DataArt

Microsoft Expertise

New York USA
London UK
Munich Germany
Zug Switzerland

As a leading digital transformation services provider, DataArt is the partner for progress of companies ready to embrace constant change.

We help you design and engineer data-driven, cloud-native solutions that create immediate and enduring business value.

Fast Facts

DataArt

Reliable

profitable, financially strong, fully audited

30 global locations

- USA
- UK
- EU
- UAE
- Eastern Europe
- Latin America
- India

5,000+ consultants & engineers

1997 founded in New York City

4,500+ successfully completed projects

95% return clients

Since **2000** Microsoft Partner

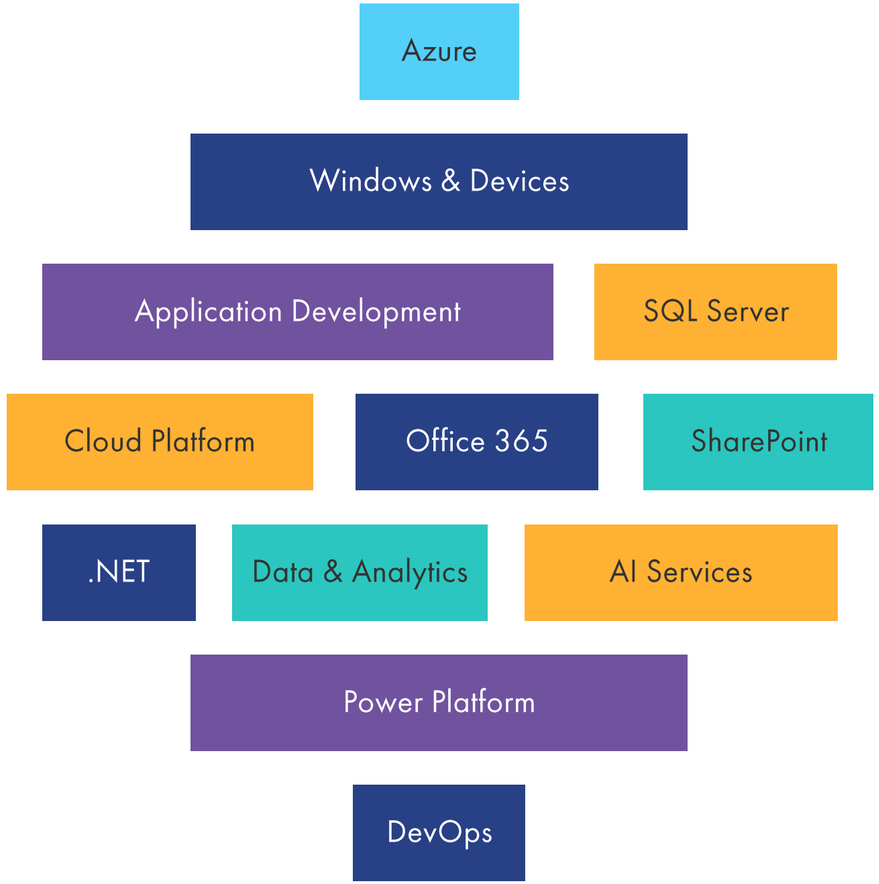
Since **2011** Building on Azure

Microsoft Stack

DataArt

Most modern enterprises rely on **Microsoft technologies**, from business intelligence and productivity systems, to data management and development tools.

DataArt has extensive experience with Microsoft stack and helps clients **develop, integrate and optimize** Microsoft-based solutions that **drive innovation and growth**.



Microsoft Solutions Partner

Microsoft Azure

DataArt & Microsoft

DataArt

- Over **20 years** of partnership
- Microsoft **Solutions** Partner
- **Azure** consulting partner
- Certified Developers, Architects, and DevOps
- Building on Azure **since 2011**
- Strong **cloud** expertise
- North America, UK, EMEA, LATAM, India
- DataArt is **a partner of choice** in various partnership activities (events, external workshops, programs)

Microsoft
Solutions Partner

Microsoft Solutions Partner designations identify partners with specific capabilities and experiences in high customer demand solution areas.

Microsoft
Solutions Partner
Data & AI
Azure

Microsoft
Solutions Partner
Digital & App Innovation
Azure

Microsoft
Solutions Partner
Infrastructure
Azure

Microsoft
Solutions Partner
Security

Azure Services and Competencies

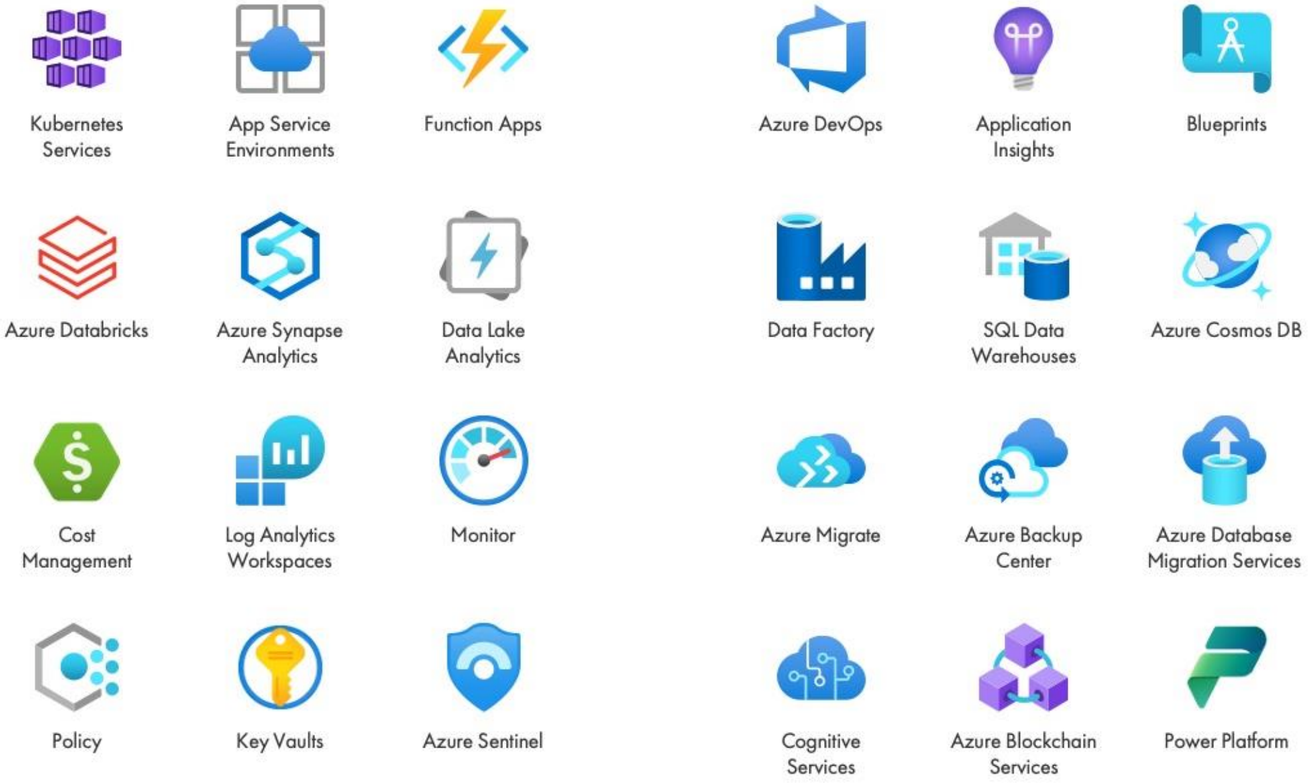
DataArt

Azure Services

- Solution Design and Cloud Architecture
- Analytics Platform Design and Implementation
- Azure Migration
- Application Modernization
- Data Management and Data Warehousing
- Optimization of Operations and Security
- Security Testing
- AI and ML
- Cost Optimization

As an Azure Consulting Partner, we have solid experience with Azure services, implemented for multitude of client projects

Azure Competences



DataArt Apps & Services in Microsoft Azure Marketplace

DataArt

Cloud Migration
Read More

Azure AI and ML Solutioning*
Read More

Generative AI Solutions Prototyping on Azure*
Read More

Microsoft Azure Security
Read More

App Architecture Modernization
Read More

Azure App Custom Development
Read More

* This mentioned Azure Marketplace offer is co-sell ready and has been technically validated by Microsoft. Technical validation indicates that the service offering meets a high standard of technical expertise.

You can find more DataArt consulting services and apps here

DataArt

Working **across industries**, DataArt designs and scales Microsoft solutions that drive customer transformation

Finance

Insurance

Retail & Distribution

Travel & Hospitality

Healthcare
& Life Sciences

Media
& Entertainment

DataArt's offerings on Microsoft Industry Solutions Directory

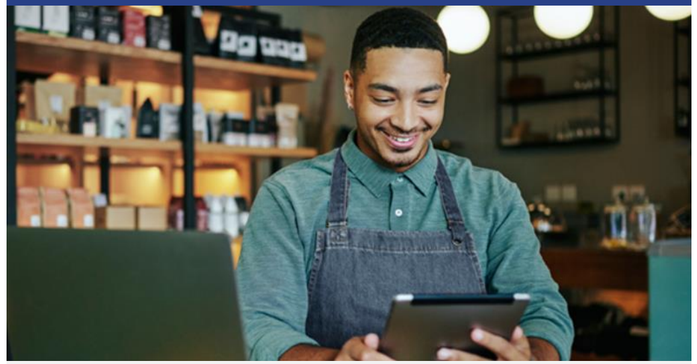
DataArt

DataArt's industry-specific offerings on Azure are listed in Microsoft's Industry Solutions Directory.

Finance

- Risk Management
  Learn more
- Differentiated Customer Experience
  Learn more

Retail



- Maximize Data Value
  Learn more
- Elevate the Shopping Experience
  Learn more

Healthcare & Life Sciences

- Secure Productivity and Security
  Learn more

CIFC adopts agile Azure platform for mission-critical credit services

DataArt

Microsoft published a customer success story of CIFC Asset Management LLC, a global corporate and structured credit specialist located in the US and UK.

The technologies and services provided by Azure expanded CIFC projects' capabilities — not only improving performance and scalability but also reducing maintenance overhead and even unlocking new functionalities for the business.

With more modernization projects in the queue, CIFC continues to work with DataArt and take advantage of Azure Managed Services.

> DataArt brought to bear expertise, knowledge, and qualified resources to help us realize the goals of this and other projects. They also have been our venue into Microsoft.

Adrian Iosifescu
CIFC Chief Technology Officer

Case Studies

Legacy Systems Transformation for Monex Europe

Client

Monex Europe is a leading specialist in commercial foreign exchange. Headquartered in London, the company offers a suite of foreign exchange products designed for corporate clients and high net-worth individuals. A security audit revealed that some of Monex's systems were using SaaS services in Azure that were no longer supported and no longer receiving security updates from Microsoft.

DataArt was able to eliminate the need for classic Azure services by containerizing and deploying legacy applications in Service Fabric, a next-generation platform that makes it easy to package, deploy, and manage scalable and reliable application components. The bundling of Windows Docker (with IIS) with Service Fabric eliminated the need for classic Azure services without any significant investment in system overhauls.

Highlights

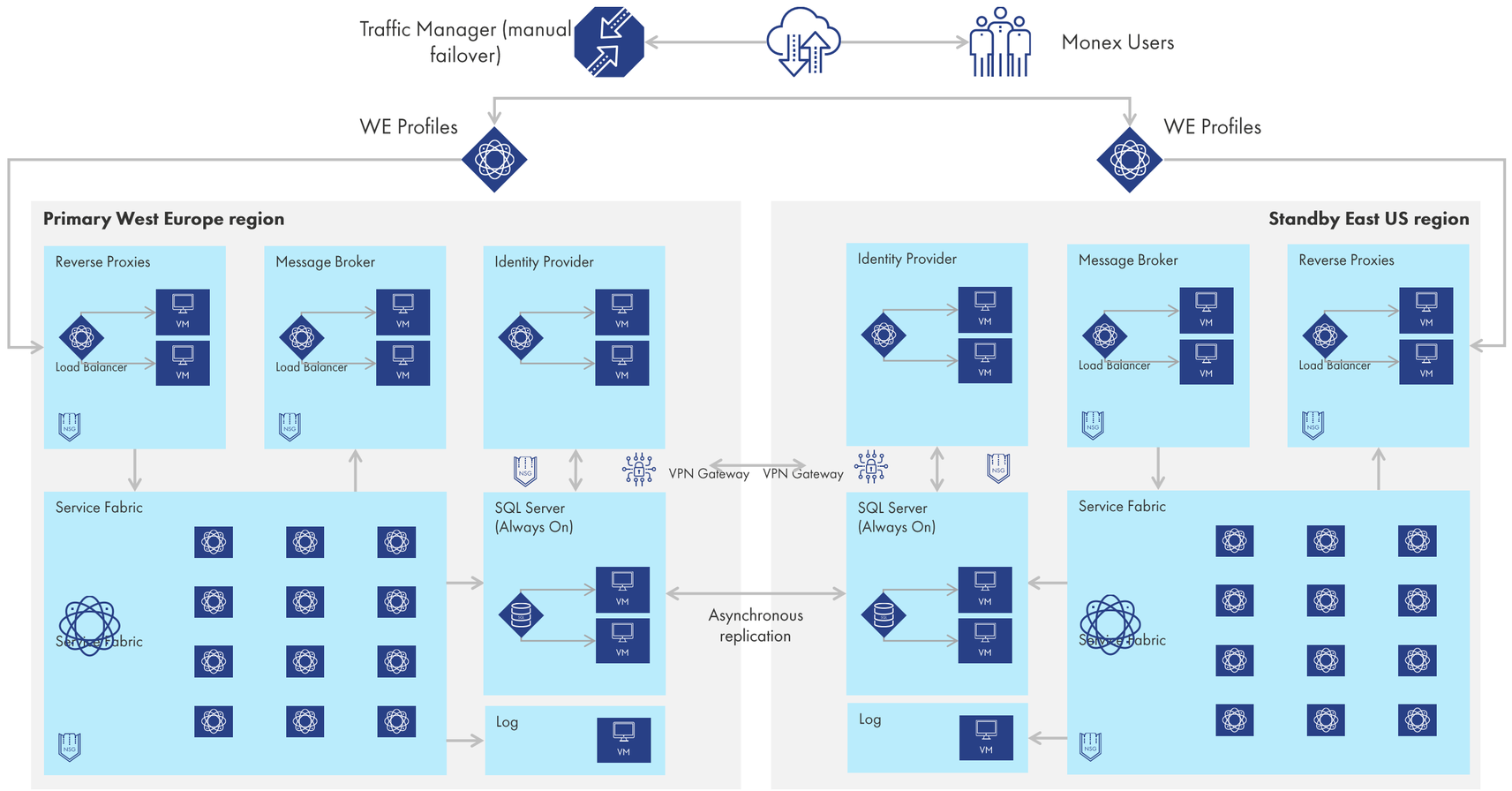
- Substantially increased efficiency
- Substantially reduced costs and infrastructure requirements
- Implementation of security best practices
- The ability to flexibly manage load distribution, ensure the security of inter-service communication, and maintain a high degree of fault tolerance with zero system down-time
- Added flexibility in system health monitoring and diagnostics

> DataArt is an invaluable strategic partner for Monex Europe. We trust DataArt to deliver all of our business systems developments and to ensure reliable, secure delivery of our IT based products and services internally and to our clients. We also rely on DataArt for their industry knowledge, advice and support at all times.

Shelton Fray
Director and Co-founder
Monex Europe

CASE STUDY 2 / 2

Legacy Systems Transformation for Monex Europe



Global Car Service for Corporate Clients

Client

Travel & Hospitality Industry

GroundScope is a leading U.K.-based service that provides business cars to clients around the world. The company lets traveling employees manage their journey by providing access to a network of fully vetted ground transport providers.

Challenge

GroundScope wanted a more reliable and secure car booking platform, as well as a new mobile app. The legacy system was also difficult to integrate with modern software and external APIs, so the client asked to build a more efficient and extensible system to reduce operational costs. In addition to this, the new system should be secure and compliant with various industry regulations.

> We're very pleased to have DataArt as a partner. Their combination of travel industry experience with technical expertise helped us achieve our goals faster and run our business much more efficiently.
>
> The new system allows us to manage and operate the business more cost-effectively and provide a faster response time to all customer booking requests.

John McCallion
CEO, GroundScope

CASE STUDY 2/2

Global Car Service for Corporate Clients

Business Benefits

- The new solution, which uses Azure as the cloud platform, has reduced operating costs by 80%, simplified new release deployments and improved fault tolerance.
- Azure dashboards and flexible monitoring reports provide all necessary information to control system availability and health.
- The platform makes journey arrangements easy and stress-free for clients. Moreover, a faster onboarding process has already brought on several new high-profile clients.

Solution

- DataArt helped modernize the system by moving from a legacy infrastructure to a cloud solution.
- There was a choice of multiple cloud providers and Azure was the best option due to high level of compliance out of the box, e.g., HIPAA.
- Azure was chosen due to native support for .NET services.
- Containers and AppServices were used to optimize resource utilization and provide quick disaster recovery mechanism.
- Azure Bastion service was used to secure the infrastructure access.
- Building new platform using Azure cloud has reduced the operating costs on infrastructure by 80%.

Azure Well-Architected Review for GroundScope

Client

GroundScope is a leading UK-based service that provides business cars to clients around the world. The company lets traveling employees manage their journey by providing access to a fully vetted ground transport provider network.

Challenge

The car booking platform, which runs on Azure cloud platform, was experiencing performance issues with its current system. Therefore, the working team decided to conduct an Azure Well-Architected Review (WAR) to identify the root cause of the issues and improve the overall performance and status of the system.

> The conducted Well-Architected Review (WAR) used a relatively small amount of our resources. At the end of the process, we were provided with a detailed review and some excellent insights into enhancements we could make to improve the performance of the system, many of which were very easy to implement.
>
> Before WAR, we found ourselves improving the performance just by purchasing extra processing power from Azure. The WAR has enabled us to tackle any issue in a much more planned, structured, and cost-effective way.

Russell Jackson
CFO, GroundScope

Azure Well-Architected Review for GroundScope

Solution

The Azure Well-Architected Review (WAR) provides an opportunity to review the current state of the project against Microsoft's best practices and identify areas for improvement.

Thus, the working team received the WAR report containing recommendations to improve the system based on the cloud architecture pillars: security, operational excellence, performance efficiency, reliability, and cost optimization.

Business Benefits

The working team implemented most of the recommendations provided in the WAR analysis report, as a result of which the system's stability has been greatly improved. This advancement has enabled our client to use the system freely and without the risk of any downtime, resulting in a better experience for the client and a more reliable service for the business.

Highlights

- Increased stability of the system
- Improved protection against data loss
- Decreased operational costs
- Simplified rotation of secrets (DB passwords, keys, etc.)
- Reduced build time and increased time-to-market metric
- Increased back-end scalability
- Reduced configuration drift

Technology

- Microsoft Stack
- Azure Cloud Services
- RabbitMQ
- Seq

Web Portal Solutions for Streamlining Healthcare Processes

Client

Anthony Nolan is a UK-based charity that works in the areas of blood cancer and blood disorders, and hematopoietic stem cell transplantation. It makes lifesaving connections between patients in need and strangers ready to donate their stem cells.

Challenge

To streamline their workflow and improve the efficiency of the internal staff, the client recognized the need to replace the outdated desktop system with modern web portals. Additionally, the client needed to create a new solution for its external users – staff of the hospitals they work with— to digitize communications with them.

Solution

DataArt enhanced the client's two existing web portals solutions, **Anthony Nolan Search and Anthony Nolan Labs**, both accessible through the Anthony Nolan Active Directory. These portals were used for the client's internal staff and were hosted on the Azure cloud. The first solution, Anthony Nolan Search, allows users to manage patient data, request and track international and internal donor searches, and request and track additional tests. And the second system, Anthony Nolan Labs, allows users to track samples and investigations performed for donors and patients.
DataArt also developed the **AN Connect** external system for Anthony Nolan, which was created from scratch and is accessible to external users via the B2C Active Directory. This portal allows users to manage the patient journey - from registration to receiving a transplant. Like the other solutions, this new system was also built on the Azure cloud platform.

Additionally, DataArt provided technological support to enhance integration with the European Marrow Donor Information System (EMDIS), a network of bone marrow donor registries that includes Anthony Nolan as a member. These enhancements provided the ability to search for compatible donors worldwide, request tests for the donors, and reserve the donors for the patient.

Web Portal Solutions for Streamlining Healthcare Processes

Business Benefits

The developed internal platforms have made the work of the staff easier, resulting in increased productivity. Many tasks that previously took a significant amount of time can now be completed in just a few minutes.

Also, the development of the external portal has strengthened relationships with external partners since the partner hospitals were also involved in the evaluation and requirements-gathering processes of the systems development. And thanks to this portal, the communication between the company and its partner hospitals is expected to become easier and more streamlined, leading to even stronger partnerships.

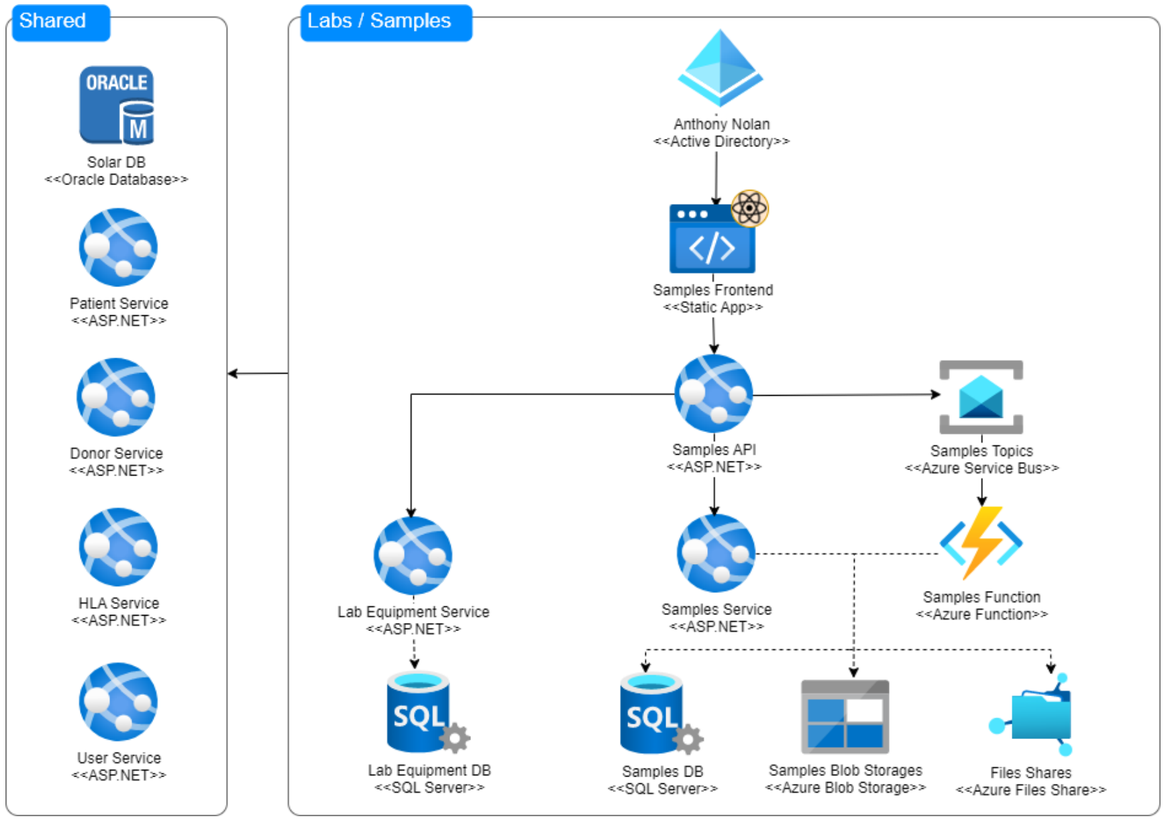
Highlights

- Automated search for matching donors for patients with blood cancer
- Automated laboratory analysis of samples
- Secured platform
- Digitized communication between Anthony Nolan and its partner hospitals
- Faster and more efficient communication
- Subsequent increase in efficiency of the internal staff

Technology

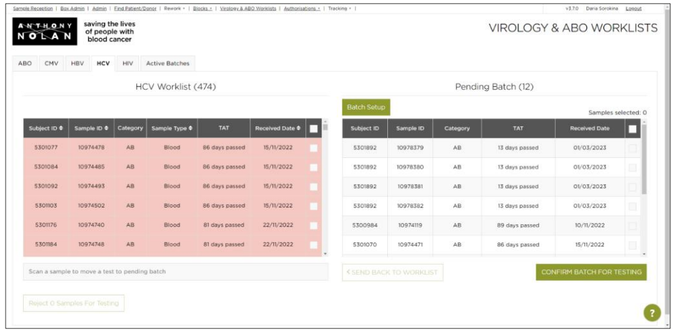
- ASP .NET Core
- Azure App Services
- Azure Functions
- Azure SQL Server
- Azure Storage
- Azure Service Bus
- Azure Active Directory
- Azure Active Directory B2C
- Azure Logic Apps
- React + Redux
- Azure DevOps
- Terraform
- NUnit + Selenium for auto tests
- Puppeteer for FE end-to-end tests

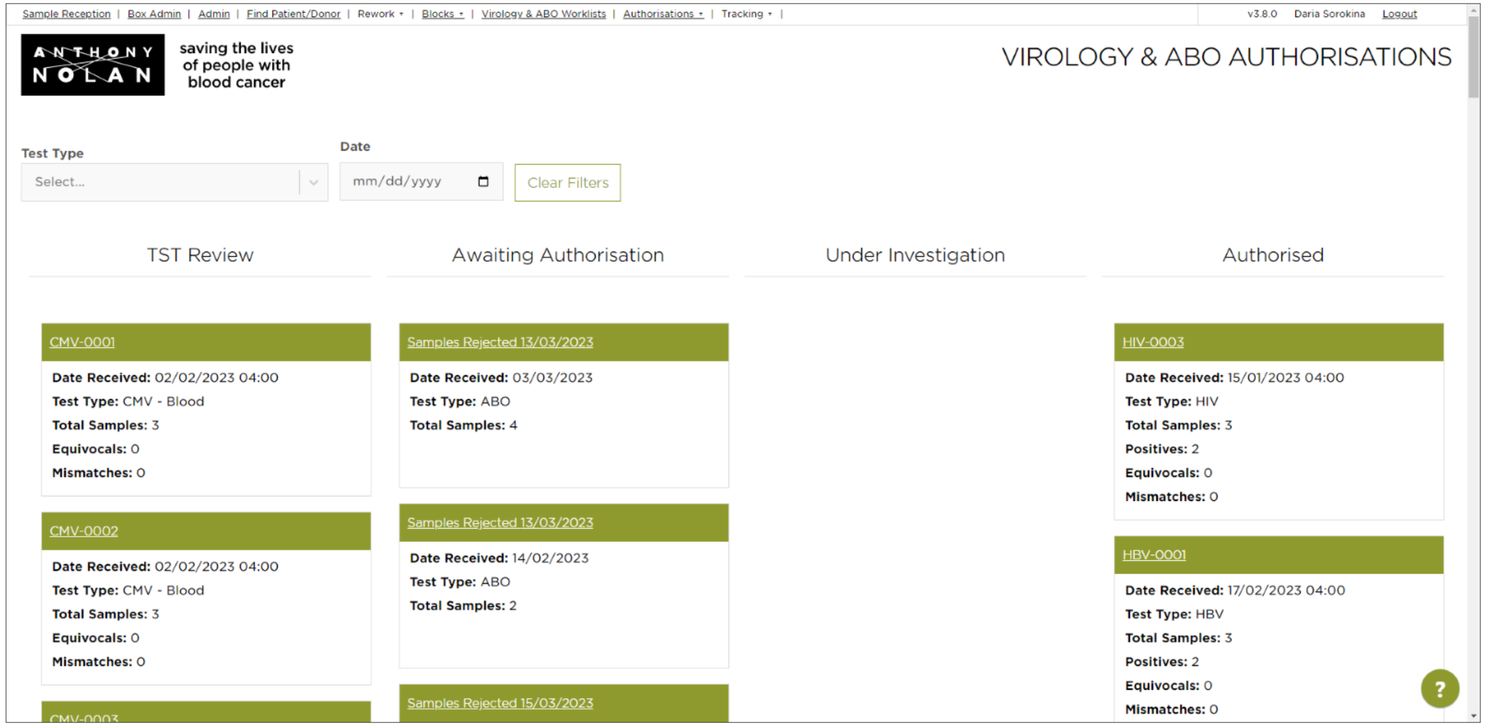
Anthony Nolan Labs



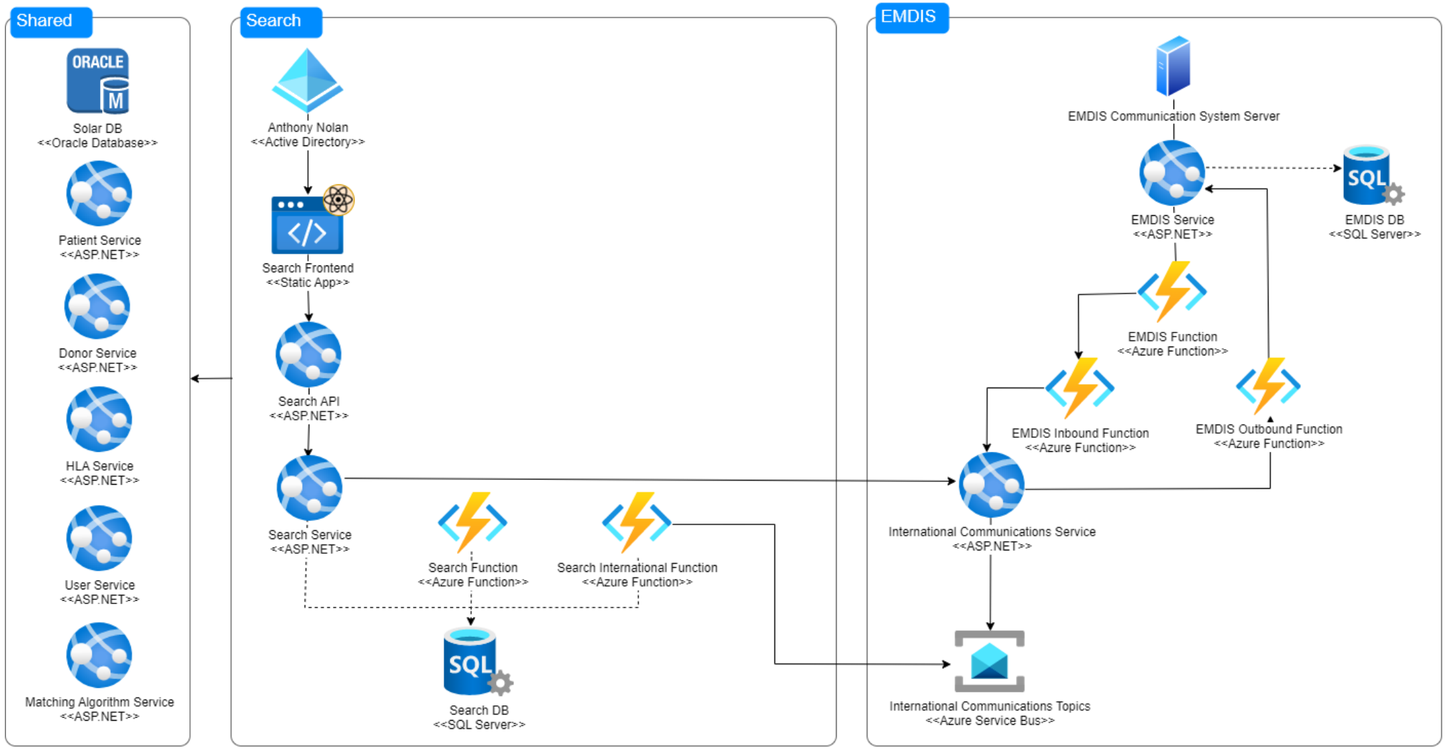
CASE STUDY 4/6

Anthony Nolan Labs System

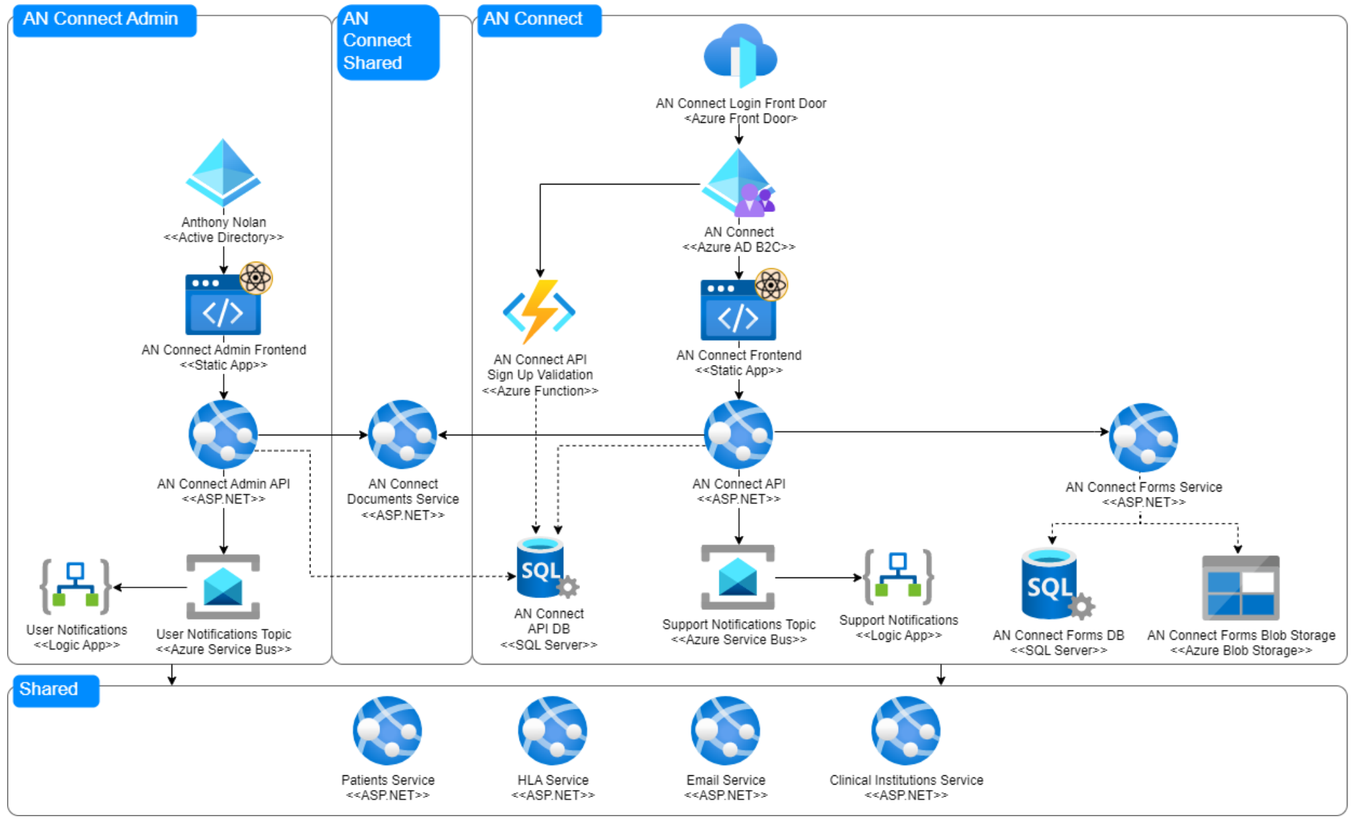




Anthony Nolan Search and Integration with EMDIS



Anthony Nolan AN Connect



Azure Hybrid Infrastructure for PSI

Client

PSI CRO, headquartered in Switzerland, is a full-service global Contract Research Organization specializing in delivering clinical projects across multiple therapeutic areas.

Challenge

To enhance the technology infrastructure and streamline PSI operations, the company required an internal network in the cloud with the ability to access on-premises services. The main challenges leading to this request included:

- The geographical distribution of project teams requiring a unified solution to foster efficient collaboration;
- The necessity to enhance the responsiveness of business applications;
- Cost optimization for the company's Data/AI/ML infrastructure, as traditional on-premises data centers often incur high costs;
- The need for integration between existing applications to ensure a smooth and uninterrupted data flow across the entire organization.

Thus, these factors led the DataArt experts to integrate Azure cloud-based resources with the existing on-premises infrastructure, creating a hybrid infrastructure model for the client. This solution allowed the client to harness the advantages of Azure Cloud while leveraging their on-premises resources.

> DataArt was a fantastic partner in our project. Together, we were able to take our inexperience with Azure Cloud and turn it into an opportunity to develop and implement an entire DevOps methodology from scratch. In large part, that was possible because of DataArt's ability to listen and hear the client's needs as well as the cohesiveness of the joint team.

Kirill Soldatov
Head Process Improvement, PSI

Azure Hybrid Infrastructure for PSI

Solution

Several services were provided by DataArt in this project's scope, including:

1. **Developing DevOps practice inside PSI from scratch:** The client had no prior experience in Azure cloud, so DataArt's team developed and implemented the entire DevOps methodology from scratch. The existing on-premises infrastructure was extended to the cloud, enabling the client to leverage the benefits of Azure cloud computing while still utilizing their on-premises resources.
2. **Establishing Azure cloud governance:** As part of Azure cloud governance, the team defined guidelines and standards for accessing the cloud, established naming conventions, determined artifact storage practices, implemented cloud governance policies, and more.
3. **Fixing PSI hybrid network implementation (on-prem + Azure cloud) and improving security**: The issues or inefficiencies in the existing network setup that combines on-premises infrastructure with Azure have been resolved. The focus was on enhancing network performance, connectivity, and overall security.
4. **Usage of DNS services in the network setup:** Since all resources were deployed without external access, Azure DNS Forwarder has been set up for seamless integration between the local customer network and Azure cloud network.
5. **Deployment with Azure Kubernetes Service (AKS):** DataArt's solution utilized AKS and intelligent scaling based on a queue system. This approach accelerated computations while optimizing the total cost of infrastructure ownership.

CASE STUDY 3 / 3

Azure Hybrid Infrastructure for PSI

Highlights

- Stable and secure hybrid network with Azure
- Faster and more precise calculations
- Cost efficiency for the scalable Data/AI/ML infrastructure
- Unified network for geographically distributed users
- Seamless data transfer and workload migration between environments

Technologies and Tools

- Azure K8s service
- KEDA scaling
- Queues
- Azure DevOps
- Azure SQL
- Private networking
- WAN
- Azure Hubs
- Azure Route Tables in Hub
- Azure Synapse
- PowerBI
- VM
- Web Apps
- Data Lake
- VM Set
- CI/CD
- C#
- Private Endpoints
- Firewall
- NSG
- AVD services

Portfolio Analytics Platform: Cloud Migration and Optimization

DataArt

Client

The client is a global alternative asset management company.

The client lift-and-shifted its portfolio analytics platform from on-prem to Microsoft Azure. Despite the fact that the client historically had been using Microsoft Stack, the processes still needed further streamlining.

DataArt implemented the best practices for cloud development and migration to optimize the deployment process, monitoring strategy, and performance of the environment. This optimization allowed the client to cut costs for migration and hosting.

Challenge

System requirements changed very quickly. The client needed to satisfy users' requirements instantly, so new features or customizations to existing functionality were to be released frequently and promptly

There was no CI/CD environment in place. The deployment was performed manually, hence was prone to issues

Solution

DataArt helped the client to develop a custom portfolio analytics platform to calculate the values of financial metrics and conduct their analysis.

Some of the platform's benefits included:

- Huge amount of portfolio calculations can be done overnight
- Azure cloud architecture enables virtual machines for calculations on-demand, which eliminates the need for on-premise servers
- Calculations can be done simultaneously, so they can take up to 10x less time than previously. This gives the client additional flexibility

DataArt also helped the client to create an independent data layer for the platform, which allowed portfolio calculations to be done at anytime.

DataArt implemented a modern CI/CD approach with testing and version control.

CASE STUDY 2/2

Portfolio Analytics Platform: Cloud Migration and Optimization

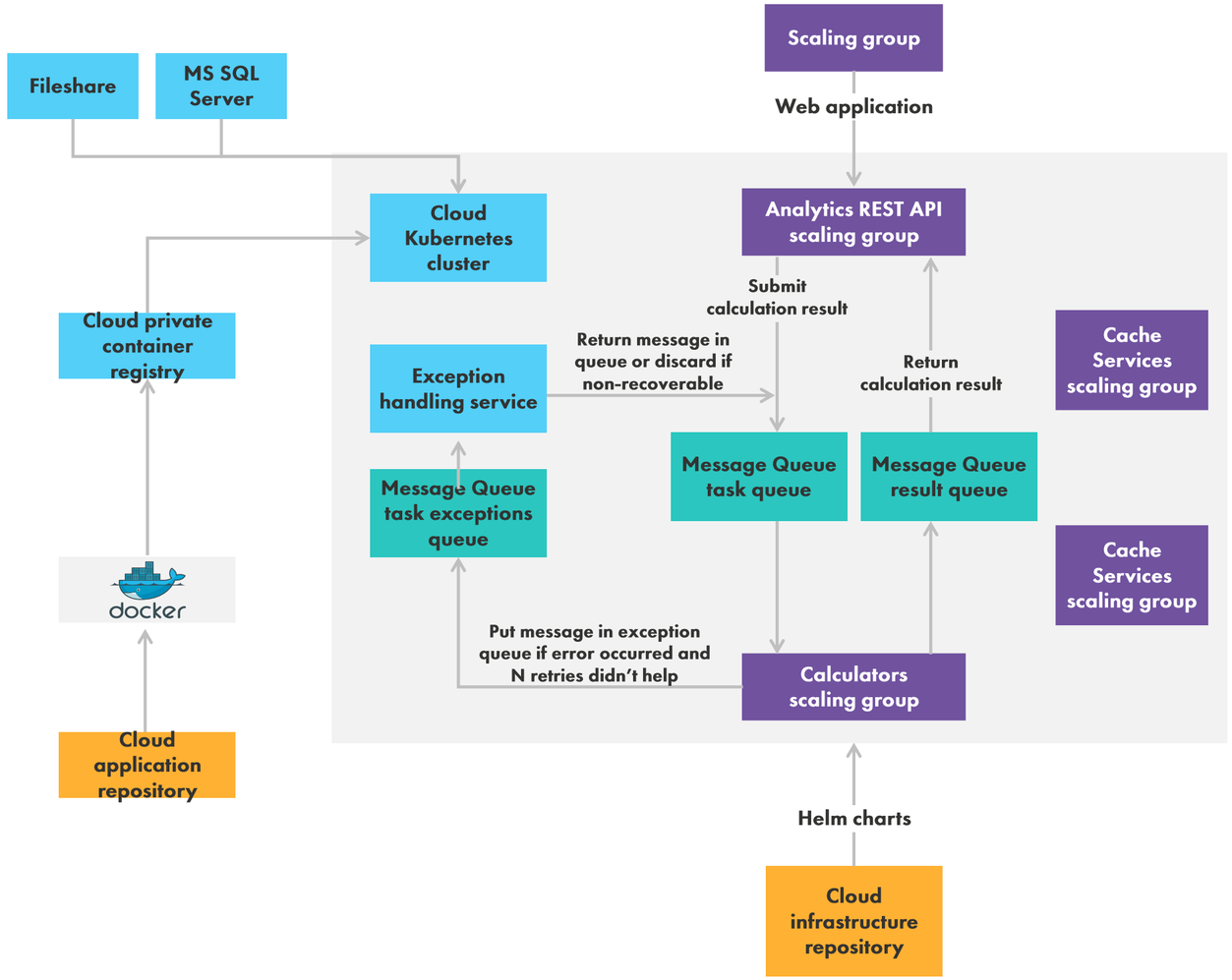
DataArt

Highlights

- Application and development process lifecycle adapted for Cloud
- Cost optimization and highly increased application performance
- Scalable architecture
- The ability of the platform to make calculations for data from different sources
- Calculations scheduling

Business Benefits

- Reduced cost on infrastructure maintenance in the long term
- A significant increase in the calculations volume
- Subsequent reduction of administration costs due to the transition to Azure Cloud and Managed Services
- Scalable architecture allows the business to grow along with the increasing number of portfolios



CASE STUDY

Smart Lift-n-Shift from AWS to Azure

DataArt

Client

The client is a US based company that makes web-based clothes stores plugin. The plugin is used for further communication with end users and is platform agnostic. DataArt has been developing an application for the client for three years and has established great relationships and trust.

The client has been using AWS services, when Microsoft initiated an engagement and provided good discount to use Azure services. DataArt team performed lift-n-shift migration for the client from scratch, moving and adopting all his applications and services to Azure. During Migration, majority of systems were modernized and best practices were implemented.

Technologies and approaches

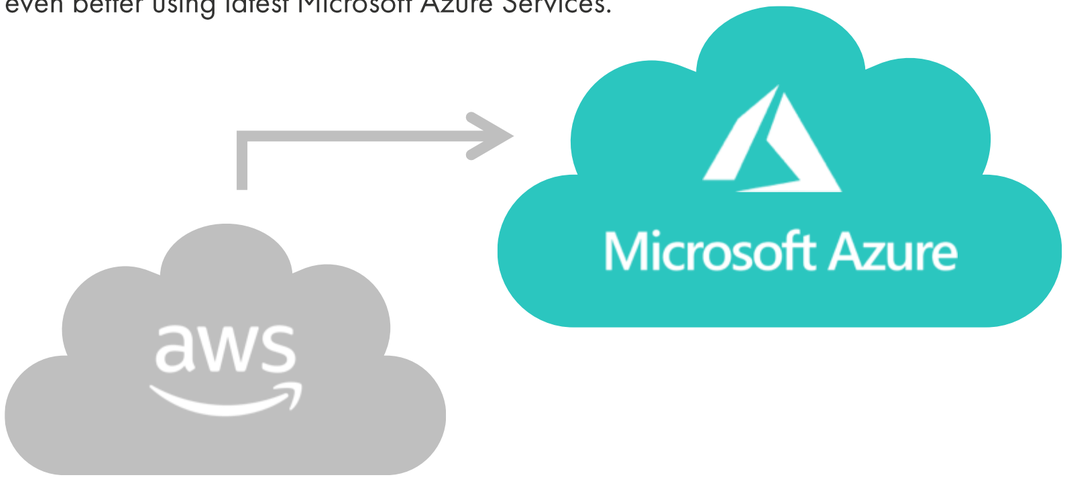
- AKS K8s orchestration is used in Azure instead of simple Docker containers in AWS
- Azure DevOps (10 pipelines) is used as CI/CD process instead of Jenkins in AWS
- Azure Functions are used instead of AWS Lambda functions
- Other Azure-native services used are Azure Service Bus, Blobs and more

Summary

Smart Lift-n-Shift was performed by DataArt from scratch without any POC or MVP etc.
It took a month to perform end-to-end flow from planning till finish of the move.

Business value

The client received a huge costs optimization using Microsoft proposition.
In addition, a modernization of client systems was performed, making value stream even better using latest Microsoft Azure Services.



CASE STUDY

Analytics Platform for Guest Experience System

DataArt

Client

The client is a leading hospitality technology solutions company that offers SaaS platform to major hotel groups. The platform offers end-to-end solutions and support, transforming guest experience and improving operational efficiency, leading to higher market share and profit margins.

Solution

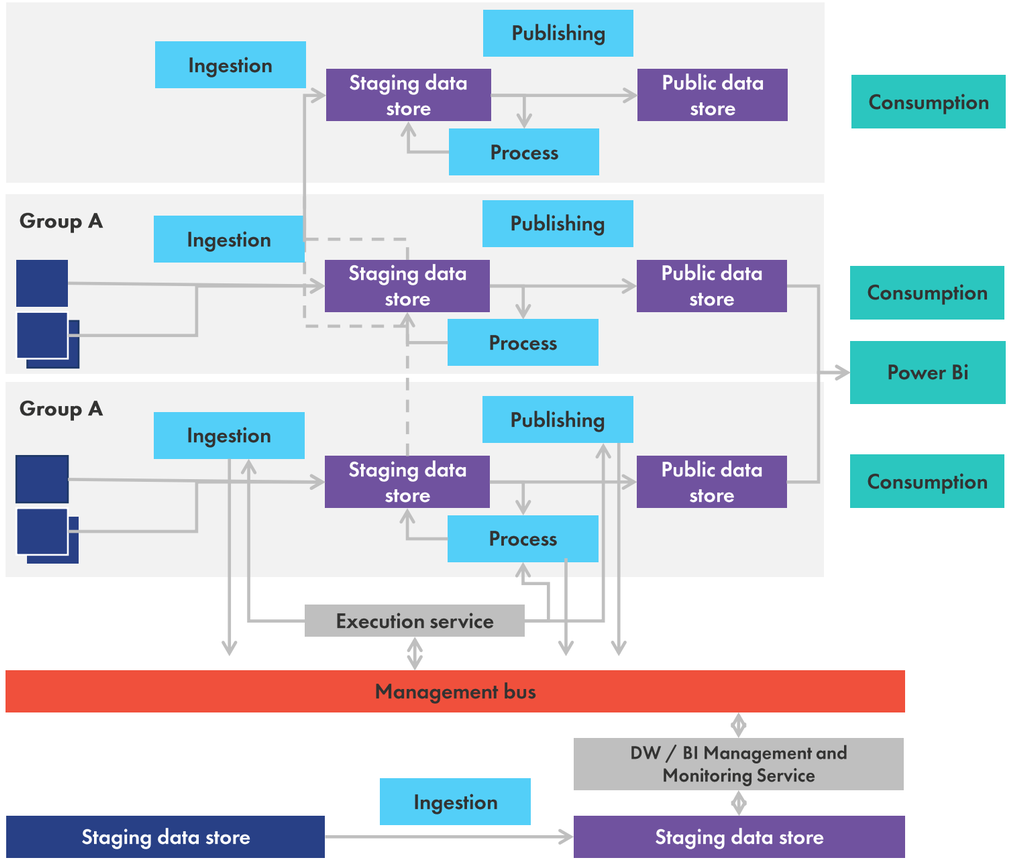
DataArt designed and implemented Data and Analytics components of the platform. Engagement began with POC focused on de-risking core technology decisions, comparing several implementation options (Data Lake + SAAS + DW, Azure Data Warehouse, Traditional Data Warehouse) and validating core requirements fit:

- Multi-tenancy at database level
- End-to-end integration data flow
- Authentication in Power BI
- Infrastructure cost optimization

Several month later, data and analytics platform based on proposed architecture was successfully implemented.

Technology

Azure, Elastic Database Pool, Functions App, Data Lake and Blob Storage, Power BI Embedded



Booking Engine Development

DataArt

Client

The client is a leading cruise line that wanted to improve customer satisfaction by providing new air transportation booking and purchasing features. DataArt served as a technological partner and developed a unique booking engine that allows users to schedule flights and make changes if necessary.

Business Challenge

The client was planning to add more self-service capabilities through its website to allow customers to view air and cruise details, book shore excursions, and modify other details related to the cruise. To add self-service booking capabilities, the client needed to develop a new booking engine. DataArt provided all major aspects of the product development, including:

- Leveraging Sabre GDS best practices and API integration experience
- Building the new product using best-in-class cloud technologies
- Applying relevant industry and project management expertise

Solution

By leveraging our experience as a **Sabre authorized developer**, DataArt developed an air booking engine that provides the following features:

- Automatically books suitable flights by applying business rules to determine the best quality/price for the customer
- The platform can be used both by guests looking to make self-service changes and by the customer service team for agent-assisted changes
- The new product enhances the guest experience by bringing flexibility and allowing changes to the traveler's pre-booked itinerary as well as add-on choices like seat selection without the intervention of a customer service representative
- Automatically facilitates PNR quality control and ensures that PNR has all the required information

Solution Highlights

- Bargain finder max search
- Create/Update/Cancel PNR
- Event notification services
- Lower fare search
- Schedule changes
- Seat assignment/selection
- PNR quality control

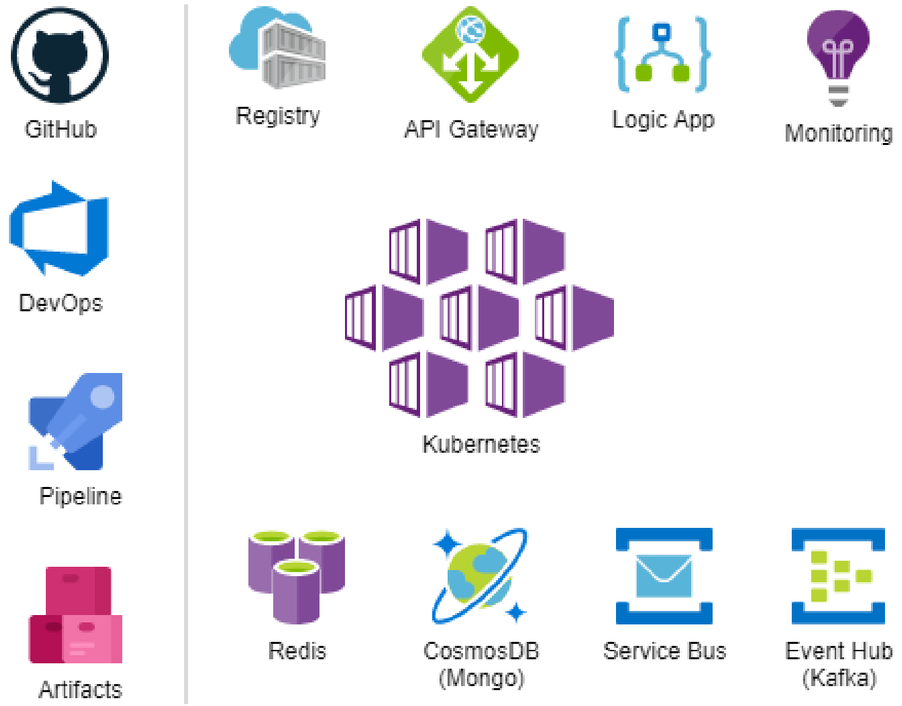
Booking Engine Development Microsoft Azure Expertise

DataArt

Solution

As a **Microsoft Solutions Partner**, DataArt created an infrastructure in Azure cloud. We used:

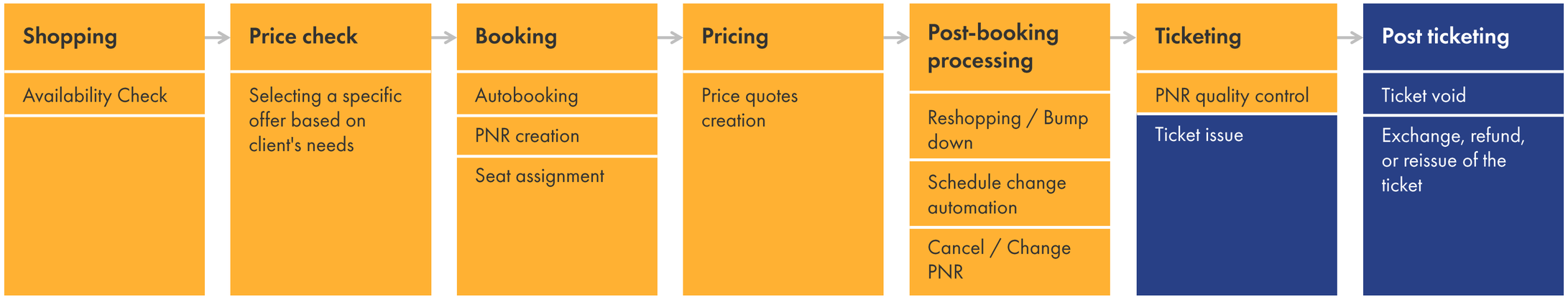
- Azure Key Vault for Secrets management
- Azure DevOps for CI/CD
- Azure Kubernetes Service for managing containerized services
- System monitoring with Azure Logs Alerts
- Azure VNET peering
- Azure EventHub for managing data pipelines
- LogicApp as distributed job scheduler
- Azure ServiceBus as a job queue



CASE STUDY 3 / 3

Booking Processing

DataArt



Automated Solutions

Benefits

- 8x increase in the speed of booking processing
- Introduced flexibility to the booking process
- Maximized flexibility for configuring business rules
- Enhanced agent's productivity
- Increased revenue thanks to upselling tool
- Easily integrated system
- The new product's architecture allows the client to introduce new features and expand the product

CASE STUDY

Recommendation Systems for Contract Research

DataArt

Leading Contract Research Organization hired DataArt to create a model to accelerate patient recruitment. The main challenge for our client was the complicated patient recruitment process for clinical trials, oftentimes leading to research being delayed, or even abandoned because where there is an insufficient number of participants, accurate conclusions cannot be drawn, and even promising therapies can appear to underperform. By merging sophisticated algorithms with an automated process, DataArt solved the once-difficult, costly and time-consuming problem of distributing patient quotas over hospitals and countries, as well as making sure to avoid extra expenses.

The solution is built on the Azure platform. The primary tech problem was that the modelling consumes a lot of CPU resources to satisfy performance criteria. Using all Azure flexibility, we were able to implement cost-efficient infrastructure, with a custom pre-heat strategy and easy scaling.

Highlights

- Taken into account the given eligibility criteria, our model selects different geomixes with the optimal number of hospitals and patients planned for that country which considerably accelerates the recruitment process
- Selects the most efficient and optimal combination considering that all hospitals should finish the patient recruitment at the same time
- Finds cost-efficient solutions
- Continually adapting and optimizing model, with a focus on randomization
- Instead of single scenario, our solution also provides different scenarios with different level of confidences

Technology

Python, CP-SAT library, Pandas, Scikit-learn, LightGBM, Azure

CASE STUDY

Fraud Detection System

DataArt

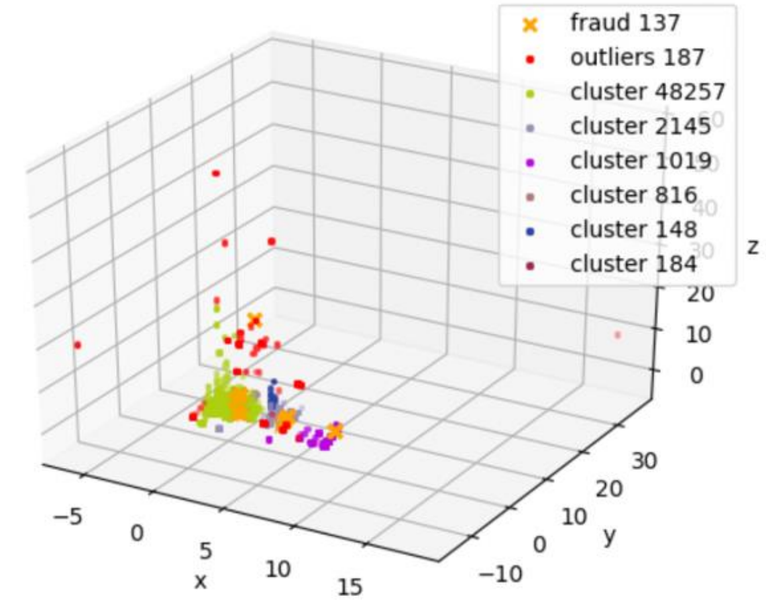
A client that provides customers with a suite of payment processing services needed to replace the existing 3rd party fraud detection system with a next-gen in-house solution. DataArt developed a bespoke anti-fraud system that efficiently combines both rule-based and AI/ML approaches.

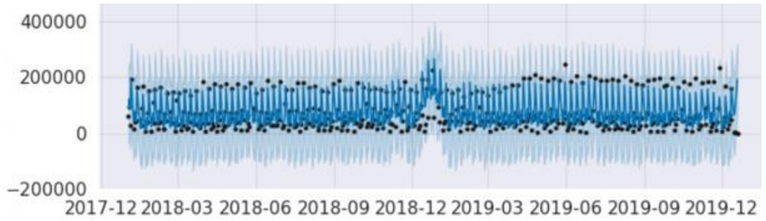
Highlights

- The real-time system ranks all suspicious transactions automatically and brings the most outstanding ones to the top of the list.
- The following AI/ML models are utilized to increase the accuracy of the results:
  - Supervised – based on already known fraud results for the historical data.
  - Unsupervised – anomaly detection approach to address the unknown cases of fraud potentially missed by the previous system.
  - Time series – predict the characteristics of the next transaction based on a historical data
- The original approach detects outliers based on custom fields importance provided by the administrator.
- The system operates with tens of thousands of data per day and enables dynamic generation of the transaction limits.

Technology

Python (pandas, NumPy, scikit-learn, Flutter, SQLAlchemy), Docker, Azure





CASE STUDY

Revenue Maximization for Insurance Aggregator

DataArt

The client is an InsurTech providing auto insurance quotes side-by-side comparison for its clients. The primary goal of the project was to increase the revenue by offering the appropriate content to different visitors of the website.

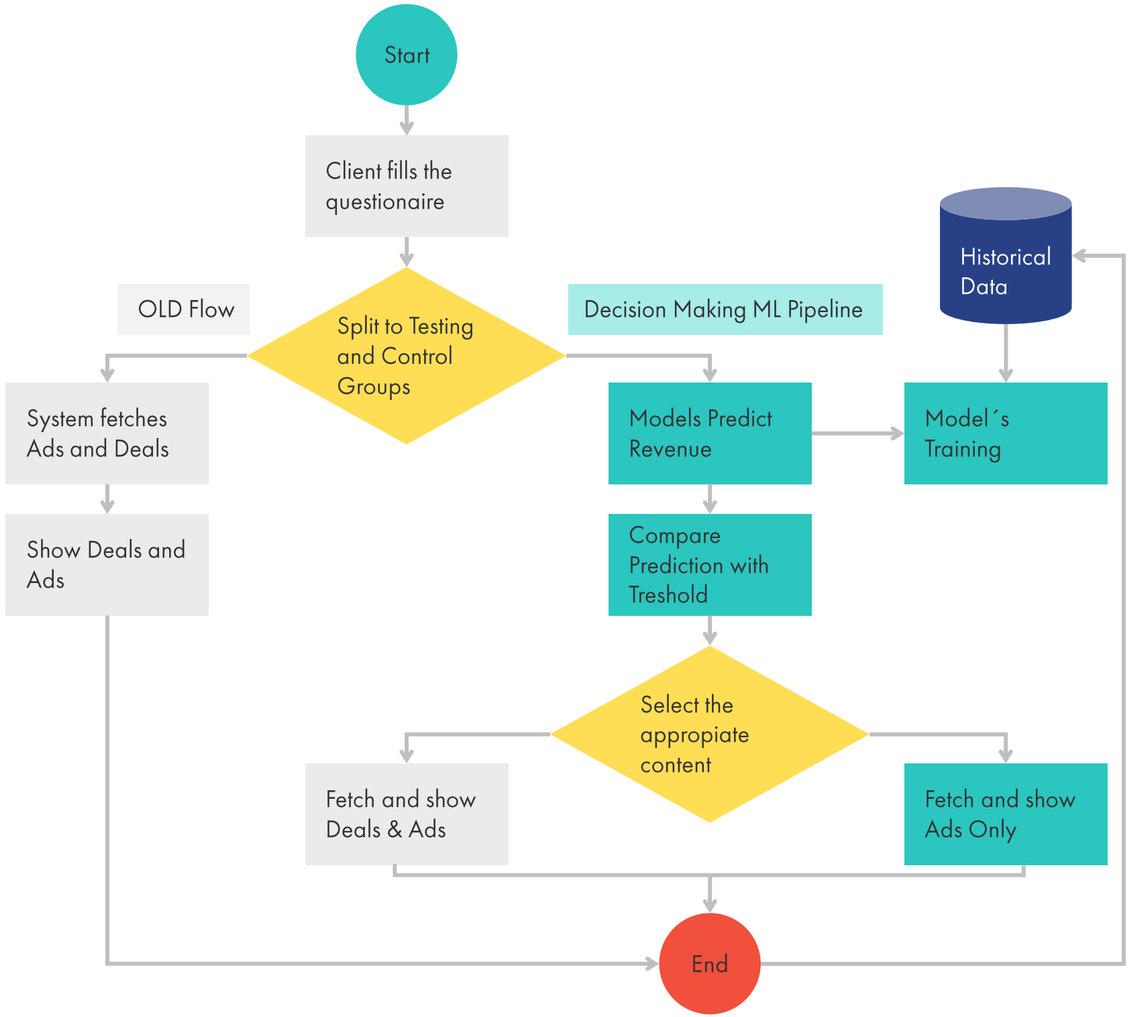
DataArt developed a decision-making ML pipeline that uses various models to predict revenue for different sets of content and select the one with the highest potential revenue for a new website visitor.

Highlights

- 5 models combined into 3 approaches to predict the revenue
- Revenue threshold approach for controlling the percentage of Ads Only cases
- Best model training period based on data trends
- Prediction Service for using models in Production
- Designing the approach to verify models in Production (A/B Testing)
- Estimated revenue increase up to 10%

Technology

Azure, Python, Flask, Docker, CatBoost, ML open-source libraries



CASE STUDY

Gesture recognition for innovation strategy

DataArt

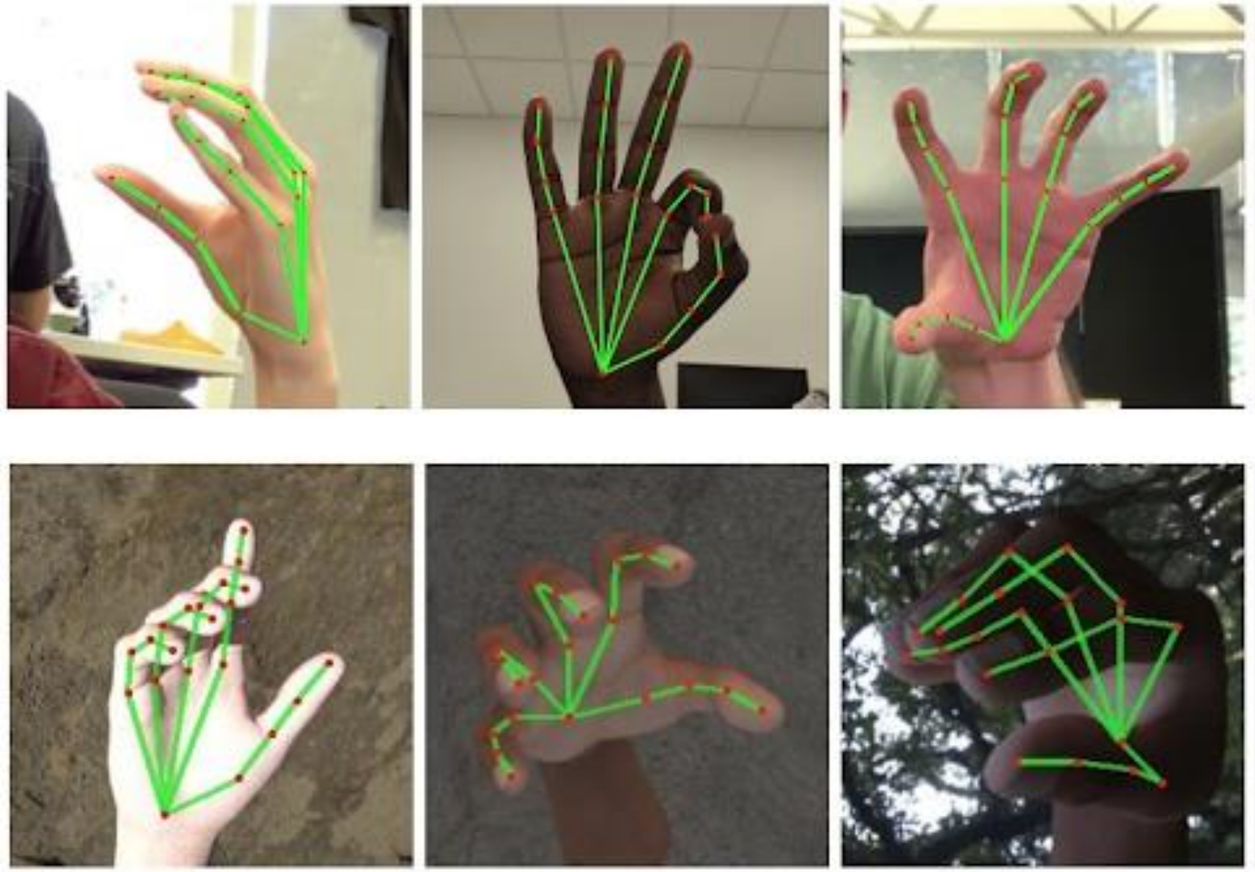
The leading organization in the FMCG market hired DataArt to help with product innovation strategy. Our experts were tasked to develop a model for gesture recognition and build winning product concepts to gain a competitive advantage.

Highlights

- Lightweight solution based on convolutional neural networks.
- Siamese networks for gesture recognition. The Siamese architecture allows both pre-defined gesture classification and recognition of user-defined gestures.
- High accuracy even in a complex environment.
- Optimized solution that runs directly in PWA on Mobile Devices.

Technology

Keras, Tensorflow, Azure DevOps, GitLab



CASE STUDY

Boost Travel Agents

DataArt

Email Processing Automation for Streamlined Booking Management

The Client

One of the largest travel retailers and corporate travel managers organizations, which manages a massive swirl of daily booking emails. Manual email processing is time-consuming and risks human error, leading to longer response times, missed booking opportunities, and impacted customer satisfaction and loyalty.

Solution

DataArt was hired to create a solution to automate and enrich travel agents' email processing with Generative AI.

Salesforce UI and agent flow integration

Priority Score calculation to increase agents' time to respond

~500k monthly emails handled with **Azure OpenAI Services**

Key Advantages

- Email intent recognition and key booking data extraction
- English and Spanish language support
- Complex booking structure and informal email handling
- Booking Priority Score calculation based on urgency and extracted data
- Automated follow-up email generation to confirm received data and request missing data
- Automated email processing leading to enhanced productivity and workload management for the client team.

CASE STUDY

Maximize Potential with Generative AI

DataArt

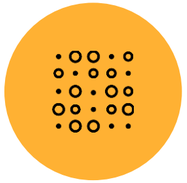
Improving Data Quality by Automating the Mapping System

The Client

The client was seeking to enrich their hotel data quality to avoid unreliable information, failed deliveries, billing errors, or inadequate support aiming for better decision-making processes.

Solution

DataArt was hired to automatize time-consuming manual data-collecting, matching, and validation efforts to eliminate the risk of human error and build a credible golden record dataset.



Advanced solution seamlessly integrated with Azure OpenAI Service

Boosted photo-matching accuracy

Automated hotel matching and validation

Key Advantages

- Improved operational efficiency through an automated hotel recommendation system
- Better customer experience with personalized offerings based on user data
- Enhanced pattern, trend, and correlation analysis for informed pricing and marketing strategies
- ChatGPT amplified Salesforce System

CASE STUDY

Creative Endeavors Made Easier

DataArt

Automated DIY Project Support with Buy-me-Bot

The Client

A German-based consulting company which offers strategic, IT, organizational, and management solutions to its extensive clientele network in automotive, retail, insurance, and healthcare sectors.

Challenge and Solution

The client wanted to enhance their sales opportunities with a generative AI PoC to spawn new leads in their customer base. DataArt was approached to create a ChatGPT-powered bot for delivering do-it-yourself projects. The solution is an interactive agent which addresses ChatGPT to compile a list of essential materials and a step-by-step DIY manual. The bot provides users with three price-ranked bundles of required items and the links to order them on eBay. There is also a download option to save project details for further use.

Azure-Hosted
Generative AI model

Compatibility
with major e-commerce platforms

Elevated **user experience**

Key Advantages

- Cloud-native Azure-hosted AI model built with Streamlit
- Reinforced with Azure Open AI Services and ChatGPT 3.5
- Compatible with major e-commerce platforms (eBay, Amazon, etc.) via API
- Fully secure and compliant
- Provides enhanced experience for DIY enthusiasts
- Unveils co-marketing opportunities and pledges boost in sales

CASE STUDY

Intelligent Automation

DataArt

Helpdesk L1 ChatBot

DataArt internal helpdesk Level 1 team is overloaded with queries that are usually trivial to solve. Employees ask questions that are usually answered in corporate wiki documents and FAQs, which are typically scattered and not easily discoverable, especially for newcomers. Some cases still require special treatment by the appropriate department (HR, IT helpdesk, practice DMs, etc.) via the JIRA ticket tracking system.

Solution

To streamline the support process, DataArt introduced an internal corporate tool that seamlessly integrates with the corporate Jira and Confluence systems. Leveraging advanced technology, Confluence documents were indexed using a powerful vector search engine. This allowed for the efficient retrieval of relevant information, regardless of the language used, thanks to the implementation of multilingual embeddings.

ChatGPT-based engine answers most popular questions out of the box.

Jira and Confluence integrations automate ticket creation, pre-filling employee information, and reducing manual effort.

Key Advantages

- 60-70% of L1 requests are handled by the chatbot.
- Confluence-hosted corporate information is easily discoverable via MS Teams.
- Helpdesk workload is handled by a substantially smaller team.
- The integration of Azure OpenAI services with Confluence creates a centralized knowledge repository.

Success Stories

DataArt

Contacts

Partnership.Microsoft@dataart.com

dataart.com/microsoft

Partners for Progress

DataArt