Atos | Syntel

Artificial Intelligence: Creating Value for Retail

Over the past few years, artificial intelligence and machine learning have enabled many enterprises to dramatically transform their operations. The power of these technologies is evident in both physical and online retail outlets. Retailers use AI-driven technologies like NLP and machine learning to create a highly personalized experience, which makes customers come back asking for more. AI is poised to unleash the next wave of digital disruption for retail, and companies are preparing for it now.

However, organizations are still faced with a critical decision – identifying where in their value chain to start implementing AI. With nearly four decades of experience helping retailers transform their operations, Atos Syntel has the knowledge and experience to help you solve this challenge.

Offerings

Atos Syntel focuses on finding the right match between your organizational strategy and planning the AI roadmap. Our end-to-end AI accelerator ecosystem can help you set up a dedicated AI center of excellence which can be scaled to other units within the enterprise.

At Atos Syntel, we focus on four critical areas of AI: computer vision, language, decision engines and data ingestion, plus machine learning and deep learning. Our AI offerings include:

Discover	Brainstorm AI applications for your business with portfolio workshops and domain templates. Helps align AI with your business strategy, identify challenges and opportunities, and select the technology stack and platform.
Design	Study your current processes, capture user stories and process design to create process benchmarks. Includes use case benefit analysis for feasibility, ROI, and impact on the customer experience.
Develop	Create an end-to-end roadmap by prioritizing use cases and setting up implementation models. The implementation process consists of: ▪ **Prepare:** service mapping, algorithm selection, data selection, etc. ▪ **Data Pipeline:** data source, ingestion, processing and labeling service ▪ **Model Building:** preprocess, train, configure, compare and publish ▪ **AI Testing:** algorithm and model testing ▪ **Deploy and Optimize**

Why Us?

Domain Templates: Pre-built domain templates for quick opportunity validation

Reusable Accelerators: 60+ accelerators to speed up implementation and reduce efforts

AI Ecosystem: Complete set of AI tools and accelerators from reusable services to preconfigured algorithms and platforms

AI Labs: Global cloud-based sandbox for customers for hands-on development of use cases

Domain Expertise: Retail and logistics domain experts with in-depth experience delivering business results enabled by AI

BENEFITS

▪ Significant productivity gains, faster time to market and TCO reduction through AI-driven process automation

▪ Enhanced customer experience with 24x7 availability and shorter wait times enabled by chatbots

Our Experience:

Lost shipment tracking using OCR and computer vision for a logistics provider

💡 Business Challenge	🤝 Solution	🗂 Business Benefits
• Packages are diverted to "lost & found" if the shipping label is missing or illegible, especially common with large packages • Re-routing packages involved posting photos to a central repository and waiting for lost package complaints from customers • Customer care teams had to manually scan through images to identify lost goods, a slow and tedious process	• Atos Syntel developed a solution using an image search algorithm, which uses an image file as the input query and returns results related to the image • The solution scans the central repository for similar images, returning results within seconds • The solution works for images taken in any orientation (upside down or at an angle)	• Enhanced customer satisfaction • 95% reduction in lost package turnaround time • 70% productivity improvement

Stockout and inventory balancing solution for a home improvement retailer

💡 Business Challenge	🤝 Solution	🗂 Business Benefits
• Reduce stockouts, or out-of-stock (OOS) events in their stores • Ensure that planned promotions do not lose impact because the product isn't available • Avoid the risk of brand damage or loss of customer loyalty • Reduce the extra time and resources necessary for additional ordering	• Created an image recognition service that provides real-time actionable insight from a shelf photo • The algorithm includes image pre-process-ing, feature extraction and real-time recognition • Out of stock products are detected and immediately flagged • Designed to adapt in real time to in-store products evolution	• Reduced inventory distortion • Increased sales revenue • Reduce lost sales due to stockouts, and minimize seasonal discounting due to overstocks

Catalog search, product ordering and DIY ChatBots for an auto parts retailer

💡 Business Challenge	🤝 Solution	🗂 Business Benefits
• 2,000+ daily queries raised for technical and transaction support in areas like sales, customer support, catalog search, and DIY • Required a dedicated team to address the questions, taking 10-15 minutes each • Repeated and duplicate questions were not addressed by direct look-up systems	• Atos Syntel implemented a chatbot that learns from past Q&A data and uses the learning to respond to user queries • The bot learns and suggests responses to unanswered areas to admin users, to improve it's own knowledge base • Easy to train, update or overwrite with a new data set	• ~70% of the current workload has been replaced by the chatbot • The bot resolves 80+% of queries and uses the unanswered queries for future learning. • Bot is integrated with different information systems, which extends its scope from chat to transactions

About **Us**

Atos Syntel is a leading global provider of integrated information technology and knowledge process services. Atos Syntel helps global enterprises evolve the core by leveraging automation, scaled agile and cloud platforms to build efficient application development and management, testing and infrastructure solutions. Our digital services enable companies to engage customers, discover new insights through analytics, and create a more connected enterprise through the internet of things. Our "Customer for Life" philosophy builds collaborative partnerships and creates long-term client value by investing in IP, solutions and industry-focused delivery teams with deep domain knowledge.

To learn more, visit us at www.atos-syntel.net

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