

Client

National Institutes of Health (NIH) National Institute of Biomedical Imaging and Bioengineering (NIBIB)

Overview

The National Institute of Biomedical Imaging and Bioengineering's (NIBIB's) rapid growth necessitates an extensive property inventory. Accurate management and tracking of this inventory is critical in reducing the loss of valuable Institute resources. The old manual system was slow and presented users with greater chances of error. LCG developed a mobile app to quicken the pace of management activities and increase reporting and tracking accuracy.

Challenge

NIBIB's former inventory process was unduly burdensome. The manual processes were error-prone and time-intensive, and the data produced was quickly outdated due to the nature of inventory swaps and redeployments. To reconcile this, LCG looked to integrate mobile technology and easy-to-configure database systems to largely automate the inventory process, thereby providing value through:

- A reduction in errors,
- Savings in time and money,
- "Organic" inventory updates,
- Automation of many manual processes,
- Providing real time, up-to-date information on assets, and
- Allowing both IT staff and PCO's access to a centralized database.

To address these challenges, NIBIB required an efficient and secure mobile solution for managing the existing inventory and making its tracking and redeployment easier for facilities personnel.

Solution

LCG developed the Asset Management System (AMS), an inventory control system used to manage, identify, and track equipment or objects using a barcode tag that is issued by NIH and placed on each government asset. Asset barcodes can be quickly scanned using an iOS mobile device or manually entered into the system. The scanned information is stored in a central database located at the NIBIB Data Center. Records can be quickly retrieved by searching for the Decal Number, Description, Manufacturer, Model Number, Serial Number, or by User. Inventory is easily shared through export to a PDF file or as a printed hardcopy. Additional AMS features include:

- Property custodian receipt notices prompted by any changes made to the system,
- Signed agreement forms for validating property assignments,
- Customizable daily and weekly reports, and
- Inventory surplus tracking and reporting.

NIBIB AMS is a customizable, expandable, and centralized system that any agency may adopt with minimal effort. It is also the first mobile solution of its kind to be implemented at any of NIH's 27 Institutes and Centers.

Business Value

LCG enhanced NIBIB's ability to manage and track its current inventory in real time using mobile technology and automated processes. The result is a savings in time and money, greater data accuracy, and better access to timely inventory reporting.



Result

The application has been deployed to 12 individuals at NIBIB to manage assets for a staff of approximately 285. The app is slated for implementation by the Fogarty International Center (FIC) starting in the Summer of 2015. LCG is also currently in talks with the National Institute of Arthritis and Musculoskeletal and Skin Diseases (NIAMS) regarding expanding AMS's use to its Institute.

Savings Analysis

Savings Analysis Task: Add/Transfer Equipment

- Old Method:
 - Gather Machine Information (by hand or other method)
 - Manually transfer information into Excel spreadsheet
 - Manually write property transfer form (must be done with each machine)
 - Xerox form(s) and Send to AO
 - Time spent: ~4 minutes
- New Method Using Inventory Database
 - Scan asset tag using iPad
 - Enter asset information into iPad
 - Database automatically generates transfer form with ALL new machines added and emails to AO
 - Time spent: ~1 minute
- Savings:
 - 1 hour saved for every 20 items added/transferred in the system
 - Total items in NIBIB Inventory: ~2000
 - Potential savings: 100 hours

Savings Analysis Task: Search and Edit Property in Database

- Old Method
 - Check-out SharePoint file
 - Locate equipment on file
 - Edit Changes
 - Check-in SharePoint file
 - Email AO of changes made to data.
 - **Time Spent: ~3 Minutes**
- New Method
 - Open Database
 - Type in Decal Number or Other search criteria
 - Edit Changes
 - Click Button to automatically send changes to AO
 - **Time Spent: ~30 Seconds**
- Savings:
 - 1 hour saved for every 24 items added/transferred in the system
 - Total items in NIBIB Inventory: ~2000
 - Potential savings: ~83 hours