CVS Cloud Migration: Strategic Transition from Pivotal Cloud Foundry (PCF) to Microsoft Azure

Business Imperative:

Within a business unit of CVS, the continued dependency on Pivotal Cloud Foundry (PCF) translated to a \$5 million annual financial commitment. Identifying the potential fiscal burden, there was an urgent call for a refined cloud solution - Microsoft Azure

Strategic Solution Overview:

- **Holistic Migration:** Eight pivotal systems, serving both internal and external functionalities, were seamlessly transitioned using Azure Kubernetes Service (AKS). This ensured scalability and operational consistency across the board.
- **Modernized Tech Stack:** Migrated to a more modern stack: Java 7 to 17, Spring Boot 3.x, and Angular versions ranging from 10 to 14, which met both security and operational requirements. This necessitated code changes and dependency adjustments.
- **Robust Integration:** Adopted Azure-native tools, including Key Vaults for secure credential management and Azure Service Bus for middleware communication. This ensured secure and seamless connectivity with third-party services like Oracle and Salesforce.
- **Comprehensive Monitoring:** Implemented Azure's Application Insights for granular application monitoring, alongside enterprise log management systems for a complete view of the application landscape.
- Collaborative Execution:

Senior consultants from Creospan, in collaboration with CVS's product, security, and networking teams, effectively migrated nine core systems encompassing both external and internal services.

Strategic Outcomes:

- **Financial Prudence:** Migrating to Azure curtailed the looming PCF-associated financial commitments, marking a strategic cost-saving maneuver.
- **Operational Scalability:** Azure's robust infrastructure and Creospan's strategic approach ensured dynamic scalability, meeting fluctuating demands with élan.
- **Enhanced Security:** The new tech stack and Azure's intrinsic tools bolstered the overall system security, resonating with compliance mandates.

Challenges & Mitigation:

- **Synchronized Collaboration:** Orchestrating synchronized efforts across multifaceted teams presented its challenges, which were met with structured communication protocols.
- **Middleware Adaptation:** Azure's absence of a native RabbitMQ setup nudged the adoption of Azure Service Bus, a strategic decision ensuring project continuity without compromising timelines.