



C4 ENTERPRISE MODERNIZATION PROJECT (EMP)

THE TRANSFORMATION OF CONNECT FOR HEALTH COLORADO

October 26, 2020

Challenges to the C4 Legacy Application

Challenges to Address

- Aging, Inflexible Legacy Application
- A Mixture of Licensed Code and Home Built Application(s)
- Business Rules Scattered Across Code
- Rigidity or Difficult to Change or Scale Infrastructure
- Infrastructure Costs did not Match the Business Cycle
- Inability to Rapid Prototype Solutions or POC for the Business

Benefits

- Culture of Change Acceptance
- Multiple Training Environments Available at Full Scale and Year Around
- Ability to Manage Large Projects Simultaneously
- Software Development Pipeline
- Skills/Capability Forecasting

C4's Modernization and Requirements

High-Level Requirements

- Alignment with the Organization's Strategic Goals
- Implement Flexible and Innovative Technology to Support Future Initiatives (Futureproof)
- Implement an Infrastructure that is Cost-Effective and Matches the Business Cycle of the Business.
- When? Timeline
 - 2019 – 2021-> Over 2 Open Enrollments (OE)
- Some Legacy Code will remain for this Open Enrollment along with its limitations.

C4's Modernization and Requirements (cont)

- Modernization of the Colorado Exchange Application and Support Containerization
- Change our Application to Microservices and APIs
- Migration to the Cloud
 - Pay for usage (pay by the drink)
- Rapid Prototyping of Products and Features
- Centralized Eligibility Rules
- Customer Experience
 - Human Centric Design
 - If we do X, what does that do to our customer experience?



Expected Benefits

C4 Agility and Responsiveness

<ul style="list-style-type: none"> REALIZE CLOUD BENEFITS 	<ul style="list-style-type: none"> Enable existing application investment to operate in and receive business benefits of cloud computing and pay for what you use
<ul style="list-style-type: none"> REDUCE TIME-TO-MARKET 	<ul style="list-style-type: none"> Re-architect and re-write apps using modern technologies, languages and platforms to accelerate responsiveness
<ul style="list-style-type: none"> EMPOWER BUSINESS 	<ul style="list-style-type: none"> Modernized applications can more quickly adapt and respond to the requirements of the business

ROI and Cost Control

<ul style="list-style-type: none"> UPDATED IT & IP ASSETS 	<ul style="list-style-type: none"> Extend the investment in C4 IP, lower costs for application maintenance
<ul style="list-style-type: none"> CONSOLIDATION 	<ul style="list-style-type: none"> Reduce/remove duplicative applications, infrastructure and system processes... REUSABILITY
<ul style="list-style-type: none"> OPERATING COSTS 	<ul style="list-style-type: none"> Replace expensive or obsolete platforms, infrastructures, or languages that are costly and difficult to maintain.

Business and Operational Risk

<ul style="list-style-type: none"> STANDARDS ADHERENCE 	<ul style="list-style-type: none"> Migrate long-term applications to an enterprise architecture
<ul style="list-style-type: none"> TALENT CONSTRAINTS 	<ul style="list-style-type: none"> Remove dependence on scarce programming language skills or application knowledge. Right size C4 SME vs vendor staffing
<ul style="list-style-type: none"> COMPLIANCE 	<ul style="list-style-type: none"> Build into the SDLC the processes to maintain / ease Federal regs and requirements

Key Areas of Transformation over the past 2 years

- Project Management
 - Added a C4 PMO (+ PMs)
 - Migrated from Waterfall to Agile (SAFe)
 - Developed Agile focused team/coaches (Scrum Masters)
- Infrastructure to the Cloud
 - Adapting the Infrastructure to Support the Business
- Total Re-Architecture of the Infrastructure and Application
- Human Centric Design Study and Updates
 - UI and Customer Web Site Flow Updates
- Staffing – lots of moving parts
 - Skill Matching to Match Future State

Expected Benefits to Cloud Migration

- Be Agile
 - Supports a Pay-by-the-Drink Infrastructure Cost
 - Automated upgrades, self-healing and scaling
 - Change Management
 - Anytime/Realtime Pushes to Production Capability
 - New Governance Model
 - Staffing/Vendor Requirements
 - Different Skill Set Required
 - Lower System/Infrastructure Administration
 - Skill & Staff Migration to Cloud Plan



The New C4 Exchange EMP

DELIVERED.....



Go-Live: September 28th, 2020 !!!!!

(Actually 9:15PM Sept 27th)

What C4 Completed as part of the EMP Project

Infrastructure

- Auto-Scaling Apps/Infrastructure
- BI Conversion from MS SQL -> Snowflake Database (ODS) with Matillion Tool (ETL)
- Centralized Engine (Removed C4 from the Shared Eligibility System)
- Migrated Off Oracle Database, Identity Service, Service Bus -> AWS
- Complete Security Assessment and Authorization from CMS

Supporting What C4 Completed as part of the EMP Project

- Migrated to SAFe Agile from Waterfall Project Management
- Created and Enabled Value Streams
- Implemented a Project Management Office (PMO)
- Implemented a Release Management Department
- Implemented a Quality Assurance (QA) Department
- Implemented Staffed to Match Skills with Training and Certification(s)
 - (AWS, SAFe Agile Scrum Masters, SAFe Agile Product Manager, PMI, Drools)

User Facing Changes

- Mobile Enabled Version of the Quick Cost Plan Finder (QCPF) Tool
- NEW Broker Portal
- Self-Service Password Reset
- NEW Account Creation
- NEW Shopping Portal
- Zero Downtime Deployments
- NEW Admin Portal

More to Come....

Discussion / Questions