AUDAX LABS

Audax Labs- AI Based Process Optimization

Harnessing Artificial Intelligence for Enhanced Efficiency

Our Capabilities & Experience

Audax labs is an Innovation Partner with a strong System Integrator background. We work with enterprise clients in their innovation journey from ideation to enterprise grade deployment.

PARTNERS

HITACHI Inspire the Next

Microsoft Solutions Partner

talend Partners

Google Cloud Partner

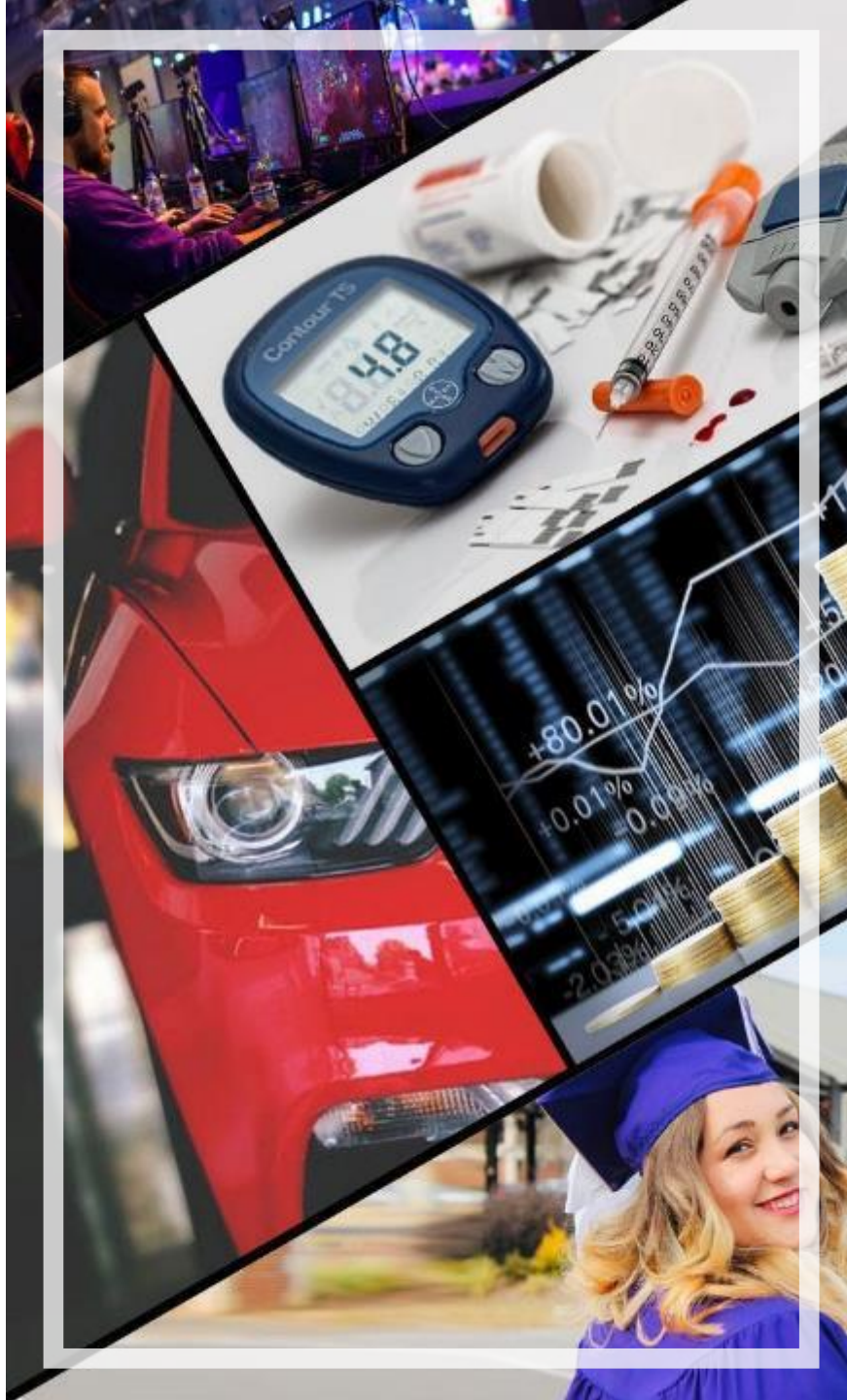## CUSTOMERS

HITACHI Inspire the Next

Microsoft

Parker

KARMA

EV Bike Manufacturer

Rabobank

9to5 seating

Kelvin

Bonsai mediagroup

INDUSTRIES

- Automotive
- Manufacturing
- Healthcare
- BFSI
- Retail

TECHNOLOGIES

AI
Artificial Intelligence

AR, VR, & XR
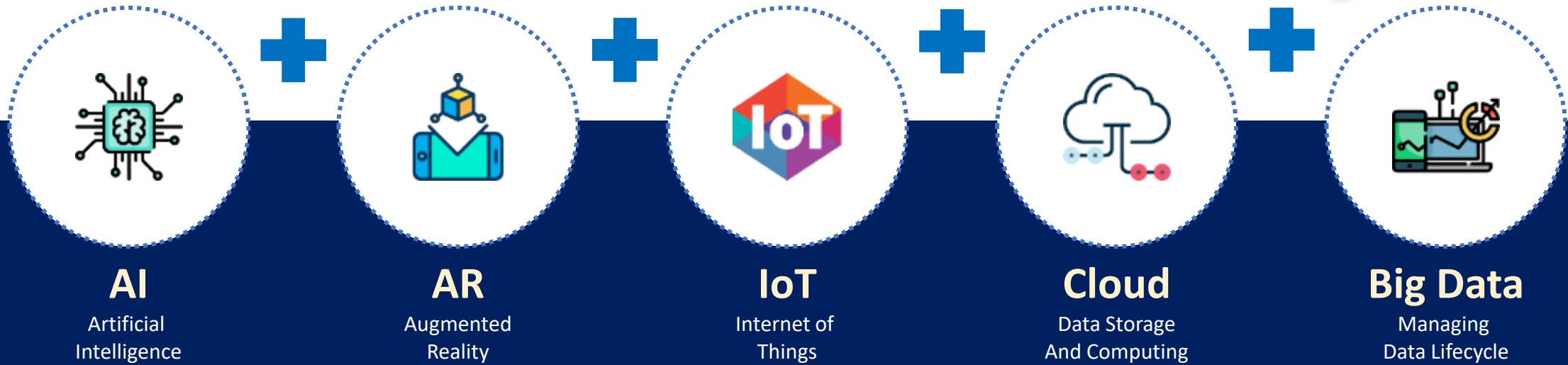Augmented Reality

IoT
Internet of Things

Cloud
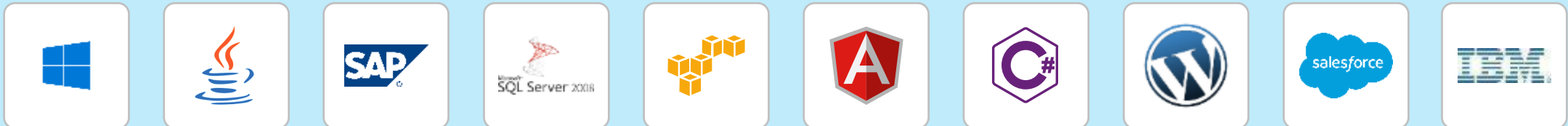Storage & Computing

Data
Managing Data lifecycle

GLOBAL PRESENCE

SEATTLE

OXFORD

DALLAS

NOIDA

SAN JOSE

KOLKATA

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Introduction to AI-Based Process Optimization

AI-based process optimization refers to the application of artificial intelligence techniques and algorithms to improve and streamline business processes.

By leveraging AI, organizations can analyze vast amounts of data, identify patterns, make predictions, and automate decision-making processes.

Understanding the Process

1 Data Collection

- Gathering relevant data from various sources, including internal systems, sensors, devices, and external sources.

2 Data Analysis

- Using AI algorithms to analyze and preprocess the collected data, identify patterns, correlations, and insights.

3 Model Development

- Building machine learning models or algorithms to predict outcomes, optimize processes, or make recommendations based on the analyzed data.

4 Implementation

- Integrating the developed models or algorithms into existing systems or processes to automate decision-making or improve efficiency.

5 Monitoring

- Continuously monitoring the performance of the implemented solution, collecting feedback, and adjusting as needed.

Importance of AI in Process Optimization

Enhanced Efficiency

AI automates repetitive tasks, reduces manual intervention, and optimizes processes, leading to improved efficiency and productivity.

Cost Reduction

By streamlining operations and minimizing errors, AI helps organizations save costs associated with labor, resources, and downtime.

Improved Decision Making

AI analyzes data in real-time, providing insights and recommendations that enable better decision-making and strategic planning.

Competitive Advantage

Deliver better products/services and adapting to changing market conditions more effectively.

Industries Leveraging AI-Based Optimization

Finance

Fraud detection, risk assessment, algorithmic trading, customer segmentation.

Healthcare

Disease diagnosis, medical imaging analysis, patient care optimization.

Manufacturing

Predictive maintenance, quality control, supply chain optimization.

Retail

Demand forecasting, personalized marketing, inventory management.

Logistics

Route optimization, fleet management, warehouse automation.

Microsoft Tools for AI-Based Optimization

Leveraging Microsoft Technical landscape for building innovative AI-Based Optimization Solutions

Azure Machine Learning

A cloud-based platform for building, training, and deploying machine learning models at scale.

Power BI

A business analytics tool that provides interactive visualizations and insights for data analysis and decision-making.

Azure Cognitive Services

Pre-built AI models and APIs for vision, speech, language, and decision-making capabilities.

Azure Data Factory

A fully managed data integration service for orchestrating and automating data workflows across on-premises and cloud environments.

Gen-AI powered chat support for One of the Largest EV Manufacturer

Solution Component:

Cloud + On-Premise

Challenge:

A prominent US-based electric vehicle (EV) manufacturer faces a challenge with its support system. Support gurus are overwhelmed by repetitive queries from electric bike users, resulting in unnecessary workload. The manufacturer aims to optimize the support process by minimizing reliance on support gurus through the utilization of previously resolved similar issues, ultimately improving efficiency and response times.

Solution:

Audax Labs recommends implementing a robust chat support system empowered by generative AI capabilities The proposed system incorporates an integrated user manual and a comprehensive recording mechanism for each issue raised by bikers, along with its corresponding resolution.
The solution autonomously addresses routine queries using historical data, minimizing the need for support gurus initially. Support gurus are engaged only for complex issues, optimizing resource allocation.
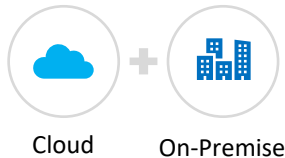
Outcome (ROI):

- Data-Driven Chat Support
- Generative AI Integrated User Manual
- Guru Engagement Protocol to Optimize Resource
- Resource Optimization & Efficiency Improvement
- Continuous Learning for Quick Issue Resolution

Reduce workload for the customer support team

Solution Component:

Cloud + On-Premise

Challenge:

Customer support teams often grapple with high volume of routine inquiries, resulting in prolonged response times and decreased efficiency. This strain on resources hampers their ability to address complex issues, impacting overall customer satisfaction causing human errors.

Solution:

Audax Labs' Generative AI-driven Customer Support Assistant. This intelligent system seamlessly integrates with customer's support workflow, automating responses to common queries. By harnessing NLP (natural language processing), it not only reduces the support team's workload but also ensures swift and accurate resolutions for routine issues.

Outcome (ROI):

- Find knowledge base faster
- Summarizes the call history to improve engagements
- Efficiency gains & resource optimization
- Maintains uniformity and accuracy in replies
- Enhanced customer experience

Gen AI to Empower internal users – internal apps & knowledge base

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Challenge:

As organization expands, internal knowledge retrieval becomes a bottleneck. Teams often struggle to find relevant information swiftly, affecting productivity. They seek an innovative solution to empower their internal users with efficient and intuitive access to their existing wealth of knowledge.

Solution:

Audax Labs introduces Generative AI-driven Internal Search Apps and Knowledge Base. Our advanced system understands natural language queries, enabling Customers' teams to effortlessly locate information. It not only streamlines internal searches but also dynamically updates the knowledge base, ensuring relevance and accuracy.
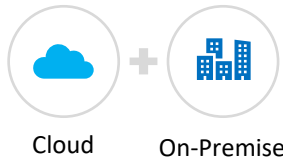
Outcome (ROI):

- Accelerates information retrieval
- Offers a user-friendly interface
- Improved efficiency
- Centralized knowledge base
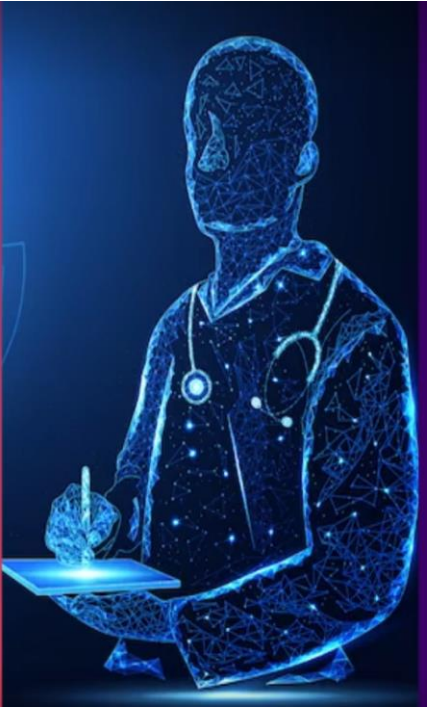- Saves time and cost

Solution Component:

Cloud + On-Premise

Physician e-Assistant (Gen AI)

Solution Component:

Cloud   On-Premise

Challenge:

Due to low ratio of doctors to patients' healthcare providers and caregivers are struggling to support large number of patients.

Physicians spend considerable amount of time in gathering basic details of the patient and summarize their problem.

Solution:

Audax Labs developed a Generative AI based solution that would gather crucial information of the patients by asking them relevant questions and summarizing their medical condition.

The app provides a summarized report to providers and caregivers which they can use to diagnose the problem. The solution reduce time and cost of service for the patients.
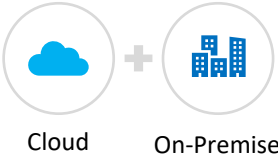
Outcome (ROI):

- Reduces patient's wait time in the facilities
- Cost effective
- Increase in the number of patient appointments
- Increase in Revenue