

artificial intelligence in action

The Amdocs Real-Time Digital Intelligence Platform

The power of artificial intelligence for service providers

"Service providers move from data to analytics to actionable cognitive intelligence. The combination of analytics, artificial intelligence and automation will have a disruptive and transformative impact on service providers' care organizations."

Gartner Market Trends: Top Five Disruptive Trends for CSPs, Worldwide, 2017-2022

The next phase in the digital evolution for service providers is driven by artificial intelligence (AI). AI is unique in its ability to extract and apply insights from data, in real time, enabling the automation and optimization of decisions and actions, as well as delivering ongoing improvements through self-learning and automatic tuning.

The force of AI can have such an impact that it was even recognized at the World Economic Forum (2017) as the driving force for the 4th industrial revolution.

AI serves as a powerful tool for evolving business process efficiency and effectiveness, driving new revenue streams, and for delivering a "wow" customer experience. Therefore, it is no surprise that service providers seeking to improve processes relating to their customers, networks, and operations are seeking to embed artificial intelligence, machine learning, and cognitive computing into all of their core business processes.

aia, the Amdocs Real-Time Digital Intelligence Platform

Amdocs enables service providers to leverage artificial intelligence to make a meaningful, quantifiable, and differentiating impact on their business with aia, our Real-Time Digital Intelligence Platform.

It includes a unique set of technologies and capabilities that enable service providers to inject intelligence across their business and processes.

The platform combines machine learning, integrated market leading artificial intelligence engines from Amdocs partners, cognitive computing from the Pontis acquisition, the Amdocs Real-Time Data Management Platform, and extensive telco-specific domain marketing expertise. We integrate these advanced capabilities across the Amdocs portfolio for a comprehensive solution that delivers real-time, digital intelligence to service providers, in all areas of their business.

The platform is comprised of the following major layers:

The Real-Time Data Management Platform, where we aggregate, filter, organize, and analyze real-time and batch data. This layer is comprised of:

- **The Amdocs Data Hub:** An enterprise-grade, data management platform that leverages the latest Hadoop stack, and enables you to seamlessly collect, store, integrate, and visualize all of your data
- **The Amdocs Logical Data Model (aLDM):** Open and TM Forum-compliant, it is a pre-packaged communications-specific data model that maps multiple data sources, optimizes the data for analytics and reporting, and includes 200 pre-designed reports
- **Intelligent Customer 360:** Collects and integrates real-time and batch data from disparate and diverse data sources to deliver a unified view of the customer to the service provider in the contact center, the sales rep in the store, and for un-assisted support such as through chatbots, robots, and IVR

Amdocs Engage, for Intelligent Customer Engagement:

Combines 1st and 3rd party data, including CRM, billing, engagement history, web visits, and real-time customer data, applying machine learning, and leveraging the Intelligent Customer 360. It enables you to arrive at an accurate and complete understanding of customer needs, preferences, and intents. It also enables you to manage

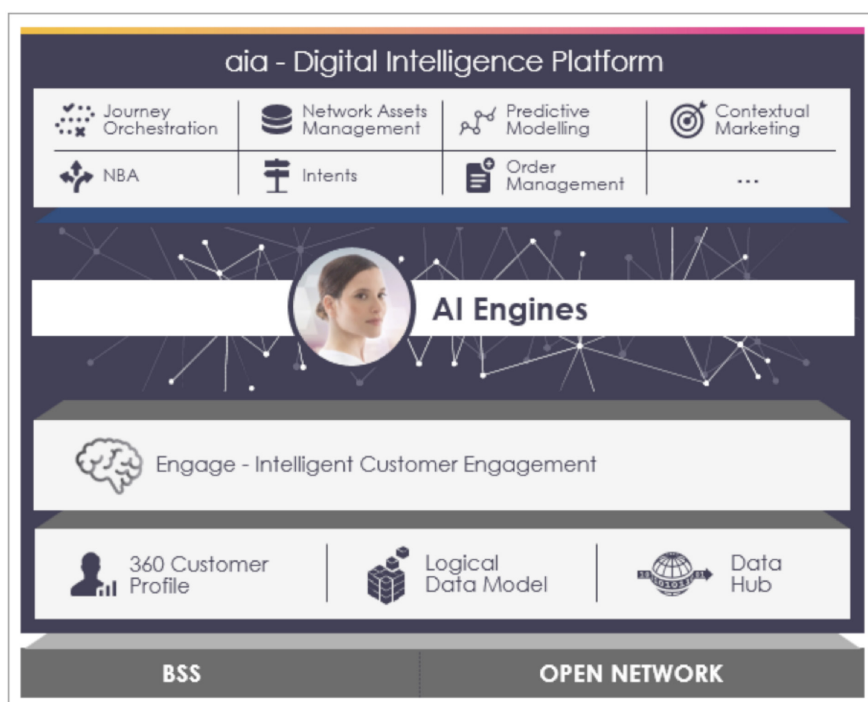
an adaptive customer journey, have personalized and contextual engagements on all channels, and deliver NBA and NBO recommendations to customer facing channels.

Integrated best of breed AI engines: Best of breed engines from IBM and Microsoft, among others, deliver cutting edge capabilities such as machine learning, natural language processing (NLP), and cognitive computing, and more.

Through our deep familiarity with these source systems and the data models, we are uniquely positioned to effectively extract, process, and organize masses of real-time data, including unstructured data that is dispersed across multiple disparate silos.

This way, we remove the complexity from turning data into insight and intelligence, enabling the AI engines to unlock the value that is contained in data, and which would otherwise be inaccessible.

The Amdocs Chatbot is embedded with cognitive capabilities that leverage natural language processing and machine learning. The chatbot is pre-trained on the service provider's specific processes, and is infused with industry domain knowledge. This enables service providers to create and offer personalized self-service engagements that provide their customers a uniquely exceptional experience.



How aia transforms key areas of the service provider's business

Intelligence-driven marketing

"To create an effective NBO, you must collect and integrate detailed data about your customers, your offerings, and the circumstances in which purchases are made."

Thomas H. Davenport, the President's Distinguished Professor in Management and Information Technology at Babson College, Harvard Business Review

aia enables service providers to infuse intelligence into marketing operations and activities, and achieve new capabilities such as:



Adaptive customer journeys: With a visualized map to plan and manage the various experiences and journeys of customers



Personalized and contextualized engagements: Tailored in real-time to each customer's preferences, needs, and behavior



Proactive engagements: Leveraging the full customer view to predict risks such as churn, as well as opportunities to sell, and to engage at the right moment with the right action



Real-time ad customization: Adapt ad content and bids on paid media, as based on the full ad context and the Intelligent Customer 360



Continuous optimization of the message, offer, and channel, enabled by machine learning capabilities

Intelligence-driven care

The Amdocs Digital Intelligence Platform enables the next generation of customer service, which is predictive and proactive, leveraging the efficiencies of non-human-assisted channels, and optimizing human-assisted channels by empowering agents.

With Amdocs you can:



Anticipate customer needs and intents, and proactively engage with them at the right time and on the right channel



Personalize engagements by leveraging machine learning to quickly and effectively address needs on assisted and unassisted channels



Guide agents on assisted channels, empowering them with real-time data, which enables them to personalize care, accelerate resolution, and avoid repeat calls

Data-fueled intelligence

"Exponential digitization creates exponentially more data. The adoption of technology that can learn and evolve from that data should be at the forefront of business strategy."

World Economic Forum 2017

At the heart of every successful AI strategy and implementation is the ability to access relevant, accurate, and high-quality data in real-time. The Real-Time Amdocs Digital Intelligence Platform enables these capabilities, turning data into intelligence, by:



Collecting and integrating both real-time and batch data from disparate and diverse sources



Organizing 1st and 3rd party data in the Amdocs market leading, open and TM-Forum compliant Logical Data Model (aLDM)



Creating and delivering a unified view of the customer to customer facing employees and channels



Extracting and providing insights to the organization's multiple stakeholders

Thus, with access to high quality fresh data, service providers can make data-driven decisions, achieve faster time to insight, and easily embed intelligence across the organization.



Benefits to service providers and their customers

"Artificial Intelligence (AI) is a key component supporting service providers' current and future IT systems and will allow them to keep pace with the demands of the digital world."

Ovum

Benefits for service providers



Optimized customer engagements: Predictive, proactive, and personalized engagements, adaptive journeys across all channels, highly efficient human-less care, empowered agent-assisted care



Improved network management: Resource allocation optimization, automatic remediation, network orchestration and operation, proactive service management



Efficient business and operational processes: Data-driven and optimized with auto detection and correction



New revenue streams generated from more accurate, personalized packages that drive higher uptake rates



A competitive advantage gained through improved customer loyalty and advocacy, increased revenues, and decreased operational costs, driven by more efficient and effective processes

Benefits for customers



Personalized engagements that are tailored to their needs, with the offers and support they need most, delivered when they need them most, and on their channel of preference



Better performing networks that don't drop calls and enable them to enjoy a data plan without interruption or slowing down



Increased satisfaction and reduced frustrations around back office processes such as pricing, billing, and more

Act on your intelligence

aia, the **Amdocs Real-Time Digital Intelligence Platform**, enables you to adeptly and expertly ride the next wave of the digital journey. We help you embed cutting edge artificial intelligence into every aspect of the business, and deliver improvements with all the core activities and processes relating to the main pillars of your business – customers, network, and operations.

www.amdocs.com/aia

