Optimizing an Application for a Mobile Platform

LOCKHEED MARTIN

QUEST HONORS PROGRAM

Company

- Global Security and Aerospace Company
- 125,000 Employees Worldwide
- Largest IT Provider for U.S. Government

FIELDS Application

Field Integrated Engineering Logistics Data Set

Application collects field data across Mission Systems and Training (MST)

Opportunity: Improve User Experience

Approach

- Analyze different platforms
- Build Iteration
- Interview End Users
- Gain Feedback and Iterate

User Driven Changes

- Project Manager Portal
- Performance Metrics
- Response User Interface
- Streamlined Entry Process
- Automated Business Process
- Integrated Communication

Pie chart: 6%, 17%, 11%, 18%, 19%, 29%

Impact

95% Quick Report Eliminates 95% of Potential Wasted Time

5 min 5 Minutes Saved Leads to Streamlined Part Tracking and Faster Decision Making

- Improved Accessibility For Old and New Clients
- Larger End-User Community Enabling Scales of Economy
- Information Received by Off-Site Teams is Quicker

Current State ①

New State ②

Program Report

Dashboard

Recommendations

Deployment
Connect to Database/Server
API Security Testing
Program Manager Training

Database Infrastructure
Product Barcodes Replace Part Number
Local Encrypted Storage
Secure Photo Upload to Report
Integrate Vendor Selection

Expansion
Extend FIELDS to New Regions
Geotracking Barcode Scans
Partitioned Database

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PROJECT SUMMARY

Lockheed Martin is a global security and aerospace company, headquartered in Bethesda, MD. It employs approximately 125,000 people worldwide and is principally engaged in the research, design, development, manufacture, integration and sustainment of advanced technology systems, products and services. For this project, we partnered specifically with Lockheed Martin's northeastern region, working with offices in both Moorestown, New Jersey and Syracuse, New York. After developing and implementing a desktop part-tracking application called Field Integrated Engineering Logistics Data Set (FIELDS), Lockheed Martin hoped to move the tool to a mobile platform. Crystal Ball Consulting (CBC) then took on the project of designing, implementing and optimizing a mobile user-interface for the client. After researching the application further, CBC found that optimizing the user interface could not only increase end-user efficiency, but also strengthen Lockheed Martin's overall worker productivity and vendor relations.

CONTRIBUTIONS AND RECOMMENDATIONS

Using an Agile developmental approach, CBC went through multiple iterations of the user-interface in order to design the best tool possible for Lockheed Martin. Basing decisions off of end-user feedback and current industry standards, CBC created a responsive, mobile FIELDS web application for both field service engineers and program managers alike. Moving forward, the team sees great value in expanding the FIELDS application to include more end-users, manage vendor relationships, and integrate new features like a comprehensive bar code database and geolocational tracking. It is CBC's vision that the FIELDS application will one day become the universal tracking tool utilized by Lockheed Martin.