

## Gym Equipment Maintenance

### Company profile

- The company is a pioneer leader in gym industry for the last 40 years, utilizing state of the art hi-tech fitness equipment.
- The company also expanded into many industries, including gaming, video games and amusement parks.

### Business situation

Gymnasium is a place where we can find multiple fitness equipment being used by many members. This is a typical case where the need of day to day maintenance is high. The Gym management was not able to afford to keep any equipment under maintenance for a long time. This becomes a huge issue if we are talking of a Gym chain. There needs to be an effective repair and maintenance process in place.

### Technical challenge

Gyms are typically located in places like basements of buildings where there is low network coverage and bulky inspection devices may not be very helpful for any person inspecting the equipment. So there was need for an Inspection Reporting application working on a small and handy device. Also the device selection was an important criterion, since user needs accept the device and work with it. The work allocation, reporting and prioritization needs to be controlled centrally since this application was to work for a chain of Gyms.

### Solution

Sameva along with our technological partner, a leading RFID and inventory management solution provider, came up with an approach of developing a custom inspection reporting solution on iOS device like iPhone which would be backed by a server side module to control the data. It was planned that the data on the iOS device would be synced with the server at the start of the day and all the work orders for that day would get populated in the device. The inspector would then select a particular work order and start inspecting the equipment without the need of the network connection. Once the inspection is completed, the inspector can sync back the data to the server when the data connection is available. Once the data is synced, new work order queue may be created depending on the severity of the equipment inspection report. These reports are checked manually by the concerned person and work orders are created and allocated to inspectors on the central server. The inspection module on the iOS device will have the capability of taking pictures of broken or faulty equipment if the inspector wants to. There will be a set of decision based questions that would be prompted to the inspector so that they are more meaningful.

## **Benefits**

Since the entire solution was reporting back to a centrally located server, it was very easy for the client to monitor the repair logs as well to prioritize the work. It also greatly improved the performance of the inspectors as they were able to record their observation more accurately with visual indications of the defects and explain the same to the repair staff without having to go to the physical location. The ambiguity in locating specific equipment that needs maintenance in the gym was also eliminated since all the equipment were tagged with unique barcodes and each work order would execute only after scanning the barcode. If the wrong asset was scanned, then the activity would not proceed.

Based on the success of this project, the task of implementing identification of assets/equipment for scheduled maintenance based on the due dates is being discussed.