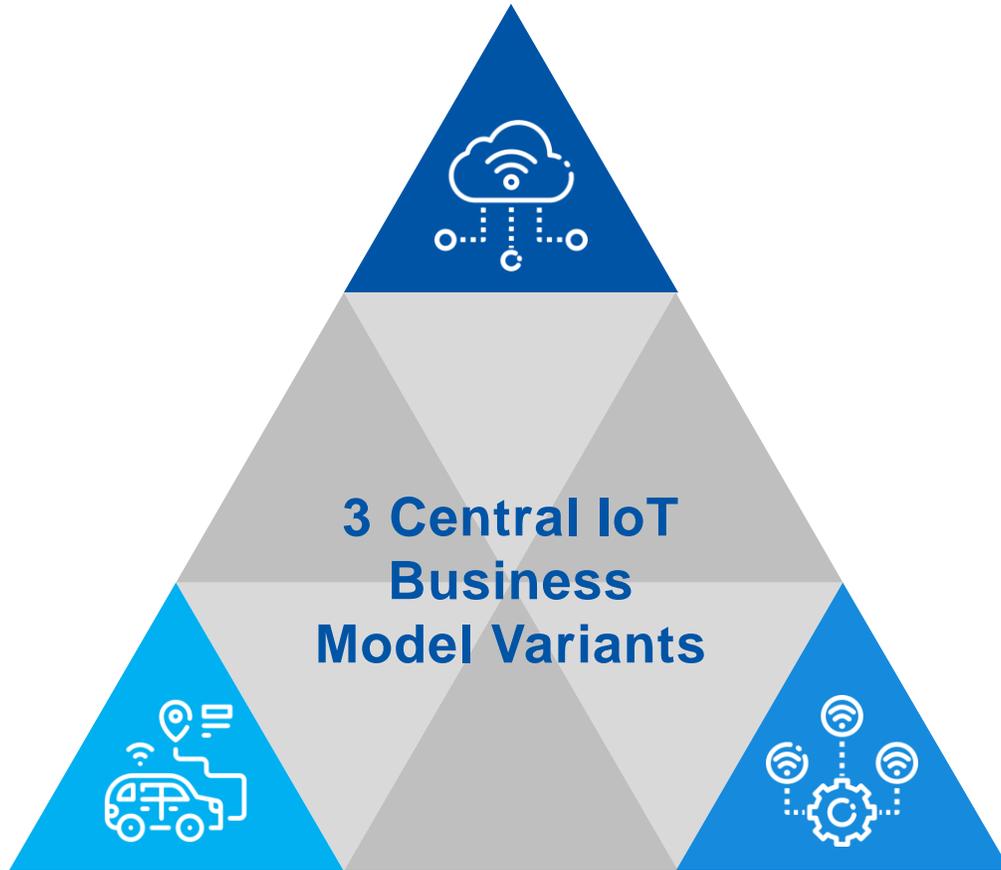
PROCESS as a SERVICE

Process-as-a-Service solutions enable improved operational efficiency by deploying sensors, services, and connectivity to monitor or automate processes. For example, providers of asset tracking solutions provide visibility into supply chain processes.

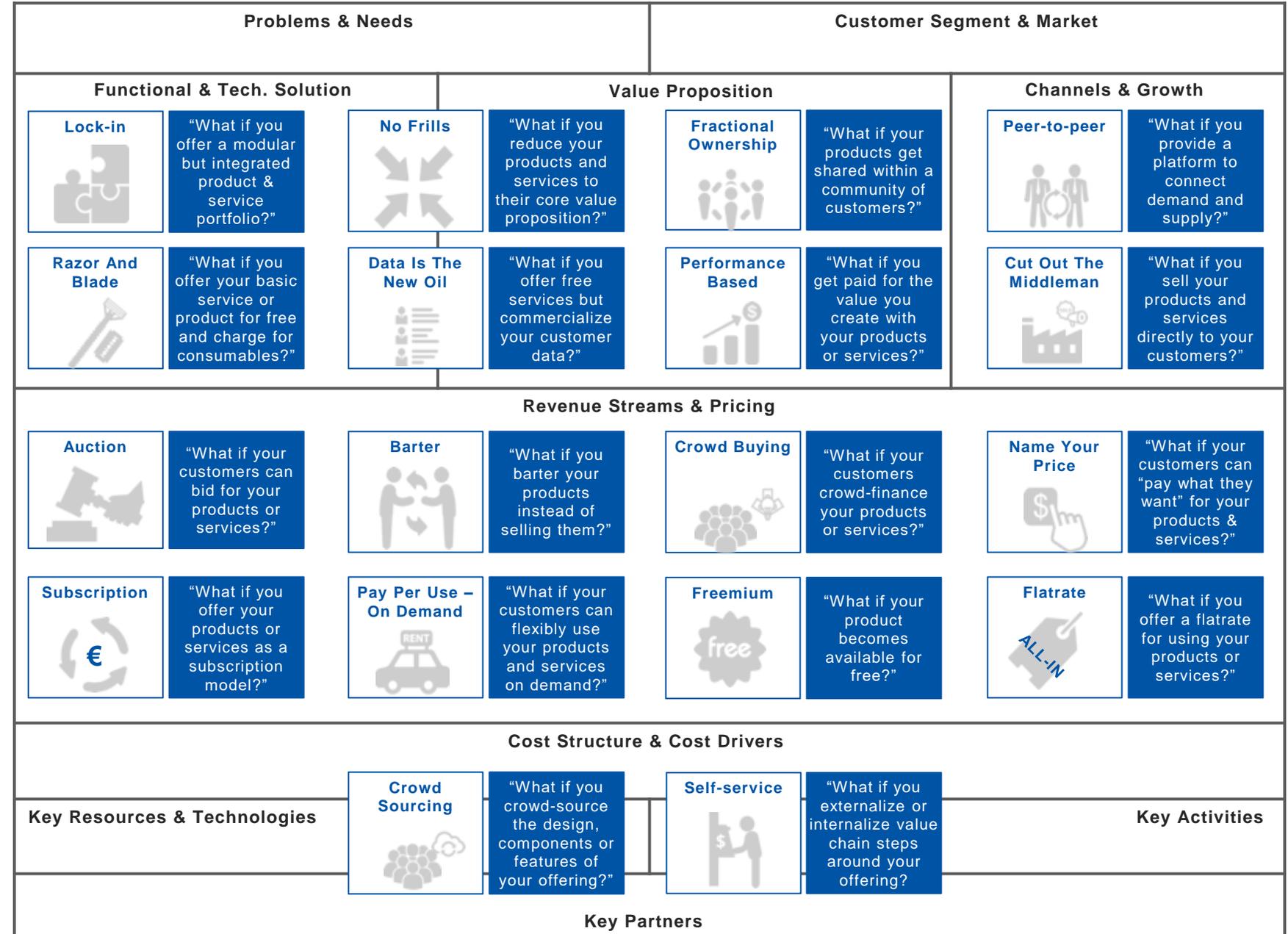


PRODUCT as a SERVICE

Product-as-a-Service solutions enable new offerings by fusing physical products, services, and monitoring software to replace owning an asset with subscribing to use the asset for a fee. For example, industrial equipment can be offered on a pay-per-use basis.



There are 18 Business Model Archetypes that can be utilized

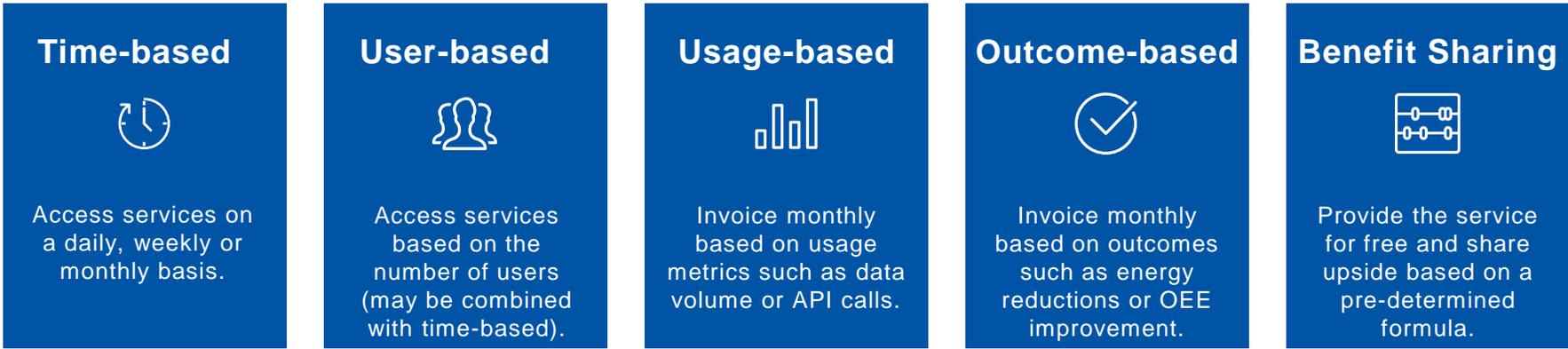


The value that IoT solutions generate can both be monetized through external customers and provided to internal customers to maximize the aggregate benefit.

Low Alignment of Customer Value and Billing Volume High

Monetization

There are five as-a-service pricing models that can be used to monetize IoT business models. Outcome-based and benefit sharing models most precisely align value with billing.



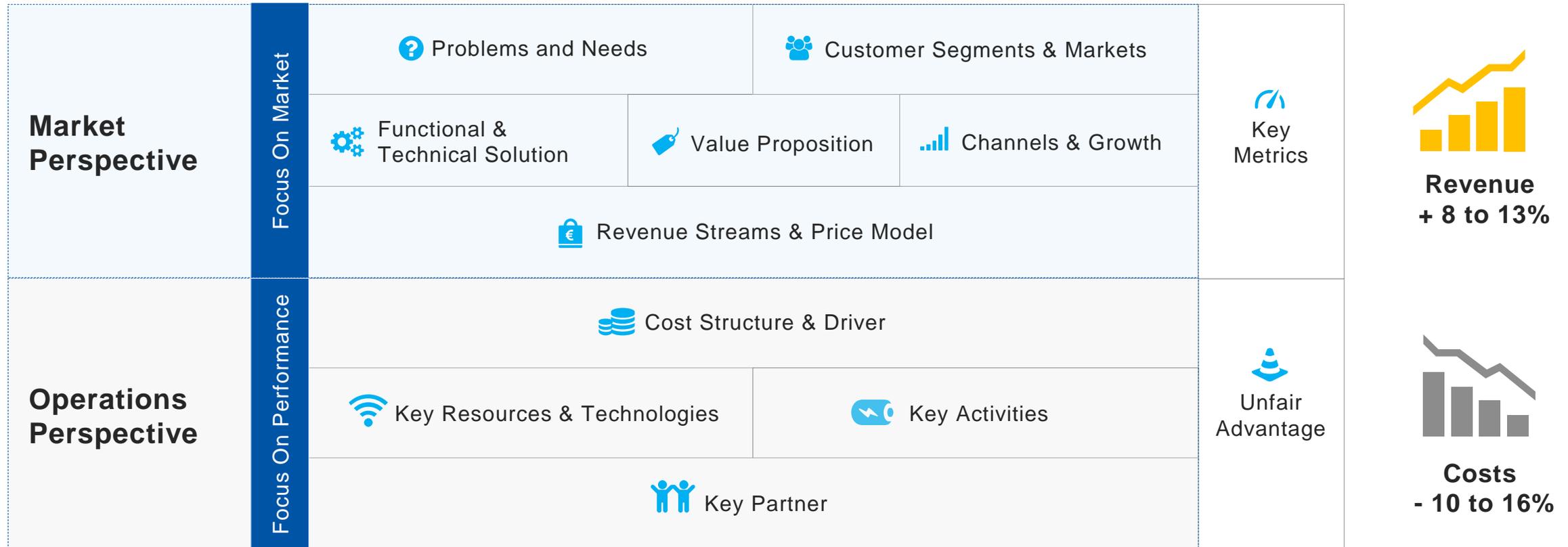
Internal Value

IoT solutions provide value to a variety of internal stakeholders, from R&D to operations to maintenance. Value capture depends on data access.



Others? 

IoT business models can realize significant benefits in both market performance and operations performance.



Sources: Study among 550+ businesses worldwide cross-industrial; Business Application Research Center

This methodology was developed by IoT ONE's strategic partner Excubate GmbH.

Example: Schindler uses machine-learning to order spare parts for repairs, increase equipment uptime, and decrease repair time and overall maintenance service expenses.



B2C

Schindler produces, installs, maintains, and modernizes elevators & escalators in public, residential, commercial, and high-rise buildings.

Focus On Market	? Problems and Needs		Customer Segments & Markets	Key Metrics
	Functional & Technical Solution	Value Proposition	Channels & Growth	
	Revenue Streams & Price Model			
Focus On Operations	Cost Structure & Driver			Unfair advantage
	Key Resources & Technologies	Key Activities		
	Key Partner			

01 AI monitors machinery in realtime via sensors

02 AI identifies & forecasts maintenance issues

03 AI recommends measures & sends technician

Maintenance process optimization

Multiple dimensions need to be considered when designing an IoT business model due to the complexity presented by data centrality, deep tech stacks, and network effects.

Business Model	Business Model Type	Internal efficiency gains			New internal services		New external services			
	Data sources	Internal existing	Internal self generated	External acquired	Customer provided	External free available				
	Aggregation Level	Individual data				Aggregated data				
	Key activity	Generation	Acquisition	Preparation	Organization	Integration	Analytics	Visualization	Decision	
	Offering	Data			Information/ Knowledge			Non-data product/service		
	Target Customer	B2B				B2C				
€€€	Revenue Model	Asset sale	Leasing	Licensing	Data-aaS	Process-aaS	Product-aaS	Advertising		
Privacy	Privacy	Non-personal data		Personal data		Personal data anonymized		Personal data pseudonymized		
	Approval required	Yes				No				
	Privacy Communication	Proactive			Transparent			Vague/Reactive		

Source: This methodology was developed by IoT ONE's strategic partner Excubate GmbH.



Example: Schindler’s data-driven elevator maintenance service is oriented around internal efficiency gains from internally managed assets.



Business Model	Business Model Type	Internal efficiency gains			New internal services		New external services			
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	Offering	Data			Information/ Knowledge			Non-data product/service		
	Target Customer	B2B				B2C				
€€€	Revenue Model	Asset sale	Leasing	Licensing	Data-aaS	Process-aaS	Product-aaS	Advertising		
Privacy	Privacy	Non-personal data		Personal data		Personal data anonymized		Personal data pseudonymized		
	Approval required	Yes				No				
	Privacy Communication	Proactive			Transparent			Vague/Reactive		

IoT Business Model Innovation



A clear scope that aligns with long term strategic objectives is crucial when defining where to invest in data utilization and data-driven business models.



IoT business models offer great opportunities to differentiate...

- Significant **revenue increase** through creation of new business models and revenue streams
- Better **understanding** of customers, their needs, and potential solutions
- Major **cost reductions** through streamlined operations and thereby higher overall efficiency



... but a clear scope is necessary for successful implementation

- How can we **create value** with our company resources in a data-driven way?
- What are our company's **use cases**?
- Which part of our business can we **further refine** with data?
- How **can data be managed effectively** across the external supply chain and internal value chain?

Five principles are important to consider when developing IoT business models

1

Align business model to overall company strategy: To ensure strategic fit, validate at an early stage whether and how the opportunity contributes to the overall company strategy. This can be done in the idea selection phase, using checklists that represent key values or strategic goals of the company.

2

Identify key drivers of value: Adopt a user-centered approach when defining the IoT offering, starting by defining the value proposition and assessing which parts of the solution are central to the value proposition.

3

Assign tasks to internal and external stakeholders according to their capabilities: To minimize costs and efforts and maximize value, use a resource-based view to allocate resources. Determine what capabilities are required for the IoT offering and which stakeholder can best provide them. Do not aim to build the entire stack if partners are available.

4

Future-proof business models at an early stage: Consider how to ensure sustained economic viability of the business model as early as possible. Aspects might include data rights, technological evolution, human resources, or network dynamics. Expect both the solution and the external dynamics to evolve constantly.

5

Document and validate assumptions that have an impact on the business model: Throughout business model development process, many assumptions are made about target groups, market size, user acceptance, technical feasibility, costs, etc. It is crucial to document them and to explore on how much they affect the business model.

Source: Bosch IoT Lab

How to turn data into profits: Four steps towards a data-driven IoT business model.

1 Ideation
Understand customer problem

Do we have a problem worth solving?

- Figure out the **need in the market or internally** (problem first!)
- Scope **data required** to solve the problem, e.g.
 - Internally existing or generated
 - Externally acquired

Data-Problem fit

2 Design
Generate business concepts

Can we find a solution to solve it?

- **Ideate Ideas** (e.g. Design Thinking approach)
- Define **business model components**, estimate value
- Define **key data activities**:
 - Data generation, processing, analytics
 - ...

Problem-Solution fit

3 Validation
Prototype & test

How do we deliver on the promise?

- Develop **MVP**, incl. actual access to data
- Analyze data and visualize/**leverage insights**
- Constantly **iterate** with customers and users

4 Market Entry
Implementation

How do we scale a business?

- Build **go-to-market** and deliver revenues/ margins
- **Iterate** on the business model
- Add functionality to **MVP**
- Draw learnings and **repeat** with additional IoT business models

Business model-Market fit

Many stakeholders will be involved in the journey from idea to validated business model but a core team should own the process from beginning to end.

Ideation: 1 – 3 weeks

1. Map disruptions and trends
Cross-functional team

2. Identify threats to existing business
Cross-functional team

3. Identify opportunities for new business
Cross-functional team

4. Sketch threats and opportunities
Cross-functional team

5. Define value drivers and success levers
Core team

6. Rank and prioritize opportunities
Core team / Steering committee

Design: 2 – 4 weeks

7. Create product storyboards
Core team

8. Map solution technology stack
Core team + technology experts

9. Analyze stakeholder networks
Core team + business experts

10. Decide “build-buy-partner”
Core team + technology & business experts

11. Build IoT business model canvas
Core team

12. Complete business case
Core team + controlling experts

Validation: 4 – 8 weeks

13. Identify challenges
Core team + functional experts

14. Define key hypotheses to validate
Core team

15. Implement validation plans
Core team

16. Plan Business model scenario
Core team + controlling & planning experts

Market Entry: 8 – 16 weeks

17. Choose a medium of entry
Core team + business experts

18. Define prospecting strategy
Core team + business experts

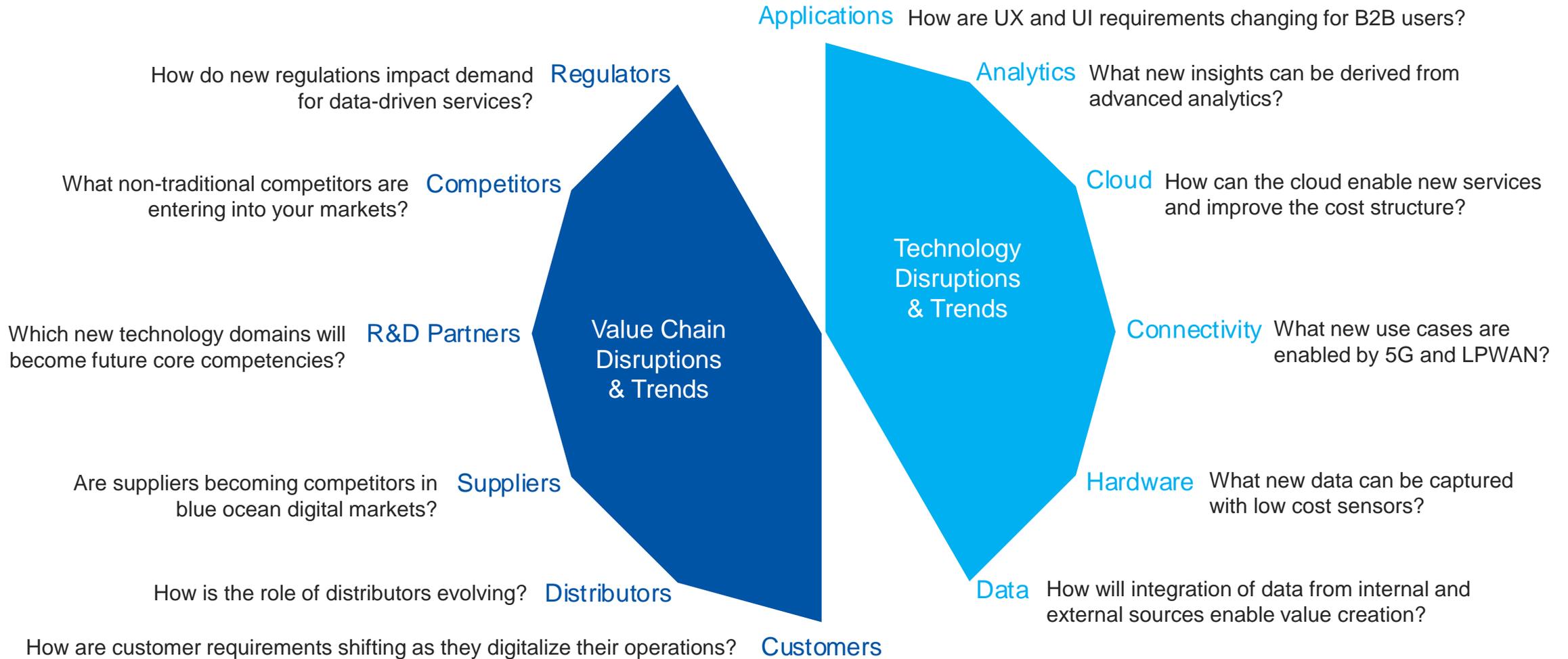
19. Test the market with MVP
Core team + business experts

20. Monitor actual business case
Core team

21. Iterate the product
Core team

22. Draw learnings
Core team + cross-functional team

Ideation is driven by a combination of value chain and technology disruptions and trends that present opportunities for new business and threats to existing models.



Data driven business model innovation requires answering a wide range of questions related to the customer, product, internal organization, and partner network.

IoT Business Model Elements	Key Functions	Disruption	Key Questions (illustrative)
Value Propositions	BU / Marketing	High	How does our value proposition change? How do we communicate it?
Customer Segments	Sales / Marketing	Low	Does our segmentation change? Are we able to more precisely segment customers?
Customer Relationships	Sales / Marketing	Low	Do our relationship management practices change? Can we access customers in new ways?
Channels	Sales / Marketing	Moderate	Do our channels change? Are our existing channels still relevant?
Solution Development Model	R&D	High	Will we build, buy or partner to acquire new capabilities needed to deliver the solution?
Technology Stack	R&D	Moderate	How will our tech stack evolve? Do our core technical competencies need to change?
Data Availability, Ownership & Access	BU / Legal / R&D	High	What data provides value? For who? How do we acquire it? Who owns it? Who can access it?
Revenue Streams / Pricing Model	BU	High	How can our revenue model more precisely map to value? Can we better segment price?
Value Tracking & Segmentation	BU	High	What internal/external stakeholders derive value? Can we track the value we deliver?
Key Activities	Operations	Moderate	How will our value stream evolve to operate this business? What activities will be externalize?
Key Partners	BU / Marketing	Moderate	Which partners are needed for solution development, go to market, and servicing?
Stakeholder Interactions	Strategy / BU	High	How do stakeholders in the solution network interact with us and with each other?
Talent	HR	Low	Do we have the required talent to build this business? If not, how will we train or acquire it?
Cost Structure	Operations	Moderate	How will our cost structure evolve? Can we externalize fixed costs or financial risk?
Privacy & Security Risks	Legal / Finance	Moderate	What risks does the new solution present? For who? How do we mitigate them?
Balance Sheet Impact	Finance	High	How does the change in asset ownership model impact our cash and capital situation?
Legacy Business Disruption	Strategy / BU	High	How will the new business impact our existing revenue streams? Is cannibalization a concern?
Stakeholder Disruption	Strategy / BU	High	Will we compete with customers, collaborate with competitors, or disrupt existing channels?

The business model design process is guided by 3 canvases, each addressing critical questions to why, what and how to create a competitive business model.

1

Technology	Disruptions & Trends	Importance	Urgency	Threats to Existing Business	Opportunities for New Business
Cloud Applications	Cloud applications allow software update through cloud. Sending a local technician to update the software is not required anymore.	H	L	<ul style="list-style-type: none"> The lifetime of parts has limited the operation efficiency of our products, making this a competitive disadvantage of ours in long term. Local technical service is in shortage but technician costs and travel costs are rising. Lack of operation data can lead to a huge operational inefficiency in long run. 	<ul style="list-style-type: none"> Implementing cloud applications to collect operation data? Can we predict potential breakdown by analyzing data gathered in the cloud platform so we can utilize the limited local technical resources? Can we calculate how many consumable parts our customers will need and let them prepare in advance, so we can minimize the disadvantage of the short lifetime of our parts and the insufficient stock in our distributors?
Cloud Platform	Cloud platform allows easier integration of elevator operation data and enterprise data.	L	L		
Connectivity	Some competitors start to connect their elevators to the Internet to provide entertainment services.	L	L		
Device Software					
Device Hardware					
Data	We do not have the operation data of our elevators to analyze reasons of operational errors.				

1. WHY: define change factors, business impacts, and opportunities.

2

Customer Segments	Problem	Solution
<ul style="list-style-type: none"> High end shopping mall that has <ol style="list-style-type: none"> High visitor volume High visitor flow Low acceptance to breakdown / issues Existing products that are custom-built 	<ul style="list-style-type: none"> Unexpected breakdown causes: <ul style="list-style-type: none"> Compensation to tenants. Complaints from visitors. Public relationship crisis. 	<ul style="list-style-type: none"> Predictive maintenance for our elevators to predict potential breakdown and analyze reasons. Schedule local technician for repairing services before actual breakdown.

2. WHAT: develop alternative IoT Business Model Canvases.

3

Technology	Solution Components	Our Competency	Value for Customer	Build-Buy-Partner
Cloud Applications	Data analytics – Collect operation data from elevators and run predictive analysis to identify potential breakdown and root cause.	M	H	Build
Cloud Platform	A cloud platform to aggregate data from edge and enterprise software, provide predictive analytics capability to cloud applications.	L	H	Partner
Connectivity	NB-IoT to connect elevators, providing stable performance with acceptable latency.			
Device Software				
Device Hardware	Sensors have to be deployed – vibration, sound, voltage sensing ability is required.			
Data Required	Data from sensors that collect operation data of elevators.			

Solution	Implementation Challenges	Effort	Risk	Validation Activity	Stakeholders
Technology Development (applications, analytics, cloud, connectivity, hardware...)	Analytics: What if the analytics is not accurate enough because data collected by sensors may have restriction?	H	H	Run complete product tests	Product Development, Supplier
Data Management (data ingestion, storage, privacy, security, ownership...)	Data: Difficulty in collecting training data sets for developing the predictive analytics model. Ownership: Can we disclose sensitive data around error detection, if requested by the government or the property owner?	M	L	Collaborate with supplier to generate dummy data for developing the analytics model.	Operations; Legal; Government Relationship
Deployment & Service (installation, integration, maintenance, updates...)	Integration: Can we integrate this new product with our legacy technical service module in SAP? Cloud platform: What if the cloud platform service break down?	M	M	Contingency cloud service / back up cloud	IT; Supplier

Business	Revenue Models
<ul style="list-style-type: none"> Partner with cloud platform providers 	<ul style="list-style-type: none"> Yearly-basis service contract

Business	Implementation Challenges	Effort	Risk	Validation Activity	Stakeholders
Portfolio Strategy (product bundling, cross-selling, cannibalization...)					
Business Model (value proposition, revenue model, pricing level...)	Potential sales generation cannot be reflected in business case.	L	L	Take reference from market benchmark.	Core team
Sales & Marketing (signification, prospecting, messaging, channels...)	Current local sales representatives are not equipped with predictive analysis knowledge.	L	M	Conduct sales training and prospecting strategy training	Core team, sales team
Financing & Ownership (external financing, external financing, spend...)	Unclear direction on which department to invest in the upfront HW and SW R&D.	L	L	Build business case. Present to COO and ask for direction	Core team, COO
Organization Structure (P&L impact, direct reporting, indirect reporting...)	No existing department to manage the development of this new product.	L	M	Same as above	Same as above
Team (leadership structure, talent development, compensation...)					

3. HOW: identify implementation challenges and validation activities.

There is no one “right” answer to “build, buy, or partner” for a particular element of the tech stack. The decision is based on competencies and strategic positioning.

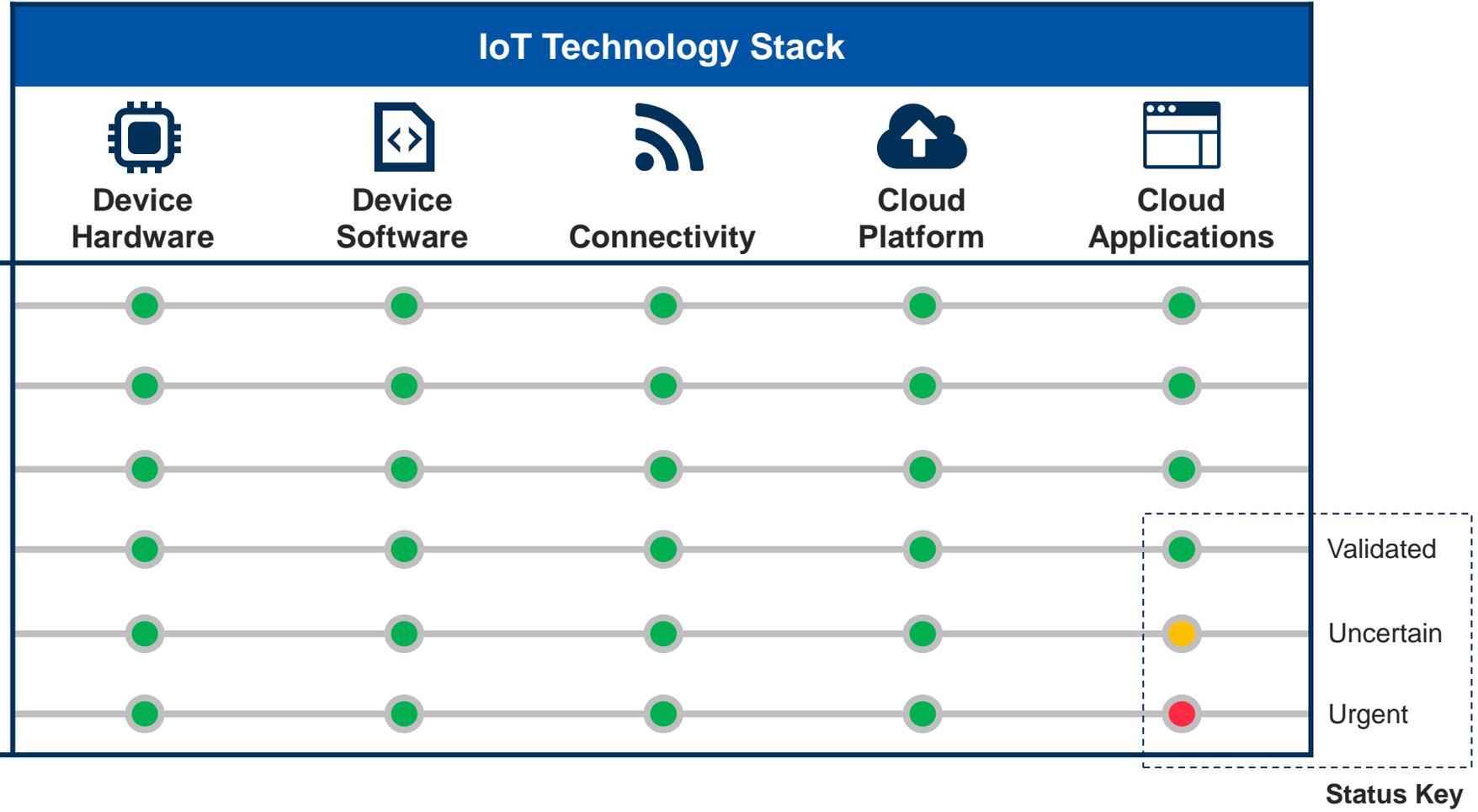
The decision of whether to build, buy or partner to acquire each element of your solution’s tech stack has far reaching consequences on competitiveness and profitability. No company can build a full tech stack internally, so tradeoffs must be reached.

1. Evaluate the impact on the business model canvas under different **build, buy, or partner scenarios** for key technologies.
2. Assess your company’s **technology development capabilities**. Identify gaps and determine what is required to fill them.
3. Identify your company’s **risk tolerance**. Determine the risks associated with each tactic and assess mitigation possibilities.

		Common considerations	Strongly agree	Agree	Disagree
Dimensions Inside ↓ Outside	Organization	We have the requisite skill set and resources to build a best-in-class technology.	Build	Partner	Buy
		The organization is highly committed to maintaining technical leadership.	Build	Partner	Buy
		We have sufficient understanding about future market requirements.	Build	Buy	Partner
	Product	The technology involves critical intellectual property that we need to own.	Build	Partner	Buy
		The technology strongly impacts solution functionality and user experience.	Build	Partner	Buy
	Market	Existing solutions cannot be found in the market at a reasonable price.	Build	Partner	Buy
		Developing the technology will not impact our time to market.	Build	Partner	Buy

The IoT Decision Framework provides a structured process for assessing potential challenges and risks across the tech stack and key decision areas.

The IoT Decision Framework guides the identification of expected solution implementation challenges



Source: Daniel Elizalde (modified by IoT ONE)

A company's portfolio of solutions should also be assessed to ensure that value creation is balanced in order to avoid over or under-investment in specific areas.



Inner Ring

Direct commercial benefits

- Digital product is sold for a specific price
- Digital product directly reduces cost (e.g. replacing a formerly manual process)



Middle Ring

Indirect, but quantifiable commercial benefits

- Digital products can have effects on multiple elements of the core value chain
- Benefits can mostly be quantified



Outer Ring

Goodwill-type, less quantifiable benefits

- Digital products can contribute to overall strategic business elements
- These are typically not easily quantifiable but define long-term success

Source: This methodology was developed by IoT ONE's strategic partner Excubate GmbH.

There are four critical success factors for achieving profitable growth in IoT markets: Product, Revenue Model, Prospecting, and Distribution.

What product portfolio differentiation gives you a competitive advantage?

We assess market segmentation, business objectives, competitor strategies, and the tech landscape to guide product strategy.

How will your revenue model maximize growth, retention, and profitability?

A detailed understanding of value delivered, customer perception, and sales scenarios guides revenue model optimization.



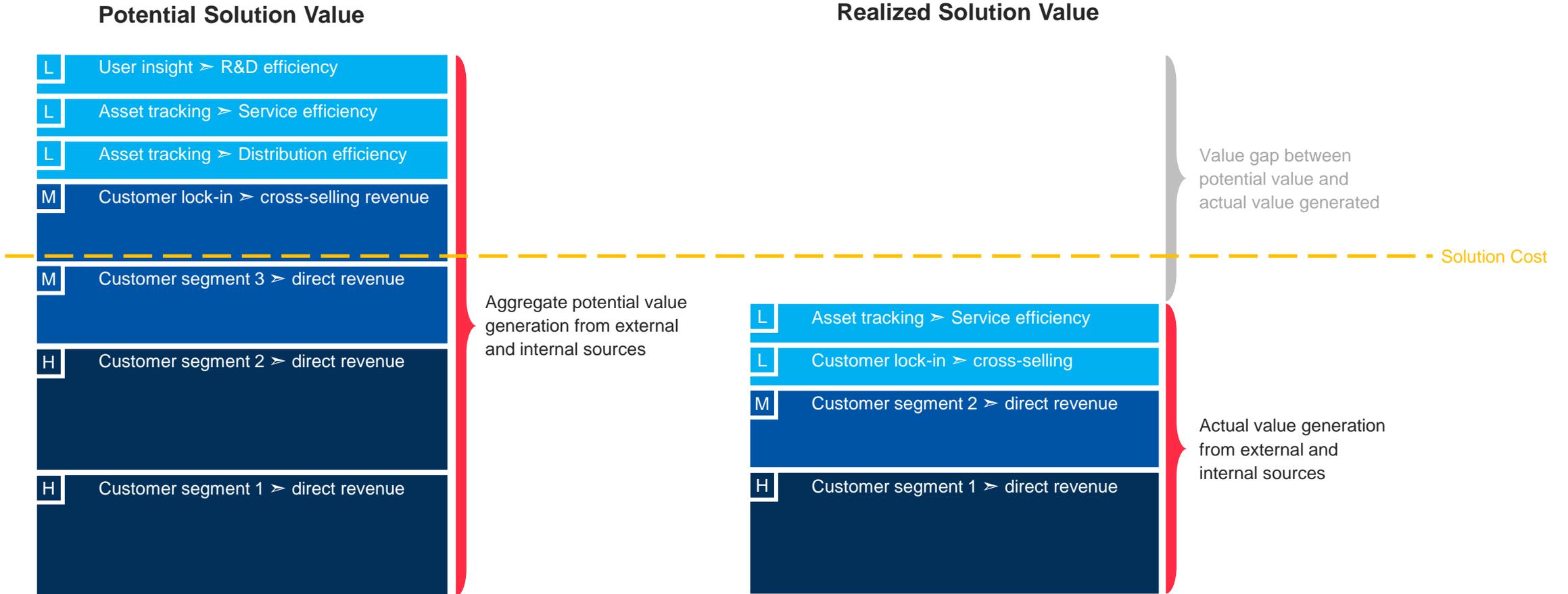
How will your achieve superior distribution in competitive markets?

Driving growth with a lean sales force requires effective channel strategy and a highly motivated partner ecosystem.

Are you prioritizing the right customers and engaging them effectively?

Buyer journeys, buyer personas, value propositions and prospecting strategy are all oriented around prioritization of use cases.

The advantage of digital solutions is their ability to benefit multiple stakeholders with marginal impact on cost. It is thus critical to ask “Where is value left on the table?”



About IoT ONE

Our mission is to increase the competitiveness of our clients by helping them to realize the opportunities and manage the threats that are created by digitalization.

Will you disrupt or be disrupted by the Internet of Things?

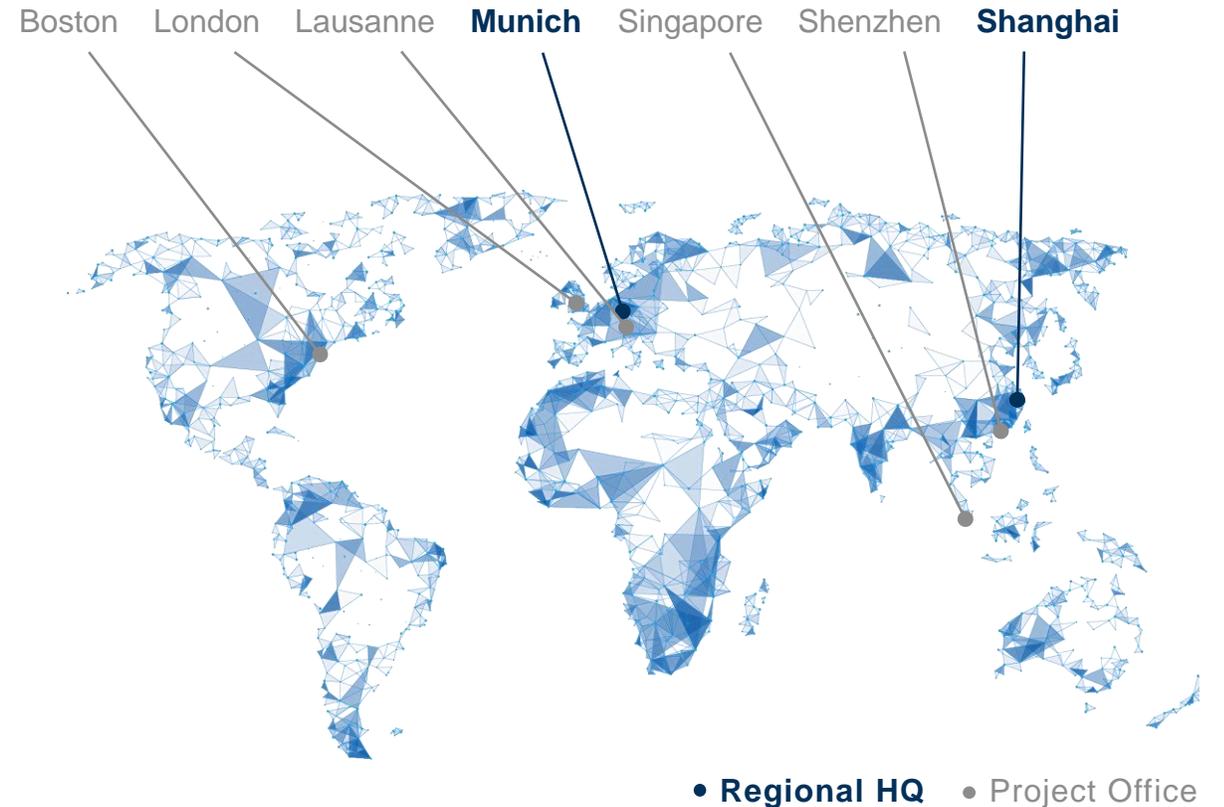
The first Internet wave disrupted retail, media and finance. Traditional market leaders declined and new leaders emerged.

The second Internet wave is now disrupting how products and operations create value. It will impact every company that builds or operates physical infrastructure, assets and devices. We help companies evolve and grow their businesses.

We are known for:

- Expertise in the interface between technology and business.
- A strong foundation in detailed, bottom-up research.
- Deep engagement with domain experts and tech ecosystems.

IoT ONE delivers research services globally and innovation plus implementation in Asia.



IoT ONE Knowledge Domains

Microenvironment

Use Cases

What problems can you solve for your customers or operations?

Technology Stack

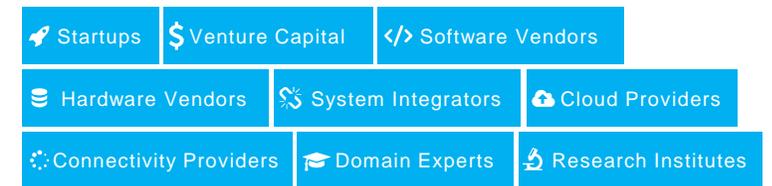
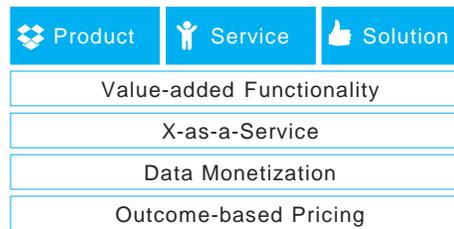
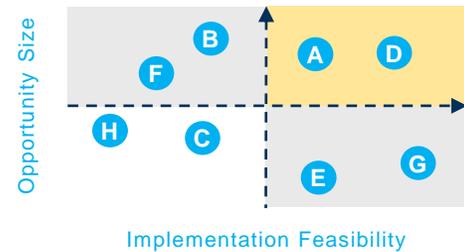
Which technologies enable your use case?

Business Models

How do you package, price and sell digital offerings?

Company Ecosystems

Which companies are relevant to your strategy?



Macroenvironment

What external factors impact solution development, market adoption or system deployment?

- ¥ Economic
- ⚙️ Technical

- 🏛️ Regulatory / Legal
- 🗨️ Cultural / Social

- 👤 Demographic
- 🌍 Environmental

Selected IoT ONE clients

EQUIPMENT/
MACHINERY

SCHAEFFLER

BOBST

PALFINGER

Desoutter

SKF

Lenze

stratasys

NAVVIS

**BOUYGUES
CONSTRUCTION**

INDUSTRIAL
AUTOMATION

SIEMENS



KÖRBER DIGITAL

KÖRBER LOGISTICS

VOITH



BLACKLAKE

lenovo

**WERMA
SIGNALTECHNIK**

SOFTWARE



aws

Qlik

Bright Wolf



VANTIQ

Lenovo

**Zco
corporation**

IOT COMPONENTS



**WIBU
SYSTEMS**

**TE
connectivity**

LOGISTICS/
SUPPLY CHAIN



Lyreco
WORKING TOGETHER
FOR TOMORROW

Astrata

LIFE SCIENCE /
MATERIAL SCIENCE

MERCK



CLARIANT

CONSUMER
PRODUCTS

L'ORÉAL



FrieslandCampina

Betty Barclay

SERVICE FIRMS/
ORGANIZATIONS

**WORLD
ECONOMIC
FORUM**

**OAK
RIDGE**
National Laboratory

RANEPA
THE RUSSIAN PRESIDENTIAL ACADEMY
OF NATIONAL ECONOMY
AND PUBLIC ADMINISTRATION



**McKinsey
& Company**



BAIN & COMPANY





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CONTACT
