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AI BY SDG GROUP

Artificial Intelligence
Portfolio

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ARTIFICIAL INTELLIGENCE PORTFOLIO

AI Portfolio
Elevator Pitch

AI is a challenge for many companies that aspire to extract maximum value and insights from their data. With Orbitae - AI by SDG Group, our AI value proposition offers a holistic approach, guiding clients from the identification of their needs to the full integration of advanced AI services, always with a focus on the safe delivery of measurable business value.

We specialize in **AI Strategy & Discovery**, guiding businesses to identify and prioritize AI use cases that drive innovation and measurable business impact. Our

workshops and in-depth analyses translate strategic business needs into actionable AI initiatives.

Through our **AI Foundation services**, We design, modernize, and deploy scalable AI platforms and infrastructures that enhance operational efficiency and support data-driven decision-making. Our **AI Engineering & Operations** services go beyond optimization by designing, developing, deploying, and integrating AI systems that ensure peak performance and scalability.

We commit to **Responsible A**I by ensuring safe, ethical, transparent, and compliant AI adoption. We help organizations establish governance structures, implement AI policies, and monitor systems to maintain security, privacy, and accountability. By addressing regulatory, ethical, and operational requirements, we build trust in AI initiatives.

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Through our **AI Solutions**, we develop custom AI-powered systems such as conversational agents, insights generation platforms, and document automation solutions, all aimed at improving decision-making, productivity, and operational efficiency. Our AI Solutions encompass several key areas, including **GenAI Solutions, Supply Chain Solutions, Analytical Customer Portfolio Management, Market Intelligence, Marketing Analytics, and Operational Intelligence**. These solutions empower businesses to optimize operations, gain actionable insights, and drive innovation across diverse functions and industries.

Furthermore, our **AI Elements** offer near-complete, pre-built solutions developed in Orbitae's innovation labs. These solutions are designed to address specific business challenges and can be quickly adapted and finalized to meet the unique needs of our clients.

By leveraging these ready-to-deploy elements, we enable faster implementation and reduce time-to-value, providing businesses with cutting-edge AI capabilities that are fine-tuned to their operational context.

Our **AI Intelligent Process Automation** services reengineer and automate key business processes using RPA, AI, and machine learning, significantly enhancing operational efficiency through intelligent workflows and seamless integration.

We also specialize in **AI Migration**, enabling businesses to transition AI systems to advanced technologies with minimal disruption, ensuring improved efficiency, scalability, and future-readiness.

Our **AI Innovation & Partnerships** initiative drives collaboration and co-creation, fostering rapid prototyping and the exploration of transformative AI technologies and business models.

A key differentiator is our use of **assets, accelerators, and toolkits** in every project and service. Developed from our extensive experience, these proprietary tools significantly improve project impact, accelerate time-to-market, enhance ROI, and reduce the total cost of ownership (TCO) for our clients. By optimizing AI project delivery, we ensure that our clients realize the full potential of their AI investments.

With Orbitae, our AI scope spans a wide range of solutions, **from quantitative AI**, addressing forecasting, optimization, and recommendation challenges, **to advanced cognitive and generative AI**, including language processing and computer vision. With proven frameworks and a deep understanding of industry needs, we empower organizations to seize new opportunities, drive sustainable growth, and maintain a lasting competitive edge through AI.

AI Strategic
Assets & Capabilities

• Strong AI capability with **300+ multidisciplinary AI experts**: Industry & Business Domain experts, Business Scientists, AI Architects & AI Engineers, AI R&D, and AI Compliance & Governance experts.

• Proven AI experience with **70+ clients and 100+ use cases** across most industries and business domains delivered by AI, Industry, and Business Domain SMEs.

• Unique IP & Accelerators: **Over 50+ technology and consultative accelerators** like AI Toolkits, Frameworks, Solutions, Elements, and Pattern Designs.

• **Innovation Engine**: Early experimentation and incubator for AI trends and technologies through our **Orbitae's iLabs & Innovation Radar.**

• **Rich Alliance & Tech Ecosystems** with AI Hyperscalers Microsoft, Google, and AWS, as well as key AI vendors such as Databricks, Snowflake, and OpenAI, among others.

• **Client, Partner & Market Recognition**: Top 5 Global Leaders in the Data and AI Space service providers; Leader in Data & AI Services in Spain; numerous partner awards and recognitions.

• Mature Data & Analytics Consultancy Capability: **2,400+ consultancy** with strong focus in industry and business domains - both critical for AI readiness.

AI Detailed Portfolio

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01

AI Strategy

Evaluate and develope AI approaches to align with business goals, drive innovation, enhance decision-making, and ensure competitive advantage.

Services

AI Strategy Grounding
Develop, improve, and optimize AI roadmaps using actionable insights derived from our proprietary research, AI expertise, business acumen, experience with clients and in different markets, and advanced tools such as the SDG Innovation Radar.

AI Strategy Assessment
Evaluate and develop AI strategies to align with business goals, enhance decision-making, drive innovation, and ensure competitive advantage. Our comprehensive assessment includes typical phases: as-is, to-be, gap analysis, roadmap development, recommendations, prioritization, risk assessment, and implementation planning. Tailored recommendations guide your organization towards strategic AI adoption and success.

AI New Business Models Analysis
Evaluate and design innovative AI-driven business models to uncover new opportunities, enhance efficiency, and drive sustainable growth. This involves reimagining the company's overall operational framework and value creation methods, facilitating company transformation, and fostering innovation.

AI New Business Cases Analysis
Evaluate and develop innovative business cases through AI to identify specific project opportunities, enhance efficiency, and drive sustainable growth. This involves detailed analysis and justification of individual AI projects, including cost-benefit assessments and implementation plans.

AI Use Case Discovery & Roadmap
Identify and prioritize AI use cases, measuring their organizational and business impact, and creating

a strategic roadmap to implement solutions that drive business value and innovation.

AI Change Management and Adoption
Reshape change management, address barriers and opportunities, and integrate AI effectively. This includes adopting AI internally for operational efficiency, developing strategic AI plans to enhance business performance, and enriching the business with new use cases and models for future-ready organizational strategies.

AI Architecture & Platform Assessment
Utilize consultative toolkits, technology benchmarks, and advisory from hyperscalers and architects, along with our expert knowledge and experience in assessments with large organizations, to evaluate and redesign AI architectures and platforms through AS IS, TO BE, and GAP analyses.

This approach assesses AI maturity, ensures scalability and efficiency, improves TCO, and aligns with business goals.

AI Incubation (Rapid Prototyping Squads)
Form agile teams to quickly develop and test PoCs and MVPs for strategic business and use cases, assessing impact and potential business returns to refine final implementations.

Assets, Frameworks and Accelerators

- Impact Measurement Framework
- ROI Evaluation Framework for Business Cases
- AI Architecture Platform Foundation Framework
- AI Assessment Framework

02

AI Foundation

Establish a robust infrastructure, optimize operations, select technologies, integrate platforms, and fine-tune models for scalable, data-driven solutions.

02 AI Foundation

Services

AI Platform & AIOps Foundation
Establish a robust AI platform and AIOps capabilities to enhance operational efficiency, scalability, and automated insights. This includes considering cloud adoption frameworks, best practices in architecture from leading hyperscalers, and product recommendations.

AI Technology and Vendor Selection Advisory
Offer strategic guidance to identify and select the best AI technologies and vendors and ensure alignment with business goals. Utilize consultative toolkits, technology benchmarks, advisory from hyperscalers and architects, and our expert knowledge and experience in assessments with large organizations to maximize ROI.

AI Products & Platforms Deployment and Integration
Expertly deploy and seamlessly integrate AI products and platforms, ensuring optimal performance and scalability for data-driven solutions in analytics and AI consulting.

AI Systems Technical and Business Audit
Conducting a comprehensive technical and business audit of AI systems, identifying gaps and opportunities for scaling and integrating stand-alone created or isolated ML solutions into cohesive, efficient enterprise frameworks or platforms.

AI Foundation Models conception & Fine-Tuning
Conceptualize and fine-tune AI foundation models (LLMs, VLMs), tailored to enhance performance and adaptability, ensure robust and scalable solutions for diverse business applications.

Assets, Frameworks and Accelerators

- AI Architecture Platform Foundation Framework
- AI Cognitive Platform Foundation Framework
- AI Conversational RAG Framework
- LLMs Strategy Toolkit

03

Responsible AI

Ensure ethical and compliant AI adoption through governance structures, policy implementation, technical safeguards, continuous monitoring, and certification of AI models.

Services

Enterprise Responsible AI Transformation
Drive enterprise responsible AI transformation by establishing a governance structure, implementing principles, policies, and standards, and setting up an internal multidisciplinary program team. We ensure robust technical safeguards and pathways for responsible AI adoption.

AI Governance Office
Establish an AI Governance Office to oversee responsible AI practices, enforce standards, ensure compliance, and promote ethical AI. This framework covers ongoing monitoring and continuous improvement for sustainable and accountable AI integration within the organization.

AI TRiSM Assessment
Assess the organization's current AI state, envisioning the desired future, and identifying gaps to develop technical plans for responsible AI. This includes regulation, security, privacy, AIOps, ethics, control, and other needs related to generative AI, using advanced toolkits and governance frameworks.

AI TRiSM Design and Development
Design and implement AI TRiSM based on a prior assessment of the organization's current AI state, desired future, and identified gaps. This includes technical plans for developing components of regulation, security, privacy, ethics, control, and safety to prevent liabilities. Some components related to foundational AI platforms and generative AI - such as explainability, observability, guardrails, and model monitoring - are addressed using advanced toolkits and governance frameworks.

AI Model and Systems Certification
Certify AI and generative models and systems to ensure they meet all regulatory and compliance standards, as well as recommendations from certifying bodies and best practices from software vendors and hyperscalers.

Assets, Frameworks and Accelerators

- Responsible AI Framework
- Model Card Toolkit

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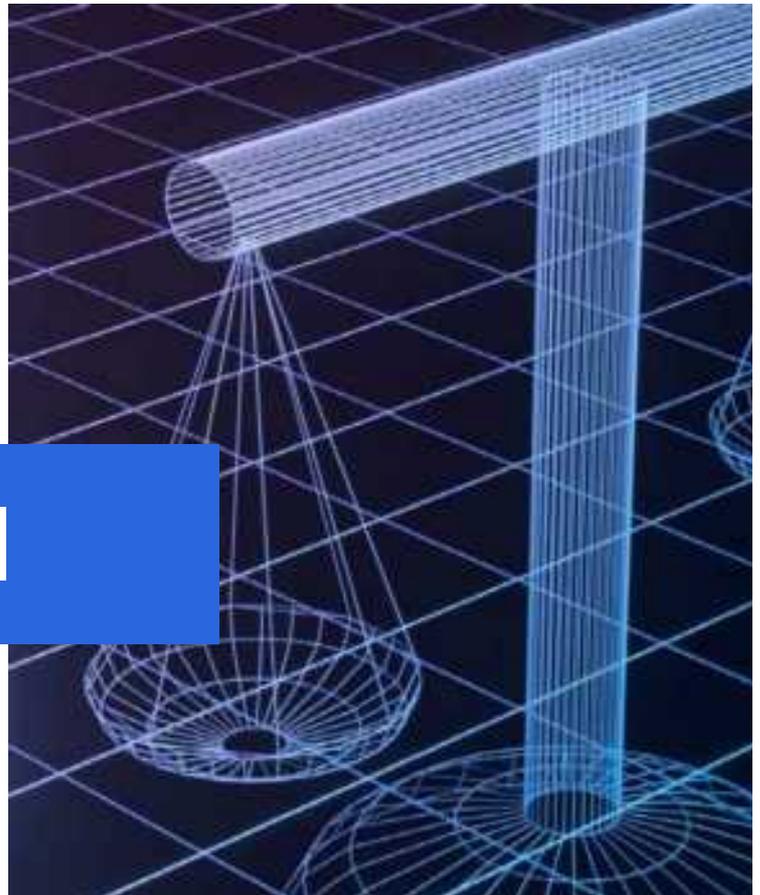
04

AI Engineering & Operations

Design, engineer, and modernize AI systems for optimal performance, scalability, and seamless integration, leveraging best practices and advanced technologies.

Services

AI Systems Quantitative Solution Design
Designing quantitative (business) solutions for AI systems, focusing on the development of precise and efficient models and algorithms. We optimize performance and enable data-driven decision-making, as well as the generation of insights and new business models.

AI Systems Tech Architecture Solution Design
Creating technical architecture solutions for AI systems, leveraging frameworks and best practices from vendors or hyperscalers. We draw on our extensive engineering experience to create robust and scalable AI/ML systems that ensure seamless integration and performance.

AI Systems End-to-End Engineering
Deliver end-to-end engineering for AI systems, from precise model development to robust, scalable architecture. We leverage best practices and frameworks to produce data-driven insights.

AI Systems Modernization and Reengineering
Modernize and reengineer AI systems, including legacy systems and experiments developed by data scientists. We enhance performance, scalability, and integration by aligning with advanced technologies, company technological platforms, and standards.

AI Systems Operativization
Industrialize AI systems by refactoring and reprogramming prototypes and legacy models for production deployment. We ensure these systems meet industrial-grade performance, scalability,

and integration with technological platforms and other company frameworks and standards.

AI Digital Twin Foundation
Build a robust foundation with a composable architecture of AI and ML systems, rule-based systems, and cognitive knowledge chains enhanced by generative AI. This enables real-time monitoring, simulation, and optimization of virtual representations of physical systems for enhanced operational efficiency.

AI Technical Office
Establish an AI Technical Office to oversee the development, deployment, and maintenance of AI systems. This office ensures adherence to best practices, regulatory compliance, and technological standards while fostering innovation and operational excellence.

Assets, Frameworks and Accelerators

- AI Architecture Platform Foundation Framework
- Data Audit Frameworks for Data Science
- Design Patterns for Data Science
- Responsible AI Framework
- Model Card Toolkit
- GenAI Development Toolkit
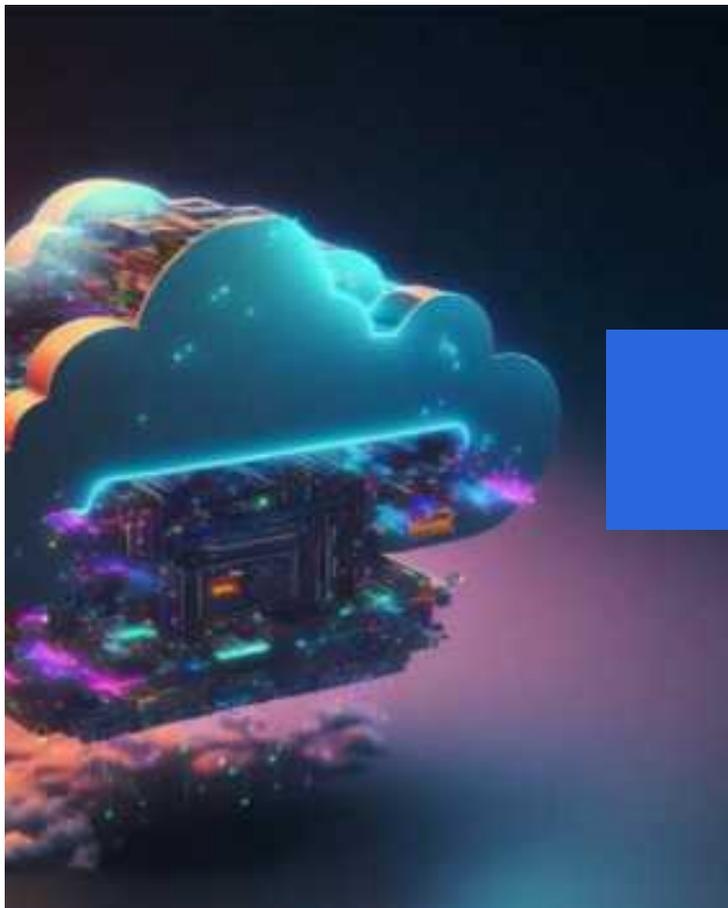
05

AI Migration

Seamlessly migrating AI systems and platforms with advanced technologies to ensure efficiency, scalability, and minimal operational disruption through strategic planning and collaboration.

Services

AI Migration Strategy Assessment
Evaluate different AI migration strategies to assess current systems, identify migration paths, and ensure a seamless transition to advanced AI technologies. We focus on minimizing disruptions while maximizing efficiency and scalability.

AI Platform & AIOps Migration
Facilitate AI platform and AIOps migration to transition current systems to advanced AI technologies. We ensure seamless, efficient, and scalable integration, leveraging best practices and minimizing operational disruptions. This collaborative effort involves working closely with IT, architecture, and business teams to align objectives and optimize outcomes.

AI Systems Migration
Transition AI/ML systems to new environments while ensuring identical functionality post-migration. This includes adapting to destination libraries, frameworks, and technologies. We work collaboratively with IT, architecture, and business teams, focusing on development and engineering without altering core functionalities.

AI Foundation Models (LLMs) Migration
Transition from one foundational model to another due to infrastructure changes (e.g., SaaS to on-premise), model suitability, or shifts from proprietary to open or open-source models. This process involves migrating the surrounding AI engineering and adjusting prompts, pipelines, and frameworks to ensure seamless integration with existing systems while also maintaining functionality and performance.

AI Systems Migration Office
Transition AI systems and foundation models to new environments while ensuring consistent functionality and performance. This includes adapting to new libraries, frameworks, and technologies. We collaborate closely with IT, architecture, and business teams to focus on development and engineering tasks, such as adjusting code languages and updating libraries, to ensure a smooth and efficient migration process.

Assets, Frameworks and Accelerators

- AI Architecture Platform Foundation Framework
- Data Audit Frameworks for Data Science
- Design Patterns for Data Science
- Responsible AI Framework
- Model Card Toolkit
- AI Migration Frameworks
  - From Kedro to DataBricks Framework
  - From SAS to Airflow + DataCloud Framework (incubating)
  - From Stratio to DataBricks Framework (incubating)
  - From Databricks to Airflow + AWS SageMaker Framework (incubating)
- LLMs Strategy Toolkit

06

AI Solutions

With Orbitae, we bring extensive expertise in high-impact AI initiatives across various industries. We have developed technical and functional archetypes backed by numerous market success stories. Over time, we've created accelerators, toolkits, and frameworks to further enhance these solutions.

With Orbitae, we excel in high-impact AI initiatives, developing industry-specific archetypes enriched with accelerators, toolkits, frameworks, and proven success stories.

6.1 GenAI Solutions

AI Q&A Conversational Agents
AI-powered conversational agents leverage a company's documentation and knowledge base to address a wide range of internal queries and maximize business efficiency from various perspectives. These solutions ensure both reliability in response generation and security through a tailored approach designed specifically for each client.

AI Corporate & Analytics Assistants
AI-driven conversational tools go beyond answering questions, incorporating a wide range of skills and capabilities to boost a company's productivity and efficiency. They fully and securely integrate both internal and external systems to provide an accelerated and customized experience for completing various tasks according to specific business needs.

AI Coding Assistant
AI-powered coding assistants designed to improve not only development efficiency and quality, but also the overall coding experience

of all analytics-related engineering staff. These assistants perform tasks such as code generation, intelligent suggestions, refactoring, unit test creation, code optimization, debugging, error detection, and documentation generation. By leveraging AI-driven techniques, they enhance coding efficiency, reduce development time, and elevate software quality, making them invaluable tools for engineers aiming to streamline workflows and focus on innovation.

AI Customer-Facing Assistants
Conversational agents designed for integration into various customer-facing environments, enhancing customer service efficiency. These AI-powered assistants efficiently guide and assist customers, ensuring accurate responses at all times while also eliminating any risk of security breaches or compromising customer satisfaction. They offer a reliable and secure solution for improving overall service interactions.

AI Document Processing
Solutions and tools that enable the hyper-automation of document-based processes, maximizing workflow efficiency where significant cognitive processing of diverse documents is required. These tools handle tasks such as information and entity extraction, summary generation, document validation, cross-referencing, topic discovery and tagging, and large-scale analysis, ultimately streamlining complex processes.

AI-Enhanced ESM (Extraction, Searching & Matching)
Systems and mechanisms for processing, indexing, and retrieving information from various content types (text, documents, audio, video), enabling the creation of extensive knowledge bases from unstructured data, as well as the subsequent exploitation of this information through semantic search techniques. These solutions allow for the development of advanced AI systems, such as multimodal recommendation engines

or conversational assistants with enhanced capabilities, enabling more sophisticated interactions and decision-making processes.

AI-Powered Insights Generation

Advanced AI systems focused on data interpretation, contextualization, and the generation of actionable business insights for improving enterprise value. Delivered in multiple formats (static or dynamic reports, conversational assistants, analysis companions), these solutions seamlessly integrate with existing analytics and BI platforms, enhancing their capabilities through AI. They provide a new layer of interpretability, uncovering hidden opportunities and personalizing insights to specific companies' needs and paving the way for new business opportunities.

AI Speech Analytics

Components for processing voice interactions between a company and its customers using advanced audio recognition and analysis technologies. Through call transcription, speaker identification, keyword detection, and tone and speech pace analysis, companies can gain valuable insights into customer experience, identify service improvement areas, detect recurring issues, ensure data security by masking sensitive information, and establish regulatory compliance. These capabilities enable strategic decision-making based on precise data from voice interactions.

AI Satisfaction & QA Analysis

AI-powered unstructured data analysis solutions that process all types of information related to natural language interactions between a company and its customers (call center conversations, satisfaction surveys, complaints, emails, social media comments). These solutions can perform individual processing to enrich data with metadata (summaries, key points, detected sentiment, satisfaction levels, identified themes) and aggregated processing to generate advanced insights, uncover new business opportunities, ensure service quality, and even provide competitive intelligence.

Multimodal AI Data Synthesis & Augmentation

Solutions capable of generating diverse and high-quality synthetic data to enhance AI models by integrating various data types, improving model robustness and accuracy.

These systems support training, validation, and testing. They also address data scarcity and ensure privacy compliance and security, all while collaborating with IT, data science, and business teams for optimal results.

AI Content Generation

Advanced and automated tools for generating high-quality content powered by AI. Provided through conversational interfaces or implemented as part of hyper-automation processes, these solutions increase productivity and efficiency in content creation for marketing materials, testing variations of the same idea, or generating content for different media while adapting to specific formats and requirements. This boosts both creativity and efficiency, enabling new business opportunities while reducing costs.

AI Image, Video & Audio Conversation
Systems for indexing and exploiting multimedia content (images, videos, or audio) that, through multimodality and semantic interpretation, allow for intelligent interaction with this data. These systems serve various purposes, from feature extraction, event detection, and automated auditing, to enabling conversational interfaces for more personalized analysis.

Automated-by-AI Compliance Evaluation & Generation
Solutions for large-scale data processing and individualized assistance designed for regulatory compliance in specific industries. By capturing and processing applicable regulations, these solutions can extract regulatory requirements, assess compliance based on provided documentation and context, and generate suggestions for modifications or extensions. This ensures a higher degree of compliance while reducing the effort involved in maintaining it.

AI-Infused Knowledge Graphs
Large-scale information processing architectures based on cognitive analysis techniques, which enable the construction of extensive knowledge graphs by identifying and extracting entities and relationships from unstructured data across various types (texts, documents, communications, audio, images, videos).

These solutions allow for the exploitation of these graph structures not only for traditional analytical purposes, but also for the generation of well-structured semantic context in various generative AI applications.

Multimodal Translation
Automated translation solutions for scaling all types of content. These AI-powered solutions can generate accurate translations while incorporating specific glossaries, adapting tone and length to different formats and target audiences. They even provide a multimodal perspective for generating audiovisual materials in multiple languages.

AI-Powered UX & Accessibility
Solutions applying generative AI to enhance the user experience in interactions with various systems, covering everything from data collection and structuring from natural language speech, to voice synthesis for generating responses that enhance accessibility. These solutions fully adapt to a company's specific needs, incorporating proprietary glossaries and terminology and seamlessly integrating with all types of systems. This enables functions such as natural language-based data entry to increase efficiency in manual data entry operations.

AI Data Matching & Remediation
Custom corporate tools for applying cognitive and generative AI to improve the quality of data for informational and analytical purposes. Using various natural language processing techniques, these solutions tackle tasks such as record linkage, master data remediation, information classification and clustering, and linking external data with a company's internal data. This not only enhances data reliability, but also enables the development of new AI and analytical solutions delivering derived value.

AI-Augmented Data Catalog
AI solutions fully integrated with a company's data systems to accelerate the automated construction of data catalogs, enhancing data governance levels and aiding in the profiling and understanding of information. By enabling complete and accurate metadata layers, these solutions foster a more efficient data-driven culture and open new avenues for data exploitation (such as conversational interfaces) through the integration of these data catalogs with AI.

6.2 Supply Chain Solutions

Demand Planning
Predict any business-relevant demand drivers, offer greater accuracy in estimation, and fully automate the demand planning process.

Strategic Sourcing
Enhance a company's expense management, data collection, and market research. This methodology eliminates supply chain risks by optimizing supplier selection and understanding material cost variations' impact on the P&L.

Route Optimization
Detect and dynamically adapt transportation routes and optimal locations for material and merchandise in distribution processes.

6.3 Analytical Customer Portfolio Management

Cross Selling / Upselling & Product Recommendation
Understand which customers are most likely to purchase a certain product at any given time and the reasons associated with this propensity, allowing you to improve the effectiveness of commercial campaigns.

Customer Potential / Market Share Estimation
Approximate the market share you have over clients or the volume of business they may have contracted with competitors, allowing you to better direct commercial efforts.
Assess the volume of business that new clients can recruit, improving the effectiveness of client acquisition campaigns.

Customer Life-Time Value
Estimate the future value of customers by simulating their life cycle through Analytical Customer Portfolio Management tools, bringing the future income generated by customers into present value.

Customer Next Best Action & Sales Recommendation
Maximize customer engagement levels through the best tactical actions and touchpoints at all times.

Strategic Segmentation
Establish the best management strategy for each client to determine their next best action and maximize overall value.

Churn, Customer Disengagement & Customer Winback
Predict customers at higher risk of flight, disengagement or cancellation of products/services in advance; understand the reasons for their dissatisfaction in order to improve the customer retention processes.

Estimate the probability of recovery of former customers who abandoned the service, improving recruitment and recovery campaigns.

6.4 Marketing Intelligence

Pricing Strategy
Establish optimal price levels to maximize business returns by capturing the relationship between price and demand elasticity. This includes static pricing, where the price remains constant, as well as dynamic pricing, where the price varies based on the time of product acquisition.

Market Analysis & Competitive Intelligence
Leverage AI to synthesize large volumes of market data, providing actionable insights and competitive intelligence and fully automating the analysis process.

Sales Allocation
Estimate sales made per customer in environments where data may be absent. This process leverages external sources to calculate the proper drivers for allocation.

Time on Market Optimization
Enhance the process of placing assets on the market by estimating the time required. This involves identifying asset characteristics and factors that accelerate or delay the process.

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6.5 Marketing Analytics

Marketing Mix Modeling & Campaign Optimization
Optimize advertise investments in both online channels and traditional media by understanding the impact of each campaign, advertising channel, and creatives used. Estimate the effect of advertising, analyze cannibalization between channels and campaigns, and propose an optimal mix to maximize the advertising budget.

Traffic Attribution
Estimate the incoming traffic generated by each online advertising provider, helping to correctly calculate the Customer Acquisition Cost (CAC) KPI.

Campaign Impact Measurement
Estimate the impact generated through a campaign on a KPI of interest (sales, traffic, notoriety, consideration, etc), isolating any type of external effect (seasonality, additional promotions, events, etc).

6.6 Operational Intelligence

Safety Analytics
Leverage a set of processes to study the underlying causes of workplace accidents and estimate the probability of their occurrence.

Predictive Maintenance & Root Cause Analysis
Employ data analysis to identify operational anomalies and potential equipment defects, enabling timely repairs before failures occur and uncovering causal factors to predict future incidents.

Operational Planning (Forecast)
Predict and anticipate the behavior of events or operational KPIs (traffic, processes, calls, requests, etc.) to optimize operational processes and the sizing of necessary resources.

Salesforces Next Best Action
Detect the best commercial targets considering the capacity of the salesforce to assign objectives with greater commercial effectiveness.

Fraud Detection & Compliance
Detect fraudulent events in various business processes, primarily credential theft or document manipulation, by monitoring transactions, behaviors, and patterns to identify anomalies or suspicious activities indicative of fraud.

Operative Classification
Systematically categorize business processes to enhance efficiency in analysis, management, optimization, and strategic decision-making.

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AI Solutions

Assets, Frameworks and Accelerators

Generics
- Data Audit Frameworks for Data Science
- Impact Measurement Framework
- ROI Evaluation Framework for Business Cases
- Forecast Systems Value Proposition
- Synthetic Variable Generation Framework
- Toolkit: Relevance Analysis Tool

GenAI Solutions
- AI Cognitive Platform Foundation Framework
- AI Conversational RAG Framework
- LLMs Strategy Toolkit
- GenAI Development Toolkit
- NLP & CV Design Patterns

Supply Chain Solutions
- Design Pattern: Route Optimization
- Toolkit: Automatic Forecasting Engine
- Toolkit: Omnichannel Diagnostic Tool
- Toolkit: Allocation & Replenishment
- Design Pattern: Smart Assortment

Analytical Customer Portfolio Management
- Design Pattern: Cross Selling

Market Intelligence
- Design Pattern: Time on Market Optimization
- Design Pattern: Sales Allocation
- Design Pattern: Dynamic Pricing

Marketing Intelligence
- Design Pattern: Marketing Mix Modelling

Operational Intelligence
- Design Pattern: Salesforce Next Best Action
- Design Pattern: Root Cause Analysis Detection Systems
- Design Pattern: Multi-Time Series Forecasting

AI Solutions

07

AI Elements

Prebuilt archetypes by Orbitae deployed and adapted efficiently to solve niche problems lacking mature, market-ready solutions.

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7.1 GENA SUITE®

Your AI Companions Suite for Boosting Efficiency in a Corporation

An advanced AI-powered assistant platform designed to boost corporate efficiency and leverage internal knowledge across the workforce. This platform includes a suite of pre-built agents that empower employees and users to initiate conversations with various specialized agents to perform a wide range of tasks, enhancing productivity and streamlining processes:

GENA SUITE® Labor and Policies Agent: Provide answers to labor-related questions and HR matters such as vacation policies, dress codes, time-tracking procedures, corporate tool manuals, purchasing protocols, expense policies, and more, all aimed at improving workforce satisfaction and productivity.

GENA SUITE® Recruiting Agent: Analyze CVs and connect to tools where candidate information is stored, streamlining the recruitment process.
It enhances search capabilities through keyword searches, as well as more complex natural language queries about job roles, years of experience, tasks performed in each role, time spent in each position, and more. This makes finding the right candidates faster and more efficient.

GENA SUITE® Performance Evaluation Agent: Assist managers in creating comprehensive employee evaluation documents, ensuring accurate and efficient performance reviews with a corporate tone. It helps ensure that all evaluations across the organization follow the same format, style, and content, while also providing personalized content specific to each employee.

The Suite also has specific agents tailored to certain types of corporations, such as:

GENA SUITE® Code Assistance Agent: Accelerate software development by automating essential tasks within a unified framework. Key features include code generation, refactoring, unit test creation, code optimization, repair, and error analysis. By leveraging AI-driven techniques, this agent enhances coding efficiency, reduces development time, and improves overall software quality, making it an invaluable tool for engineers seeking to streamline their workflows.

GENA SUITE® Sales Agent: Generates content for crafting compelling value propositions and client proposals, enhancing business development efforts. It leverages ingested corporate information related to each department's portfolio, corporate and departmental value propositions, proposal and opportunity templates, market research studies, and other assets to create tailored and persuasive sales materials. Additionally, it enhances content discoverability through both text-based searches and natural language conversational queries, making the process more intuitive and efficient.

Additionally: GENA SUITE® supports **extensibility with new agents** with a development framework to implement agents for various use cases.

This allows for customization and expansion to meet specific business needs.

GENA SUITE® is based on an adaptable and customizable proprietary framework, making it extensible to integrate other portals, platforms, cooperative tools, APIs, and more to enhance corporate efficiency.

GENA SUITE® empowers companies by automating routine tasks and enhancing decision-making to maximize the efficiency of your workforce and the potential of their internal knowledge.

7.2 REGULATORIA®

Your AI-Powered Assistant for Pharma Regulatory Compliance

An AI-powered tool for regulatory compliance assistance in the pharmaceutical sector. REGULATORIA® enables the ingestion and analysis of various local and international regulations impacting the pharmaceutical industry. It assesses the degree of compliance with your company's internal processes and provides suggestions for modifications or enhancements to ensure full regulatory adherence.

Knowledge base and historical tracking: Build and leverage a knowledge base that grows over time. It not only provides semantic access to all current regulations, but also automatically tracks how these regulations evolve. Using state-of-the-art cognitive document processing

technologies, REGULATORIA® extracts and structures key information, such as various regulatory requirements.

Integrated with your data: In addition to ingestion and processing mechanisms for different regulations, REGULATORIA® is adaptable and customizable to a company's internal systems. This allows for convergence

between external and internal knowledge bases, offering a unified and comprehensive view of how regulatory changes affect established internal procedures.

Automated reporting and improvement suggestions: REGULATORIA® incorporates additional cognitive reporting and processing layers, giving companies the ability to track KPIs, such as calculated regulatory compliance levels, with varying degrees of granularity. These reports are enhanced with natural language analysis and suggestions to provide further assistance in determining necessary corrective actions.

Conversational assistant: Leveraging all its capabilities, REGULATORIA® also integrates a conversation layer that not only allows access

to predefined reports, but also enables dynamic interaction with the knowledge base and analyses. Users can refine the system's suggestions in real time, using AI to generate the necessary output for regulatory corrections. This conversational layer offers multiple capabilities, such as comparing specific regulations or generating procedure lists in specific formats, to support these activities.

REGULATORIA® is the ultimate tool for pharmaceutical companies striving for regulatory compliance. It significantly reduces the time spent analyzing regulatory updates and integrating them into internal processes. It also enhances precision and provides a range of new features to ensure all employees can seamlessly adhere to regulations.

7.3 INSIGHTGEN®

Your Next-Level BI Platform for Intelligent Insights Generation and AI-Driven Decisions

A cognitive extension for leading business intelligence platforms, enabling the dynamic generation of reports and insights through AI to derive business conclusions in natural language. It is fully integrated with existing semantic layers and reporting frameworks, ensuring high credibility through a proprietary generative AI framework.

Insights beyond analytics: INSIGHTGEN® elevates business intelligence to a new level, assisting in the interpretation of the most relevant business KPIs and acting as a decision-making assistant through conversational and reporting interfaces.

Extend your capabilities: INSIGHTGEN® does not aim to replace current, widely adopted BI platforms. Rather, it integrates with these platforms, providing mechanisms to generate and derive business conclusions. These conclusions harmonize with existing data, semantic, and reporting layers within companies to avoid inefficiencies and data silos. In other words, it enables a new way of interacting with these tools.

Know your business: Unlike generic AI tools, INSIGHTGEN® adapts to specific industries

(such as Pharma or CPG) and the unique reality of each company. This tool offers a fully personalized experience through its understanding of the business and its associated data.

Provide real value: Moving beyond generic approaches to generative AI, INSIGHTGEN® establishes a cognitive engine for generating insights. This ensures both accuracy and depth of content by focusing on delivering business value and adapting to the company's narrative and style. Additionally, INSIGHTGEN® incorporates multiple security mechanisms and safeguards to ensure that the provided information is always accurate and contained. The solution underscores the importance of avoiding data leaks in enterprise-grade contexts.

Your own solution: INSIGHTGEN® is based on an adaptable and customizable proprietary framework, making it extensible to integrate other types of data, ML, and AI systems to enhance insight generation. This includes the potential integration of forecasting or recommendation engines.

INSIGHTGEN® represents the next wave of generative AI integration within the business reality of companies. It is a decision-making tool that accelerates the adoption of these capabilities in demanding and mature environments, addressing needs for adaptation and personalization to ensure an experience that meets business value expectations.

7.4 YOURVOICE®

Your AI-Driven Customer Satisfaction Analytics Suite

A cognitive platform for analyzing calls, surveys, and customer communications, designed to enhance enterprise customer intelligence and satisfaction capabilities through the combination of AI and state-of-the-art BI technologies. Key features include:

Integration with customer management platforms & multimodal ingestion: Seamlessly unify structured information from various data sources and CRM platforms, with all unstructured communications (text, calls, etc.) maintained with customers to produce a comprehensive view.

Out-of-the-box cognitive processing pipelines: Automatically apply a wide range of AI-powered analysis suites at scale to every customer communication. This immediately enriches metadata through

sentiment analysis, content categorization and tagging, summary generation, and key point extraction.

Analysis customization: Configure specific business questions in natural language for AI to address by leveraging a metadata-driven cognitive processing engine.

Business interpretability: Merge the power of generative AI with leading BI platforms to establish aggregated and dimensional analysis engines. These engines deliver business

insights in natural language, fully integrated into a range of prebuilt dashboards tailored for specific industries.

Service quality under control: Beyond discovering new business opportunities, YOURVOICE® offers a novel approach to enhancing customer relationships through service quality analysis. This ensures both regulatory compliance and best practices, while also establishing a feedback loop for improving sales scripts.

YOURVOICE® is adaptable to various cloud-based technological environments and any business domain, making it the ideal solution for conducting customer satisfaction analysis with AI, featuring low CAPEX and reduced TCO. Additionally, with various extension modules, it can incorporate advanced capabilities such as real-time integration with call center platforms, or AI-driven generation of personalized reports.

Assets, Frameworks and Accelerators

- AI Architecture Platform Foundation Framework
- Design Patterns for Data Science
- GenAI Development Toolkit

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AI Intelligent Process Automation

Assess, develop, and optimize processes using process mining. Activate intelligent automation through RPA, AI, and ML for enhanced efficiency, seamless integration, continuous monitoring, and maximized operational value.

Services

AI Process Assessment
Assess and identify core process maps and value levers of different use cases. Estimate value potential through the AI Process Excellence Framework and toolkits like benchmarks, process simulation, and value generation frame. Define an implementation and reengineering proposal by combining RPA, AI, and ML to optimize processes, simulate improvements, accelerate execution, and minimize manual activities for enhanced collaboration and efficiency.

AI Intelligent Process Automation Engineering
Develop, simulate, deploy, and test end-to-end intelligent process automation systems by combining business expertise, RPA, AI, and ML to optimize processes. By leveraging best practices and frameworks, we ensure seamless integration, performance, and data-driven insights for maximum operational efficiency.

AI Intelligent Process Automation Observability
Track impact and ROI and reveal process changes over time through the continuous monitoring of RPA applications. Features include business operations monitoring, pre-designed performance dashboards for each business, KPIs/KRIs tracking, process analytics, and ML/AI integration for optimized performance.

**AI Enabled Value Creation Competence Center**
Track the impact and ROI of process intelligence initiatives and drive continuous process improvement initiatives. Our DMAIC-based framework enables constant analysis, execution, and sustaining of changes through AI.

Assets, Frameworks and Accelerators

- AI Process Simulation Framework
- AI Process Orchestration Framework
- AI Robotic Process Automation Framework

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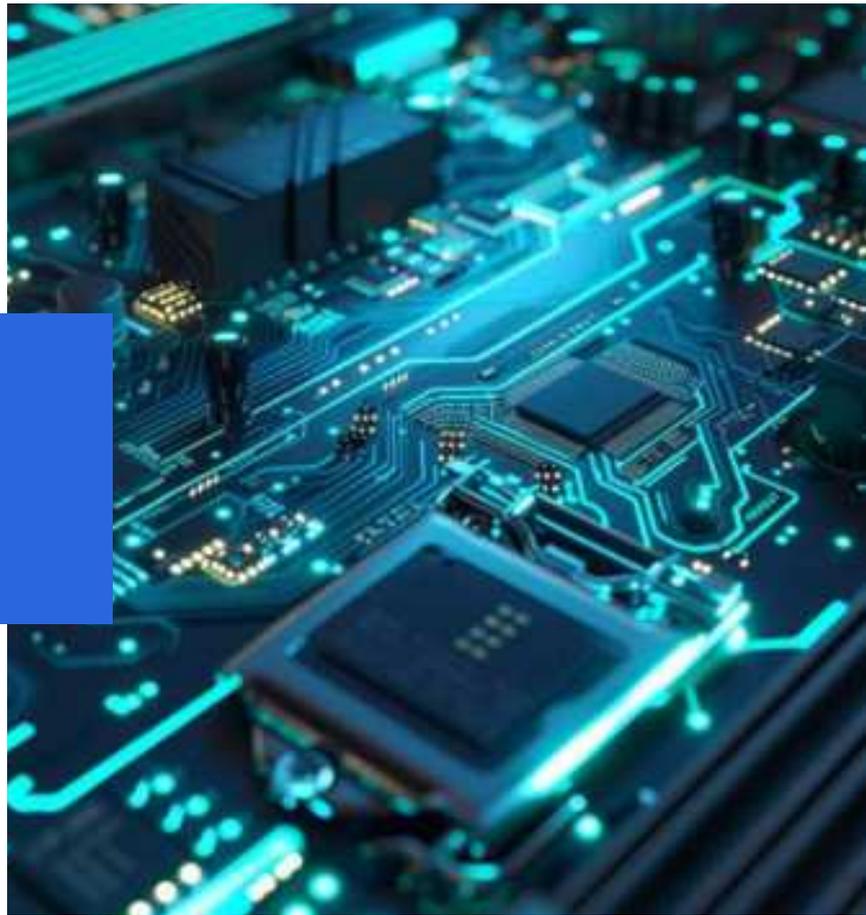
AIWare Applications

Develop intuitive interfaces, robust APIs, and sophisticated backend systems to enhance AI interaction, integration, and automation for streamlined business operations.

Services

AI-Enhanced Visual Extensions
Design and develop custom visual extensions that are enhanced with AI-driven capabilities for leading analytics platforms such as Power BI, Looker, ThoughSpot, Tableau, and more. These extensions integrate generative AI models to provide advanced insights, predictive analytics, and automated data-driven recommendations. This empowers users to interact with data more effectively, making complex analytics accessible and actionable across various platforms.

Conversational Platforms Engineering
Design and develop intuitive, user-friendly interfaces and mashups for AI-powered cognitive agents, chatbots, and virtual assistants. These apps enhance user interaction and experience, making it easy for users to engage with AI systems across various platforms.

Custom AI APIs Development
Build robust and scalable APIs to facilitate seamless communication between AI systems and models, particularly foundational models like LLMs from various vendors and applications. These APIs enable efficient integration and interoperability across diverse AI ecosystems.

Cognitive Mesh Orchestration
Design and implement sophisticated backend systems to orchestrate various AI services, with a focus on foundational models like LLMs. This involves managing the interactions between multiple AI components to ensure efficient data flow and optimal performance.

Intelligence Process Automation
Develop advanced backend systems to automate business processes using AI. This includes creating intelligent workflows that leverage AI capabilities to streamline operations, reduce manual intervention, and enhance overall efficiency.

Assets, Frameworks and Accelerators

- Chatbot Development Framework

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AI Innovation & Partnerships

Drive AI innovation through workshops, prototyping, and strategic partnerships. This ultimately fosters creative thinking, co-creation, and the seamless integration of emerging technologies.

Services

AI Innovation Radar Workshop
Our workshops present our vision of future trends across AI, data technologies, business, and infrastructure, covering dimensions like trends, patterns, tools, and frameworks. Gain insights into emerging innovations and strategic directions.

AI Innovation Radar Adoption
Assess your current innovation status across AI, data technologies, business, and infrastructure. We conduct a maturity analysis to explore innovation possibilities, evaluate economic capacity, and analyze ROI for adopting different trends. The goal is to create a technological and business innovation radar tailored to your organization about trends, patterns, frameworks, and toolkits, with ongoing tracking and an associated execution plan.

AI iLab Prototype Workshop
This hands-on session showcases our experimental prototypes of future technological and business innovations. Developed with our partners, customers, think tanks, and leading manufacturers, this workshop aims to explore new use cases,

business models, and innovation pathways for your organization. It fosters creative thinking, open-minded discussions, and co-creation in a dynamic innovation space.

AI iLab Prototype Co-Creation
This collaborative workshop explores new use cases, business models, and innovation pathways for your organization, fostering creative thinking and co-creation in a dynamic innovation space. Over several weeks, we will develop a prototype through a mixed working squad (partner, customer, provider, researchers) to evaluate a technology for a specific client need, working closely with our partners, leading manufacturers, and other innovative stakeholders.

AI Innovative Roadmap Assessment
This is a comprehensive assessment to design a business and emerging technology innovation strategy with short-term results. This includes analyzing current capabilities, identifying gaps,

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exploring strategic partnerships, planning training programs, conducting prototyping sessions, creating an innovation radar, and establishing a governance body. This assessment aligns with business goals and drives immediate impact through advanced AI and data technologies.

AI Trend Adoption and Implementation
Focusing on a specific technological or business trend, we design an actionable plan, establish a governance body, allocate a budget, benchmark suppliers and manufacturers, and develop prototypes. This involves creating dedicated teams to execute and adopt the trend effectively. During the process, we use our Innovation Technology Radar and AI iLab for analysis. The iLab can also be used to implement prototypes before full adoption.

AI Innovative Partnership Adoption
This service leverages our strategic and innovative partnerships to help clients incorporate new technologies. These technologies range from frameworks and languages to platforms, services, models, and infrastructures. We guide clients in selecting the right partnership, ensuring seamless integration and maximizing the benefits of these advanced solutions.

AI Innovation Collaboration
We collaborate with universities, research centers, manufacturers, and other key entities to develop prototypes, as well as emerging and disruptive projects. Our aim is to challenge the status quo of companies, envisioning the next stage of industry evolution and contributing to a better world. Through these partnerships, we drive innovation and prepare organizations for the future.

Partnership Funds for AI Adoption
As premium partners with leading manufacturers, we have access to funds dedicated to exploring the next evolution of companies using innovative and disruptive technologies. Our goal is to help clients develop ideas and experiments leveraging these new technologies, improving their business by utilizing investment funds. We guide our clients through the process, ensuring

they maximize the benefits of these partnership funds to drive growth and innovation.

Emerging AI Models for Business Optimization
As innovators, we are continuously exploring and integrating cutting-edge AI technologies and methodologies into business strategies to optimize the performance of your current AI systems. We actively investigate and evaluate advanced AI models such as Topological and Geometric Deep Learning, which enable the incorporation of geometric and topological structures for simplified models and improved performance. We also actively explore Neuro-symbolic AI, which enhances inference accuracy by combining neural and symbolic processing. Additionally, we explore Causal Discovery and Inference, Algebraic Data Integration, and Neural Operators to identify transformative AI tools to unlock new business opportunities and drive innovation across industries.

AI Prototyping Workshops + Partners Beta Services
This collaborative workshop explores new use cases, business models, and innovation pathways for your organization, fostering creative thinking and co-creation in a dynamic innovation space. Over several weeks, we will develop a prototype through a mixed working squad (partner, customer, provider, researchers), using beta services of disruptive new technologies from our premium technology manufacturer partners. This approach allows us to evaluate a specific client need, working closely with our partners, leading manufacturers, and other innovative stakeholders.
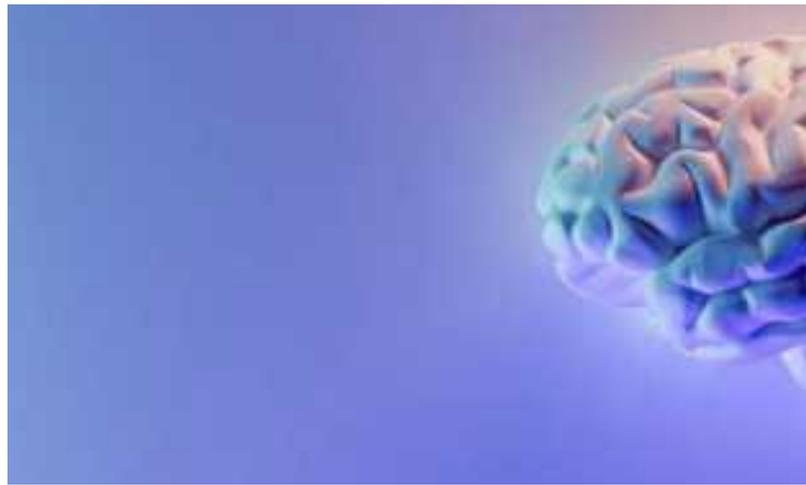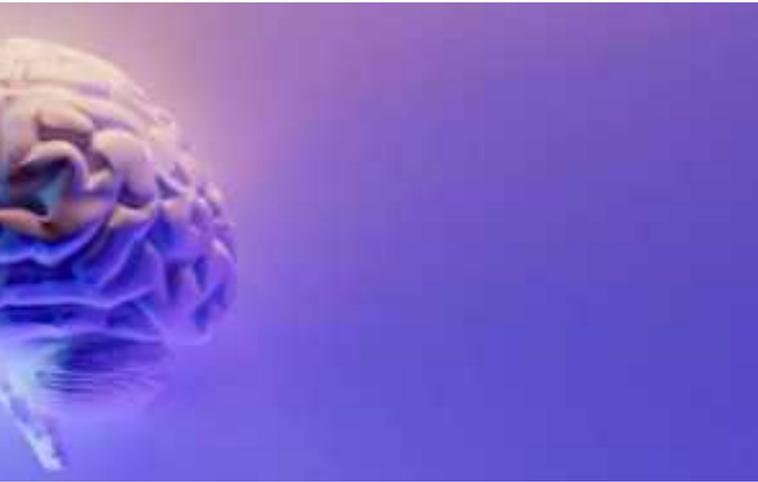
Assets, Frameworks and Accelerators

- Innovation Radar
- iLab Prototyping and Experimentation Center
- AI Specialization Azure Partnership
- AI Specialization Google Partnership
- AWS Partnership
- Databricks Partnership
- Snowflake Partnership
- Dataiku Partnership

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AI Hacks

Solve corporate and societal challenges through hackathons, leveraging cutting-edge technology and co-developing innovative prototypes with universities and research centers.

Services

AI Hackathon Squad for Corporate Challenges
Tackle corporate challenges in competitions to provide innovative solutions to internal business cases, with proven experience in challenges set by leading companies from the most demanding and innovative industries.

AI Hackathon Squad for Beta-Services
Participate in leading technology providers' competitions and championships, showcasing the value of their technology by optimizing legacy use cases with new tech. Solve novel challenges with excellence, utilizing cutting-edge beta-stage services and technology.

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AI Hackathon Squad for Good
Address public needs through competitions and championships, leveraging disruptive technology to design, think, and develop innovative solutions. Improve society by tackling challenges like health crises, and support nonprofit organizations with impactful, sustainable outcomes.

AI Prototype Co-Development
Collaborate with universities, research centers, public innovation and technology services, AI labs, manufacturers, and more to develop prototypes. We aim to discover new uses for technology or create new technology itself, putting it at the service of organizations and society.

Assets, Frameworks and Accelerators

- iLab Prototyping and Experimentation Center

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AI Education & Training

We empower organizations with AI knowledge through workshops, training roadmaps, intensive bootcamps, and immersive sessions to drive innovation and strategic growth.

Our service ensures a strategic approach to enhancing AI capabilities and organizational growth.

Services

AI Awareness Workshop: Strategic, Functional and Technical
Provide comprehensive AI education and training through workshops that raise awareness of strategic, functional, and technical aspects, empowering organizations to understand and implement AI solutions effectively.

AI Training Roadmap Definition
Design and construct customized AI training roadmaps for organizations to adopt new AI trends, embrace AI emerging disciplines, or advance to the next AI maturity level in specific business areas.

Gen AI Bootcamp for building people for our customers
Conduct intensive boot camps focused on developing AI talent for clients. Participants are trained on foundational technology, work methodologies, and tools used by customers, equipping them with the cutting-edge skills and knowledge needed to drive innovation and growth within customer organizations.

Gen AI Inmersion Day
A full day of sessions covering our portfolio, lab demos and prototypes, trends, project examples, use cases, and methods to measure the impact of generative AI. The goal is to immerse clients in generative AI, enabling them to begin collaborating with providers to design their AI strategy.

Assets, Frameworks and Accelerators

- iLab Prototyping and Experimentation Center

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AI for Good

Promote diversity, mentorship, and responsible AI practices through partnerships, advisory services, education, and sponsorships that drive societal and industry-wide positive impacts.

Services

Women in AI Forums and Conferences Commitment and Collaboration
Partner with forums and conferences to highlight and promote female talent in AI. Our
goal is to foster collaboration, support professional development, and advocate for gender diversity in the AI in dustry, contributing to a more inclusive and innovative technological landscape.

AI Mentorship and Leadership Development
Host talks, presentations, and masterclasses by SDG

Group specialists and consultants in technology and business. Our service focuses on the development and mentorship of influential figures from various sectors, helping them understand the latest advancements in AI and their applications in industry and society.

AI Advisory in TRiSM Communities
Leveraging our deep expertise in technology and business, we actively engage in forums and communities focused on Trust, Risk, and Security Management (TRiSM). Committed to societal benefit, we provide insights and

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advisory services to address concerns and drive informed discussions on responsible AI practices for the greater good.

AI Advisory in Business Communities

Drawing on our extensive expertise in technology and business, we collaborate with communities exploring AI's potential in various industries. Our aim is to uncover new value levers that benefit society. By offering insights and advisory services, we help drive innovation and responsible AI adoption, ensuring positive impacts across different sectors.

AI Advisory in University Communities

Utilizing our extensive expertise in technology and business, we partner with university communities to explore AI's potential. We collaborate in designing master's and undergraduate curricula, AI professorships, university hackathons, forums, and more. Our goal is to foster innovation and societal benefit by providing insights and advisory services, guiding academic research and practical applications of AI for positive impact.

Next Gen AI Advisory

Engaging in various forums, working groups, and specialized communities focused on generative AI, we participate in discussions on its use, study, qualification, and understanding. Our aim is to leverage our expertise to foster education, innovation, and societal impact, driving forward the responsible adoption and application of next-generation AI technologies.

AI Events Sponsorship

Sponsoring and collaborating in various AI-related events and communities, our goal is to highlight the value of AI technology, promote its correct usage, and educate on its responsible application across different industries. We aim to expand knowledge and ensure safer AI applications, ultimately contributing to a better society. Additionally, we sponsor events related to our business and with our partners and manufacturers, playing a leading role as experts in technology and business services around AI and generative AI.

ARTIFICIAL INTELLIGENCE PORTFOLIO

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AI for All

Collaborate on open-source AI projects and publishing research to advance AI technologies, fostering innovation and practical real-world applications.

Services

AI Partnerships Open Repositories Committers
Collaborating with our technology partners and manufacturers, we actively contribute to their open-source AI projects. As committers, we leverage our expertise to advance these initiatives, fostering innovation and enhancing the development of cutting-edge AI technologies.

AI Publication Collaboration
Collaborating on the writing of papers, books, and guides related to AI and generative AI, we leverage our expertise to contribute to societal improvement. We work with research from manufacturers, products, universities, startups, and innovators, focusing on applying this research to real-world cases and demonstrating the practical applications of cutting-edge AI technologies.

Assets, Frameworks and Accelerators

- AI Design Pattern Toolkit (to liberate)
- Gen AI Development Toolkit (to liberate)

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