ABSTRACT

The significant increase in the number of mobile users in the recent years has necessitated the need for secured wireless information services and reliable Mobile Commerce (M-Commerce) applications. Very important for the success of mobile applications is the availability of information about customer preferences that will facilitate personalized offerings of information and services. Digitization of land records has become a major talk out of all the e-Governance initiatives of the Government of Punjab. The State of Punjab has been selected for the purpose of this study because of the reform initiatives of the Government in the revenue department through automation of land records under the e-Governance program. Punjab has majority of its population residing in rural areas and their main source of livelihood is agriculture. The opinions have been gathered to measure the effect of existing state of land record information system on the lives of common citizens. Rural area citizens are primarily focused due to two reasons. Firstly, Punjab is an agricultural State where people have many issues and problems related with the existing land record information system. Secondly, the benefits of e-Governance have not percolated to the rural masses. The thrust of this study is the application of Mobile commerce to the land record information system in the State of Punjab so as to improve its current state. The importance of this research can be well understood by the fact that near about 70% of the total population resides in rural areas in India. There is an acute digital divide between urban and rural India and this need to be abridged. M-commerce can be one such technology to enable the same. This research emphasizes on studying the existing Mobile commerce practices, assessing the current scenario of land record information
system in the State and identifying the requirements of land record information system harnessing M-commerce methods.

The research objectives have been achieved through the empirically collected data from 400 randomly selected respondents based on the stratified sampling technique, in this case the citizens availing e-Governance services via land record information centres (Fard Centres) located at the randomly selected Districts and Tehsils/Sub-Tehsils of Punjab. A number of sub-objectives and correlated factors have been presented so as to meet the objectives of this research. The identified factors have been analyzed, resulting into M-commerce model for the land record information system. UML (Unified Modeling Language) has been deployed for modeling the step-by-step systematic design of the developed model. M-Commerce based model of land record information system has been illustrated using UML diagrams followed by the development of M-Commerce based mobile application (MobileLoanapp) for e-Enablement of land record information system. Various statistical tests have been applied to the data collected in the form of questionnaire so as to result into the desired proposed model. The results from Regression analysis have been validated using Regression model and testing of hypothesis for various objectives. The positive and negative estimators (predictors) have been depicted using Regression models developed for the research objectives. The final analysis underlined by the perceptions and opinions of the respondents is likely to help in taking corrective measures in making the existing system a more efficient and reliable Land Record Information System (LRIS). Computerization of land records integrated with the application of Mobile commerce to the land record information system will result in convenient, any-time and any-where real-time information availability to the common citizens of the State. Thus, this research ultimately follows the aim of the State Government to provide improved delivery of citizen services right at the door-step of the citizens with minimal human intervention.