



**DataArt**



# Microsoft Expertise

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New York USA

London UK

Munich Germany

Zug Switzerland

# DataArt is a global software engineering firm that takes a uniquely human approach to solving problems.

With over 25 years of experience, teams of highly-trained engineers around the world, deep industry sector knowledge and ongoing technology research, we help clients create custom software that improves their operations and opens new markets. Powered by our People First principle, we work with clients at any scale and on any platform and adapt alongside them as they evolve.

# Software Design, Development, and Support



25+

global locations

- USA
- United Kingdom
- EU
- UAE
- Eastern Europe
- Latin America
- India

6,000+

consultants & engineers

95%

return clients

25+ years

in operation

Reliable

profitable, financially strong, fully audited

4,500+

successfully completed projects

Microsoft Partner since 2000

Building on Azure since 2011

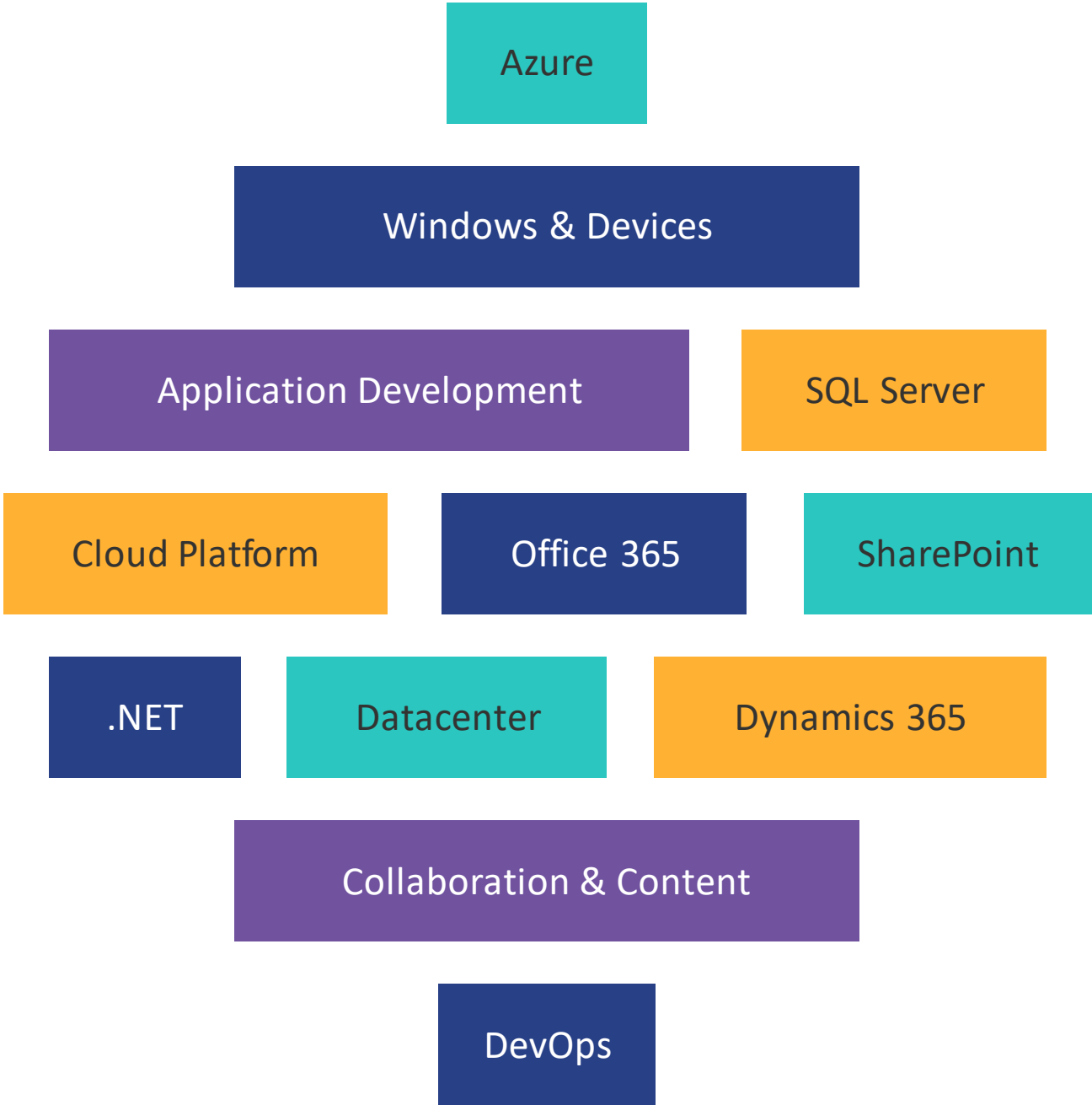


# Microsoft Stack



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.



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



Finance



Insurance



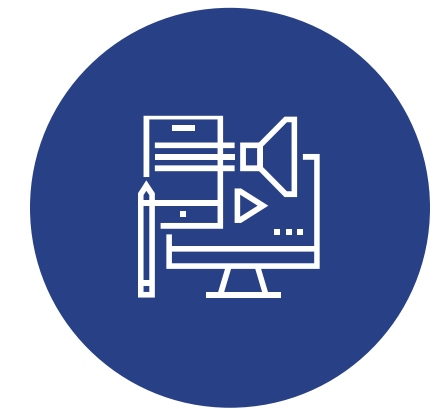
Retail & Distribution



Travel & Hospitality



Healthcare  
& Life Sciences



Media  
& Entertainment

# Azure Services and Competencies



## Azure Services

- Solution design and cloud architecture
- Analytics platform design and implementation
- Cost optimization
- Security testing
- Application modernization
- Data management and data warehousing
- Optimization of operations and security

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

## Azure Competencies



Kubernetes Service and Container Instances



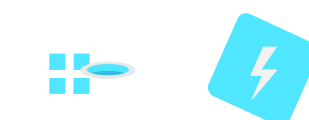
Azure Functions, App Services



Databricks, Data Explorer, HDInsights



ML and AI with CVS, NLTK



Data Warehouse, Data Lake, Synapse



Cosmos DB, Azure DB/SQL



Key Vaults, Firewall, VPN



Azure Blueprints, Templates, Terraform

# DataArt Apps & Services in Microsoft Azure Marketplace

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SMART on FHIR Accelerator

[Link](#)



Azure App Custom Development

[Link](#)



Cloud Migration

[Link](#)



App Architecture Modernization

[Link](#)



Microsoft Azure Security

[Link](#)



Azure Starter

[Link](#)



You can find more DataArt consulting services and apps [here](#).



# DataArt expertise in data and analytics



## Modern Data Analytics Platforms

Modern Data Warehousing, Data Lakes, Lakehouses, Data Mesh and Data Fabric. Cloud & Big Data Platforms, Real-Time Data Analytics. Data integration, data modelling, data quality, governance and security, observability and DataOps.



## Natural Language Processing

Advanced texts, speech and cognitive analytics. Structured and unstructured data. Chatbots.



## Predictive and Recommender Systems

Automating decision-making routine, forecasting events, probabilistic analysis, user personalization.



## Data Products, BI and Advanced Analytics

Accessible and Discoverable Data-as-a-Service and Data-as-a-Product. Actionable Insights, Dashboards, Data visualisation, Data-driven portals, Self-service and Embedded BI, Data sharing and exchanges. Unstructured data processing, Data clustering, pattern detection, statistical analysis, advanced analytics



## Computer Vision

Visual classification of object nature (i.e. tables in documents, image recognition, video processing etc.).



# Case Studies

# Legacy Systems Transformation for Monex Europe



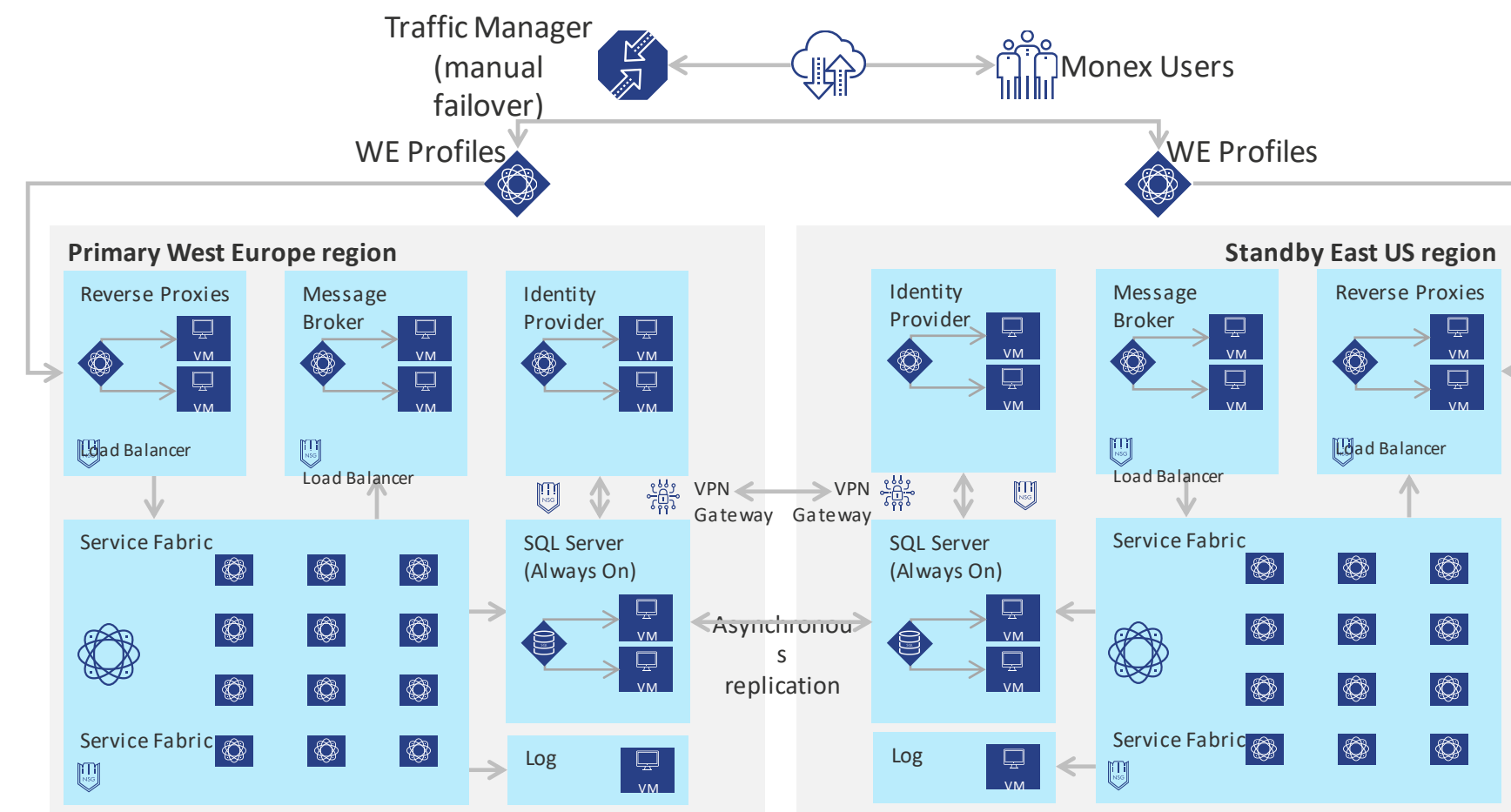
## Client

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



# Global Car Service for Corporate Clients

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## 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

# Global Car Service for Corporate Clients

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## 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  
CTO, 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

# Application Suite for a Large Hedge Fund



## Client

The client is a global independent asset manager with primary focus on credit-related activities, that has been serving various sectors of business for a few decades.

## Business Challenges

- High cost of any errors and irregularities in the underlying data
- Many portfolio managers with very different needs
- Continually expanding asset coverage and evolving investment strategies

## Technologies

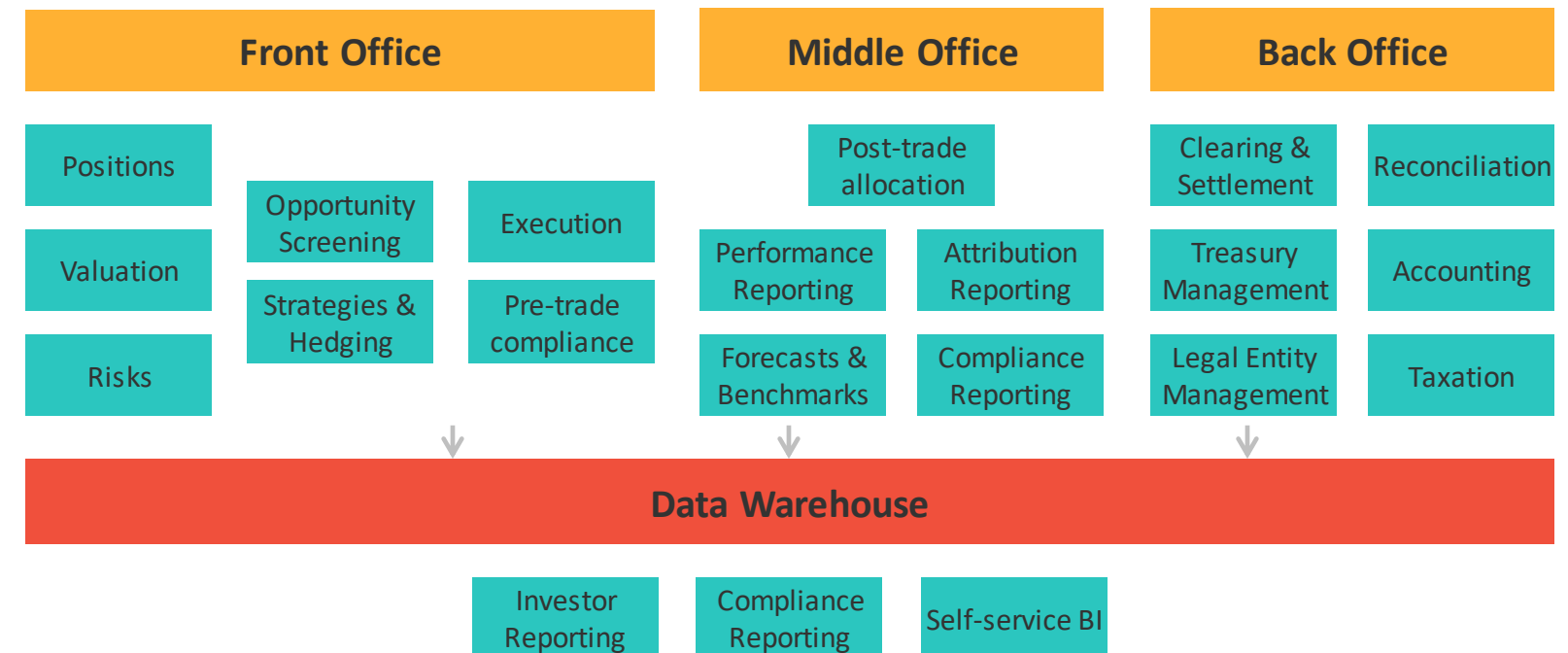
Vue.js / Ag-Grid / Tableau / .NET 4.7 / ASP / .NET MVC / SQL Server

## Highlights

- Seamless integration with Charles Rivers, Wall Street Office, Broadridge Security Master, and other industry standard products and feeds
- Convenient workflow management tools providing unparalleled view into crucial business processes across the company
- Powerful data warehouse based on Tableau and Microsoft SQL Server
- Extensive and continually growing internal web application delivery platform

## Benefits

- Reduced operational overheads and seamless integration
- Increased transparency into fund raising, deal making and portfolio performance
- Flexible no code access to the crucial investment data
- Rapid onboarding of new asset classes and investment strategies





# Portfolio Analytics Platform: Cloud Migration and Optimization

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## 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.

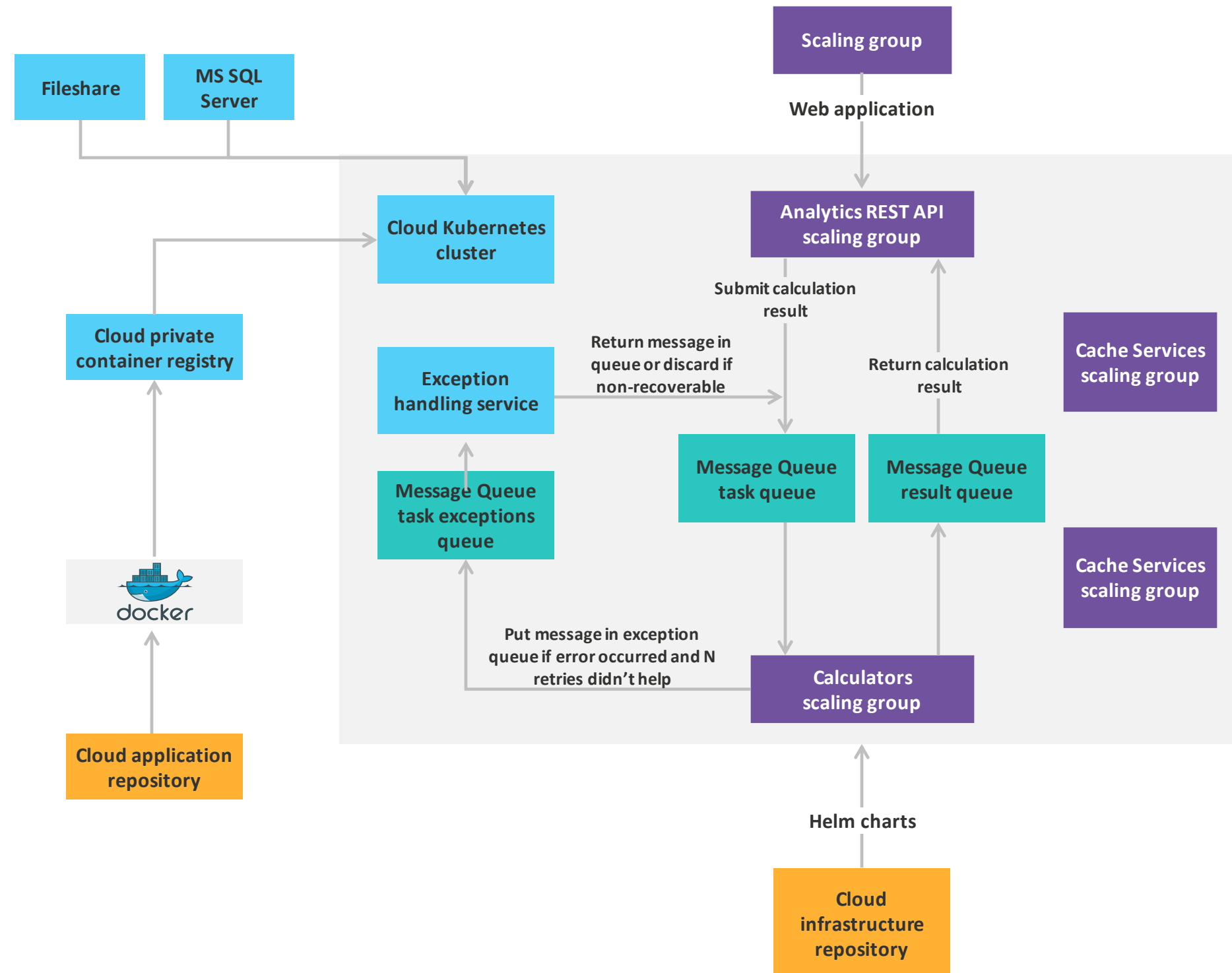
# Portfolio Analytics Platform: Cloud Migration and Optimization

## 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

- 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

## Business Benefits



# Smart Lift-n-Shift from AWS to Azure



## 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

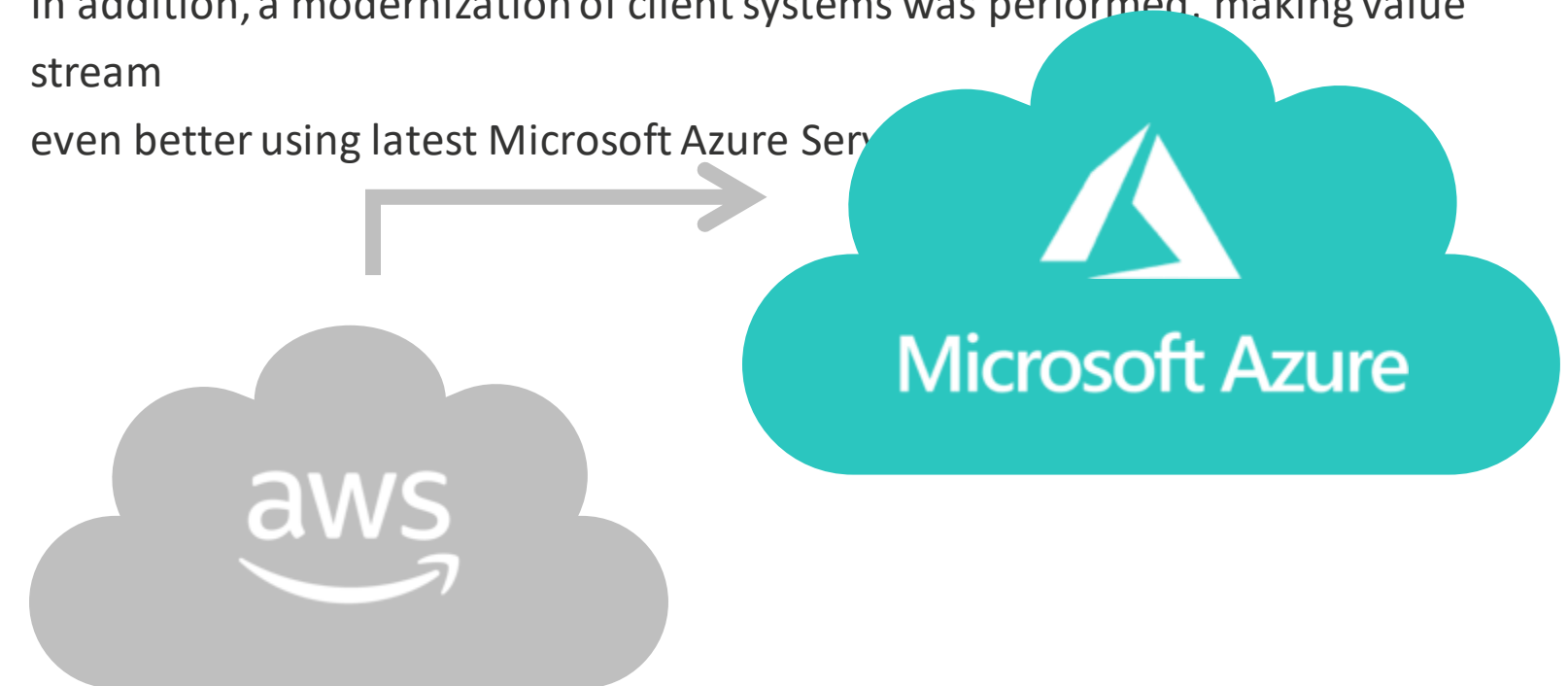
## Summary

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 Ser



# Migration to Microsoft Azure with on-Site Big Query Data Ingestion

## Client

The client is a technology solutions provider that specializes in providing end-to-end solutions to corporate clients in the areas of Data and AI, Modern Workplace, Business Applications, Cybersecurity, and Digital Strategy.

## Challenge

The client needed the migration of two containerized full-stack and mission-critical monitoring and data visualization tools from Google Cloud services to Microsoft Azure.

The client's front ends were implemented in React, while their back ends were written in Python and Javascript. Data was sourced via IoT input from on-site machinery ingested into Google Big Query. While the front end and back end had to be migrated, data would continue to be collated in Big Query, so a secure connection would have to be established as well.

## Solution

Keeping in line with the client's existing practices, their destination infrastructure had to be built from code using Terraform before the two applications in question could be migrated. The team leveraged the features offered specifically by the paid-for Terraform Enterprise web interface, using it to manage multiple environments and infrastructure deployments by several engineers. AzureRM and AzureAD were used as Terraform providers to describe resources. At the same time, popular Terraform modules (virtual network and key vault, among others) were leveraged to standardize the implementation and achieve brevity. The aim was to create a clean, pared-back infrastructure to ensure the scalability and maintainability of the applications.

## Results

Azure proved to be a mature and feature-rich ecosystem that offered the client all the necessary capabilities for their applications. As a result, the client has benefited from the versatility and relative simplicity of using cloud services like Microsoft Azure to streamline their IT processes.

# Success Stories




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# Contacts



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**DataArt**