

Tata Consultancy Services

www.tcs.com

Year of Incorporation: 1968

Category of Innovation: New Technology Advancement



Company overview: Specialist in IT infrastructure, enterprise solutions, consulting, BPO, Business Intelligence and Performance Management, Engineering and Industrial Services.

Innovation: mKRISHI (TCS' mobile-based Agro Advisory System) is an innovation that allows farmers to send queries in their local languages through a mobile and receive personalised advice or relevant information in their local languages. It also helps illiterate farmers by allowing them to send queries and receive advice and information as "Voice SMSs." The end-to-end system consists of: handsets for sending queries and receiving responses; an automatic weather station and sensors in villages to provide local weather and dynamic soil information to experts; cameras in mobile phones to enable farmers to send high resolution crop images to experts; Web interfaces through which experts can view farmers' queries and send replies; a suitable GUI in the mobile application which enables farmers to view the five day local weather forecast with details such as precipitation, temperature variation and cloud cover. mKRISHI was operationalised in July 2008

Impact of innovation

Internal: TCS expects to create a completely new revenue stream for the company as a result of this innovation. The innovation has also resulted in improved capabilities at TCS. Employees involved in creating the mKRISHI platform, have developed Embedded skills, Script technology skills (while developing the Indian language script engine on the mobile phone), User Interface for farmers, Sensor network technology, etc.

External: The innovation has created impact at multiple levels and with each implementation. It has resulted in cost reduction, the prevention of unnecessary pesticide spraying owing to timely, expert advice and reduction of pesticide spend, etc. Advice on the timing of a crop harvest beating the impact of non seasonal rains, can save a farmer from heavy damages to the crop. The innovation can help increase crop yield. Advice on the type,

method of application and the timing for application of fertilizer can all lead to better yield. Informed decision making helps farmers in fetching a better price. Advice on local Mandi prices and quantity of arrived goods helps farmers choose the Mandis and the price they can command. Further, information on spot and future prices from the NCDEX enables farmers to negotiate with the agents. The mKrishi database on farmers can improve rural efficiency. It enables bankers to disburse loans to farmers faster since the information required to compute risk can be made available to the banks.

Customer speak:

“We apply pesticide on cotton crops just as a precaution. If we get advice not to do so, we can save approximately Rs. 6,000 on pesticide and labour charges.”

Satish Deshmukh, a farmer in Ganori village

