Data Quality Guided Incentive Mechanism Design for Crowdsensing

ABSTRACT

Crowdsensing is a new paradigm of applications that enables the ubiquitous mobile devices with enhanced sensing capabilities to collect and to share local information towards a common goal. In recent years, a wide variety of applications have been developed to realize the potential of crowdsensing throughout everyday life, such as environmental quality monitoring noise pollution assessment road and traffic condition monitoring bus arrival time prediction road-side parking statistics and indoor localization. However, the success of crowdsensing based services critically depends on sufficient and reliable data contributions from individual participants.

EXISTING SYSTEM

In Existing System, crowdsensing appropriate rewards are always expected to compensate the participants for their consumptions of physical resources and involvements of manual efforts. While continuous low quality sensing data could do harm to the availability and preciseness of crowdsensing based services, few existing incentive mechanisms have ever addressed the issue of data quality. The design of quality based incentive mechanism is motivated by its potential to avoid inefficient sensing and unnecessary rewards.

DIS ADVANTAGES

- Difficult to estimate the quality of sensing data.
- Sensing data as the information uncertainty increases.

PROPOSED SYSTEM

In Proposed System, we incorporate the consideration of data quality into the design of incentive mechanism for crowdsensing, and propose to pay the participants as how well they do, to motivate the rational participants to efficiently perform crowdsensing tasks. This mechanism estimates the quality of sensing data, and offers each participant a reward based on her effective contribution. We also implement the mechanism and evaluate its improvement in terms of

quality of service and profit of service provider. The evaluation results show that our mechanism achieves superior performance when compared to general data collection model and uniform pricing scheme.

ADVANTAGES

- Guarantee the quality of crowdsensing based services.
- It achieves superior performance in terms of quality assurance and profit management.

SYSTEM REQUIREMENTS

H/W System Configuration:-

Processor	-	Pentium –III
RAM	-	256 MB (min)
Hard Disk	-	20 GB
Key Board	-	Standard Windows Keyboard
Mouse	-	Two or Three Button Mouse
Monitor	-	SVGA

S/W System Configuration:-

Operating System	:	Windows95/98/2000/XP
Application Server	:	Tomcat5.0/6.X
Front End	:	HTML, Jsp
Scripts	:	JavaScript.
Server side Script	:	Java Server Pages.
Database	:	MySQL 5.0
Database Connectivity	:	JDBC