Leveraging the AI-on-Demand Platform for AI Research: Opportunities for Postgraduates

AIDA Excellence Lecture Series

9 December 2025

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[NOTE: All links provided in this lecture are valid on 9 Dec 2025]

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Research

€1.5 bn in Grants by the European Research Council

50,000+ AI Researchers in Europe

22,000 AI patent applications in 2024

15 AI Factories by 2026

120+ AI Research Centers & Labs

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Only 26% of the European adult workforce experiments with AI at work

70% of the European cloud market owned by American cloud providers

40-60% demonstrate poor understanding of AI technology

Only 20.97% of medium and 11.21% of small enterprises use AI

$8 billion in AI venture investment in 2024, compared to $109.1 billion in the US

Europe captures merely 7% of global AI investment...

...while the US and China combined account for 80%

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Industry

€87.84 bn European AI Sector Market Value

202 European AI unicorns

6.300+ European AI Startups

+32% Annual AI Investment Growth

€13 bn Investment in European AI

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The AI Continent: The best place in the world to develop trustworthy and advanced AI

AI Office

EDIHs

TEFs

AI on Demand Plaftorm

AI Continent

Apply AI Strategy

GenAI4EU

R&I

European AI Research Council

AI Factories

Cloud & AI Development Act

European Strategy for Data

Skills

InvestAI

EUROPEAN ARTIFICIAL INTELLIGENCE OFFICE

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The Mission

Unite European AI research, industry, and public sector through a single platform- enabling collaboration, shared innovation, trusted tools, and pan-European visibility.

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The Vision

Driving Europe's AI forward with one trusted platform—enabling shared innovation, scalable technologies, and strong visibility throughout the European landscape.

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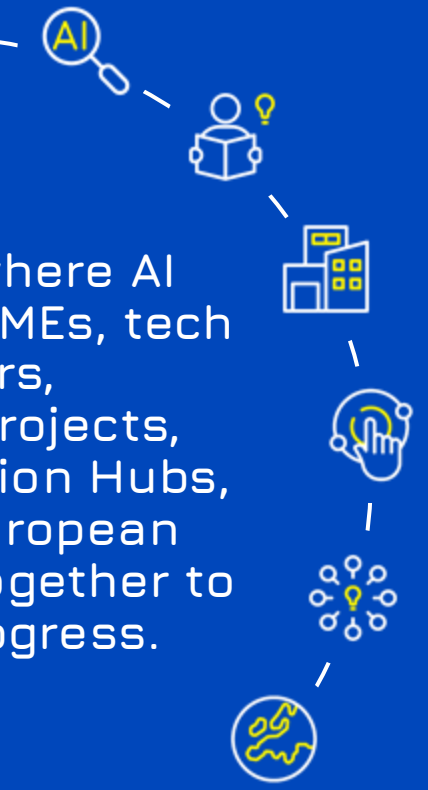
How will we achieve it?

By bringing together AI services, resources, and tools and making them easily accessible in **one place**.

A platform where AI researchers, SMEs, tech providers, EU-funded projects, Digital Innovation Hubs, and other European actors come together to share AI progress.



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AIoD Platform dialogue: Research and Industry

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AI on Demand

One Platform. Two Gateways.

AI For Europe.

Funde
the Eu

Why join the AI-on-Demand platform?

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For Researchers & Innovators

Explore. Build. Share.

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1

Find and use relevant assets, such as resources, datasets, tools, or services.

- "AI Catalogue" - Bookmarking AI assets as you explore the Catalogue, creating your own collection.
- "AI-Builder" - Simplifying AI with Teuken-7B — retrieve, summarise, and generate with no coding needed.
- "Research and Innovation AI Lab (RAIL)" - Building, sharing, and testing models together with reusable experiments.
- "RoboCompass" - Navigating non-technical challenges to accelerate Responsible Robotics.
- "Success Stories" - Connecting success stories to users with tailored support and expert matching.
- "EU Ecosystem Mapping" - Mapping Europe's AI actors to enable collaboration, benchmarking, and policy insight.

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2

Use the platform as a dissemination channel to share research outputs, news updates, or forthcoming events, and engage with the AI community.

- Make **communication requests** for news, events, announcements, blog/opinion articles, publications and press releases.
- Access **branding assets**, **promotional resources**, and **guidelines** to help showcase your work internationally.
- Connect with peers in the **AIoD Forum**, become an **AI mentor—or find the right expert** to support your journey.

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3 Access AI educational courses and resources.

Browse, search and access all the AI education resources currently available under the AI Catalogue, including distance courses, onsite courses, and more.

You are also welcome to publish your own educational resources.

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4

Technically develop or deploy different components, services, or tools.

- **“Learn how to do it” videos** - Watch short video tutorials and learnings on how to install, authenticate and access AIoD knowledge.
- **“AIoD Metadata Catalogue”** – Explore the Swagger documentation for the AIoD Metadata Catalogue.
- **AIoD Open API** - Access the contents of the AIoD and the documentation to construct services.
- **“Integrate with AIoD” section** - Build your service using the AIoD API and save time.
- Use a **stylesheet** that helps you save time on building UIs and contains reusable AIoD guidelines for your UI/UX team.

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For Industry, SMEs & Public Services

Build. Train. Operate.

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Build. Train. Operate.

AIoD is a one-stop platform for companies to **build, test, and scale** AI solutions—faster, more securely, and with full visibility across the European market.

- A single-entry point to trusted tools, infrastructure, and partners
- Built for real business needs: speed, control, and growth
- Designed for European companies that want to innovate and scale responsibly

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1 Build.

Design and develop AI solutions, faster.

Get started faster with secure, ready-made components.

- Low-code tools and prebuilt components help you build quickly
- Use proven models and assets from trusted European sources
- No vendor lock-in — keep full control of your development

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2 Train.

Train with confidence—securely and at scale.

Train your AI securely, using scalable European infrastructure.

- Use cloud or HPC resources for lightweight or high-performance training
- Pre-configured tools help reduce setup time and complexity
- Built for compliance and transparency from day one.

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3 Operate.

Deploy, share, and grow your AI solution.

Bring your solution to market—and make it visible throughout Europe.

- List your AI solution in a trusted European marketplace
- Gain visibility across industries and borders
- Use the Business Navigator to find the right partners and use cases
- Operate on GDPR-compliant infrastructure with full data control

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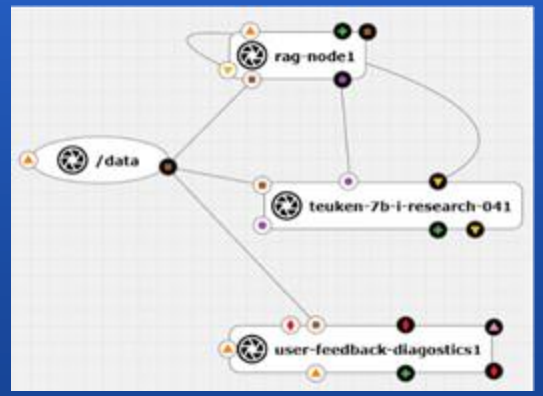
DevOps tools

Services & tools (workflow engines, cloud resources, LLMs etc.) for accelerating the process of building, training, and operating AI.



Marketplace

Provides a catalogue of European AI products and services, offering e-commerce services, pricing models, billing integration.

Business Navigator

Overview and Navigation of European business contacts, visualized on a map, different views to filter and explore the landscape.

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What's in it for you?

Deploy services at speed

Instantly publish your AI models, apps, and services in a fully managed enterprise Marketplace - complete with billing, payments, quoting, and API integrations.

Reach real buyers

The Business Navigator connects you directly with thousands of European enterprises - instant matchmaking, lead generation, and deal flow across the EU.

Empower every user

Everyone can deploy and customize AI - no programming bottlenecks, just pure innovation.

Run & scale globally

Deploy seamlessly across sovereign cloud infrastructures. Keep your data and models in Europe.

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Why join the AI-on-Demand platform?

- **Unified platform**
  All tools, services, and partners in one place — streamlined, scalable, and ready to use
- **Trusted & European by design**
  GDPR-compliant, sovereign infrastructure with built-in European values and standards
- **Inclusive access**
  Whether you're an SME or a large enterprise — AIoD lowers the barrier to trusted AI
- **Built for visibility and growth**
  List, share, and scale your solutions across Europe with no lock-in, full control, and maximum exposure

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Why join the AI-on-Demand platform?

For Research & Innovation

- Metadata Catalogue - Search 500,000+ AI assets
- AI Catalogue - Bookmark and organize resources
- RAIL - Collaborate on AI experiments
- EU Ecosystem Mapping - Connect with researchers
- RoboCompass - Robotics ethics guidance

For Business & Industry

- Gain visibility across Europe through a trusted AI platform
- Connect with partners and funding through smart ecosystem navigation
- Accelerate development with ready-to-use, low-barrier AI tools
- Scale AI efficiently using secure, high-performance infrastructure
- Deploy with confidence in a reliable, enterprise-ready environment
- Access trustworthy AI aligned with European values and regulations

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LIVE Demo-Session on the AIoD Platform

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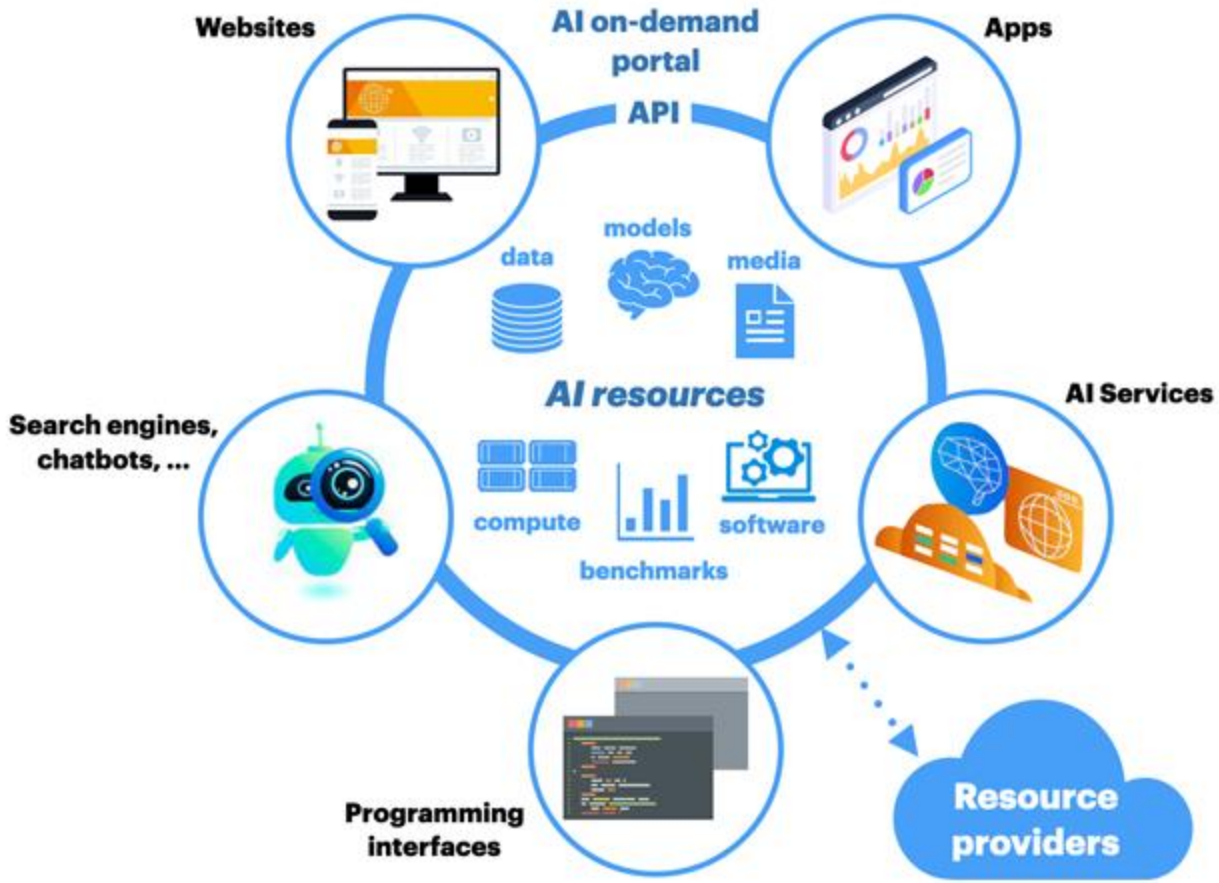
AI on-Demand platform - How?

- **Easy-to-use interfaces** for different types of users
  - Website, chatbot, API,...
  - From no-code to custom code
- **Services to help people** use AI
  - Search / discovery
  - AI model building
  - Experiments / benchmarks
- **Connect existing infrastructure and communities**
  - Break silos
  - Share data/models where you want
  - Cover all resource types
  - Entirely open source



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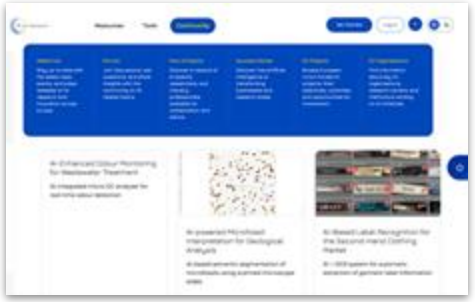
AIoD API

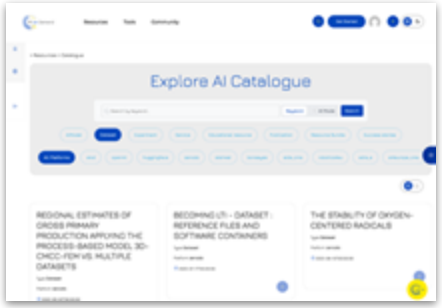
Everything we've shown is built on the open source AIoD API

You can also auto-upload resources, integrate your services, build new tools,...

Web portal



Community Portal



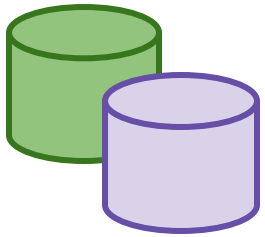
AI Resources search + chatbot

AI Catalog share + edit

(Your) services / scripts

AIoD API (metadata catalog)

Authentication



Unified Meta-Databases

HuggingFace | Zenodo | OpenML | Connector

Connectors to other platforms

Resources

Resources

- AI Catalogue
- Communication Materials
- SDKs and APIs

Tools

- RAIL
- AI Builder
- RoboCompass
- AIoD Metadata Catalogue
- EU AI Ecosystem Mapping

Community:

- Forum
- Media Hub
- Success Stories:
- Pool of Experts
- Projects

Integrate:

- AIoD API
- AIoD Metadata Catalogue
- Open source community

Tutorials:

- "Learn how to do it" videos

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Use case of RoboCompass

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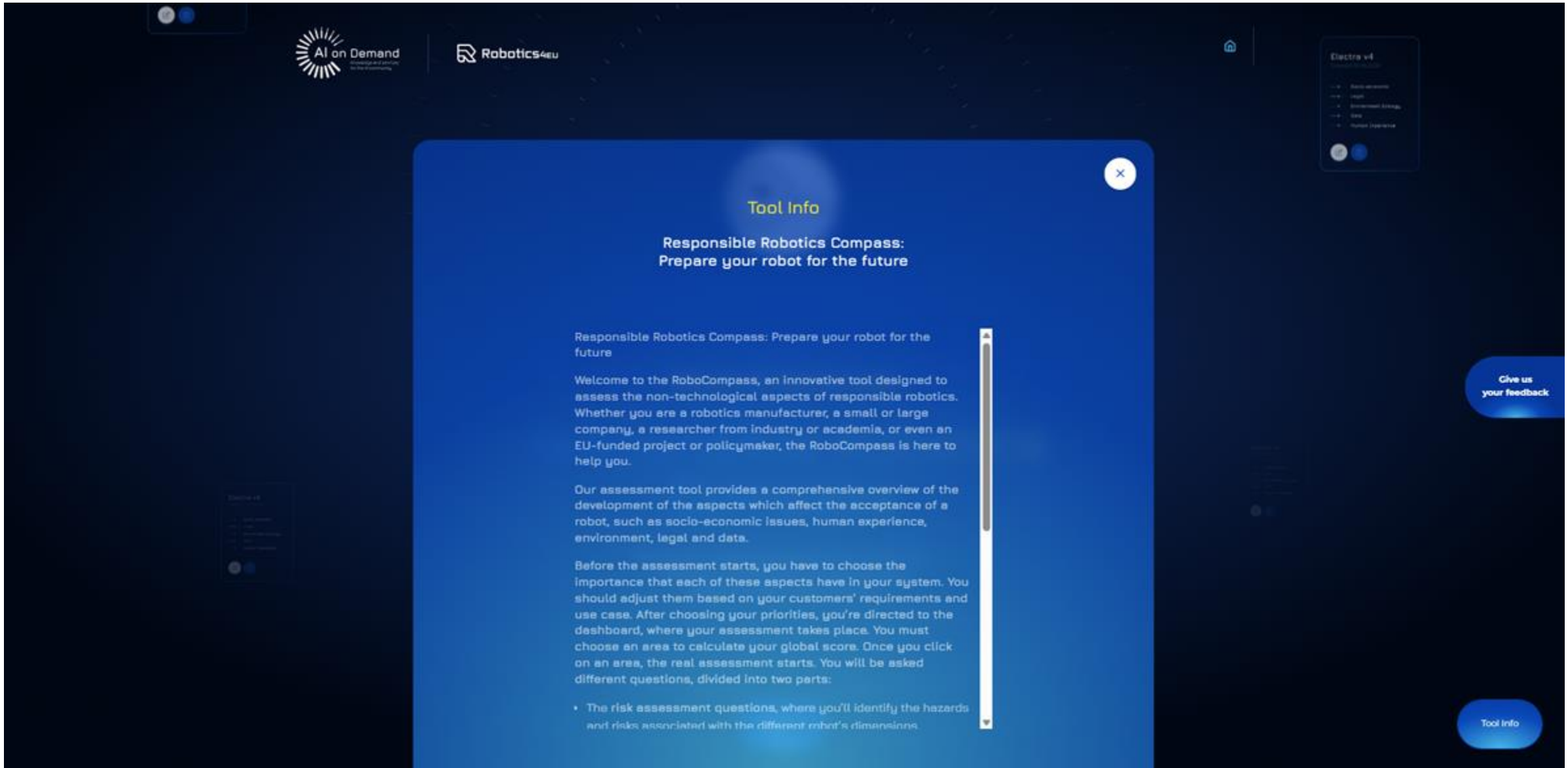
Responsible Robotics Compass

Responsible Robotics Compass



Responsible Robotics Compass

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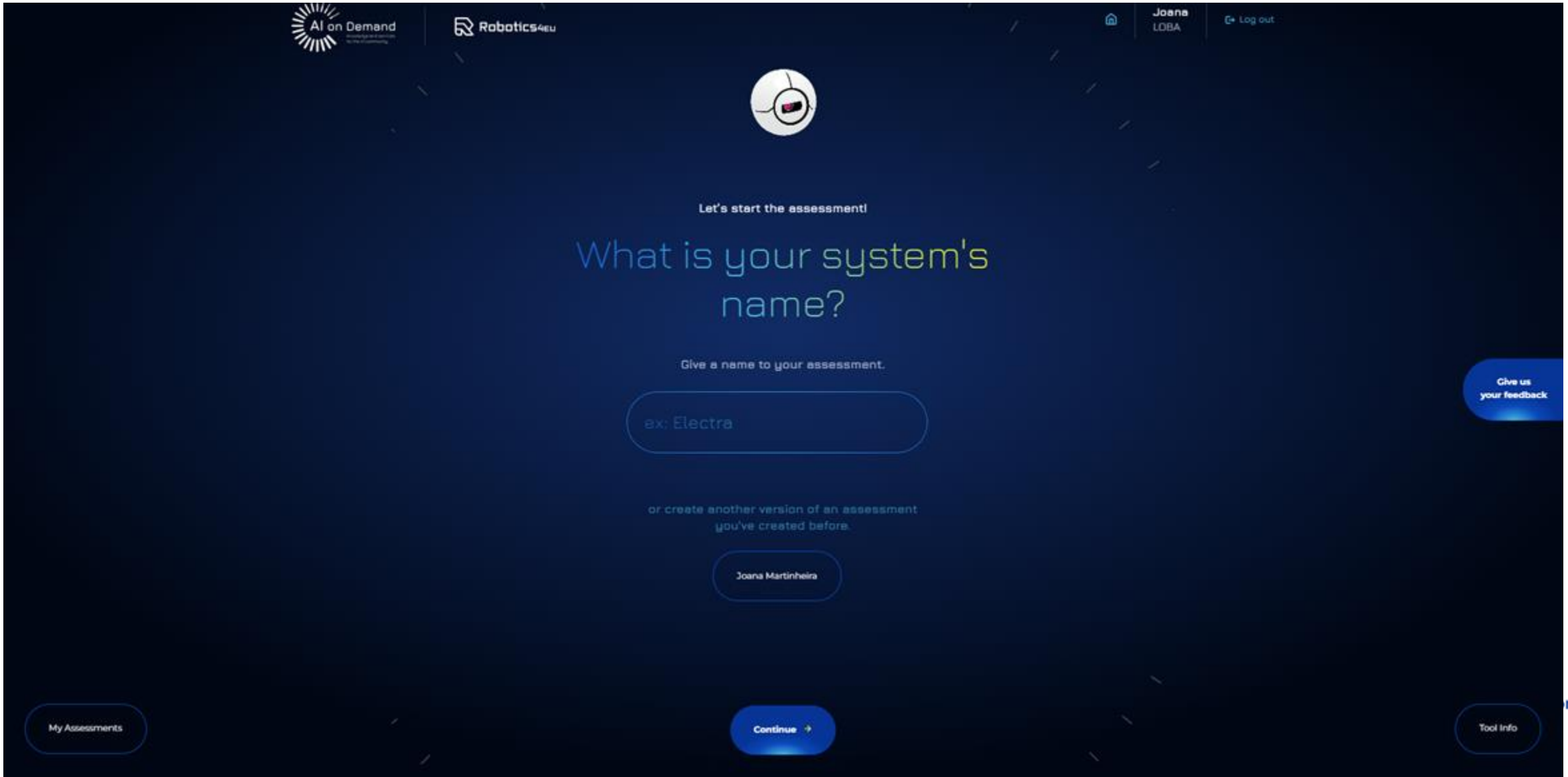

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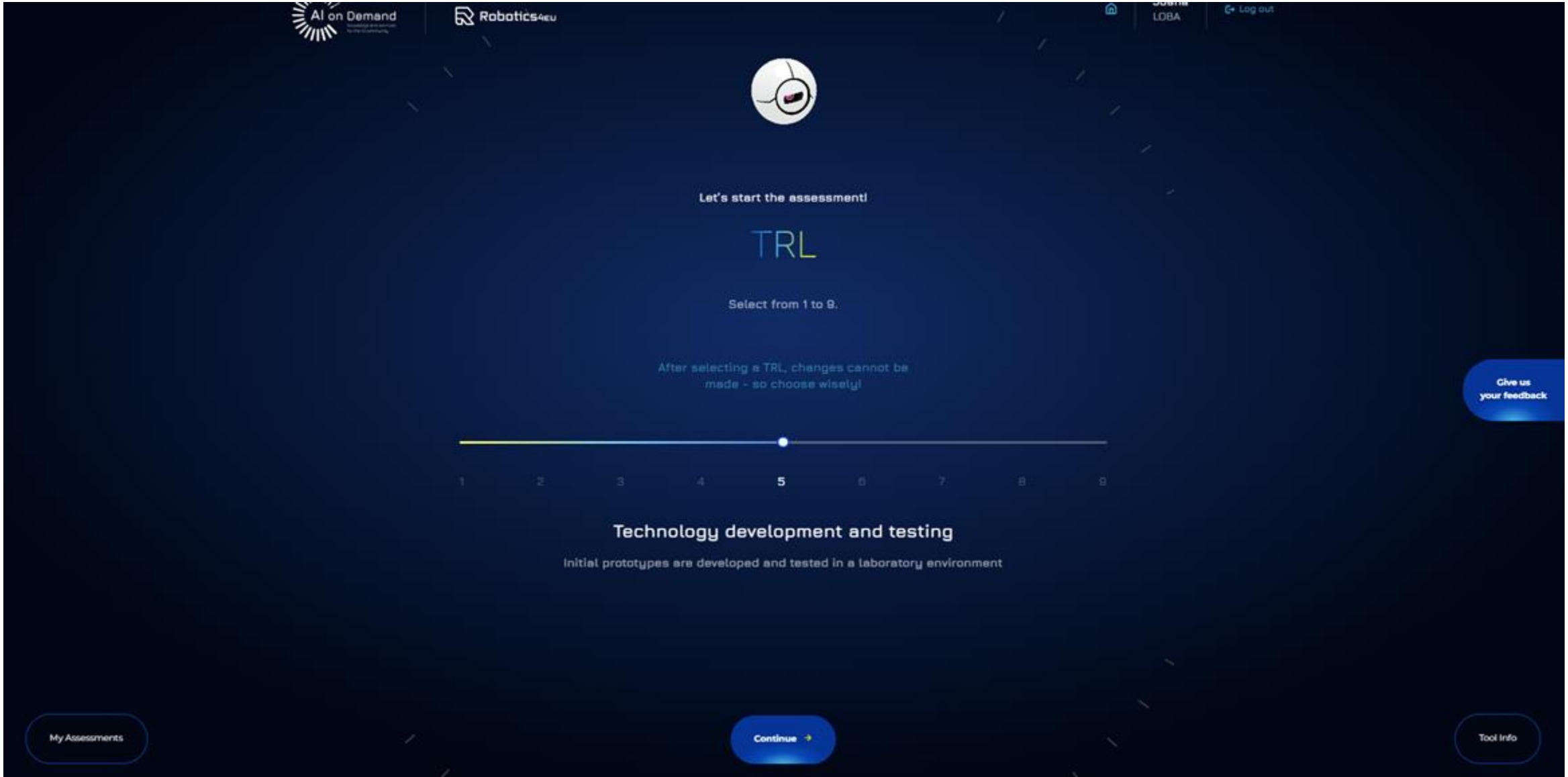

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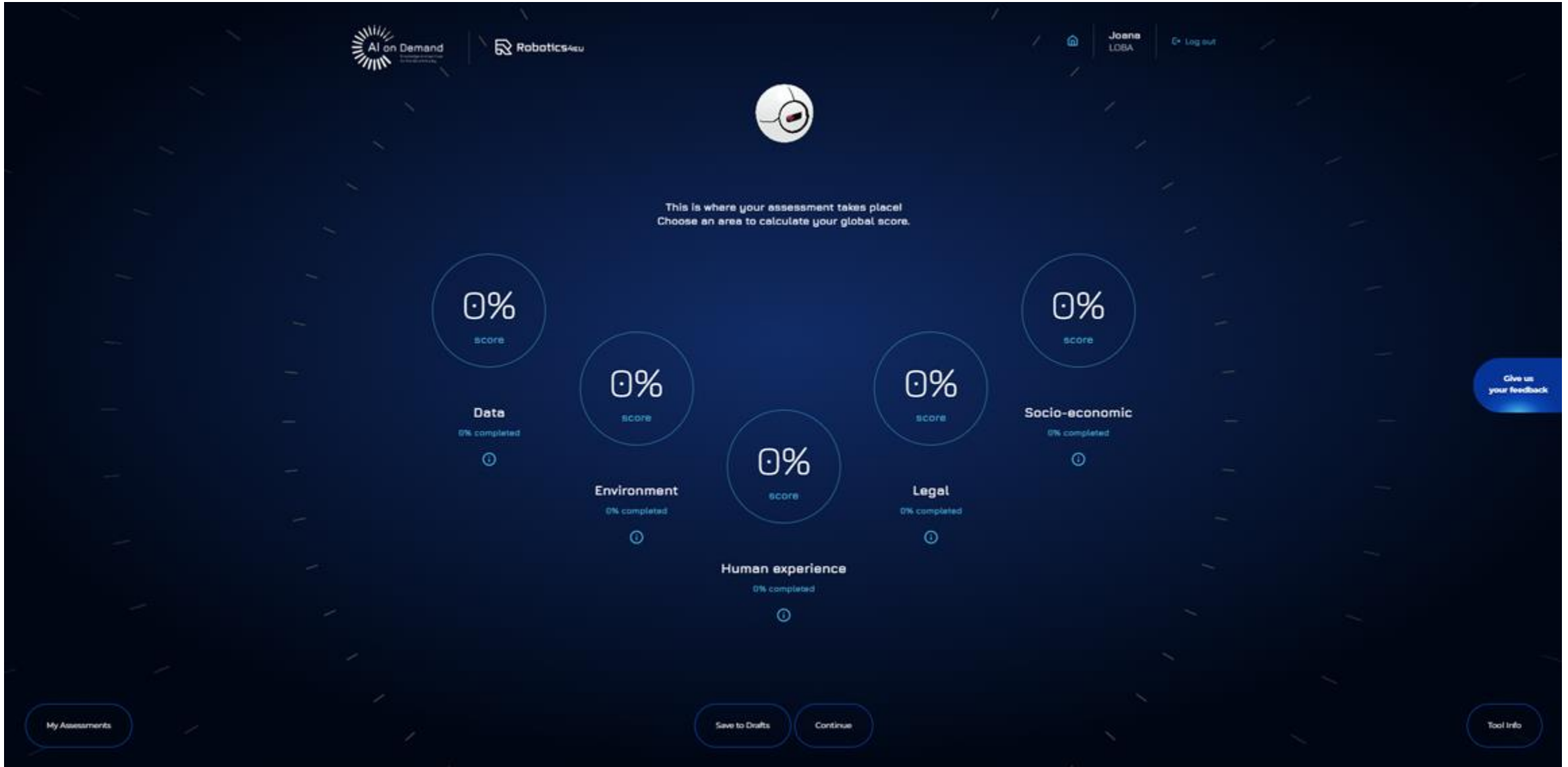

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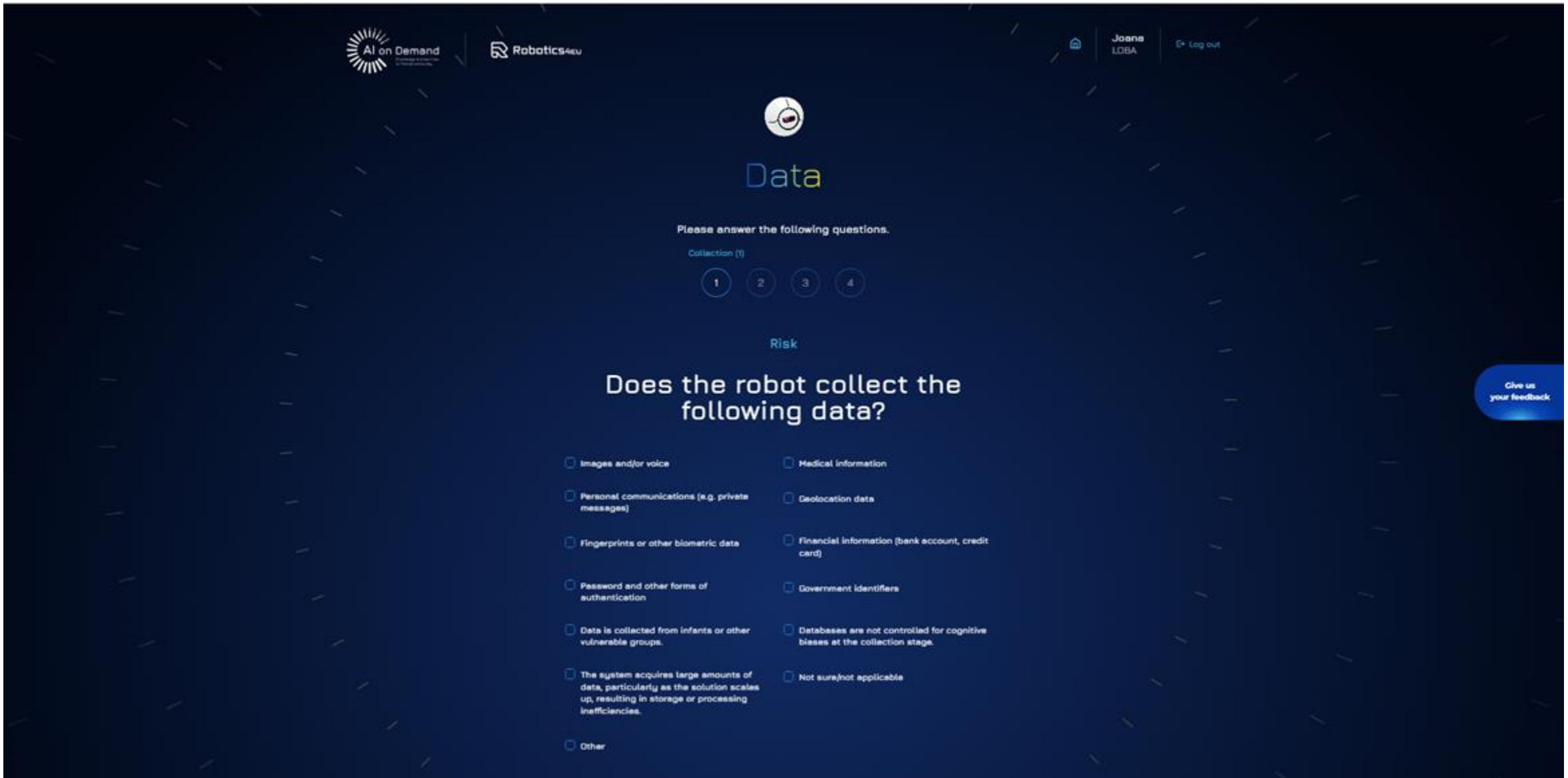

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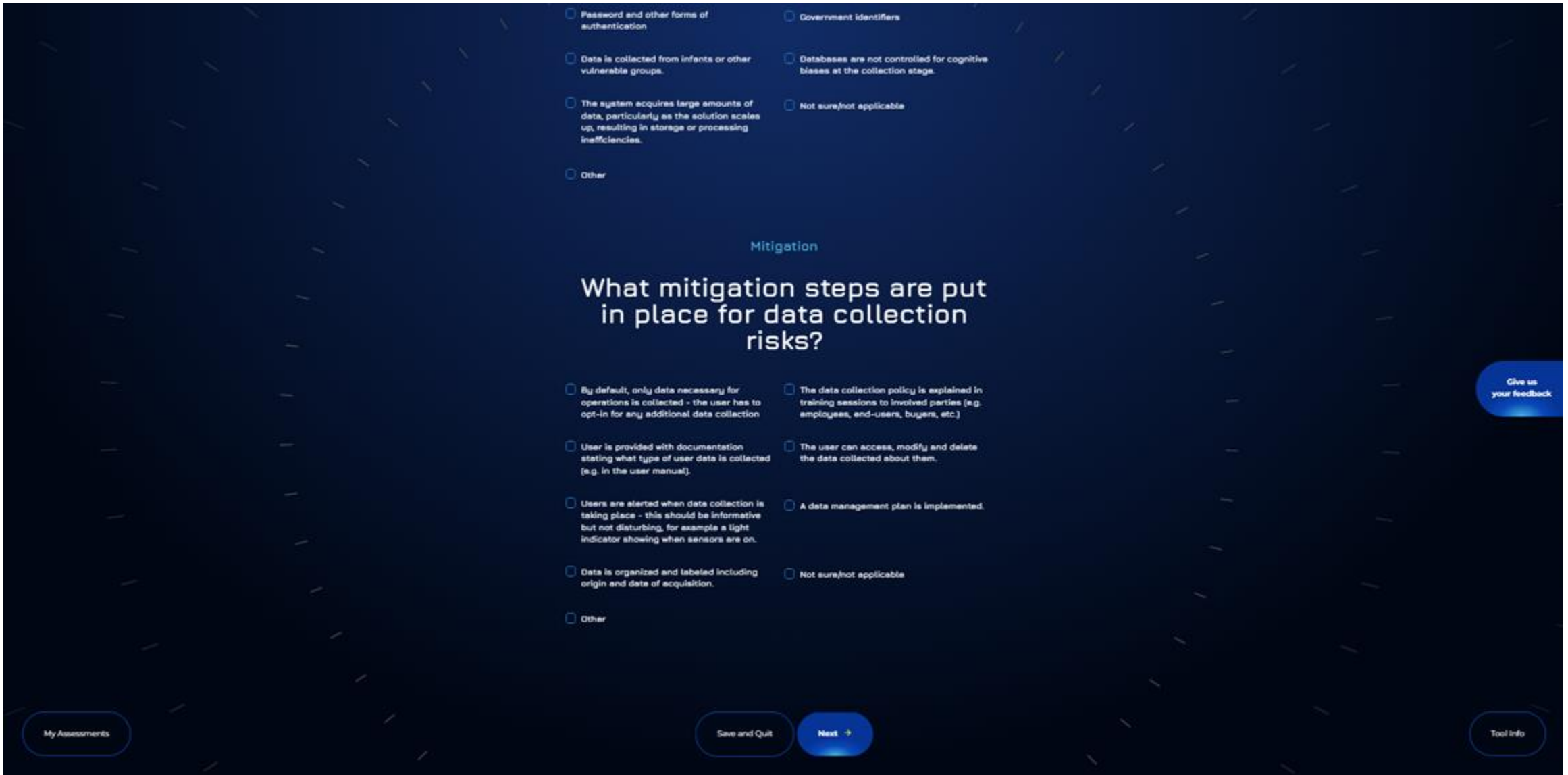

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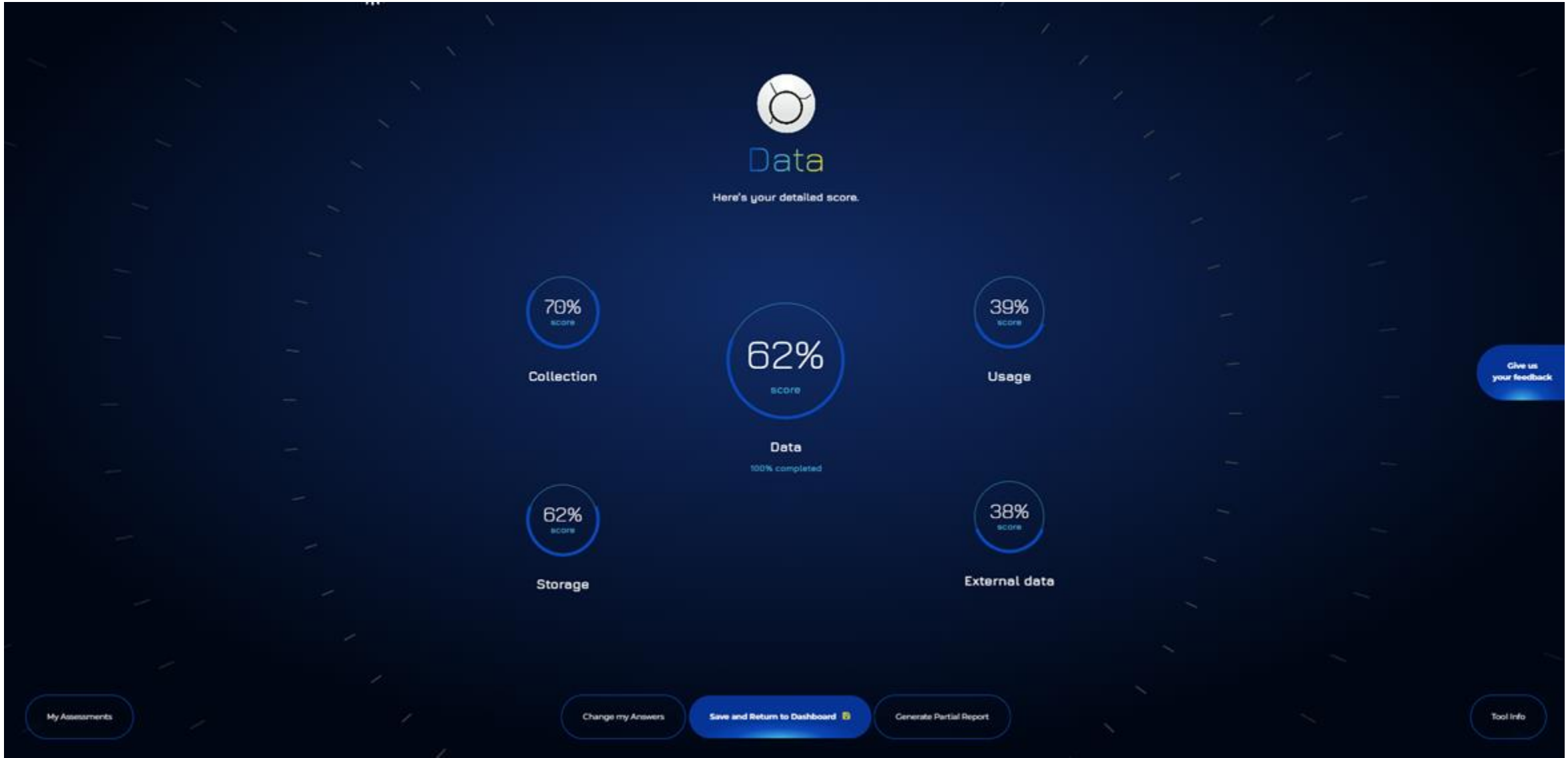

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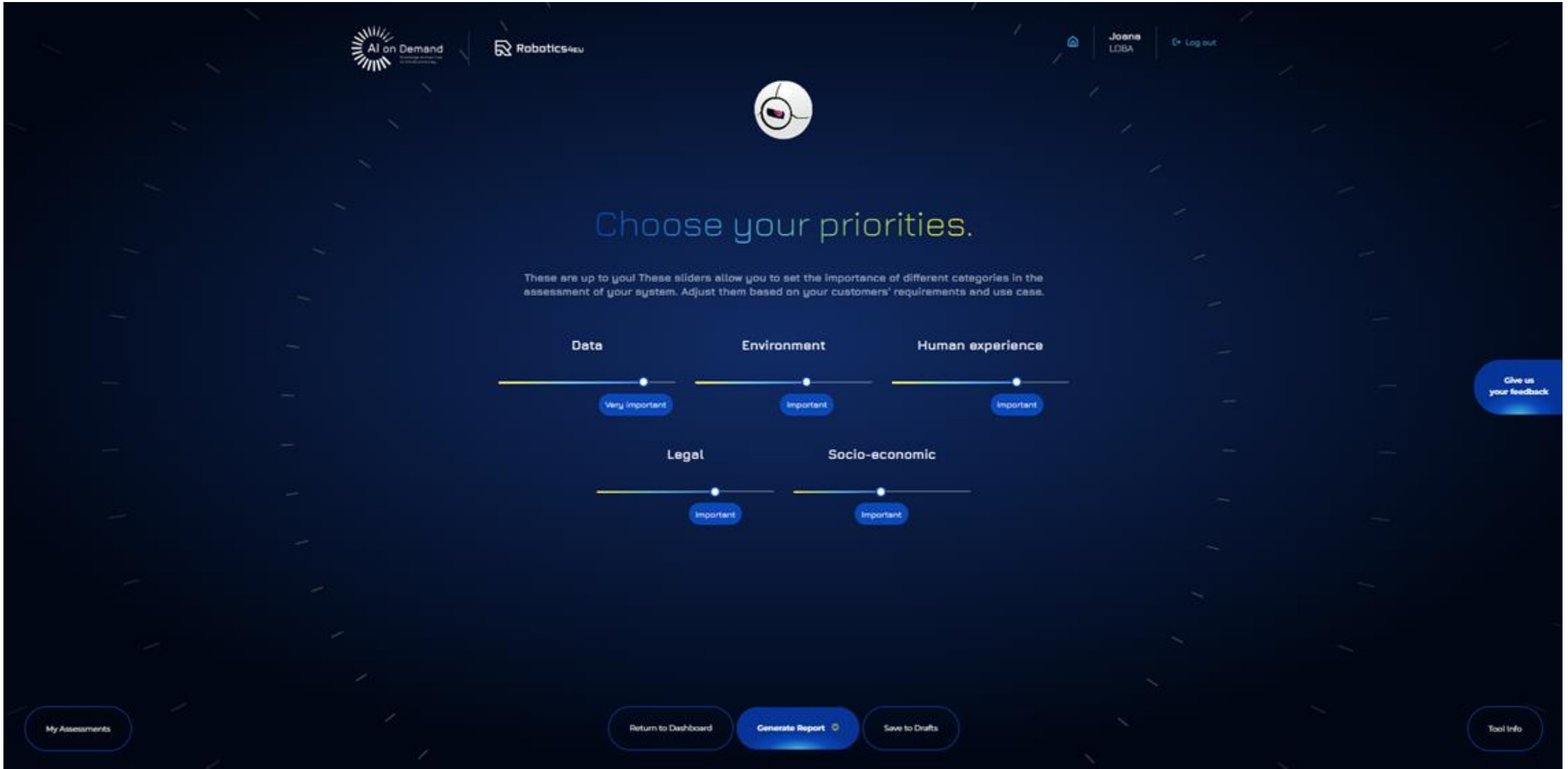

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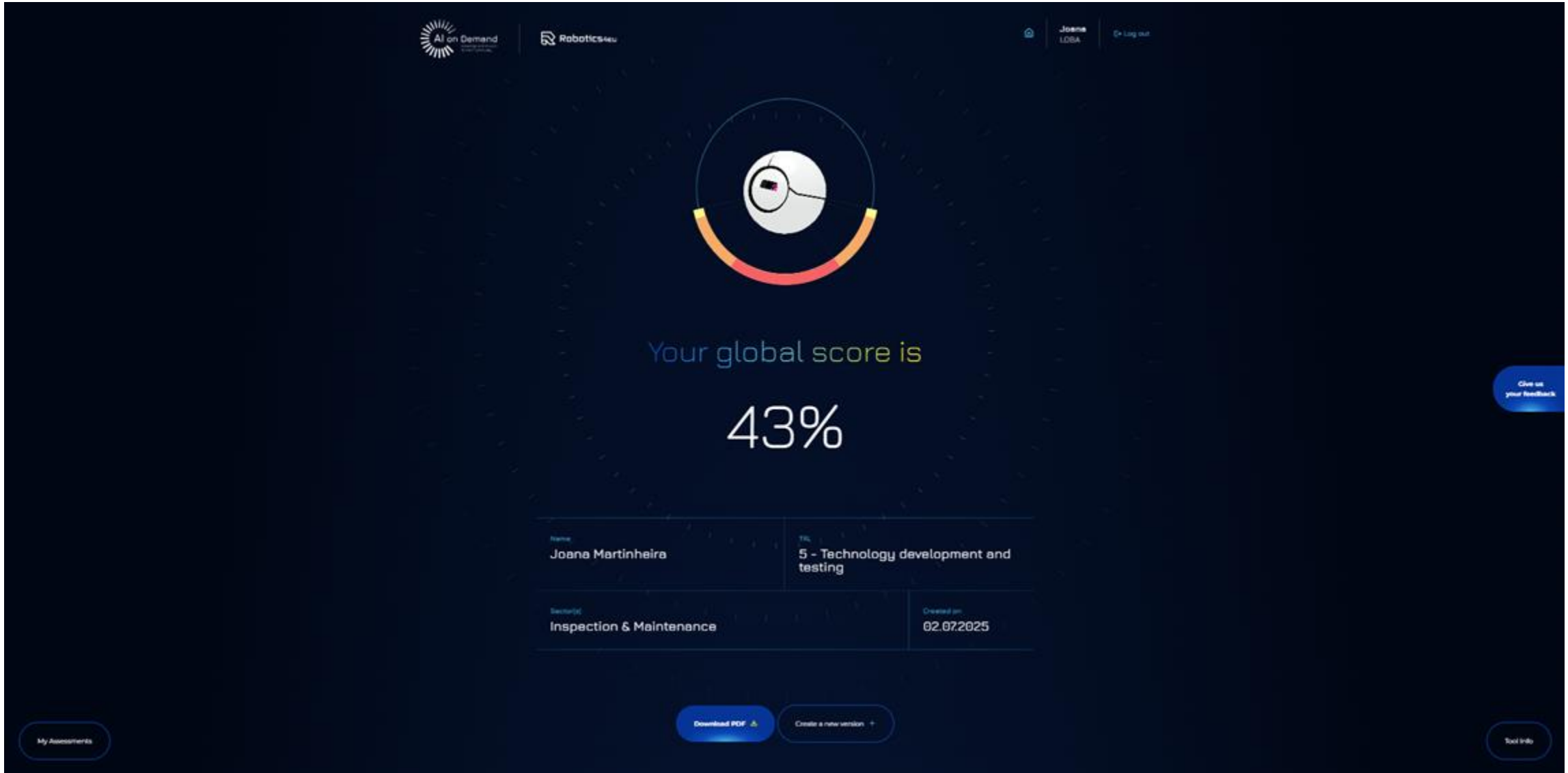

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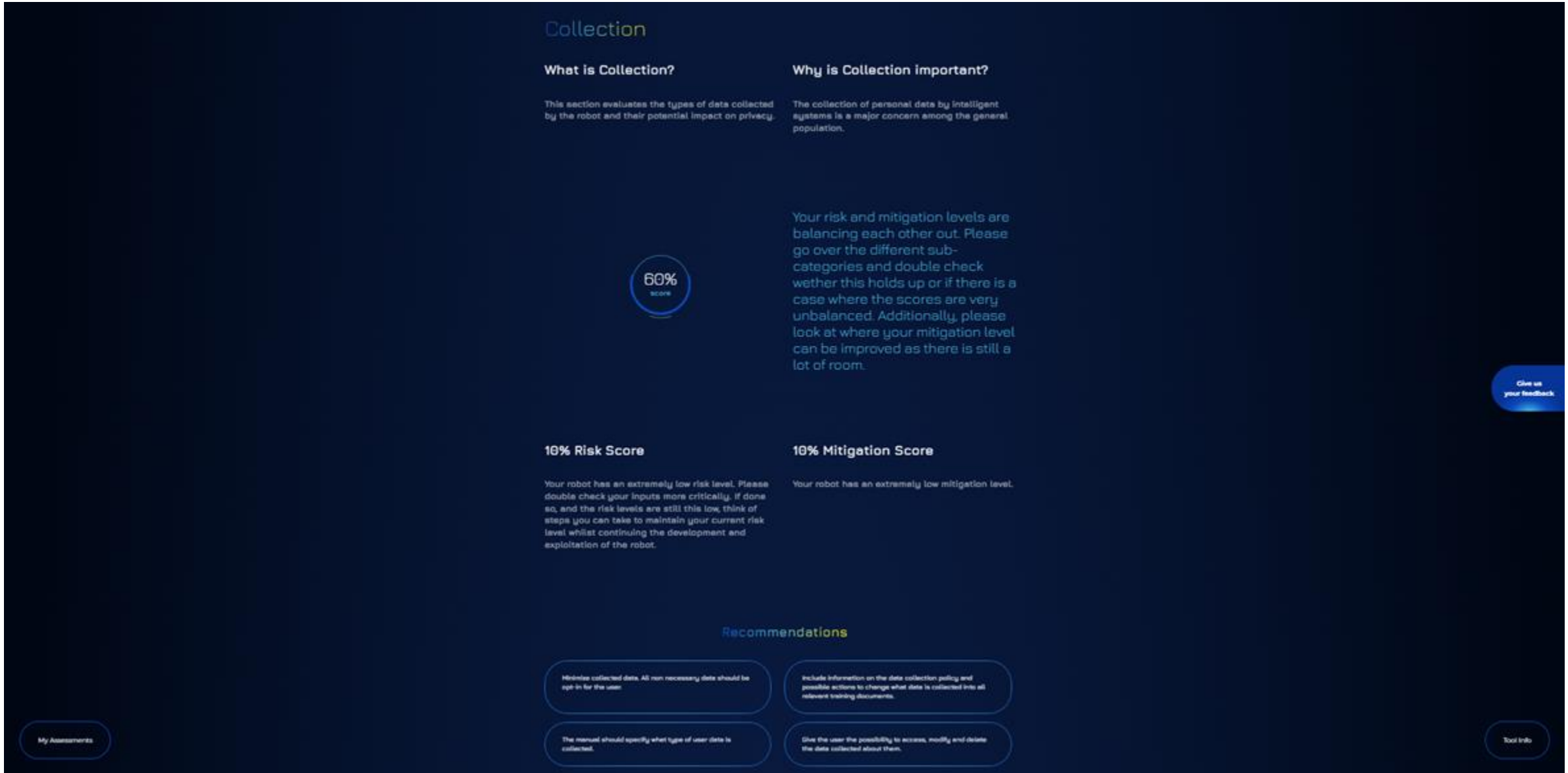

LIVE Demo-Session on the AIoD Platform

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The European AI-on-Demand (AIoD) Platform

- Objectives:

- ENHANCEMENT
- SUSTAINABILITY
- ENGAGEMENT
- INTEGRATION
- SCALABLE PLATFORM

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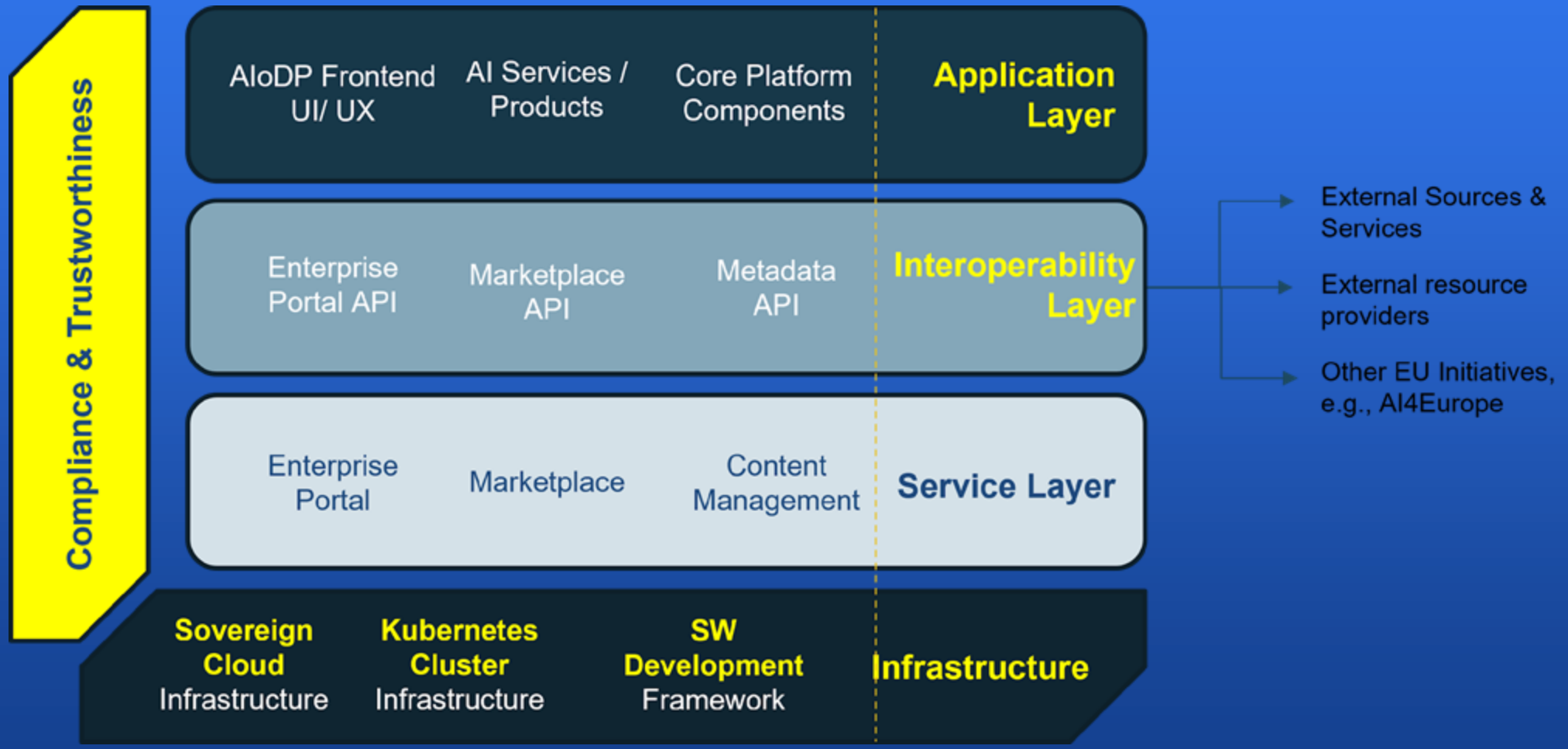
AIoD Platform High-level Architecture Overview



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Examples of Application and Service Layers of AIoD Platform

Business Navigator

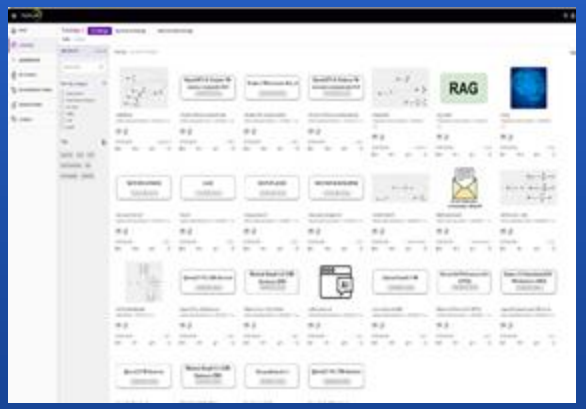
Overview and Navigation of European business contacts, visualized on a map, different views to filter and explore the landscape.

Marketplace

Provides a catalogue of European AI products and services, offering e-commerce services, pricing models, billing integration.

AI Builder

Services & tools (workflow engines, cloud resources, LLMs etc.) for accelerating the process of building, training, and operating AI.



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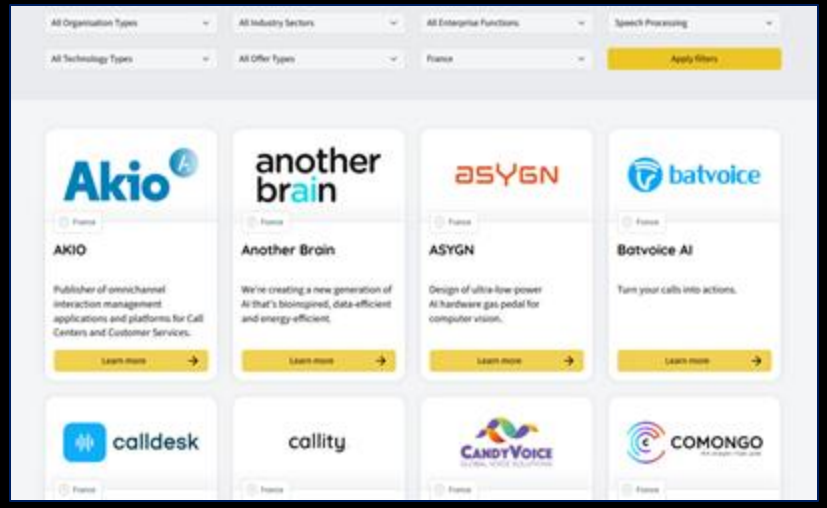
Business Navigator

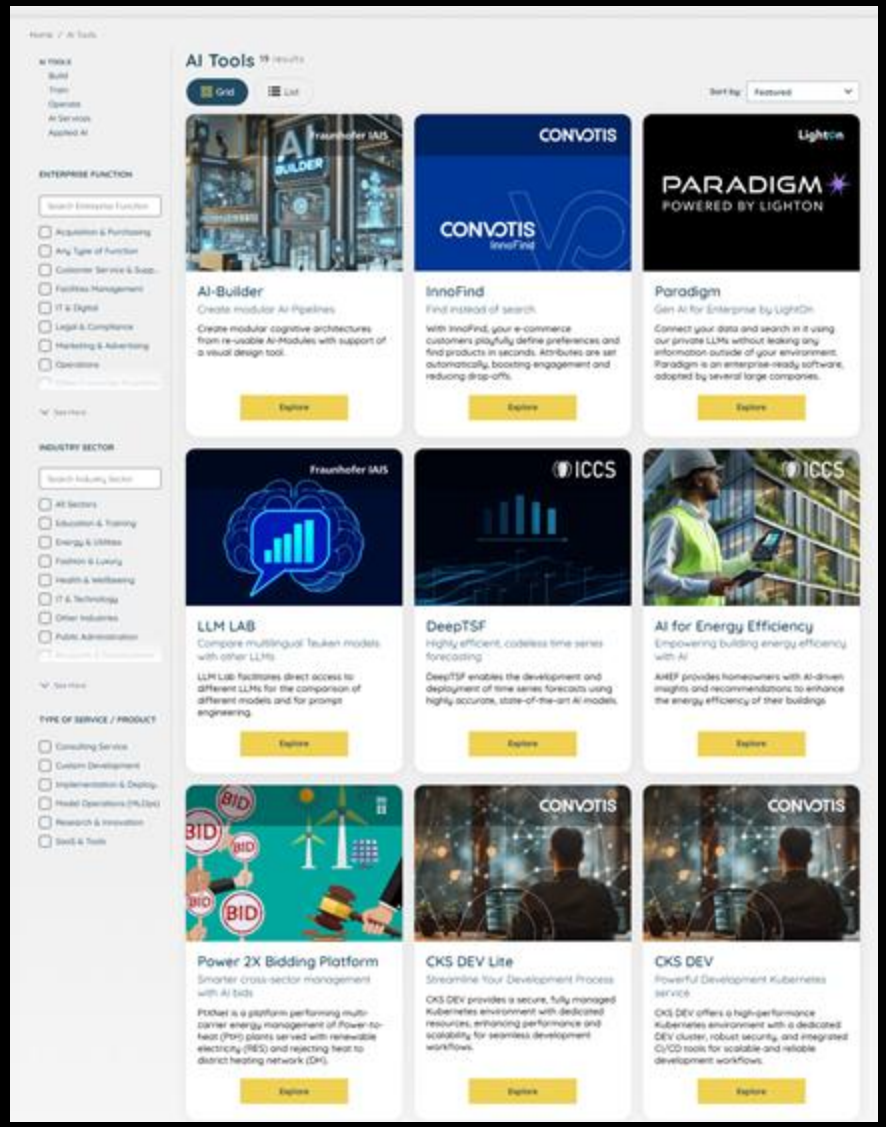


Comprehensive Overview and Navigation of TOP European AI Contacts:

- Offers visibility among the EU ecosystem
- Overview and Navigation of European business contacts
- Business contacts easily accessible
- MAP with visualized Landscape
- Different views to filter and explore the landscape

https://business-navigator.aiodp.ai

Marketplace



One-Stop Shop for AI Innovation

- Provides a secure and transparent catalogue of European AI products and services
- Offering e-commerce services, pricing models, billing integration.

https://marketplace.aiodp.ai

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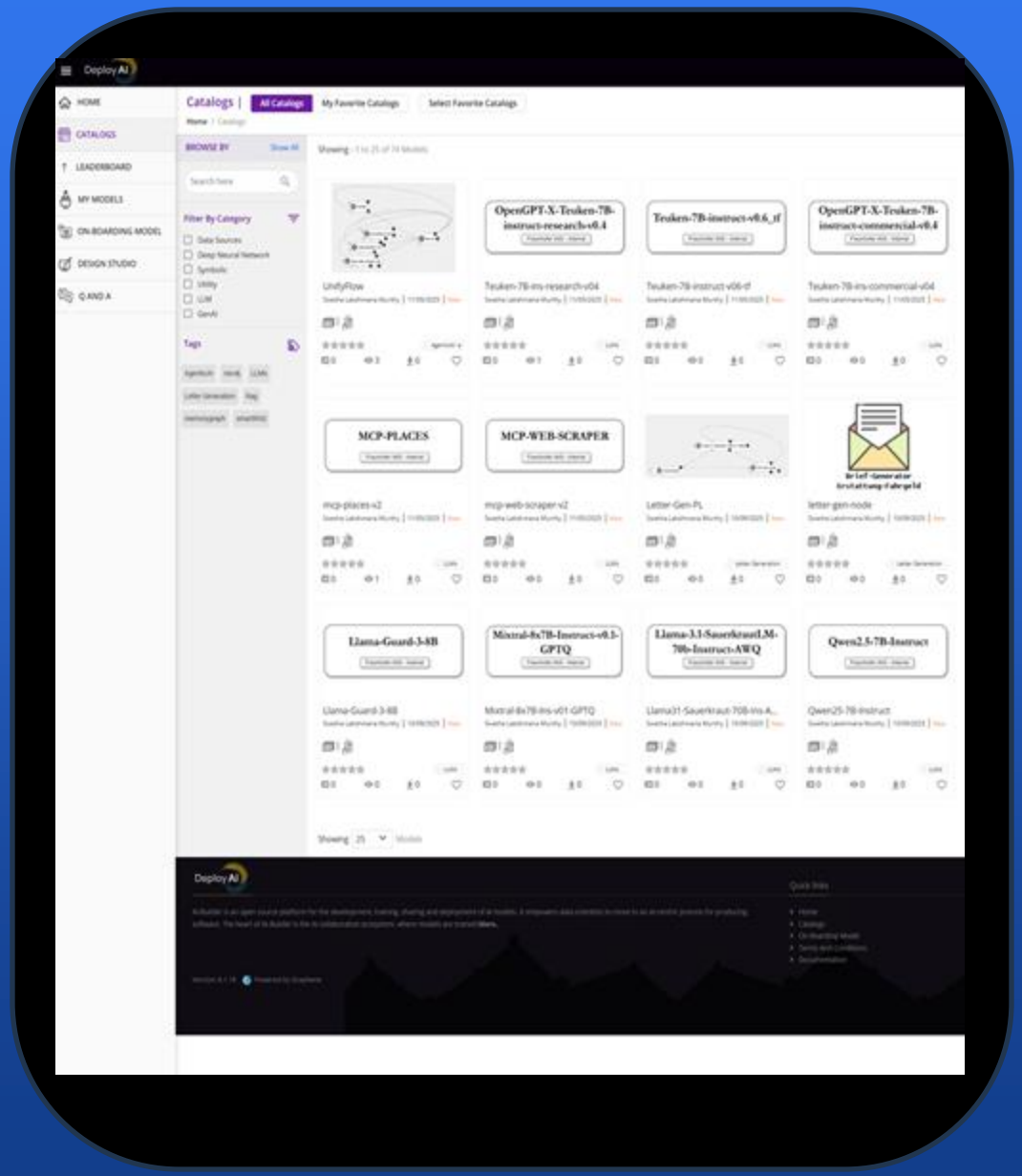
AI Builder



An open-source platform for the development, training, sharing and deployment of AI models.

- Catalog of AI-Modules: catalog with integration to the Virto Commerce marketplace to buy and sell them as products
- Visual AI-Pipeline Editor: easily create, share and deploy AI-Pipelines from reusable AI-Modules from the catalog without coding

https://ai-builder.aiodp.ai/#/home

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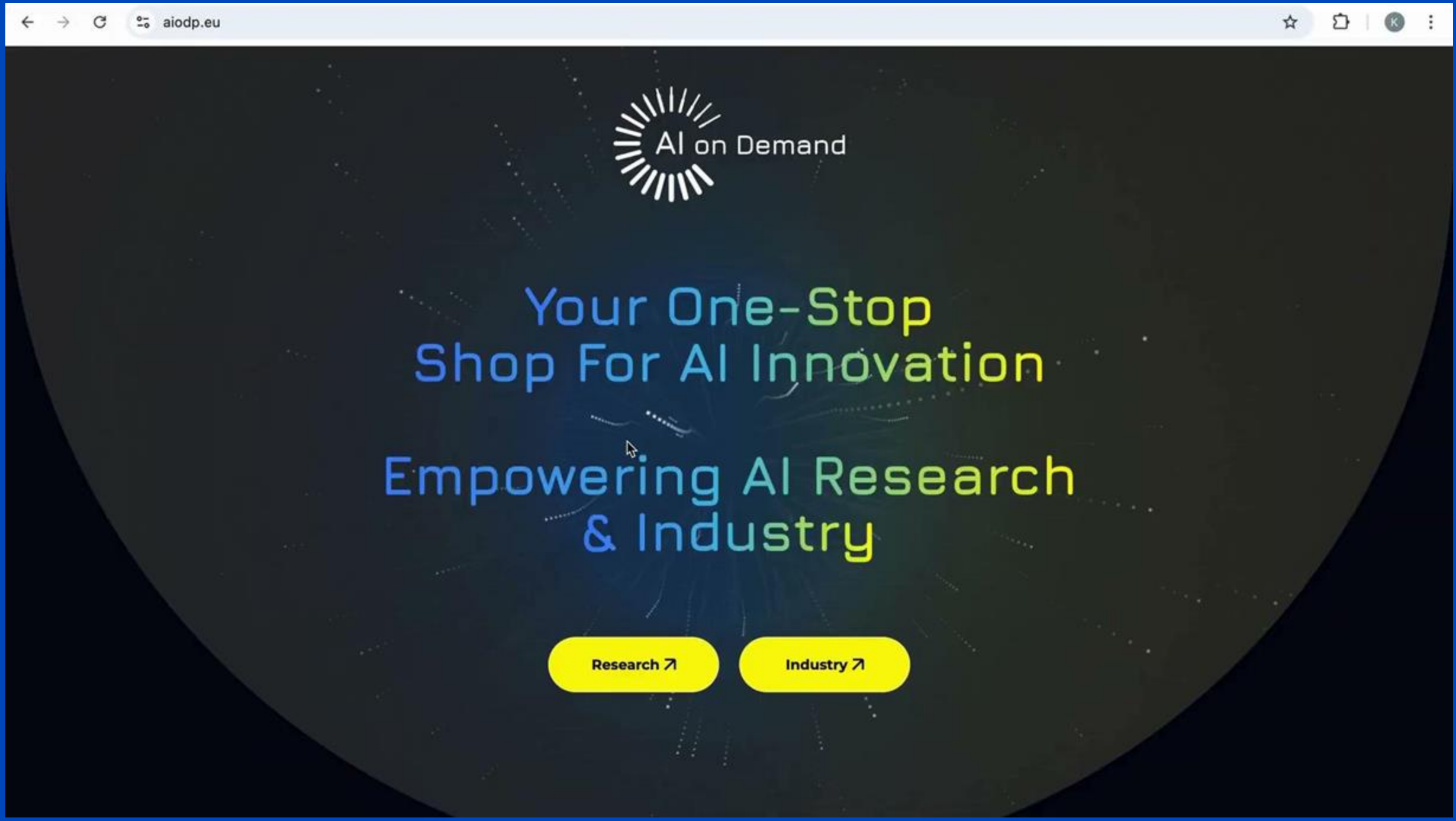
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