



Campinas Metropolitan Region

Highly industrialized in high added value areas

Technology and Research

Skilled Tech Workforce

Strategic location and service infrastructure



Sources:

- [1] Região Campinas, 2023
- [2] Data Center Dynamics, 2021
- [3] ENAP, 2022
- [4] LinkedIn, 2023
- [5] FGV, 2022
- [6] CAPES, 2022
- [7] INEP, 2021
- [8] G1/PUC, 2022

26 years providing R&D services

Our numbers

Manaus

Brasilia

Campinas

Porto Alegre



1,600

employees



\$100M

R&D projects (25e)



75

partners



240

projects / year



16,000

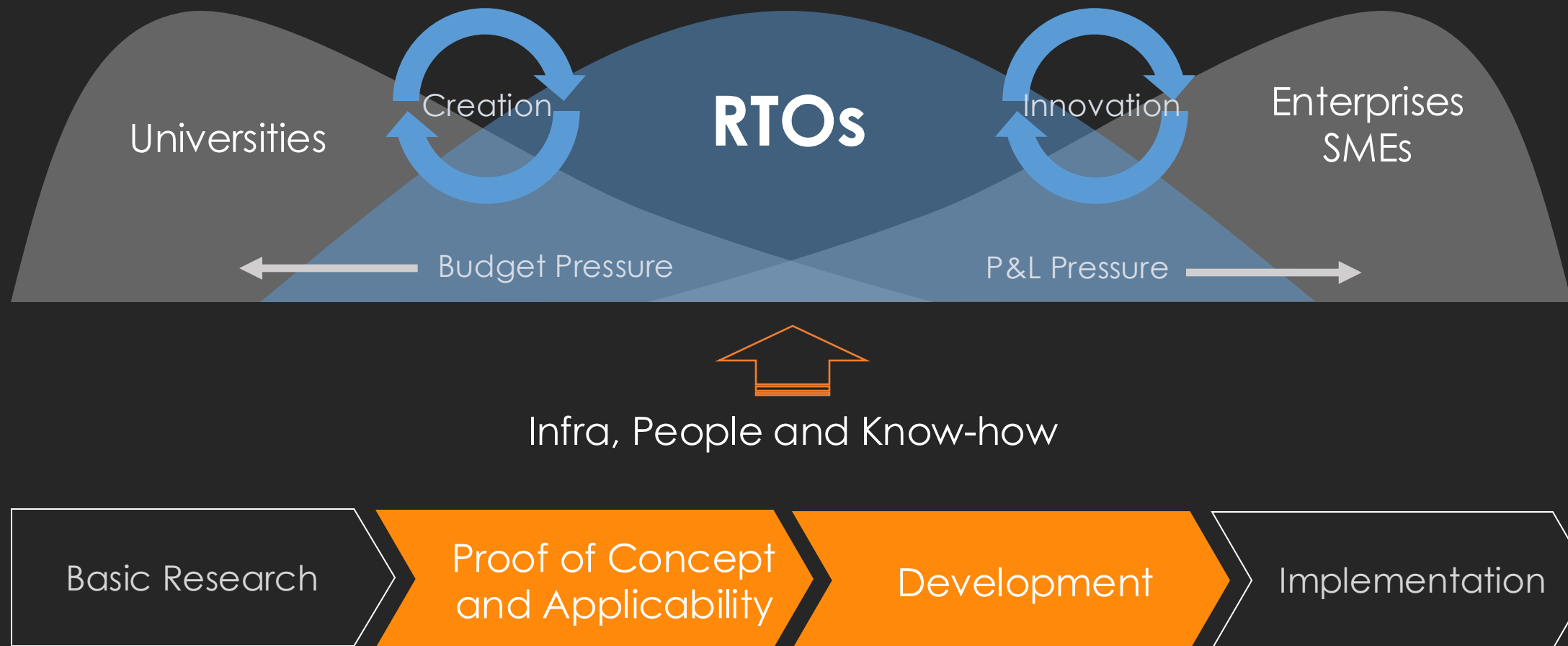
m² facilities



#1

ICT RTO in Brazil *

RTOs speeding up digital transformation



Certifications and Partnerships

global level

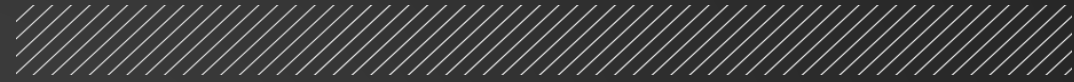
Committed to research,
development, services and
training



Embrapii Unit for
Medical Equipment and Connectivity



Funding as opportunity



Non refundable



Fiscal incentives

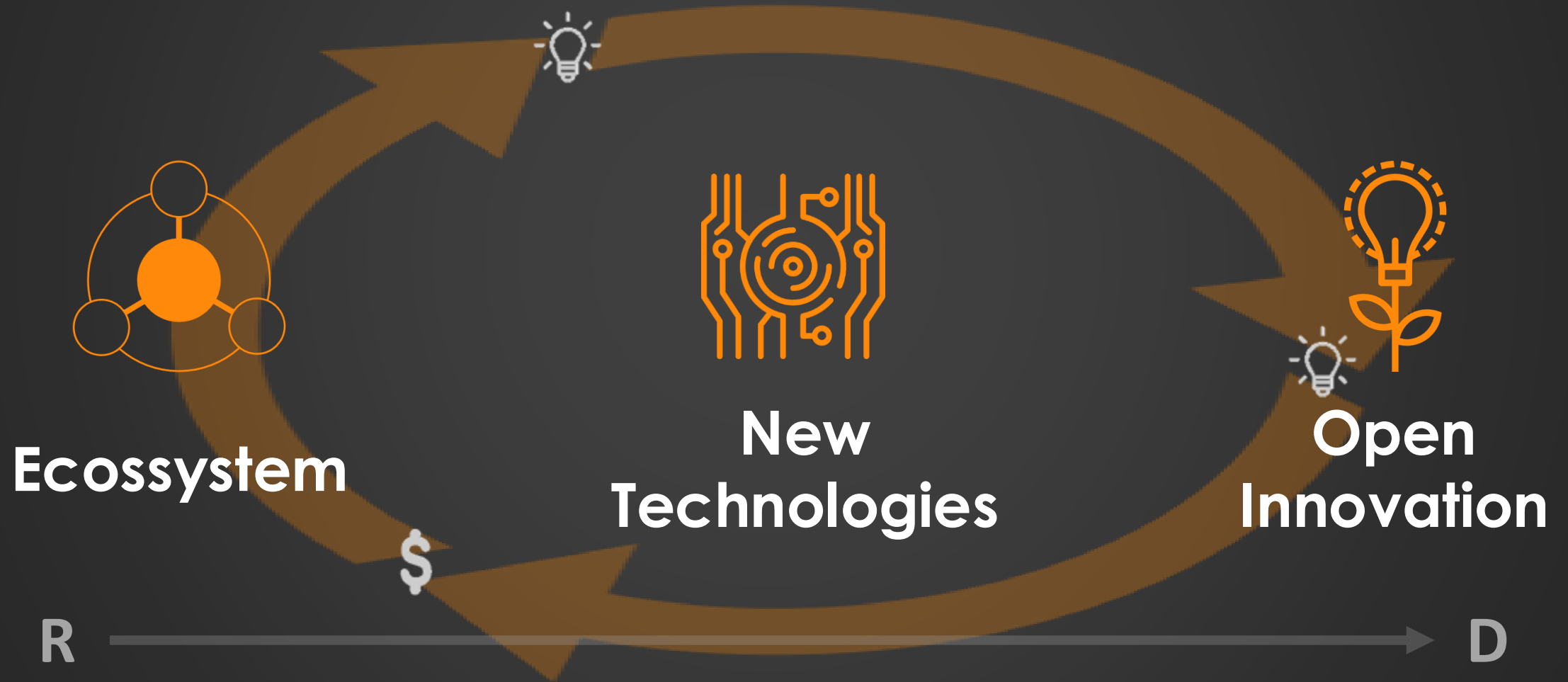


PPIs



Mandatory investments





Ready for 4.0 age!

Product Integration



Microelectronics

Cloud



Mobile & IoT

AI & Cyber



Innovation

Design



Embedded

Web & Apps

Visual Computing



Imaging

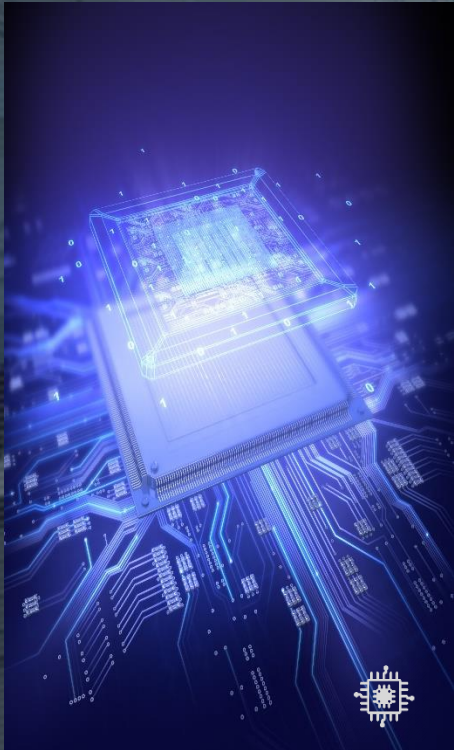


Voice



Offer

Focus areas and services



MicroE, Hardware
and Software
Solutions



Professional
Training



Laboratory
Test and Analysis



Telecom
Products
Certification



Innovation
Consulting

main partners



Skills in

Design and Packaging

ELDORADO



15 years of experience

50+ Projects / 20+ Customers

Integrated circuits projects end-to-end domain

- **Front End:** Digital / Verification
Analogical / Mixed Signal / RF / Power
DFT
- **Back End:** Physical Layout
Sign off verification
MEMS
- **Packaging:** Layout / Routing
Signal Integrity / Reliability Analysis
Prototyping / Characterization / Qualification (JEDEC)

Technologies / Foundries

180nm | 65nm | 40nm | 28nm |
22nm | 12nm | 6nm



SILTERRA xfab



imec



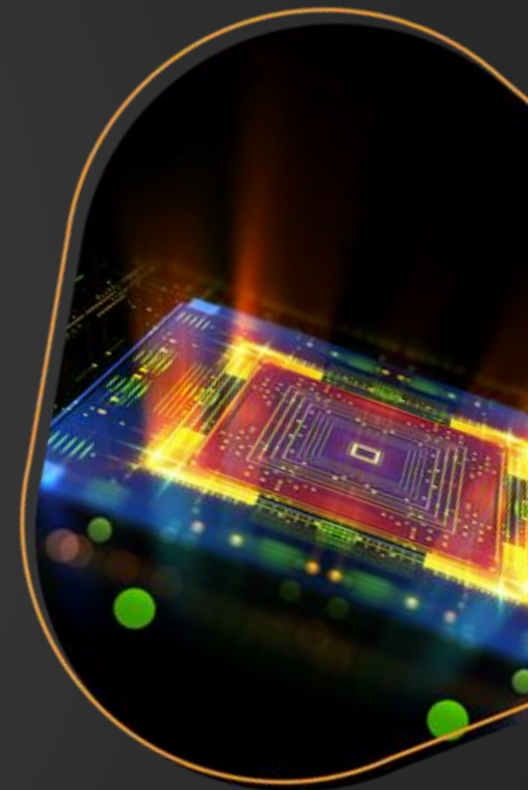
7

International
Customers

17

Tapeouts

International Partners



Skills in

Hardware Development

ELDORADO



20 years of experience in HW development
300+ projects / 100+ customers

End-to-end skills and capabilities

Multidisciplinary teams with complementary skills:

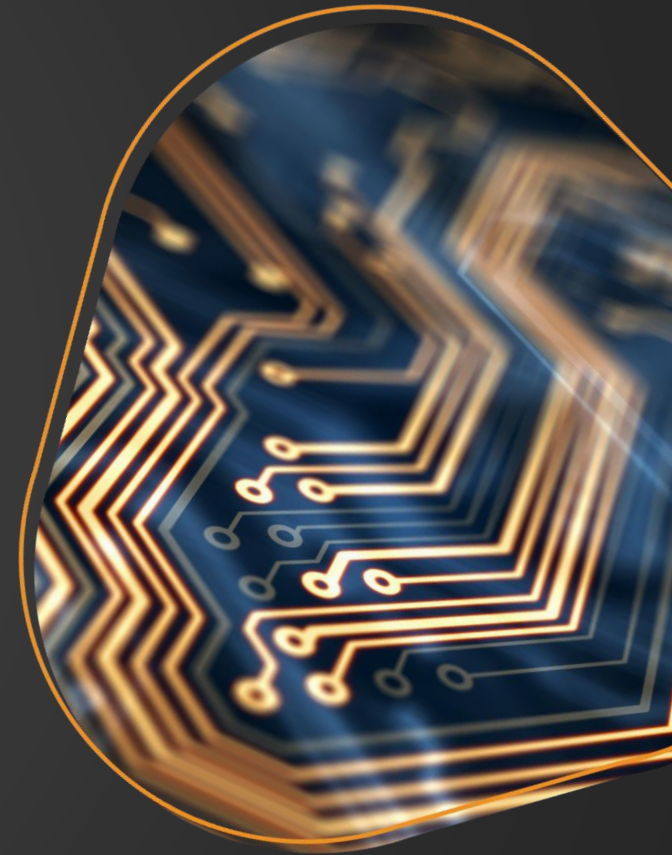
- System Engineering
- Analog and Digital Electronics
- Power Electronics
- RF / EMC
- Embedded Software

Robust laboratorial facilities

- Telecommunications, EMC, Power Electronics, Mechanical and non-destructive analysis

40+
Labs for
development and
certification

90
FTEs



Development Tools:



Ansys



pads
personal automated design system

cadence



KiCad

PSIM

Skills in Embedded Software



OS Upgrade Expertise

Since Android 6
Ready to Android 16
(early access)



Working closely with

Qualcomm
MediaTek



All Embedded SW layers

Kernel
Sensors
Connectivity
Performance
Cyber-security



Architecture Experience

x86
ARM
Power
RISC-V



Know-how



Process and Tools

CI/CD
GIT
Gerrit
Jenkins
Artifactory

490+
Open-source
Contributions (Last 5
years)

10+ Years
Of experience with
Embedded Software
Development

150+
FTE ELDORADO

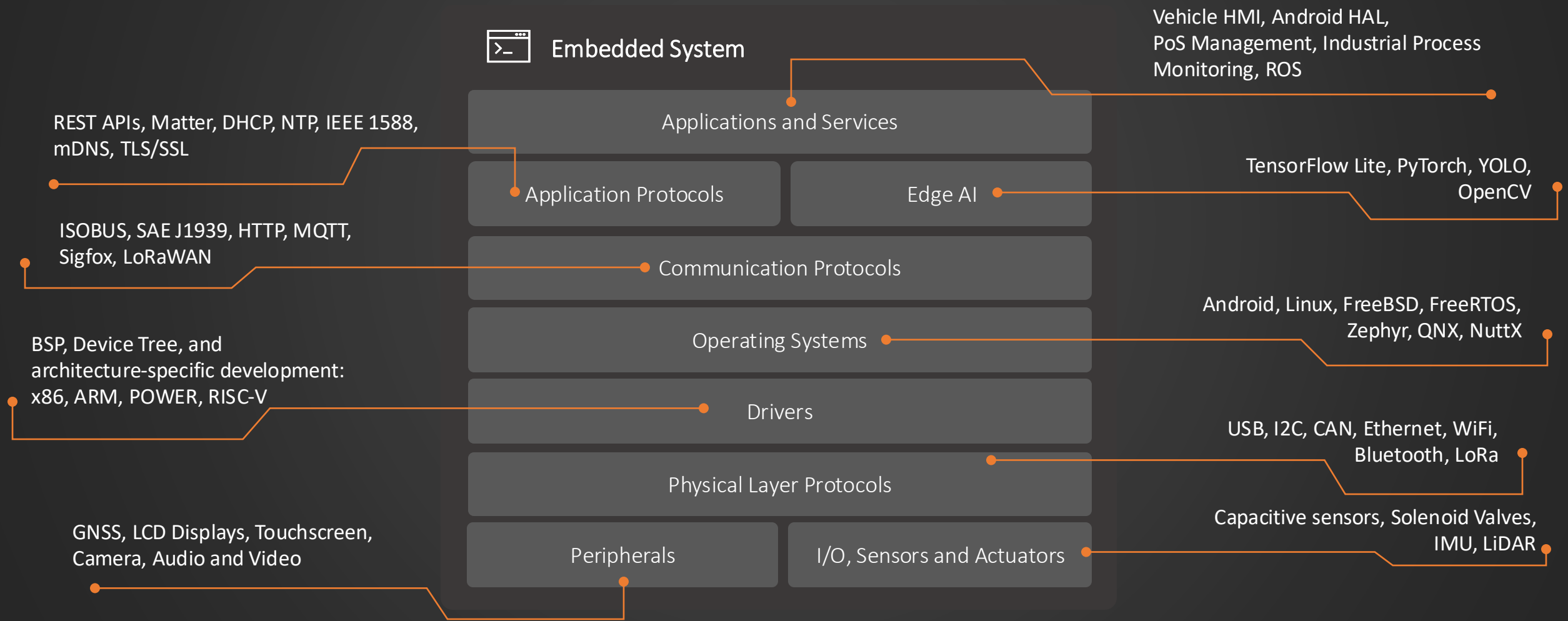


androidauto

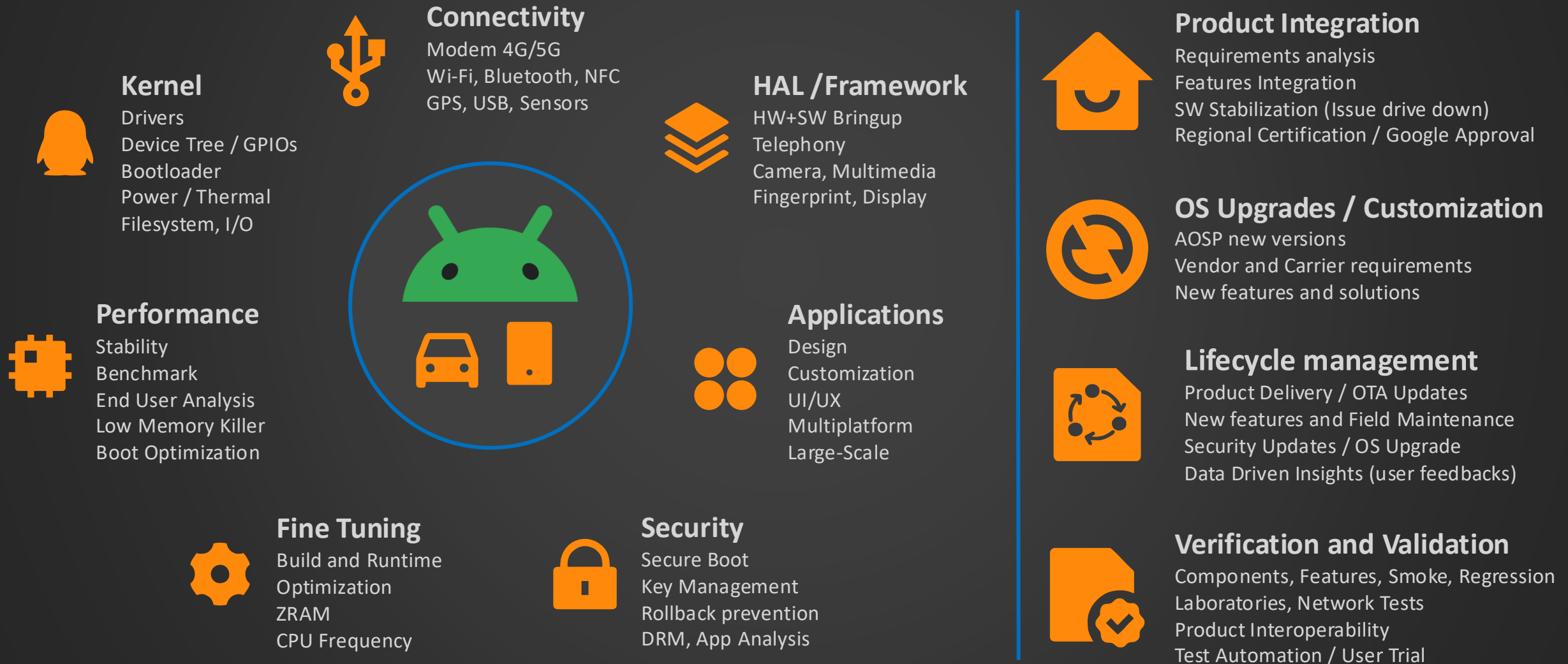


AUTOSAR

Skills in Embedded Software



Android Development



Skills in Software Application



Software Development

Mobile Apps (Android, Automotive and iOS) and Web Apps



User Experience

Research Flows
Final User Interface
University Partnership



Architecture Design

High Transition Volume
Flexibility
Security



Cloud Infrastructure

Serverless
Multi-cloud

20+

Years of experience with SW application development



Quality Assurance

Software Verification
Software Validation



Work Process

CI/CD
Devops
Security by Design



Machine Learning Models

Data
Image
Sensors

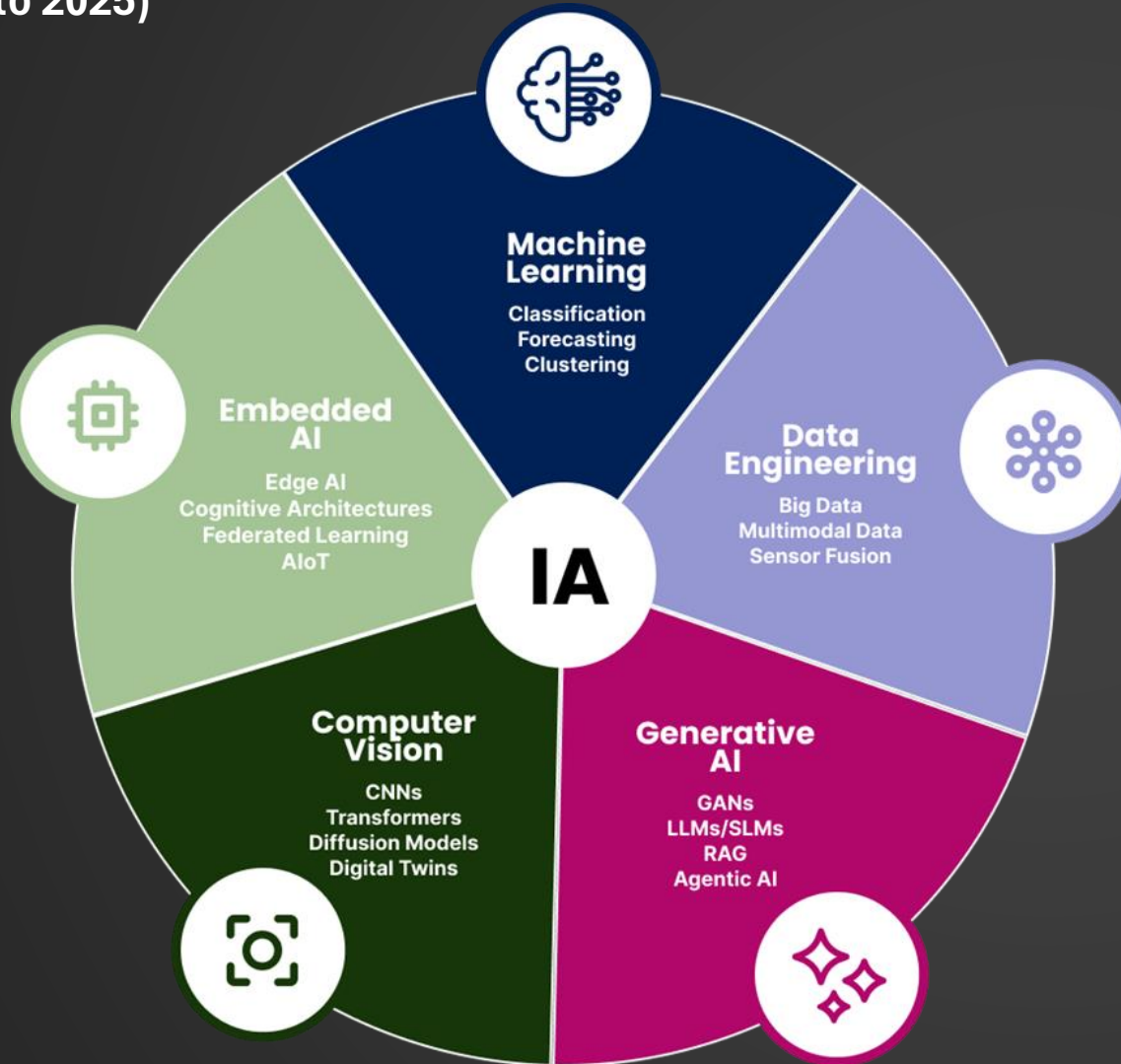
500+

FTE ELDORADO

Skills in

Artificial Intelligence

(2022 to 2025)



80

FTEs

82

Projects
Developed

290M

R&D
investments

25

Customers

Skills in

Camera & Visual Computing

From sensor data to advanced visual data applications

+ 14 Years
Experience

200+
FTEs

Image Quality

Objective & subjective evaluation
DXOMark & VCX
Industry Standards

Computer Vision

AI Models & Datasets for
classification, detection, tracking, ...
Use of synthetic data



✓ 7 global-level labs



✓ SOTA in VLM



Image Processing

Camera ISP Pipeline
Computational Photography algos
AI Models & Datasets for low level
image tasks

✓ State-of-the-art research

Camera Embedded SW

Camera module bring-up
Features integration & debugging
Camera app development
Qualcomm & Mediatek platforms
Quality process management

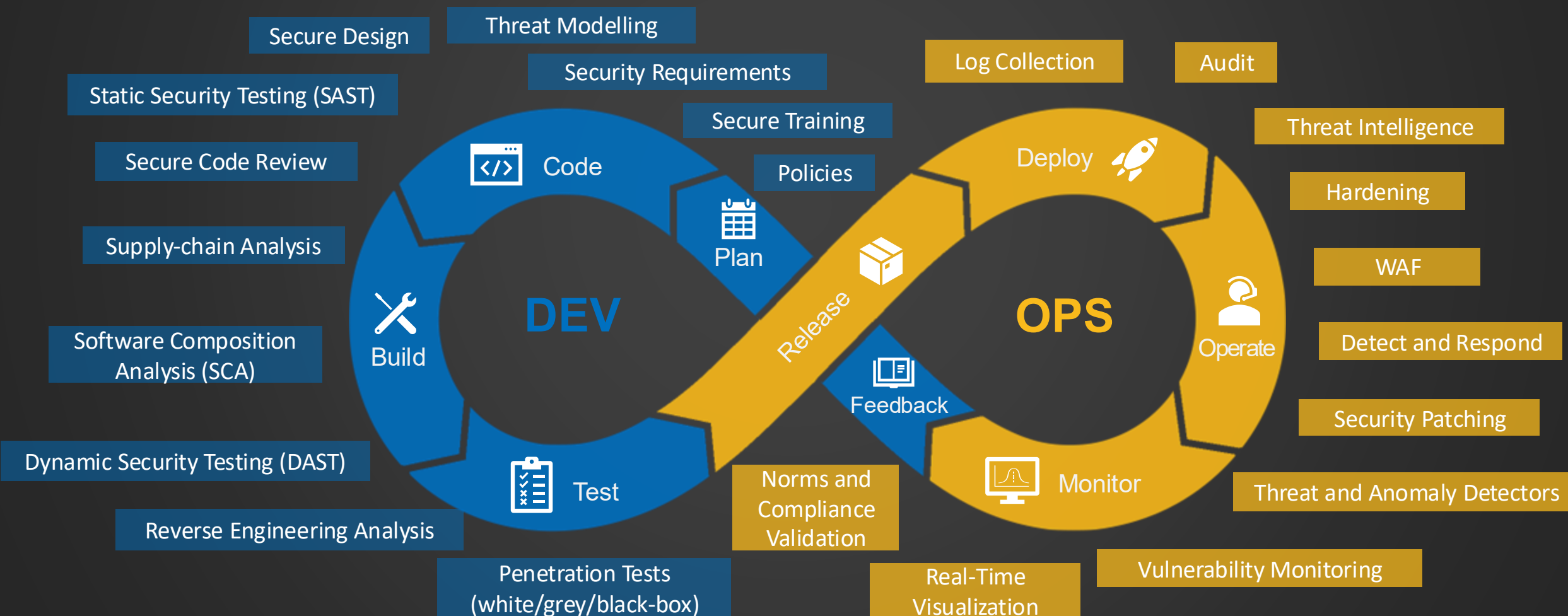
✓ 80+ models

Digital Realities & Spaces

VR/AR/XR
Metaverse
Digital Twins

Skills in Cybersecurity

ELDORADO Security Platform: Continuously securing the **PRODUCT** lifecycle



Product Integration and Validation

SW Upgrades

- Operating System Updates
- Deployment (OTA packages)

User Feedbacks

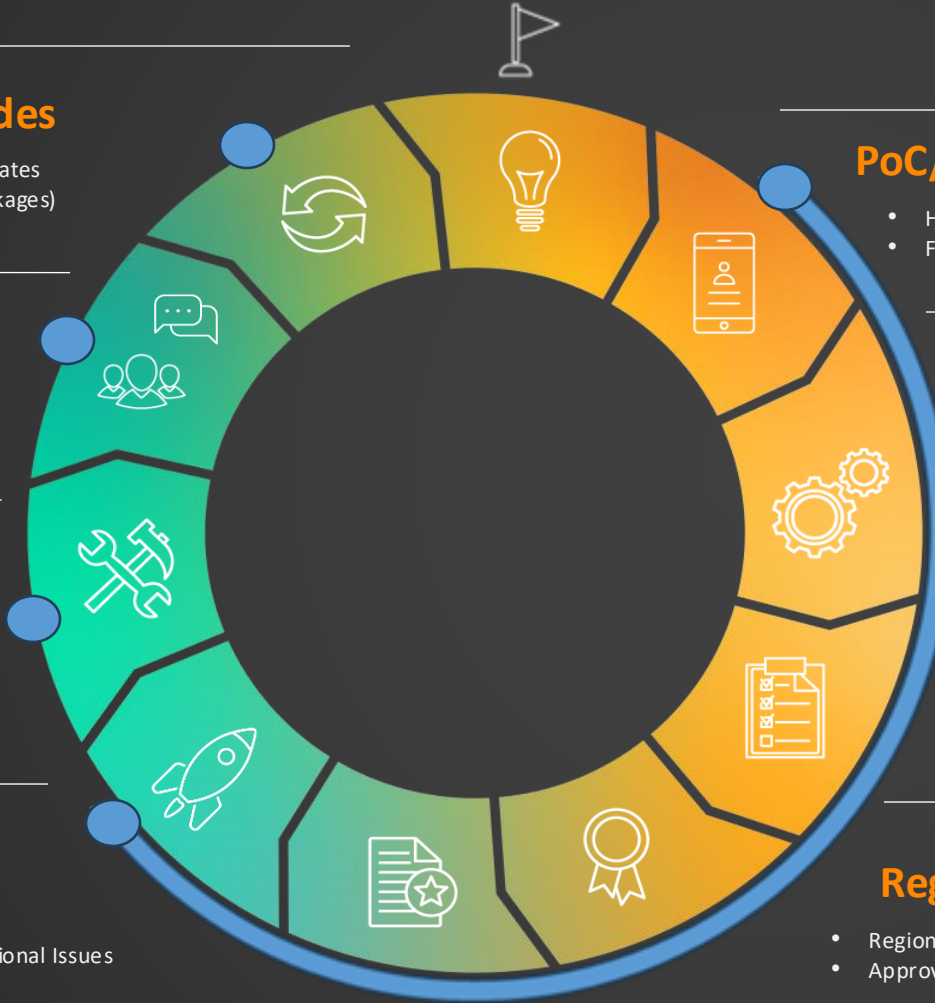
- Post-Launch Data Analysis
- NPS and User Satisfaction

Field Maintenance

- Deployment (OTA packages)
- Software Maintenance and Security

Market Launch

- Deployment (new products)
- Compliance with Factory and Regional Issues



Homologation

PoC/MVP

- HW & SW Integration
- Features, 3rd Party Apps, Components

Dev & Tools

- Defect and Customization Management
- Support for Trials and Testing

Tests and Automation

- Product Testing and Lab Trials
- User Trial and User Experience
- Test Automation with AI

Regulatory / Certifications

- Regional Product Certifications
- Approval with Regulatory Agencies

300+

FTE ELDORADO

15+

Years of Expertise in SW integration

~50M

Users / Month

~160M

Active Users

125+

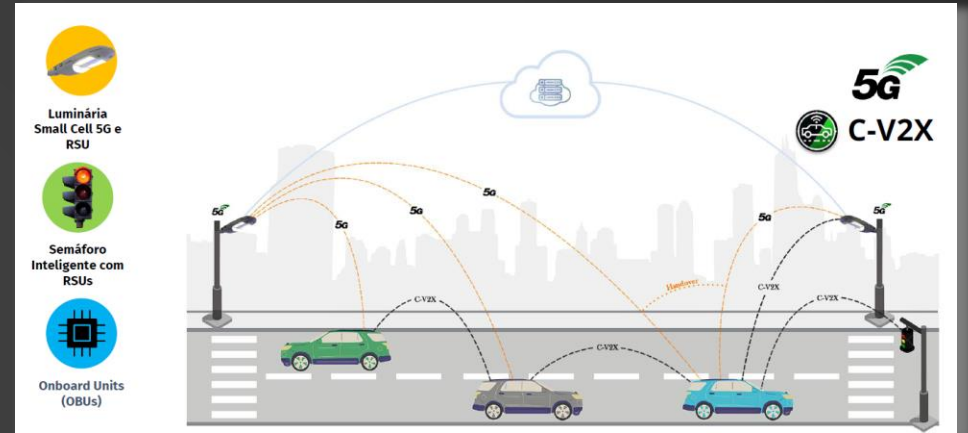
Countries

Skills in Connectivity

Connectivity and Applied Cases Laboratory

Environment created for validation and experimentation of use cases in 4G/5G connectivity solutions and private networks, such as:

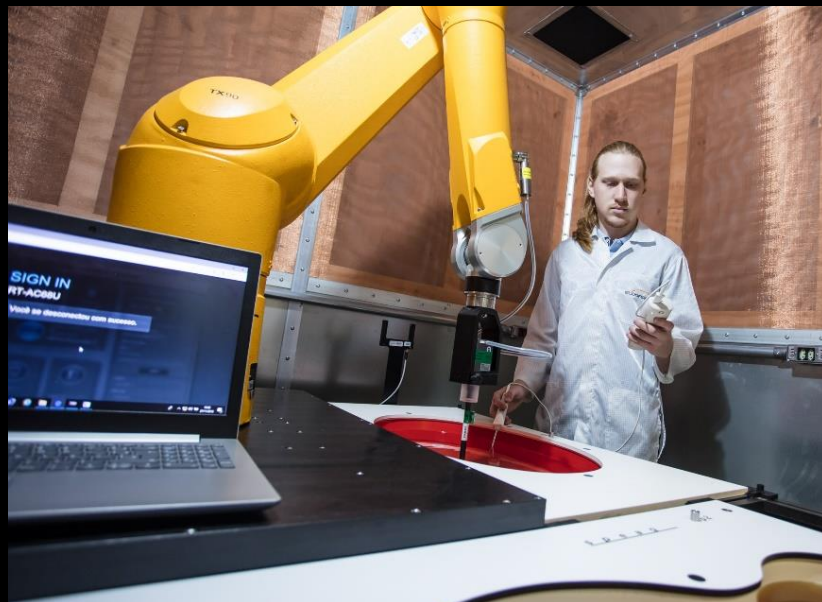
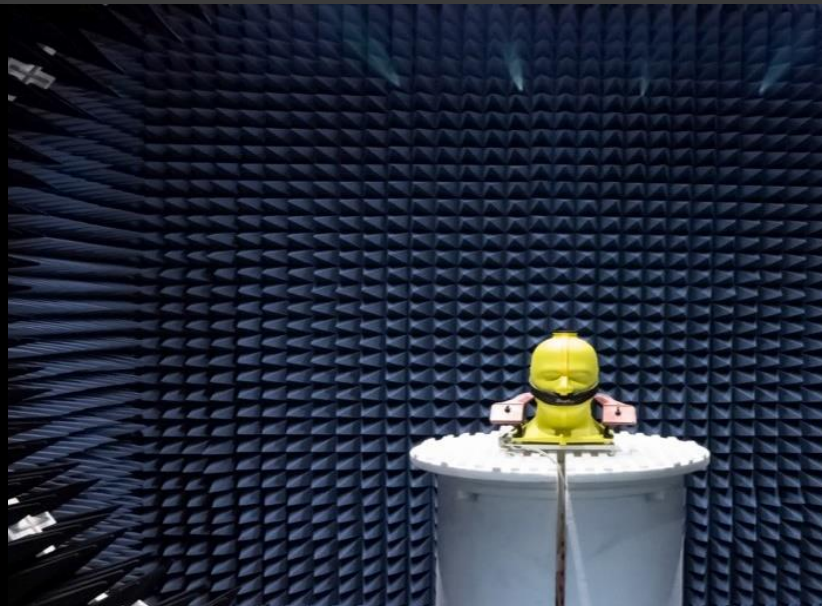
- Private 4G/5G Networks (OpenRAN, HW COTS, and 4G/5G RAN)
- Development of applied use cases
- Vehicle connectivity and C-V2X, Indoor Geolocation
- Testing of mobile connectivity with the network



Laboratory infrastructure

World class

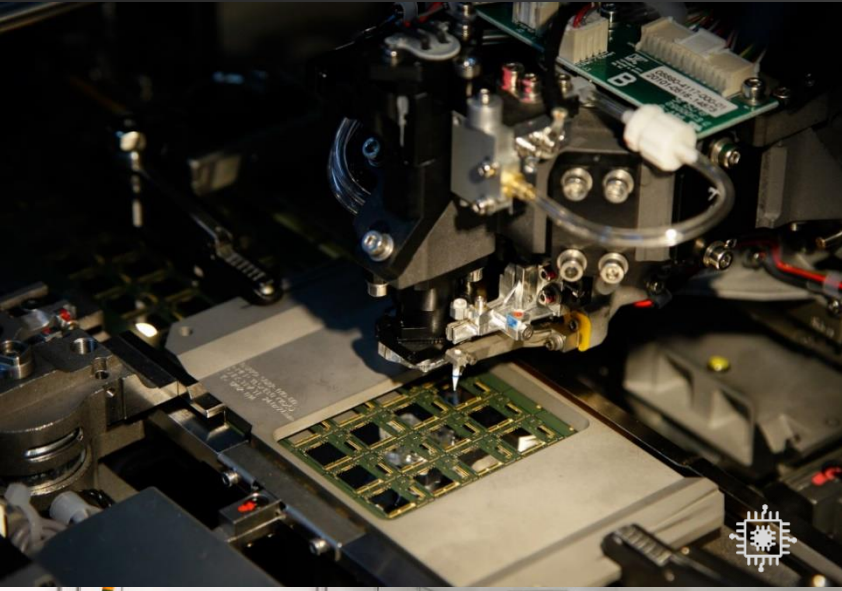
ELDORADO



Laboratory infrastructure

Microelectronics

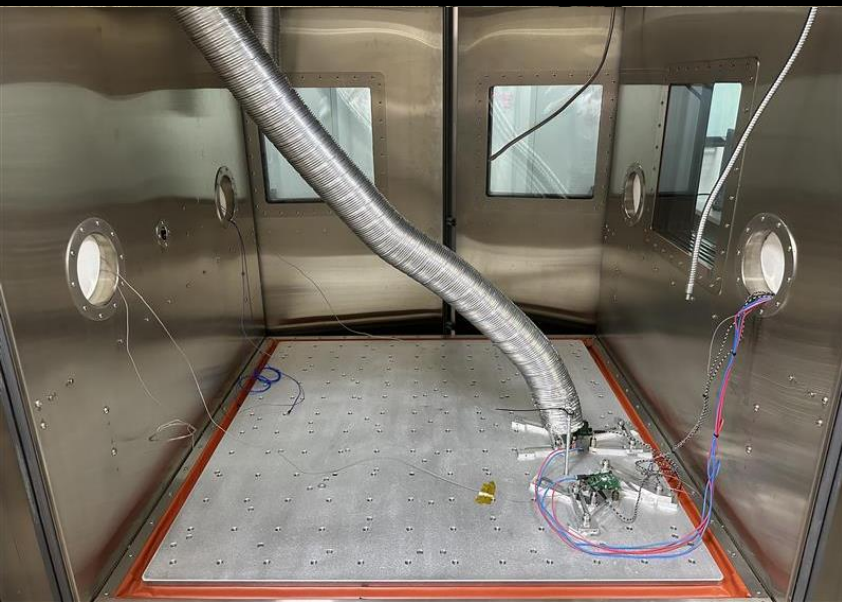
ELDORADO



Laboratory infrastructure

In Manaus

ELDORADO



INTERNATIONAL DATA SPACES ASSOCIATION



COMPETENCE CENTER BRAZIL



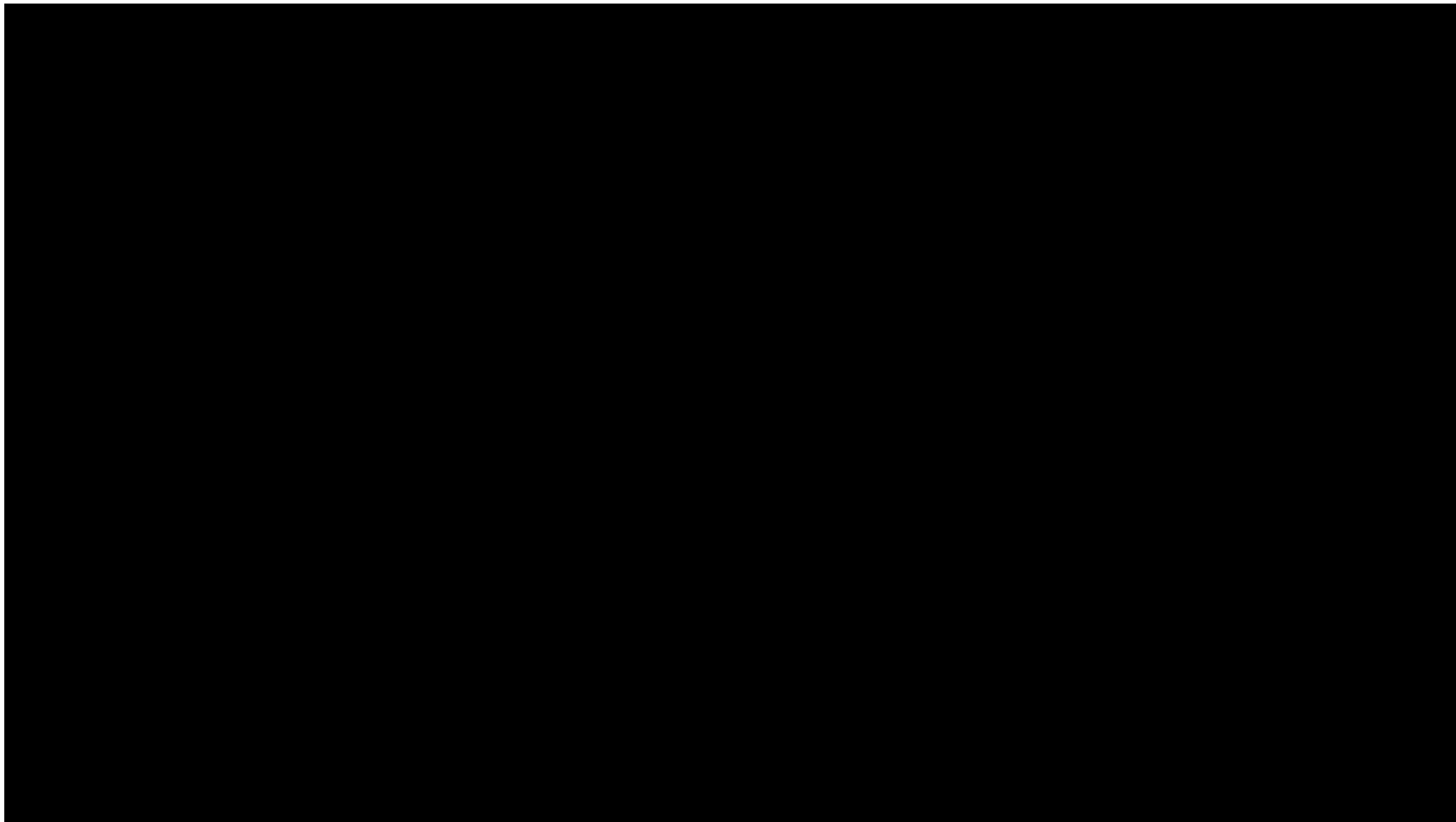
INTERNATIONAL DATA SPACES ASSOCIATION

IDSA member since 2019, ELDORADO is recognized as an IDSA Competence Center in Brazil. Its mission is to disseminate knowledge about dataspace in Portuguese, offer training programs, foster the participation of companies within the Brazilian innovation ecosystem, and drive the development of dataspace in strategic sectors such as manufacturing, agribusiness, tourism, smart cities, and automotive. Actively contributing to the strengthening of the data economy in Brazil.



WHAT IS A DATA SPACE?

It is a trusted ecosystem that enables organizations to share and exchange data securely while maintaining full control over its use. Built on data sovereignty principles, it ensures compliance, trust, and innovation.



DATA SPACE PRINCIPLES



TRUSTED DATA ECOSYSTEM

A secure environment for organizations to share data with confidence and full control



DATA SOVEREIGNTY

Participants maintain full control over how their data is accessed



COLLABORATION AND INNOVATION

Enables secure collaboration that drives innovation across multiple sectors



PILLAR FOR THE DATA ECONOMY

Provides the trusted infrastructure for new data-driven opportunities

TRUSTED DATA SHARING



REGULATION

Ensures that data is handled legally and in compliance with laws and regulations



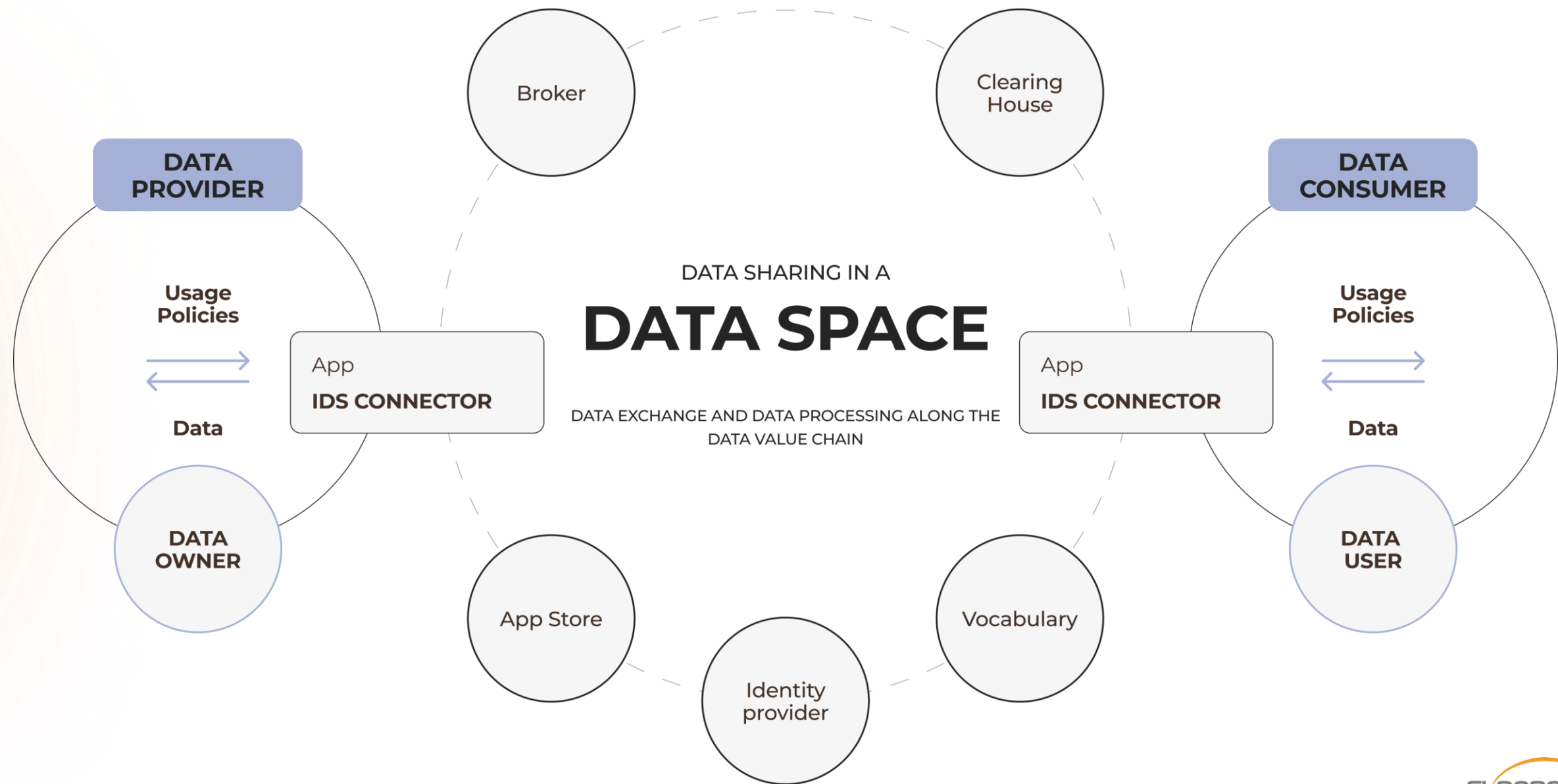
ECONOMY

Participants maintain full control over how their data is accessed and used



TECHNOLOGY

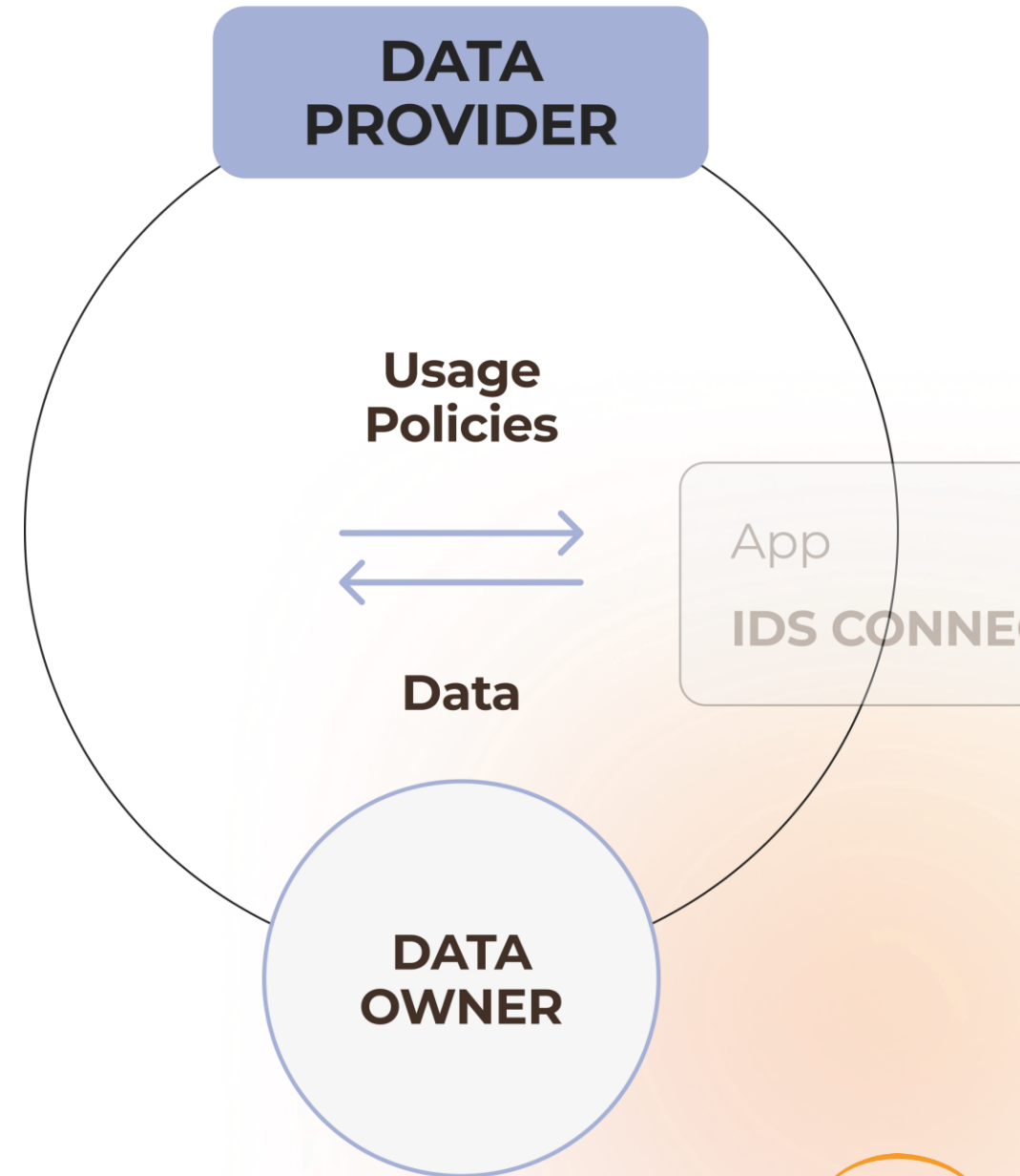
Establishes trust and interoperability

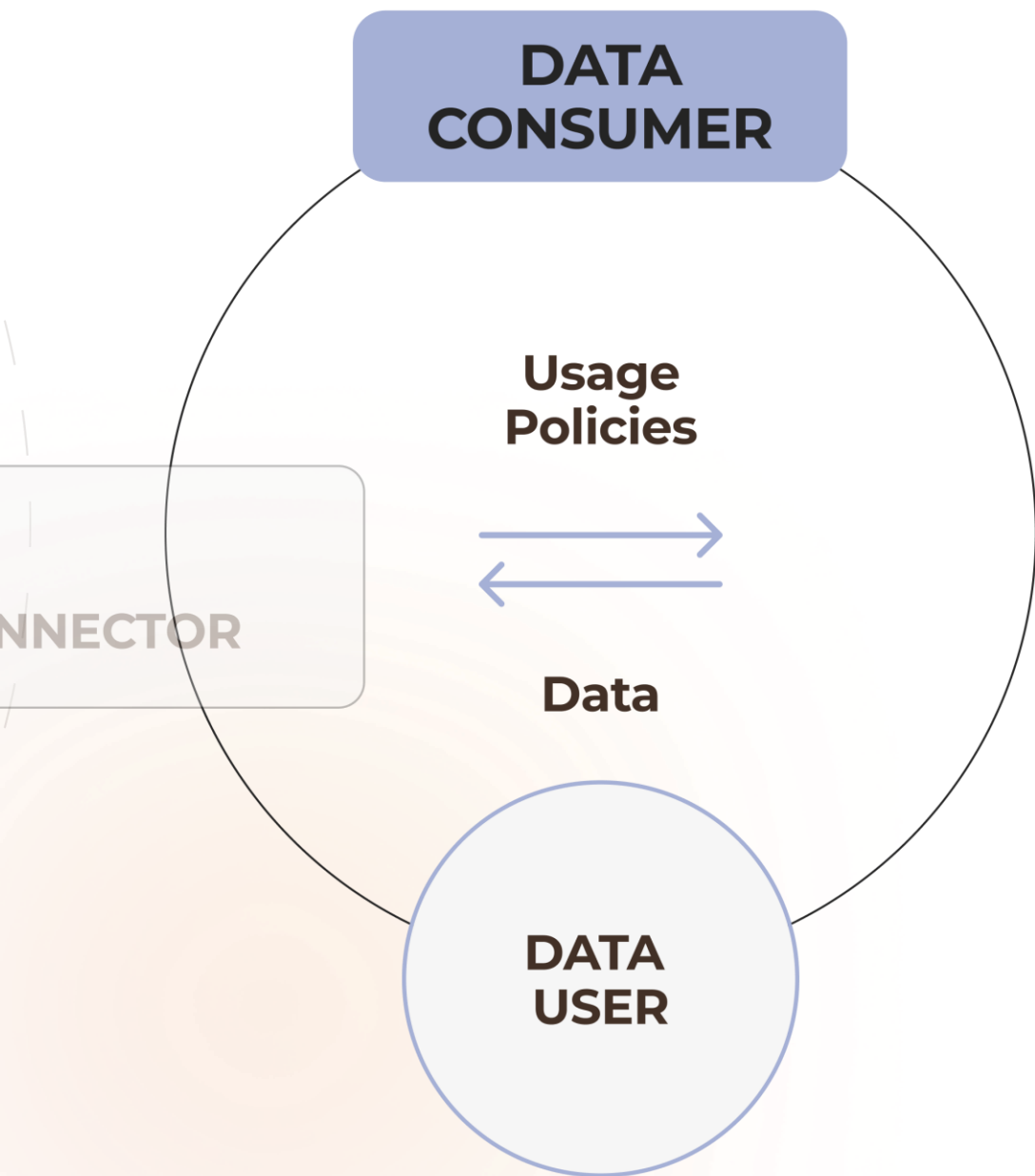


DATA PROVIDER

DATA OWNER

The Data Provider is the entity responsible for creating data offerings from the Data Owner to the Data Space through the IDS Connector. It defines the contract for each offering and transfers the data to other participants under a formal agreement, maintaining full governance over who accesses it, how, when, for what purpose, and under which conditions. This principle of data sovereignty is essential to unlocking true value and driving the digital economy.





DATA USER

DATA CONSUMER

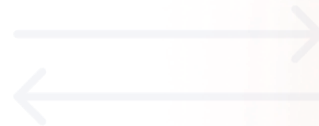
The Data Consumer is the entity responsible for obtaining the data offered in the Data Space through the IDS Connector and making it available to the Data User. This data is obtained in accordance with the usage policies established by the contract associated with the offering, ensuring quality, reliability, and compliance. This flow ensures that data delivers value in a secure and transparent way, while preserving the Data Owner's data sovereignty.

IDS CONNECTORS ARE **DATA GATEWAYS**

The IDS Connector is the component responsible for enabling secure and controlled data exchange within the Data Space. It ensures that the rules defined for the data are respected throughout the negotiation process.

DATA
PROVIDER

Usage
Policies



Data

DATA
OWNER

App

IDS CONNECTOR

BROKER

The Broker provides detailed information about the connectors that belong to the Data Space, including their data offerings, contracts, and policies. It ensures transparency and makes data discovery within the ecosystem easier.

DATA
PROVIDER

Broker

CLEARING HOUSE

Component responsible for recording all data transactions that occur within the Data Space, ensuring transparency and auditability for all participants.



Clearing
House

The diagram features a central light blue circle with a black outline, containing the text 'Clearing House'. This circle is surrounded by several concentric, semi-transparent orange circles. A thin grey line extends from the bottom right of the central circle towards the 'DATA CONSUMER' box.



DATA
CONSUMER

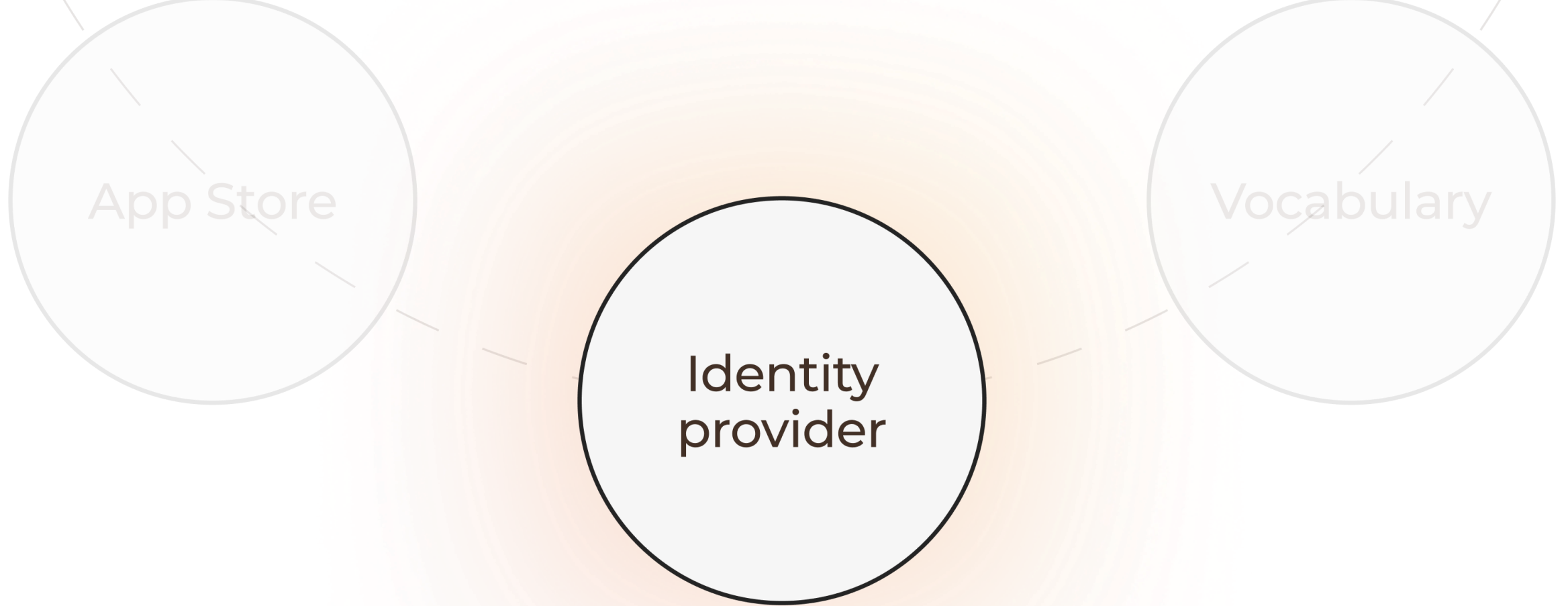
The diagram shows a light blue rounded rectangle containing the text 'DATA CONSUMER' in a light grey font. A thin grey line extends from the bottom left of this box towards the 'Clearing House' circle.

Vocabulary

DATA
USER

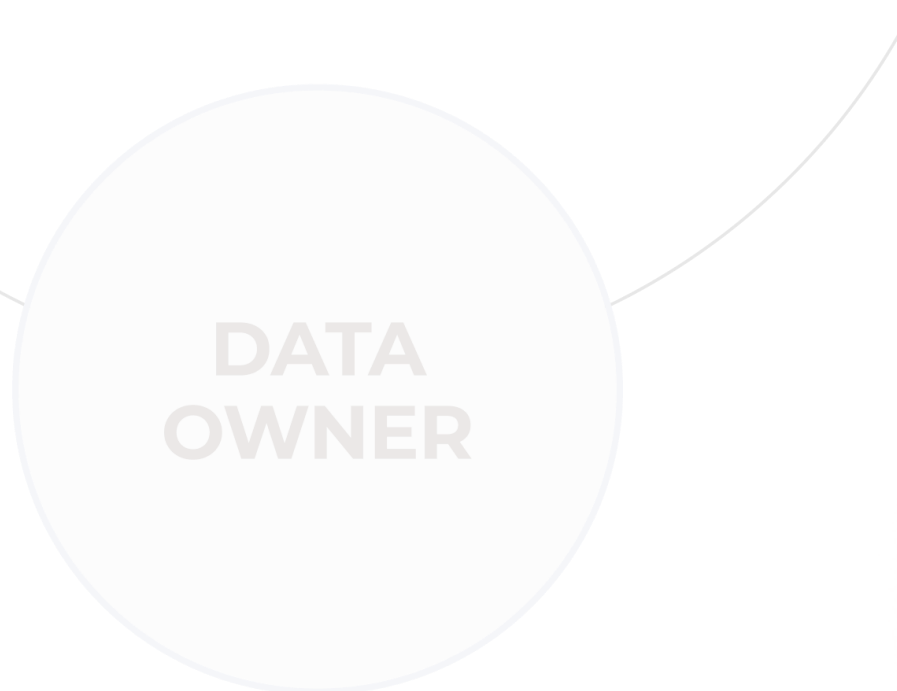
VOCABULARY

Provides standardized descriptors for the data, aligned with industry-recognized best practices, ensuring interoperability and semantic consistency.

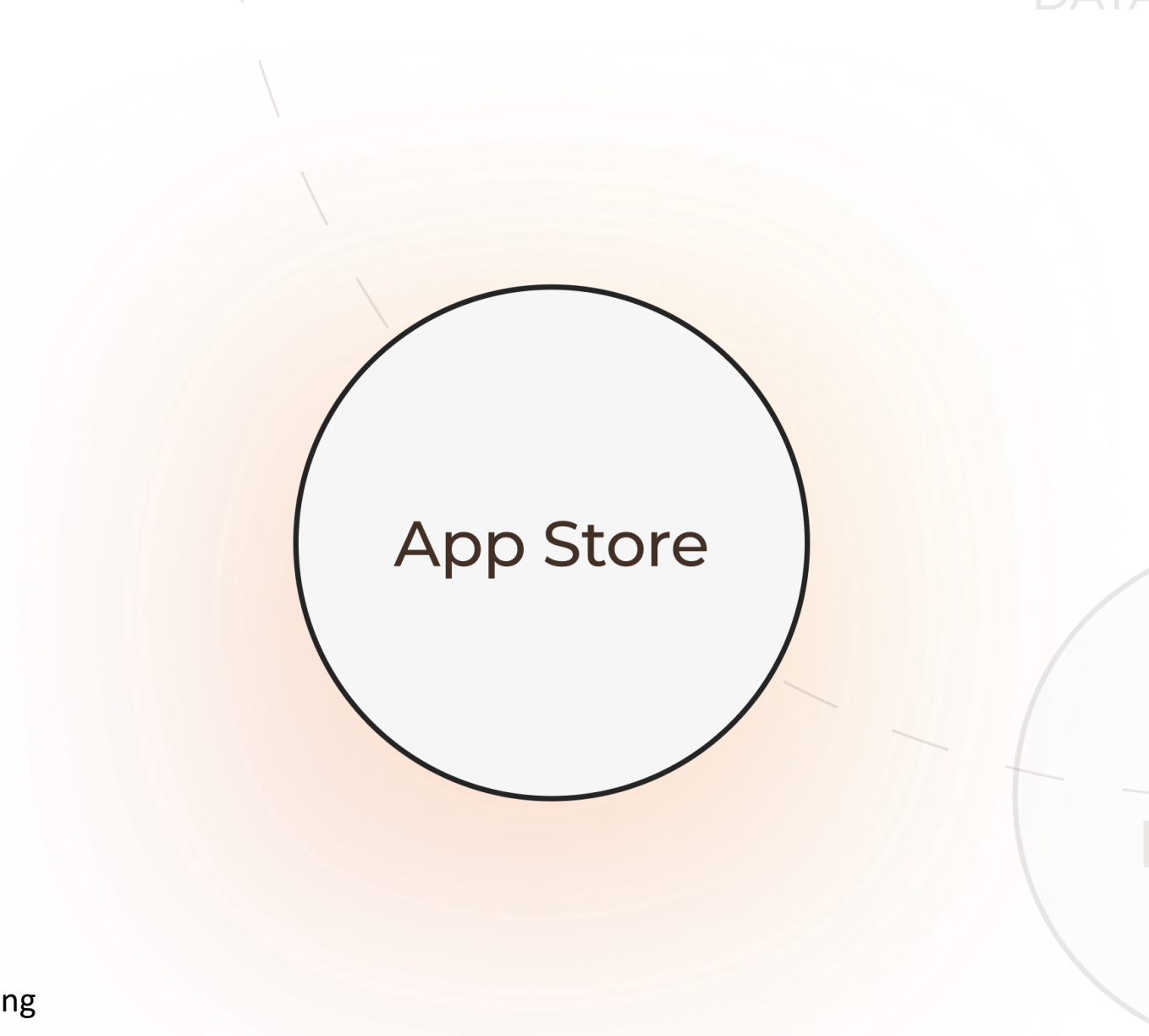


IDENTITY PROVIDER

Certification authority that creates, maintains, manages, and validates the identities of Data Space participants, ensuring security and trust within the ecosystem.



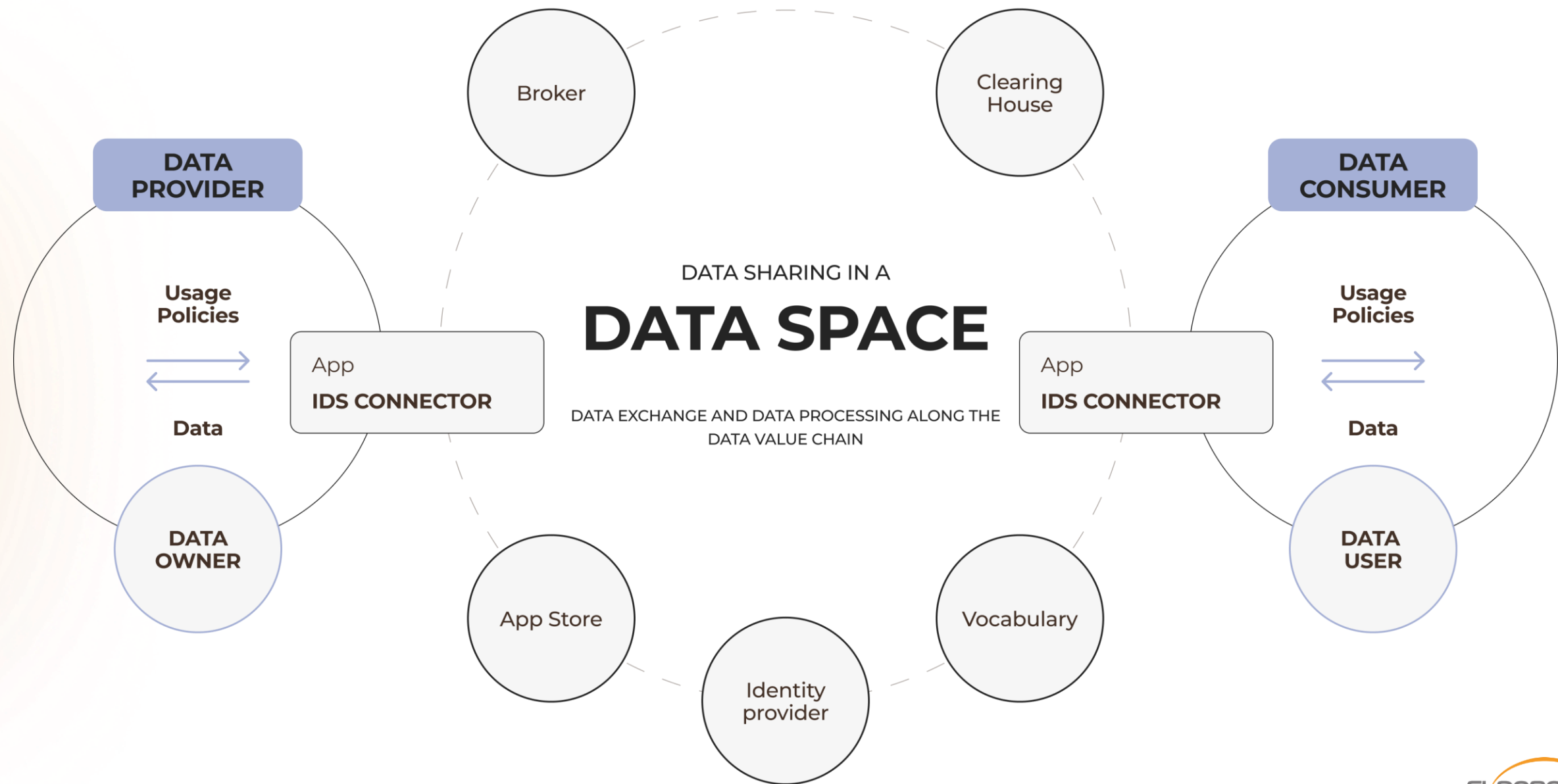
DATA
OWNER



App Store

APP STORE

Provides applications for deployment on IDS Connectors, enabling tasks such as data transformation, aggregation, and analysis.



OUR OFFERS

INTERNATIONAL DATA
SPACES ASSOCIATION

 COMPETENCE CENTER BRAZIL


ELDORADO

DEVELOPMENT

USER CASE DEFINITION

Consulting support to define use cases for the implementation of Data Spaces

Premise: Data Space in conception or early development

- Interviews and design thinking sessions
- Facilitation workshops
- Final report with proposed use cases

DATA SPACE DEVELOPMENT

End-to-end support for the development and deployment of Data Spaces

- Technical requirements analysis
- Architecture design on the client's infrastructure (GCP, Azure, AWS, On-Premise)
- Development of Data Space components
- Deployment on the client's infrastructure

DATA SPACE PROJECT ACCELERATION

Consulting for Data Space initiatives under development

Premise: Project under development

- Technical assessment of the current implementation
- Recommendations to meet Data Space requirements
- Implementation of the identified improvements

Trainings

FUNDAMENTAL DATA SPACE CONCEPTS

Overview of the main Data Space concepts

Premise: First contact with data spaces and alignment on basic knowledge.

- Introduction to Data Spaces
- Architecture and key components
- Fundamental concepts
- Governance and security
- Integration and connectivity
- Use cases and benefits

DATA SPACE IMPLEMENTATION

Practical and in-depth understanding of how to design, build, and deploy a Data Space

Premise: Prior knowledge of data platforms and APIs

- Detailed exploration of Data Space architecture
- Models, standards, and protocols (GAIA-X, IDS, etc.)
- Design and modeling of data products
- API development and interoperability
- Identity and access management
- Security and compliance implementation
- Deployment strategies (Cloud / Hybrid)
- Monitoring and observability

Workshops

Understanding Data Spaces

Putting Data Space fundamentals into practice. The sessions include: guidance on building connectors with EDC components, demonstrations of the role of Data Spaces in the data economy, an introduction to creating a Minimum Viable Data Space (MVDS), and strategies to ensure trustworthiness through certificates and secure information exchange.



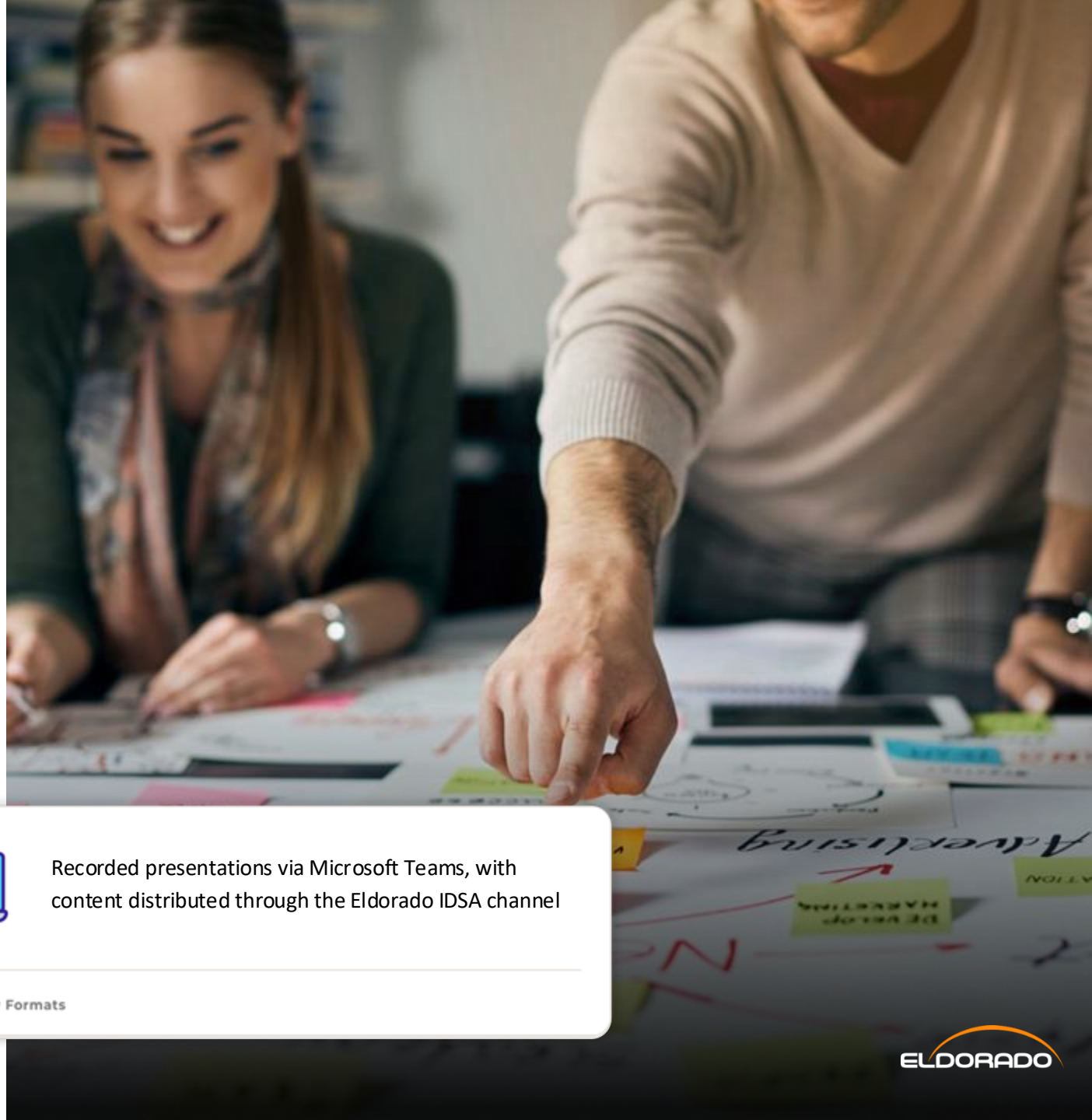
Includes a technical overview of the Data Space and the key fundamentals of technical construction

🕒 2 to 4 hours • per session



Recorded presentations via Microsoft Teams, with content distributed through the Eldorado IDSA channel

📁 Delivery Formats



Webinars

Unlocking the Power of Data Spaces

Demonstrate how Data Spaces are transforming key sectors: enabling smart manufacturing, driving sustainable agriculture through environmental data, ensuring secure information exchange, and enhancing operations through data integration. The content provides practical insights and real-world examples of data-driven collaboration.



Practical sessions with case studies and real-world scenarios



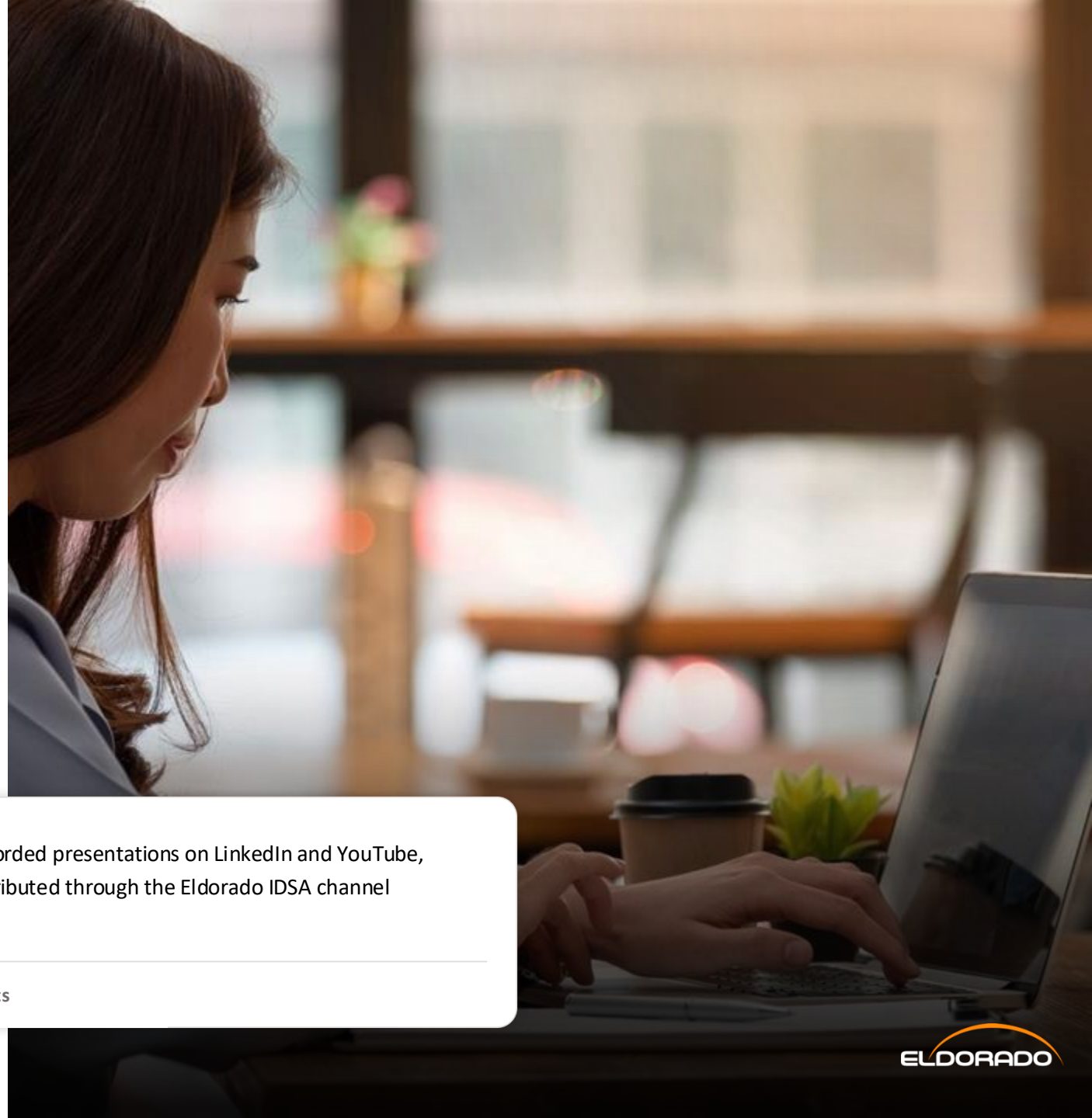
Up to 1 hour • per webinar



Recorded presentations on LinkedIn and YouTube, distributed through the Eldorado IDSA channel



Delivery Formats



Additional Resources

Local support

Translation of documentation into Portuguese to simplify complex concepts



Rulebook | Reference Architecture Model (RAM) |
Data Space Protocol | Blueprint

□ Delivery Formats



Working groups

Strategic contribution

Active participation in IDSA Working Groups.



Architecture Working Group | Training and Adoption Working Group



Delivery Formats



Engagement & Community

Strategic contribution

Promotion and engagement in events to increase visibility and community awareness.



Organização e promoção de eventos locais |
Participação em conferências e webinars.

 Delivery Formats



Prospecting



VOLKSWAGEN

Data exchange between the automaker and partners in the context of the connected car



ABTCP

Information exchange between companies in the pulp and paper sector and ABTCP for the generation of annual industry reports



GATUA

Information exchange between companies in the sugar-energy sector for operational efficiency and partner management



Thank you!

mateus.pierre@ELDORADO.org.br

www.ELDORADO.org.br

