Android Based Sales CRM Geo Tracking System

Abstract— This paper describes project that focused Mobile Customer Relationship Management (CRM) in the marketing industry. The paper deals with the possibilities and aspects to support CRM via mobile services. The key profiles of mobile communication are Interactive Broadband Protocols, Location Based Services and Individualized/Personalized Services – mainly based on Multimedia-Information. These profiles are embedded in a three-layer communication model. This paper is to provide CRM which not only provide Order Processing but also can track the move of Sales person to the customer using Geo Tracking System, so that no sales person can cheat the manager by not visiting to customers. This paper also Provide a CRM order processing module for distributor/sales person. In this manner, the new mobile CRM solutions can represent a specific kind of collaborative application.

Keywords— P2P Network, Peer Identification, Copyright Content Poisoning, Legitimate User Authorization Protocol (LUAP)

I. Introduction

Customer Relationship Management (CRM) is currently one of the most used notions in articles and studies dealing with computer applications. Nowadays it is very difficult for a company to convince a customer (a potential client) with only product or price arguments because of the strong competition in almost all market areas. Companies therefore reflected how to win the competition. One of the possibilities is to have the better client support – not only in the after sales phase, but also in all other phases of the client communication process, i.e. in the acquisition phase or in the loyalty phase. To develop solutions which integrate the high potentials of multimedia, internet and mobile communication as well as the potentials of Collaborative Systems (CS). In a certain manner, clients of a company or organisation can be part of a collaborative solution.

A. Existing System:

In the early 20th century in the United States, demand outpaced supply to the extent that companies, concentrated on selling as many products as possible. Suppliers focused on product development, manufacturing capacity, and securing distribution outlets, without regard to their consumers. They did not pay much attention to who bought their products or what their customers needed. They used classic marketing tactics, i.e., mass marketing – primarily print and broadcast advertising, mass mailings, and billboards.

By the middle of the 20th century, however, the economy had matured to a point where consumers had the power of choice because supply had outstripped demand. The era of the passive consumer was coming to an end. Companies began to find out who their customers were, what they wanted, and how they could be satisfied. They analyzed data about their customers and segmented them based on their demographics, such as age, gender, and other personal information. Then they promoted their product or service to a specific subset of customers and prospects. This was called “target marketing.” Each company thought seriously about the “four P’s” (price, promotion, product, and placement), the basic concept of modern marketing, which was first suggested by the expert in the field, Jerome McCarthy, in 1960.

a. Delayed and distorted information
b. Lack of proper communication
c. Lack of data collection and processing
d. Sales person cannot be tracked in current
II. Related Work

A. Global Positioning System:

GPS tool can be tools for determining the distance between two points or to accurately determine the acres in a field that is to be rented. The distance between two sampling points and the area of a field can be found using GPS coordinates and knowledge of the Earth Terrestrial Coordinate System. Because GPS latitude and longitude are in terrestrial coordinates, determining the distance in length measurements (feet, meters, yards, kilometers, and miles) rather than degrees, between two points is not trivial. The objective of this guideline is to provide a method that farmers, ranchers, or agricultural practitioners can use to calculate distances between points and to calculate the size of a field using Excel, a commonly available spreadsheet. A more detailed description for calculating distance and area is found in Carlson (1999), in which the mathematics and assumptions used to create the model used in this guideline are described. A Basic programming language computer program is also available in that paper.

B. Calculating Distance Between two Points:

Use a DGPS (differential corrected GPS) to determine the latitude and longitudes of two points on the earth surface and determine an approximate elevation. In the example, we have used a Trimble 132 DGPS receiver to determine the latitude and longitude of the ends of a 300 ft. GPS report locations.

III. Proposed System

CRM is about understanding the nature of the exchange between customer and supplier and managing it appropriately. The exchange contains monetary considerations between supplier and customer – but also communication. The challenge to all supplier organizations is to optimize communications between parties to ensure profitable long-term relationships. CRM is a key focus for many organizations now as a shift away from customer acquisition toward customer-retention and churn reduction strategies dictates a need for best practice CRM processes. CRM is an application that enables companies to make the move towards being a customer centered organization by putting the customer at the centre of all the information that relates to them and allowing authorized people within the organization to access the information. In a customer centered organization, salespeople would have access to all the information that affects their relationship with their customer. The conversations, the emails, the complaints, the complaint resolutions, all the information that had been sent to the customer, who else in the company the customer had spoken to …… everything that affects their ability to service the customer and sell more product or services to them. Customers of a customer centered organization feel more valued. Their requests are dealt with more rapidly and accurately because all the information required to service the request is in one place. Customer centered organizations may have a higher customer retention rates than competitors organized along traditional lines because of this.

A. Architecture:

Project Architecture represents no. of component. We are using as part of our project. The architecture describes about the flow of the request processing in the project. Describes about the communication of the components. Generally 3 tier architecture used
1. Clint (Mobile)
2. Server (JAVA Application)
3. Back End Database (My SQL)

![Android Based Sales CRM Geo Tracking System](image)

Fig 1. Android Based Sales CRM Geo Tracking System
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B. Server Moduls:
1. **View Sales Entities**: It features to display all the sales related entities — Order processing, Sales person track Report & visits, Contacts, Products where the sales personnel can navigate to the respective entity and get the required information.
2. **Customer, Product, Sales Person Master Screens**: This module will help distributors to add/edit/delete product, sales person or product.
3. **Customer allocation to sales person**: Distributor should be able to allocate customers to sales person, Sales person is expected to visit this customer site and introduce them about the new products.

C. Android Application Modul:
1. **Authentication for Different Roles**: Different logins are given with different access.
2. **Sales Person Geo Tracking**: Tracking is performed on Android phone from Distributor to Customer. It will give the entire data about the location of sales person.
3. **Customer Order Processing**: Sales person will take the customer order and save it in database.
4. **Product View**: Sales person will be able to view the product and even customer can select product from the list.

D. **Google Map**: It is conceivable to offer the salesman the opportunity to write down location oriented impressions he had during his trip using his mobile diary. This location-based information can be centralized in a mashup using Google maps. Now other Distributer can track the way path of the salesman whether he is going to related customer or not. If the salesman not visiting the customer or make fraud with distributer, this application will track the position of saleman.

Fig 2 Combination of LBS and Google Maps

IV. Conclusions

CRM is an application that enables companies to make the move towards being a customer centered organization by putting the customer at the centre of all the information that relates to them and allowing authorized
people within the organization to access the information. In a customer centered organization, salespeople would have access to all the information that affects their relationship with their customer. If the customer is satisfied in all phases of a CRM-Value Chain, he will, due to our Mobile CRM-Services, move step by step from the status of a one-time customer to the status of a patron – which is the main goal of modern CRM. In this manner, CRM mobile services also represent a specific kind of collaboration between companies on one hand and the clients on the other hand.

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