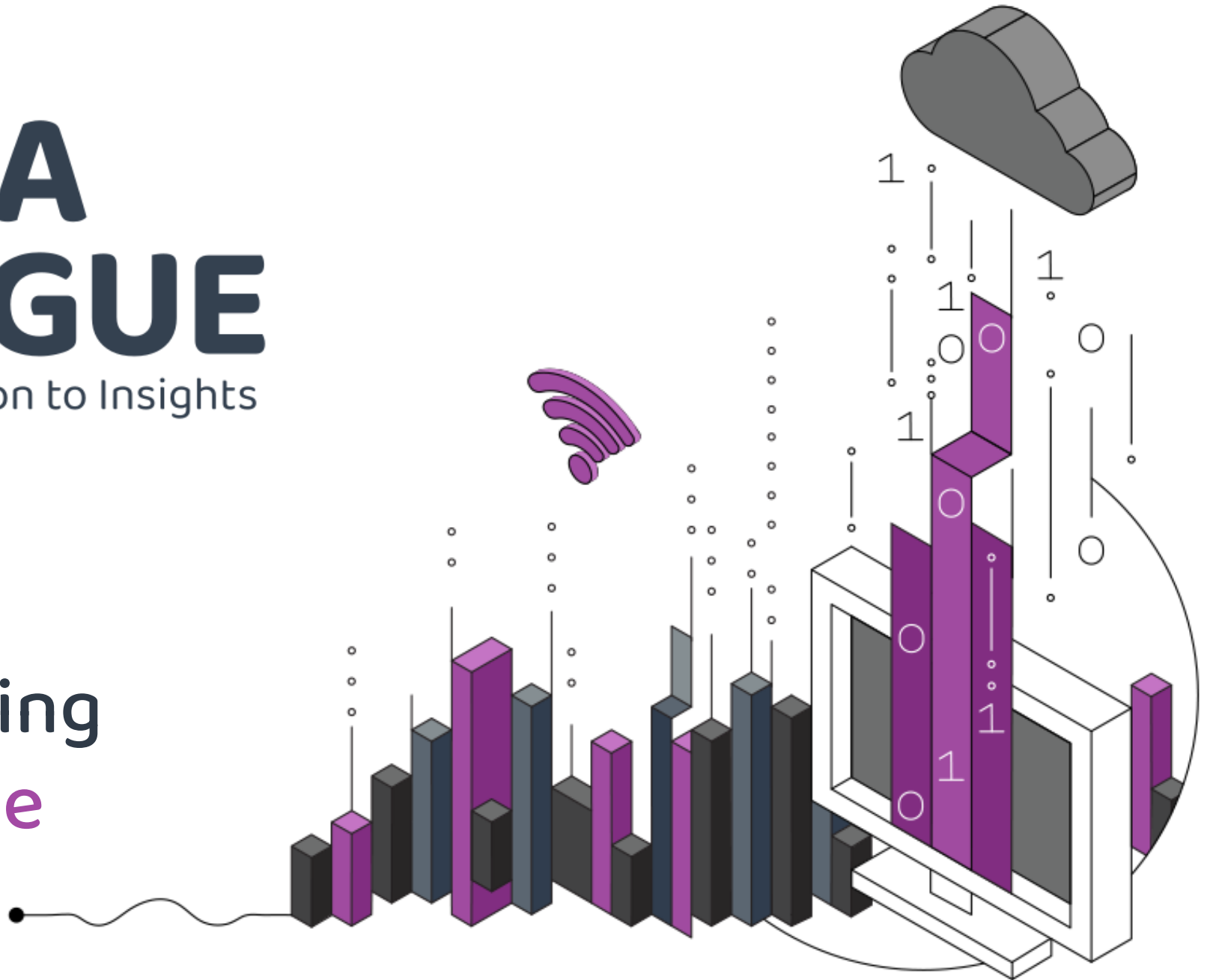




**DATA
LEAGUE**
from Inception to Insights

Modernizing
Healthcare Staffing
with **Cloud-Native
Solution**





Intro

Our consultants collaborated with a leading healthcare provider, tasked with reimagining their existing healthcare staffing solution. The legacy monolithic application, which had faithfully served end-to-end staffing needs for years, was hampered by sluggishness, inflexibility, and escalating costs. The client sought to revamp the solution with modern technologies and practices to improve performance, agility, and operational efficiency.

Challenges

The Healthcare client faced substantial challenges with their existing legacy staffing solution:

Monolithic Limitations: The legacy system's monolithic architecture made it slow, difficult to adapt, and expensive to maintain and enhance.

Outdated Technology: The desktop client relied on outdated technology, inhibiting its ability to keep pace with modern operational demands.

Data Sync Complexity: Syncing data between on-premise and cloud environments while ensuring accuracy posed a significant challenge.

Operational Inefficiencies: The need for faster issue resolution and onboarding times was critical to meeting staffing demands efficiently.



Solution


Our consulting team devised a comprehensive solution to address these challenges and modernize the healthcare staffing application:

- **Cloud-Native Approach:** Our consultants envisioned a cloud-native solution to run alongside the legacy system, fostering agility, scalability, and ease of enhancement.
- **Microservices Containerization:** We decomposed domains into microservices and containerized them for Azure Kubernetes Service (AKS), ensuring flexible and scalable deployment.
- **Data Sync and Integration:** We implemented data synchronization between on-premise and Azure using Azure Data Factory (ADF) and Change Data Capture (CDC) mechanisms.
- **Modern DevOps Adoption:** The team embraced modern DevOps practices to streamline development, cut lead times, and enhance operational efficiency.


Implementation

The modernization journey entailed the following pivotal steps:


Technology Stack Selection: We curated a powerful technology stack, encompassing AKS, Azure Functions, SQL Server (Hybrid), Cosmos DB, ADF, CDC, Azure Cognitive Search, Azure Service Bus, APIM, Azure firewall, .NET Core microservices, React, and Azure App Insights.



Microservices Containerization: Domain-specific microservices were containerized and deployed on AKS, harnessing its capabilities for orchestration and scalability.



Data Sync Implementation: We ensured seamless data synchronization between on-premise and cloud with ADF and CDC, enabling accurate and real-time information exchange.



DevOps Transformation: By adopting modern DevOps practices, we introduced agile workflows, automation, and tighter feedback loops, enhancing the efficiency of development and operations.

Impact

The modernization initiative yielded significant outcomes for the Healthcare client:



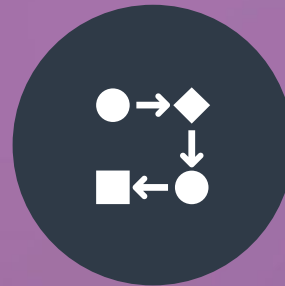
Accelerated Onboarding: A remarkable 60% reduction in onboarding time for healthcare staff was achieved, ensuring prompt and effective staffing solutions.



Faster Time-to-Value: The new solution facilitated a fourfold reduction in the time to deliver value, aligning with the client's need for agility.



Enhanced Issue Resolution: Faster issue resolution improved operational efficiency, contributing to seamless staffing management.



Modernized Operations: The modernized solution's performance and flexibility revolutionized healthcare staffing management, ensuring timely and accurate processes.



Through strategic reimagining, domain decomposition, and the adoption of cutting-edge technologies, our consultants successfully modernized the healthcare staffing solution for our client. The cloud-native approach, combined with the power of microservices and data synchronization, resulted in streamlined onboarding processes, faster issue resolution, and enhanced operational efficiency. Our expertise in cloud-native solutions and modern DevOps practices played a pivotal role in revolutionizing the healthcare staffing landscape.

For more insights into how our consulting services can assist your organization with similar modernization challenges, please contact us at info@dataleague.com.au.