



Field Force Management Solution- A Real Time GPS Tracking | Case Study

Improve profitability. Enhance productivity Satisfy customers.

Are your mobile workers being productive? Do you know where all your mobile workers are at any given time? Are they taking the most efficient routes to their jobs/stops? How long does it take of ice staff to track down a particular mobile worker in the field? How do you manage mobile worker safety? Can you provide accurate and timely information to your customers? With Hire programmers GPS tracking solutions, you'll have instant access to all the business-critical information needed to efficiently manage your mobile workforce.

The Client

Client is leading small home appliances company in NY. It is one of the fastest growing appliance companies in NY. Our Client has been making every effort to offer high quality products and standardized professional services to its customers.

Business need

The company has a large field force of over 5000 workers spread across the NY. The field force team members were given a sheet every morning, which contained information of customers they were required to contact and service. The sheets remained “static” as it was impossible to enable dynamic changes in case the customer was unavailable or any other high priority visit had to be scheduled. Also, company was not able to track the agent visit properly. This led to challenges in terms of agent productivity and client satisfaction.

The client was keen to mobile-enable services with the following requirements:

Mobile Application

- To build a GPS tracking mobile app for GPS enable mobile phones.
- Track Sales person’s details i.e. current location and location history.
- Track user’s location on a near real time basis.
- Application loaded on the client’s smartphone in silent/ hidden mode. Database capturing the user’s location and maintaining on Server with the history of the past locations.

Web based interface

- To Track current location of sales team from a PC by going the web URL & logging into the account.
- To create admin panel for administrating the mobile app user.
- Integration of Google map with the web interface to track the real time location of all users on the map.
- Administrator will have access to all the areas of the application, including; data entry forms; tracking user locations etc.

Server based backend features

- To manage the data generated from monitoring the location and history of the user.
- A login based application to access only by an authorized person.
- Multiple users tracking at the same time.

Challenges

Two key challenges in implementing the mobile solution were:

- The agents carried a diverse set of devices; hence the mobile solution had to be made available on multiple platforms simultaneously.
- It was important that the solution required low maintenance and terms of upfront investments on the part of users, apart from enabling future upgrades.

Technology

For Mobile app

- Android SDK for Android platform
- Objective C for iOS platform
- Eclipse IDE tool to develop Android application.

For Web app

- PHP/CackePHP As a Web development tool
- MySQL as a database
- HTML/CSS as a web design Language
- Apache Tomcat as application server
- Rackspace Cloud used as a platform to host database and application servers

The Hire Programmers Solution

Hire programmers has developed the field force management application in record time, and ensured that its look and feel is similar to a Web application to boost adoption.

The solution was made available on all smartphone devices such as iPhone and Android, which support GPS capability.

As part of the solution, following key features were implemented:

- **Location Tracking:** Real time GPS location based tracking on map. Tracking via IMEI number or Mobile Number: Tracking of the users will be done using Phone's IMEI number or Mobile Number of the user.
- **Hidden Mode:** Application runs in the hidden mode in the smartphone reducing the risk for the accidentally uninstalling/ disabling the application.
- **Track Multiple:** Application is design to track multiple users on the same time.
- **Check History:** Check the history of all users' locations. Database capturing the user's location and maintaining on Server for at least 16 days records .Records of last 24 hrs (1 day) will be termed Recent Data while rest of above mentioned days will be termed Archived data.

- **Searching:** Admin can search the user by entering the IMEI number and a near real time location will be displayed on the map. The system also provides the facility to search the location of multiple users at a time.
- **Web Interface:** A web interface is provided to track current location of user from a PC by going the web url & logging into the account.
- **Backup:** Administrator will be capable of taking the Backup of all the Data of all the Cell users from Server on Suitable media like CD/DVD etc., periodically.
- **Security:** A message will be automatically sent to the administrator in case user has changed the SIM card.

Benefits

- Improved field force productivity, leading to direct increase in organization's revenue
- Low total cost of ownership (TCO) for operations and future upgrades
- Mobile solution similar in look and feel to a Web solution, leading to short learning time for users, and hence, higher adoption
- Fast time to market – implementation completed from requirements till delivery in three months

About Us

Hire programmers is a one stop Information Technology Services provider. Hire programmers is involved in providing world class IT Services to its customers in the US, UK and other parts of the world in varied domains. Being promoted by the first generation IT professionals, Hire Programmers is very professional in its approach in delivering services and solutions to its customers. It understands the technology side of the business keeping in view the specific business needs of its customers.

Hire programmers is the preferred transformation partner across product and vendor evaluation; business process re-engineering; outsourcing and off-shoring; product implementation; custom solution development and IT professional services for several Fortune 1000 companies.

For more information, please contact us at followings:

US Office

1001 16th Street, Denver, CO

80265

Phone: 888.501.8555

Email: twoodfin@berkeley.edu