



SMS Solutions Improves Enterprise Productivity

J2ME & PHP powered SMS solution for daily data collection from remote areas

Executive Summary

When you have a business which is spread across geographies, as the business owner, one of your prime focus areas might be consolidation of data from various sources and then analyzing the same to determine the trends and predict the forecasts, as accurately as possible. It is needless to say that slight modifications to the data from the points of sale might prove disastrous. Doing business in remote diverse areas has its own advantages including lesser costs of operation, lesser costs of maintenance, lesser perceived risks but it comes with its own share of thorns.

The data collected from your point of sales face issues reaching your central processing server. Getting the data intact from the points of sale, regional offices, remote work stations etc does in fact become a bottleneck in areas which are not connected via the internet or where the internet speeds are low. And when your business has to collect data from agricultural fields, where you can not always carry a laptop, the problem of centralized data collection amplifies.

The Mindfire Solution

Mindfire had previously worked with number of mobile development projects and couple of them related to short messaging service (SMS). It took Mindfire one discussion to figure out the architecture of the application.

A custom SMS application was built which was fed into the phone. After user validation, it then allowed the user to enter the data in the needed format. Once the user hit the 'Send' button, the data was encrypted and sent to a GSM modem which is attached to a SMS gateway, which was a Desktop computer in this case. This is then passed on to a Web server based SMS Receive API which decrypts the information and parses the same. Upon successful parse, it sends the data into the web-browser for display. This way, without any manual intervention and without Internet, the data from the remotest part can be transferred without any inconvenience directly to the analysis web-dashboard. The system consisted of 2 parts:

- 1. Mobile Application** – This was built to be installed on the phone. The phone model was provided by the company and the application was built on the same.
- 2. MySQL Database with PHP Frontend** – Once the data was received by the SMS gateway; the data is stored in SQL Server Database and displayed in the browser with PHP frontend.

Technologies

- Technologies used: J2ME, PHP, MYSQL, SMS Gateway

Future Relationship

Mindfire not only helped the customer quickly turnaround the situation of continual data loss but also helped the customer to remove the data entry at the regional centers by proposing and building the system which took the data from the user and assimilated the data into a form which can be directly analyzed via the dashboard. Client was very happy and awarded a new project which meant a new stronger relationship with the client. And as always – Mindfire met its goal of having added another customer delighted with its services.

