Background

Aggreko is a world leader in mobile energy generation and storage consisting of mobile diesel generators, PV installation and battery storage units. The facility has storage units consisting of lithium-ion batteries; these systems are deployed around the world for natural disaster relief, humanitarian aid, and power during major world and disaster events.

Aggreko is deploying a new energy storage system that will integrate existing diesel generators, wind turbines, PV plants or interconnect with local utility scale grids. This will provide a multitude of benefits such as UPS backup, frequency and voltage regulation and spiking revenue to earn a fee.

During manufacturing, testing and deployment of these new energy storage systems, Aggreko must use a large assortment of calibrated and measuring equipment. Aggreko’s Austin facility uses a manual tracking system to document when equipment is checked in and out of their quality assurance lab. This tracking system is not conducive to checking the tools in and out of the facility.

We researched the optimal GPS tracking systems for high value equipment and need for an updated, electronic system. Using excel, we took the inventory of current tools and created a spreadsheet to document the calibrations needed to document additional tools to be utilized in the future.

Incorporate a program to track tools being checked in and out of the facility for tracking of defective tooling and equipment.

Methods

1. Define
   - Aggreko currently has a manual tracking system in place to ensure the tools are calibrated on time.
   - To solve their current issue, we will implement a system that will allow the employees to check in/out tools.
   - We also implemented a calibration system to track high value tools utilized in the facility.

2. Measure
   - Aggreko currently has an asset tracking system in place with a GPS tracking system. The tools are marked to be replaced. The report will include a GPS tracking system for defective tools and equipment.
   - The system is checked in and out of their quality assurance lab.
   - The system is not accessible to our team.

3. Analyze
   - During manufacturing, testing and deployment of these energy storage systems, Aggreko must use a large assortment of calibrated and measuring equipment. Aggreko’s Austin Facility uses a manual tracking system to document when equipment is checked in and out of their quality assurance lab.
   - No current metrics exist for tracking the tooling in and out of the facility or tracking of defective tooling and equipment.
   - Incorporate a program to track tools being checked in and out for use.

4. Improve
   - Sloka’s AssetTiger service guidelines
   - Implement final system and train Key Personnel
   - We also included the calibration dates, pricing, and manufacturer for all tools in our database.

5. Control
   - We implemented the system and trained the key personnel.
   - We are conducting a follow up to check on the system.
   - The system is performing properly and checks out reports will not be updated.

After conducting a survey and implementing a GPS tracking system on all tools, we can improve the tracking of these tools.

Project Process

- Organize and clean equipment shelves in Calibration Lab where the assets are securely stored.
- Attach barcode labels to designated equipment.
- Attach GPS designated high-value tools.
- Develop a step-by-step guide to train personnel.
- View updated equipment location through Tile tracking app.
- Increased budget will be necessary for more accurate systems.
- Aggreko’s Austin Facility uses a manual tracking system to document when equipment is checked in and out of their quality assurance lab.

Deliverables

- New system that will allow for easy check in/out of tools
- System that will send automated emails when a tool is within a certain range of their calibration date
- Implement final system and train Key Personnel

Abstract

Aggreko is a world leader in mobile energy generation and storage consisting of mobile diesel generators, PV installation and battery storage units. The facility has storage units consisting of lithium-ion batteries; these systems are deployed around the world for natural disaster relief, humanitarian aid, and power during major world and disaster events.

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Conclusions

- Improved efficiency of checking in/out assets
- Decreased the probability of misplacing equipment
- Successful integration of automated notification system for upcoming and past maintenance due dates

Summary of Results

- Implemented new inventory management system
- Designed database organizing the list of assets with their serial number, manufacturer, price, and current status
- User friendly system
- Ability to track location of high value equipment within the facility
- Improved efficiency of checking in/out assets
- Decreased the probability of misplacing equipment

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