**BCBS – Scalable Identity Management & Cloud Migration Service for Fortune 100 Health Insurance Provider**

**Background:**

* Our client - a fortune 100 health insurance provider had a legacy web application that was used by security administrators to manage the digital identity of external users who needed access to the client’s software system
* Intended users of this application: Security Administrators & Help-Desk Administrators

**Business Challenges:**

* **High Operational Cost associated with the Legacy System**
  + The legacy system used by our client was a cost-intensive and high-maintenance system that impacted the day-to-day business operations and added business inefficiencies
* **On-Prem System – Scalability & Upgrade Challenges**
  + Being an on-prem system, there were challenges associated with scaling the system due to cost-intensive hardware upgrades
* **Communication Gaps & absence of agile methodology**
  + Communication barriers between the existing development teams and business teams resulted in inefficient product architecture and code base that further impacted the performance of the on-prem system

**Our Approach & Solution:**

* Creospan provided a team of 4 - 1 Delivery Manager, 2 Developers, 1 Senior consultant
* The team followed the following process to build a solution that addresses the business and technology needs of our client
  + **Business Requirements**
    - We interviewed multiple stakeholders (business & technology) to fully understand the pain points, business challenges, technical constraints, user base and scalability needs of our client
  + **MVP Formulation**
    - Our team narrowed down the scope of MVP and developed corresponding software architecture and user stories that addressed the following needs
    - **Performance & Operational Requirements**
      * High-Reliability & Scalability
      * Reduce the operational cost
      * Streamline software deployment and user migration process
    - **Architecture & Approach**
      * Develop an intuitive user interface using a minimalistic approach with Angular framework and Java
      * Allow users to perform singular and bulk operations
      * Develop backend using SpringBoot and ensure it integrates well with existing internal applications
      * Deploy this application to the cloud and manage the deployment using Pivotal Cloud Foundry (PCF)
      * Leverage the AWS cloud platform to address the scalability and reliability needs of our client
      * Batched Migration - Migrate the users to the new system in batches while maintaining the old system until all users have migrated to the new system
  + **Scrum Methodology & Software Delivery**
    - We conducted weekly sprints and launched our MVP in 3 phases.
    - Our MVP version was launched within the first 3 months we started working on this project, and the final version of our system was launched in a phased manner over the next 6 months
    - We developed a seamless migration process for our client that resulted in minimal impact on business operations and swift migration of end users

**Technology Stack:**

* + Front-end – Angular, Backend – SpringBoot
  + Database - Neo4J
  + Cloud – AWS, Deployment management – Pivotal Cloud Founder (PCF)
  + Microservices & REST API

**Business Benefits:**

* **CapEx & OpEx Savings**
  + Our cloud-based custom-designed identity management system resulted in CapEx and OpEx savings for the customer since they were no longer required to perform cost-intensive hardware and software upgrades associated with the on-prem system
  + Adoption of newly designed cloud-based microservices architecture resulted in optimal usage of hardware and software resources resulting in a significant reduction in software development expenses
* **Business Process Efficiency**
  + Our custom-designed solution enabled the client to perform singular and bulk operations for identity management services for 3rd party users, thereby transforming this into a lean business process
* **Business Expansion & Scalability** 
  + Scalable architecture allows the client to expand their services to multiple geographies with ease and efficiency, thereby accelerating business growth
* **Agile Mindset & Enhanced Cross-Functional Communication**
  + We integrated agile framework and adopted a consultative approach to build and maintain strong rapport with business and technology stakeholders through this journey and thus delivered a solution that delighted our customer and enhanced the software development efficiency within the organization

**Consultant interviewed for this case study:** Jaya G (BCBS)