



Data Act webinar

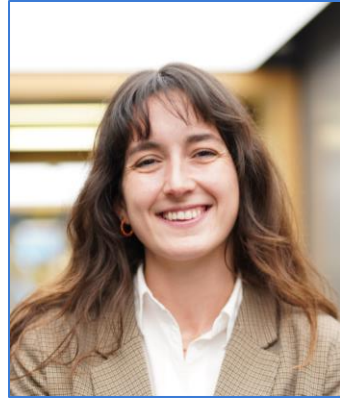
Its impact on IoT product companies

Pepijn van der Laan Ph.D. – *Technical Director*
Monica Fernandez – *Digital and AI Trust Expert*

30 September 2025

With you today

Monica Fernandez
Digital and AI Trust Expert



- **Digital trust advocate:** Actively engaged in research, education, and policy to promote trustworthy AI.
- **Ethical AI and data researcher:** Explored ethical, legal, and social challenges of AI fairness before joining Nemko Digital.
- **Strong academic background:** Holds a master's in AI from Radboud University and a bachelor's in Neuroscience from the University of Edinburgh.
- **Digital trust & strategy:** Helps shape Nemko Digital's Trust offerings, ensuring fairness, safety, and effectiveness.
- **Strategic leadership:** Developing a Digital Trust vision, roadmap, and services.

Pepijn (Pep) van der Laan Ph.D.
Global Technical Director



- **Scaling AI impact:** Over a decade of experience in realizing business value through scaling AI and ML from initial proof-of-concept to enterprise-wide solutions.
- **Strategy advisory:** Extensive experience shaping the AI & Data transformation and architecture for global leaders and national champions across industries.
- **AI & Data capability building:** Led a team of 90 data scientists through the transformation from the traditional consulting model and introducing modern delivery and development practices.
- **Growing Digital Trust:** Recognized for consistently bridging the gap between the developer and AI risk communities, building mutual understanding



Nemko Digital: Compliance without Complexity

Nemko Digital is part of Nemko Group

- We empower our customers through innovative digital solutions and expert guidance.
- We aim to build digital trust and help navigate the complexities of the modern online landscape, **with a special focus on Artificial Intelligence**.
- We combine an in-depth knowledge of regulation and market-leading frameworks with **an entrepreneurial stance and a maker's mindset**.



AI GOVERNANCE

AI COMPLIANCE

AI MATURITY

AI ASSURANCE



NIST



Maturity Model



Trust Mark



At Nemko Digital we believe that AI Trust is a growth enabler



Compliance with upcoming regulation



Reputation as leading global company



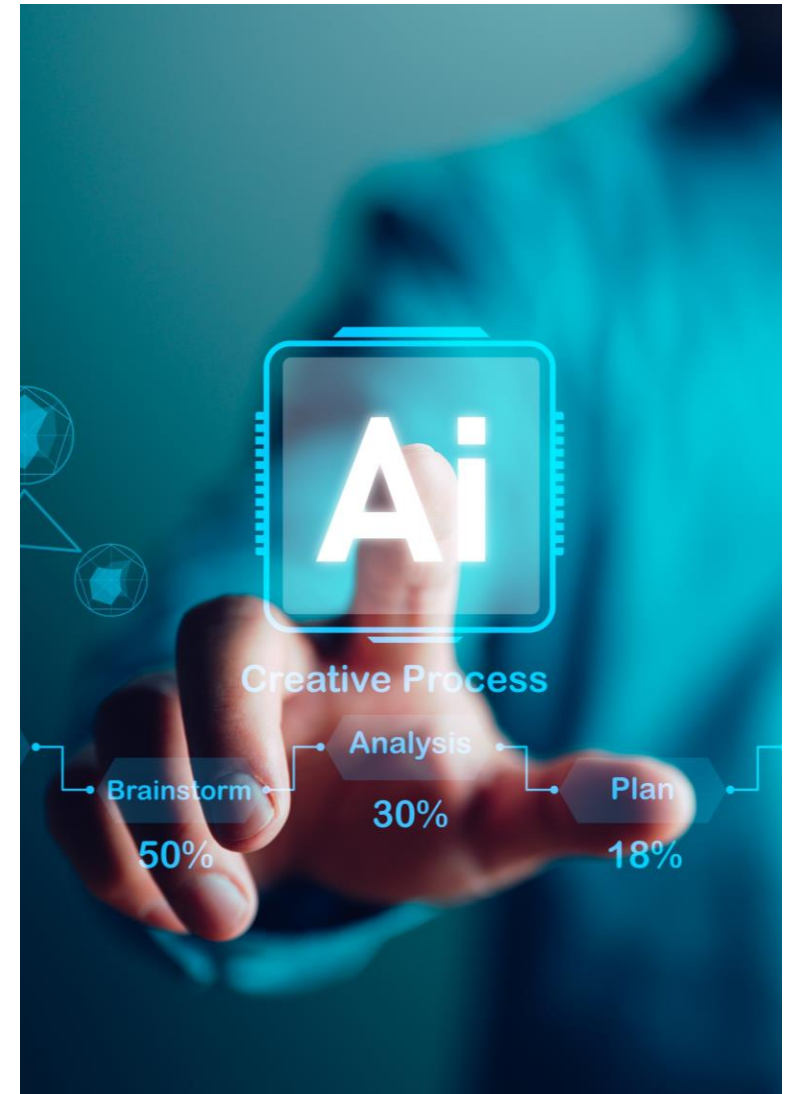
Control to prevent incidents / harm



Stakeholder demands around use of AI



Competitive advantage in the market



What is top-of-mind for our clients?

We deliver Digital Trust through end-to-end compliance and advisory support, combining technical, regulatory, and process expertise.



How to get ready for the EU AI Act?

- Risk categorization of AI systems
- Achieving and demonstrating conformity
- Ensuring market access for products



How to get ISO certified for AI, Data, and Security?

- Organizational readiness and training
- Management System implementation
- Audit and certification



How to ensure market access for AI products?

- Applicability of various directives and regulations
- Roadmap towards compliance for Digital Trust
- Achieving and demonstrating conformity



How to instill trust in AI-embedded products?

- Nemko's Trust Mark as a standard
- Proactively achieving a statement of conformity
- Pre-empting client's procurement questions



How to assure AI algorithms technically?

- Design validation and robustness testing
- Bias detection and mitigation
- Ongoing algorithmic assurance processes



How to monitor and govern AI & Data at scale?

- Performance metrics and benchmarking
- AI governance tooling and automation
- Scalable monitoring frameworks



How to structure an AI & Data operating model?

- Defining roles and responsibilities
- Establishing controls, processes, and oversight
- Integrating governance into business workflows



How to align AI & Data strategy and maturity?

- Linking value realisation with AI adoption
- Setting risk appetite and ethics principles
- Building AI & Data literacy across the organisation





Different stances on Digital Trust

Regulation-driven

What laws and regulations do I need to conform to, to run my business?

Standards-based

How can I prove to my stakeholders that our solutions as trustworthy?

Principle-led

What are the ethical, moral, and other standards I want to hold myself to?

Business-driven

What is the business impact (ROI) that we can achieve, and what risk can we accept?



EU regulation affecting AI-powered products and services

Domain	EU Regulation	Applicability
Artificial Intelligence	AI Act	Adopted / 2026
Data protection and governance	General Data Protection Regulation (GDPR)	In force
	Data Act	In force
	Data Governance Act	In force
	ePrivacy regulation	In draft / TBC
Cyber security and digital resilience	Cyber Resilience Act (CRA)	In force
	Network Information Security Directive (NIS2)	Adopted / 2027
	Digital Operational Resilience Act (DORA)	In force
	Cybersecurity Act	In force
Product Safety and Conformity	Product Liability Directive – revised	Adopted / 2026
	Radio Equipment Directive (RED)	In force
	Machinery Regulation – revised	Adopted / 2027
	General Product Safety Regulation (GPSR)	In force
Market and Critical Infrastructure	Digital Services Act (DSA)	In force
	Digital Markets Act (DMA)	In force
Sector-specific	European Health Data Space (EHDS)	Adopted / 2026

The most talked-about

AI Act: Governing AI systems that are brought onto the EU market

CRA: Governing the required precautions against adversarial attacks targeting connected devices

GPSR: Expands consumer product safety to digital, connected, and AI-enabled products.

Data Act: Often under-estimated regulation governing data from connected devices

Sources: EU regulations; Nemko Digital analysis



Today, we are going to talk about the Data Act

Domain	EU Regulation	Applicability
Artificial Intelligence	AI Act	Adopted / 2026
Data protection and governance	General Data Protection Regulation (GDPR)	In force
	Data Act	In force
	Data Governance Act	In force
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Cyber security and digital resilience	Cyber Resilience Act (CRA)	In force
	Network Information Security Directive (NIS2)	Adopted / 2027
	Digital Operational Resilience Act (DORA)	In force
	Cybersecurity Act	In force
Product Safety and Conformity	Product Liability Directive – revised	Adopted / 2026
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	Machinery Regulation – revised	Adopted / 2027
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Sector-specific	European Health Data Space (EHDS)	Adopted / 2026

Sources: EU regulations; Nemko Digital analysis

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The most talked-about

AI Act: Governing AI systems that are brought onto the EU market

penalties

<7%

CRA: Governing the required precautions against adversarial attacks targeting connected devices

< 2.5%

GPSR: Expands consumer product safety to digital, connected, and AI-enabled products.

< 5%

Data Act: Often under-estimated regulation governing data from connected devices

< 4%

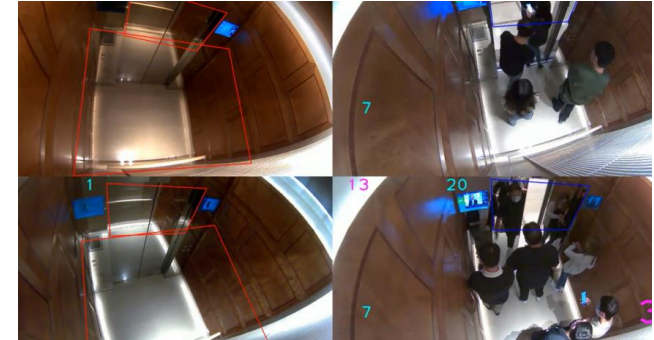


Imagine a smart elevator

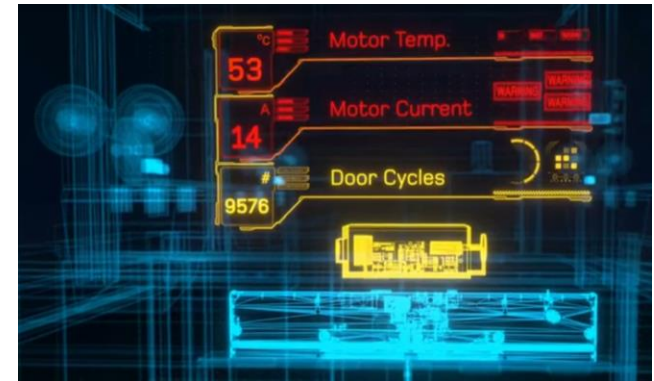
Generated data



App data

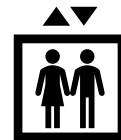


Camera footage



Sensor readings

Interested parties



Elevator company



Property manager



Tenant of the building



Maintenance service provider



Users of the building



Objectives of the Data act



Give **users of connected products** (businesses or individuals) **greater control** over the data they generate



Maintain incentives for **those who invest** in data technologies



Lay down conditions for when a business has a **legal obligation to share data** with another business

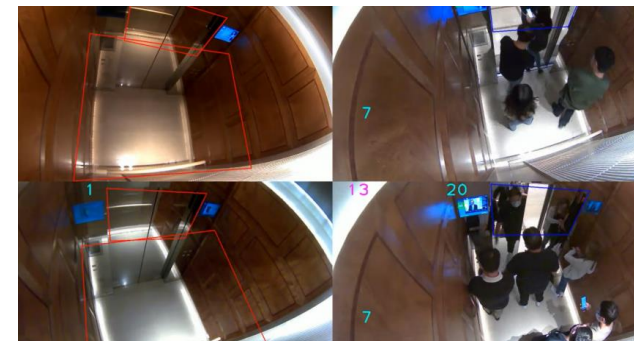
Sources: Hanwha Vision; Nemko Digital analysis

Imagine a smart elevator

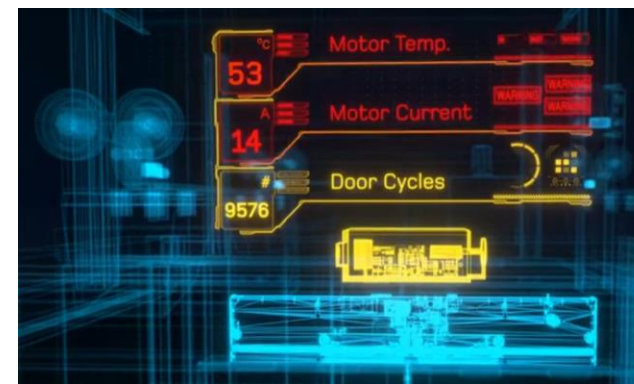
Generated data



App data



Camera footage



Sensor readings

Interested parties



Elevator company



Property manager



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Key concepts in the Data Act



Relevant products and services



A **connected product** is an item that obtains, **generates or collects data concerning its use or environment** and that is **able to communicate** product data via an electronic communications service, physical connection or on-device access, and whose **primary function is not the storing, processing or transmission** of data on behalf of any party other than the user.



A **related service** is a service (not communication or software) connected to the product, and which is **essential for the functioning** of the product.

Key concepts in the Data Act



Athlete



Watch
manufacturer



Health
insurer

Relevant actors



User: owns a connected product, has temporary contractual rights to use it, or receives related services.



Data holder: has retrieved or generated the data from a connected product and has the obligation to make it available



Data recipient: entity (user or third party) to whom the data holder makes data available



Implementation timeline



Check-in Time!



On a scale of 1 to 5, where are you in your organization's preparation for the EU Data Act?

1 – I heard that term before.

We may have a general awareness of the Data Act but haven't started any formal compliance work.

2 – Someone should do something!

We have identified that the Data Act applies to us and have started initial scoping or gap analysis.

3 – There is a plan.

We have a clear, documented plan and a cross-functional team in place to address the Data Act's requirements.

4 – Working on it...

We are actively implementing changes to our products, contracts, and internal processes, with a system to monitor progress.

5 – All set!

We have fully integrated Data Act compliance into our business strategy and are now exploring new business opportunities the Act creates.



What is in the Data Act? The thematic pillars



1. **General Provisions** – scope and definitions (Ch. I, Arts. 1–2)



2. **Data Access & Sharing** – rights for users and businesses (Ch. II–III, Arts. 3–12)



3. **Fair Contracts** – protect weaker parties (Ch. IV, Art. 13)



4. **Public Sector Access** – exceptional circumstances (Ch. V, Arts. 14–22)



5. **Cloud Switching & Interoperability** – portability, no lock-in (Ch. VI–VIII, Arts. 23–36)



6. **International Transfers** – protect against unlawful access (Ch. VII, Art. 32)



7. **Enforcement & Safeguards** – complaints, penalties (Ch. IX, Arts. 37–42)



8. **Database Rights & Final Provisions** – adapt existing law (Ch. X, Art. 43, Ch. XI, Arts. 44–50)

What is in the Data Act? Thematic pillars



2. Data Access & Sharing – rights for users and businesses (Ch. II–III, Arts. 3–12)

3. Fair Contracts – protect weaker parties (Ch. IV, Art. 13)

Art. 3: Data subject to the act

Covers all raw and pre-processed data (personal and non-personal) generated from the use of a connected product or a related service that must be readily available to the data holder.

Art. 5: Data sharing upon user's request

Ensures users get free and secure access to quality data from IoT/connected devices (where feasible, it should be made available continuously and in real time).

Art. 8: B2B data sharing obligations

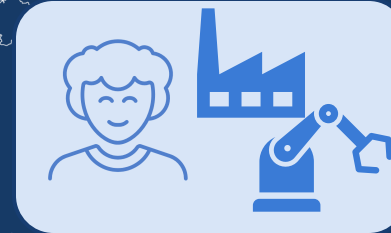
Specifies **obligations to share data with other businesses under fair, reasonable, and non-discriminatory terms**, with an exception for trade secrets

Examples business scenario



Rob produces
industrial robots*

* Connected products



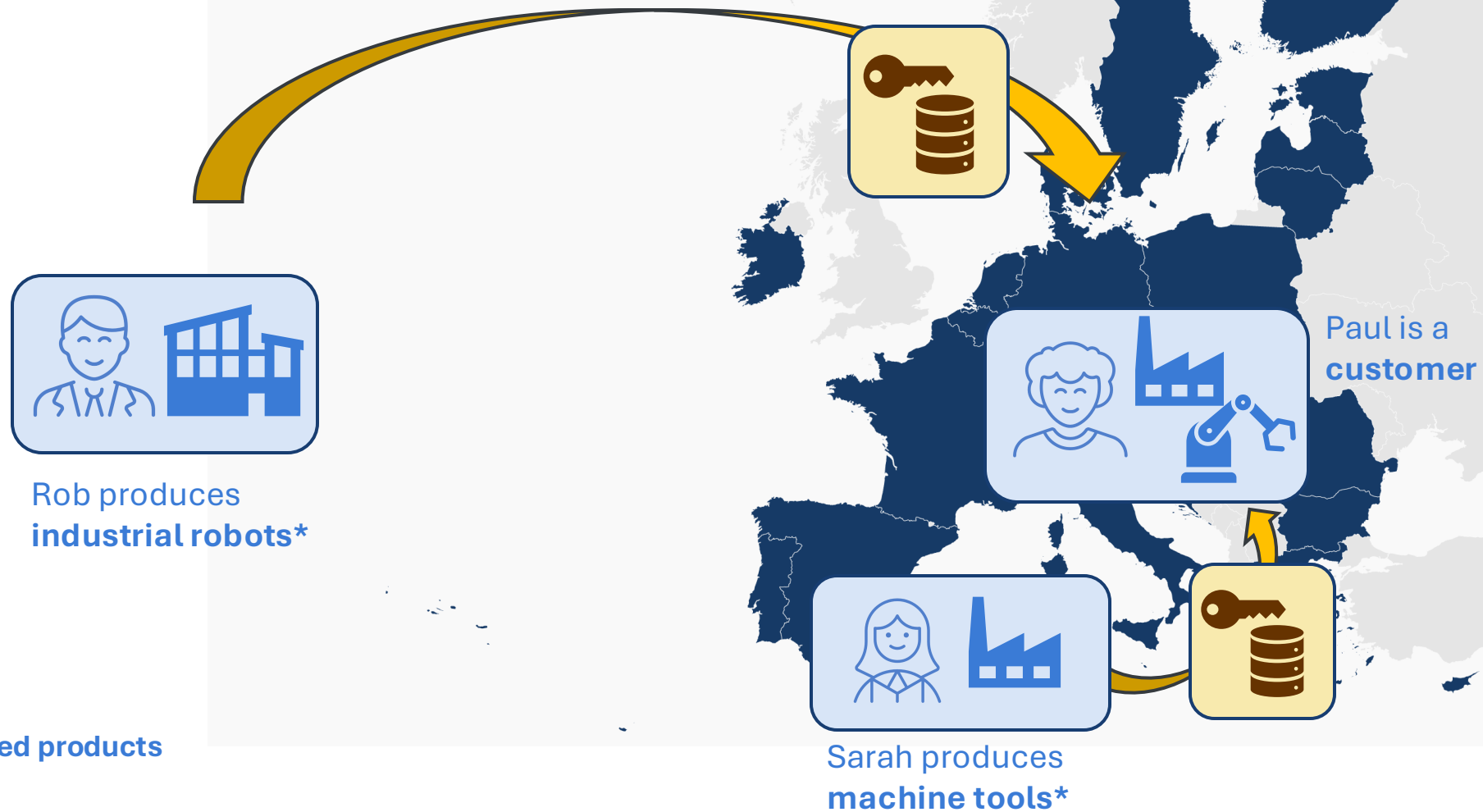
Paul is a
customer



Sarah produces
machine tools*



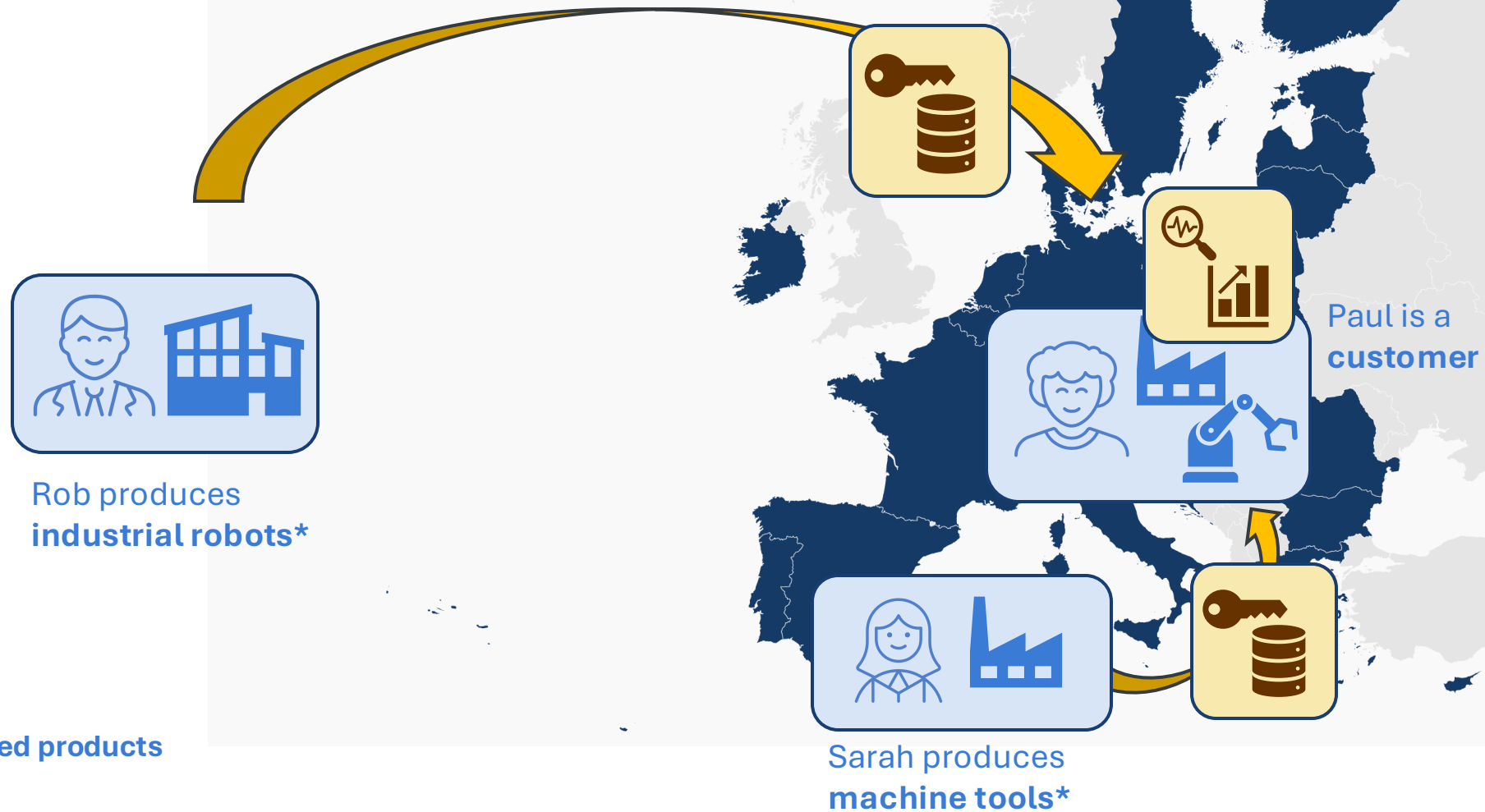
Examples business scenario



* Connected products



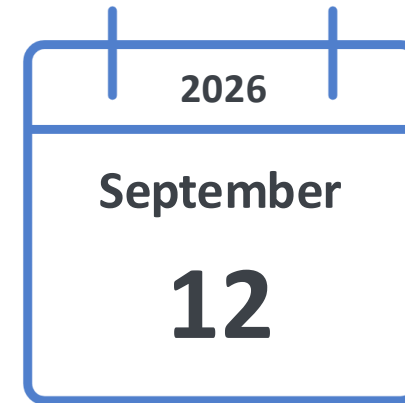
Examples business scenario



* Connected products



What timelines should they consider?



They must make data available in a **standardised** manner (*for connected products placed after this date)

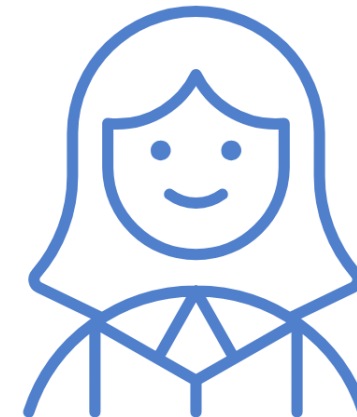
Can request access to certain data generated during the operation of these products



Paul



Rob



Sarah

Model contractual terms



Parties

Defines the Data Holder and User involved.



Scope

Specifies the types of data covered by the terms.



Access Rights

Outlines the user's ability to access data.



Use of Data

Restricts how the Data Holder can use the data.



Transfer & Users

Handles rights when product ownership changes.



Remedies & Disputes

Provides avenues for resolving disagreements.



Third-Party Sharing

Allowed only with contractual safeguards and user consent



Personal Data

Processing must comply with GDPR and ePrivacy rules



Protection

Requires security measures for data and trade secrets.



Compensation

Addresses user compensation for data limitations or data monetisation.



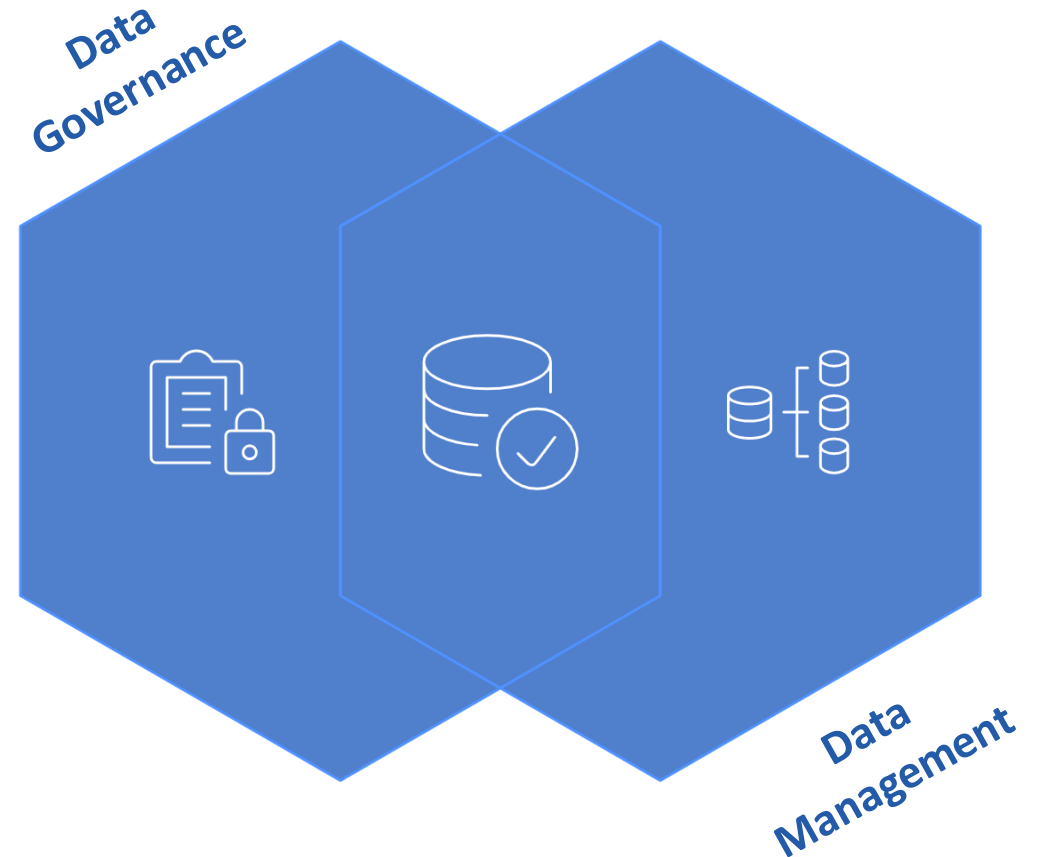
Duration & Termination

Aligned with main product/service contract and ends if discontinued

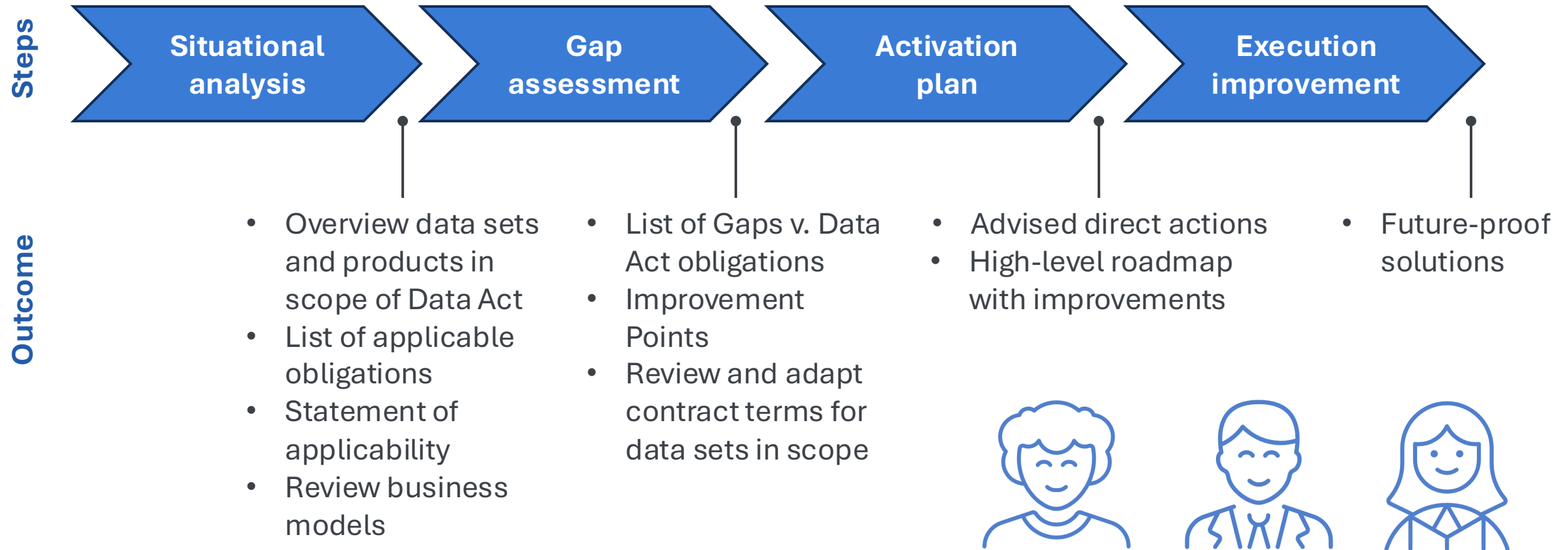


Success factors as IoT product company

1. Understand your obligations
2. Map the data sets in scope
3. Prepare draft sharing agreements (or review existing ones)
4. Create (technical) pre-requisites for successful implementation
5. Incorporate learnings in product development and procurement



What can you do now?



Next steps



15-Minute AI Consultation: Tailored Insights for Your Business



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News! South Korea recently became the second country in the world to enact a comprehensive AI law, heavily inspired by the EU AI Act! ...more

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South Korea's New AI Law



- South Korea's National Assembly has passed the 'Basic Law on AI Development and Trust-Based Establishment'
- The Act mirrors key themes found in the EU AI Act.
- It will take effect starting January 2026

1. Similar risk-based approach (with stricter obligations for high-impact AI systems)

2. Focus on ethical guideline and trustworthy AI

3. Protection of fundamental rights

4. Transparency and explainability (e.g., in the context of deepfakes and impersonation, similar to Article 50 of the EU AI Act)

5. Provisions on standardization

6. The establishment of oversight bodies and procedures



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As we wrapped 2024, we wondered "what happened in the AI world this year"? With major initiatives taken in different markets such as the EU, UK, US, and globally, we look at the new obligations, new and evolving policies, and exciting ...more



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2025

AI Governance Outlook

Read our in-depth article





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