

Sales Executive Visiting Tracking based on Android using Location based Service

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Abstract: The purpose of the study is to evaluate how mobile location applications and services might help salespeople perform better while they are working in a mobile environment. The study conceptualises important aspects of location-based mobile support after briefly addressing the state-of-the-art difficulties related to mobile location technology. The next section of the article offers a classification of salespersons' jobs based on both location-based mobile support's characteristics and the aspects of those tasks that could be impacted by mobile location technology. A third section makes recommendations for prospective mobile location services and applications that can help salespeople carry out their daily responsibilities efficiently and connects such applications to the factor that determines salespeople's effectiveness. The consideration of several important concerns, including salespeople's privacy, the danger of information overload, autonomy, and several crucial areas for additional research, closes the paper. The paper concludes with a discussion of several critical issues such as salesperson privacy risk of information overload autonomy and some key areas for future research.

Key words: Salespersons performance, Mobile location technologies, salespersons tasks.

INTRODUCTION

The role of the professional selling has expanded and changed dramatically in recent years. Instead of merely selling products, today's sales persons are expected to serve customers as consultants who offer expert advice on improving customer's life style or making their business operations more profitable. It has been argued that the marketing department is the last

organizational function to adopt information technologies (IT) in order to enhance its contribution to the overall corporate performance (Rivers et al. 1999). Salespersons now usually deal with professional buyers or purchasing agents who base their buying decisions on the representative's delivery of quality and service and how the product will affect their company's profit. It was estimated that in USA alone 2.2 million salespeople were using SFA systems with a yearly growth rate of 40% (Engel et al. 2000). Additionally, the unique nature of selling with its mobility requirements, time demand, psychological strain, work-related role stress and performance orientation continue to put unusual pressure on salespersons.

Companies have invested in sales force technologies such as sales force automation (SFA), knowledge management technologies and customer relationship management in order to take benefit from what such technologies promise in terms of decreasing costs, reducing cycle time, improving organization and access to information. Such rapidly growing sophistication of professional buyers and their increasing access to information will continue to challenge salespersons to find new sources and faster methods of obtaining information despite their constant move. Additionally, the unique nature of selling with its mobility requirements, time demand, psychological strain, workrelated role stress and performance orientation continue to put unusual pressure on salespersons.

The company does not know the location of sales at work, so there are cheats committed by sales at work, sales never take away book products when assigned by the company. Then when sales are assigned to visit the outlet, the sales do not visit the outlet and the sales do not send the book to the outlets. The company does not know whether the sales have visited the outlet according to the task of the company or not. So the company is worried about sales, especially new sales when during visits and delivery. The company wants to know the location of its sales at work, the company wants to know whether the sales are on duty or not, the company wants to facilitate sales in making visits by knowing the route to the outlet location.

Based on the description above, it is necessary to build an application of the existing problems. Android application that is built there is a feature to search for the closest travel route for sales to outlet locations by utilizing Location Based Service technology.

The objectives of this research are as follows:

- a. The company can track the location of sales presence when the sales are being assigned during working hours.
- b. The company can find out whether the sales have visited the outlet according to the task of the company or not, and whether the book products that have been sent have reached the outlets or not.
- c. It can facilitate sales when they want to make a visit that is sales can find the route to the location of the outlets they visit.

The paper suggests a task-based framework for developing mobile applications to support salespersons' tasks when they are operating within a highly mobile work environment.

Mobile (or wireless) applications, despite being different in their nature, they share a common characteristic that distinguishes them from their wire line counterpart: They put the user at

the centre of information and communication by enabling him/her to both receive and get access to information support anytime and despite their constant move. Location identification has become a critical component of mobile applications as it opens the door to a world of applications and services that were unthinkable only a few years ago. Mobile devices can be assessed according to the three dimensions: usability, capability and cost. Usability includes such characteristics as portability, micro-mobility, display and input characteristics. Portability as determined by the device's weight and size is a significant usage factor for the mobile workforce. Device's micro-mobility is inherent in the physical objects in that they may be moved about and be shared between people to support communication.

Device's capability include such characteristics as processing power, amount of local storage, battery life, available connection options, location awareness and security factors. The device's cost factor includes procurement cost, support and add-in cost. Addin cost is the cost resulting from adding other functionality to an existing type of device such as a cell phone.

METHODOLOGY

Methodology is a process of stages to support the implementation of a study. This research uses descriptive methods. A descriptive method is a research method that aims to describe or painting systematically, factually and accurately about the facts, properties, and relationships between the phenomena investigated. Android provides an open platform for developers to create their own applications for use by a variety of mobile devices. Tracking is a process of how to monitor the presence of a moving object and its path. The definition of moving in a geographic perspective is the movement of the position of an object from one coordinate to another. The job of a salesperson

is to look for prospects or customers, as well as attract prospects or customers interest in the goods or services offered, and then listen to comments on the products and services offered. Connective mobile applications involve basically a mobile and a wireless client accessing a centralized service. The Global Positioning System is a satellite based navigation system. GPS's operations rely mainly on 24 satellites that transmit signals. GPS receivers process the signals to compute positions in 3 D latitude, longitude, and altitude with accuracy of 10 meters or less. Therefore one of the main advantages of GPS technique is its high accuracy, when operational conditions are favourable.



ANALYSIS OF PROBLEMS

Problem analysis is the stage of gathering and determining the existing problems.

Analysis of the existing problems is as follows:

- a. The company does not know the location of sales during work so the salesperson has carried away the book product when assigned by the company.
- b. When sales are assigned to visit an outlet by the company, the sales do not visit the outlet and the sales do not send the book's products to the outlets.

- c. Most new sales do not know the route to get to the locations of the outlets they visit.

ANALYSIS PROCEDURES TO BE DEVELOPED

1. Admin can make the assignment of outlet visits to sales.
2. Sales can find out the list of outlets that must be visited on the application.
3. The android application displays outlet data information and outlet locations.
4. Company admins can find out the location of sales on the website subsystem, the company can select or search for sales names that want to be tracked.

CONCLUSION

The paper explored the area of mobile location technologies within salespersons' work environment. More specifically, the paper discussed potential locationbased mobile application and services to support salespersons tasks and linked them to the determinants of salespersons performance. It is worth mentioning that mobilizing location-based application and services to support salespersons for greater performance may raise a number of critical issues. One issue associated with the use of location based mobile services and application is the protection of salespersons' privacy. Some salespersons may perceive mobile applications and services as threat of their freedom in the field and thus may be reluctant to adopt them. As the acceptance of mobile applications and services by salespersons goes beyond the scope of this paper, future research is needed to both address acceptance issues associated with mobile

applications and services and translate the rapid development of mobile technologies into innovative and value adding solutions for the sales force.

As the analysis of the impact of the above issues on both the added value mechanisms and the potential acceptance of location-based mobile application and services by salespersons goes beyond the scope of this paper, future research is needed to address the above-mentioned issues together with the integration of the continuous progress of mobile location technologies with the evolution of salespersons tasks and activities to generate new innovative applications that match their needs and requirements.

Android-based sales tracking application has been able to find out if the sales have visited the outlet according to the task of the company or not, as well as the book product that has been brought to the outlet or not.

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