

## Chapter 35

# A Perspective of Adoption of Mobile Applications in Rural India

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### ABSTRACT

*Rural mobile application are designed for various purposes, ranging from reaching information regarding government schemes, agricultural best practices, market prices, fishing zones and weather forecasts, to facilitating money transfer, opening and operating a bank account for saving money and to receive money directly to the bank account for various government schemes and subsidies. This paper examines the critical success factors and inhibitors that affect adoption of the mobile applications and the effect on continued usage. A questionnaire survey was done to gather data for this study. Results indicate that last mile barriers act as inhibitors to adoption. Adoption behavior of rural people do not exhibit a correlation with the ease of use of the application. Social influence has a strong influence on adoption behavior, which will enable policy makers and practitioners to evolve the right penetration strategy. Perceived usefulness has a strong influence on adoption. The results reiterate the increasing positive impact of rural mobile applications on day to day working of rural people.*

### INTRODUCTION

Agriculture and allied sectors like fishing accounts for more than 14% of Indian Gross Domestic Product (GDP) and employs about 58% of the countries workforce. In rural areas agriculture and allied activities like fishing is the primary source of livelihood as over 70% of the rural population is dependent on it.

It is envisaged that using modern communication technology to improve information services (referred to as agricultural extension services) can improve productivity of Indian agriculture and allied service like fishing and allow them to be benefitted from the increasing trends in food price. This can increase the wellbeing of the people connected to agriculture and hence the majority of Indian population. This will also increase the food security of the country.

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The information needs of the farming and fishing community is traditionally provided by trained personnel from Indian Council of Agricultural Research Institutes, State Agriculture Universities, Krishi Vigyan Kendras, Educational and Research Institutes of Fisheries Technology. However effectiveness of this is constrained by lack of resources, skilled staff and logistics.

The maximum information deficiency is with small and marginal farmers (Parikh et al., 2007) and it is estimated by the National Sample Survey (NSS) that over 60% of the rural population in agriculture and fishing lack any source of reliable information.

The other concern is that the Indian Banking and allied services has not been able to reach vast segments of rural population. The reasons for this are varied. They include:

- High operating cost of “brick and mortar” Banking branches in remote rural areas;
- Lack of banking products which are customized to meet the specific needs of rural people;
- Socio economic factors like low literacy, lack of stable income, low savings capability, low level of awareness and unavailability of identity documents.

The financial exclusion of the majority of Indian agricultural workers makes them vulnerable to exploitation by unscrupulous money lenders and input dealers. Lack of credit facilities limit the agricultural workers from introducing cash crops, new farming or fishing practices, leading them to a vicious cycle of low productivity and poverty.

## **USE OF MOBILE PHONE IN RURAL INDIA**

Mobile telephones have penetrated the rural regions of the country. Average usage of mobile per person is also increasing with falling call rates and better mobile connectivity in remote areas. Innovative schemes like pre paid calling and low value recharge schemes have facilitated rural people to adopt mobile phones.

The various mobile applications conceived for the rural people are:

- Facilitating information oriented functions.

Mobile phones work like fixed line telephones but more convenient and portable for agricultural workers to make calls to concerned Call Centres and Help Lines to obtain information and get their queries attended to regarding work related issues as well as government schemes.

Push messages from a central server to reach pre-identified users who have requisitioned the service for seeking alerts on specific subjects.

Messages from government agencies which give public service e.g. health agencies to closed user groups like expecting mothers, physically challenged persons, parents of children. The messages contain information of various government schemes and may involve two ways communication i.e. messages as response to queries from information seekers:

- Payment oriented functions.

The mobile phone acts as a medium to transfer money. This frequently consists of using peripheral gadgets like biometric identification devices, cameras and printers synchronized with the mobile phone.

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