



The Computerworld Honors Program

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Final Copy of Case Study

LOCATION:
*Thiruvananthapuram,
Kerala, India*

ORGANIZATION:
Kerala State IT Mission

YEAR:
2011

ORGANIZATION URL:
<http://www.itmission.kerala.gov.in/>

STATUS:
Laureate

PROJECT NAME:
Dam Information to the Farmers

CATEGORY:
Economic Opportunity

PROJECT OVERVIEW

Our nation is predominantly an agriculture based one, despite its development in other sectors. Hence, an economic opportunity or development by virtue of significant contribution from agricultural sector shall contribute to a larger rise in the nation's GDP. Hence the focus on agricultural projects by Kerala Government was high & has duly paid off. According to the figures for the year 2009, agriculture contributed 17.5% to the country's Gross Domestic Product (GDP). The density of Internet penetration in our country is just around 5% clearly indicating that rural reach shall be a far-off dream. Contrastingly, yet surprisingly, the mobile users merely in rural India attribute to over a 100 million & this figure is fast skyrocketing! Kerala also boasts of a 85% tele-density level as against the national average of 56.83% as per TRAI. The state aims at leveraging the impressive tele-density levels. Statistics reveal that the state has about 2.75 crore connections of which are 2.4 crore mobile connections and 35 lakh land line phones. Besides, it is envisaged that Kerala will achieve 100% tele-density by 2011. It is evident that the M-way is the right direction to reach faster to the citizens of the country, especially rural India. Exploring the avenues to use M-Governance for achieving this, a flurry of options shall be foreseen: Dam Information to the Farmers through SMS One of the problems identified for the declining levels of agricultural productivity has been the general shortfall in monsoons. Irrigation systems thus have a major role to play to provide year-round supply of water to the crops. The Water Resources Department of the Government of Kerala, recognizing this system, has set up several irrigation systems. While there is no doubt that irrigation systems are pertinent, there is also the need to provide timely information to the community, especially the main stakeholder group of farmers, on the water levels in the dams, schedule of opening of reservoirs etc. to facilitate planning and action. The Dam Information to the Farmers through SMS, a project of Kerala State IT Mission (www.itmission.kerala.gov.in, the nodal IT implementing agency of the Government of Kerala), has been implemented in the Malampuzha dam of North-Central Kerala to achieve this purpose of providing timely information to farmers through the mobile phones.

SOCIETAL BENEFITS

It is a boon to the farmer community considering that they receive in-hand information on their core business – Agriculture, enabling them to make easy, quick & smart decisions regarding the crops, yield, market, etc. hence bettering their standard of living in the long run. Dwindles wastage of several metric tonnes of valuable agricultural production.

PROJECT BENEFIT EXAMPLE

The following information is provided to the farmers through SMS both in Pull and Push Mode. • The availability of water in the dam (In Volume) • Next opening schedule of shutters • The Schedule of opening of shutters at any particular day The following alert services are also provided through SMS Alert and e-mail • Natural calamities for registered users • Change in distribution to registered users Service Delivery The water availability, schedules of opening and closing of shutters, emergency alerts, warning notification etc can be provided through the following services. SMS Pull Services To avail this service, the farmer has to send an SMS to a pre-designated Number in the following format SMS WATER, the system will reply “Malamphuzha Dam: water availability as on 6:00 am on DATE is: 823567 Cubic Feet”. SMS Alerts Push Service Registered mobile users receive alerts as to when the dam shutters will be opened. Registration is done through mobiles by sending an SMS to a pre-designated number in a prescribed format. E-mail Alerts Another touch-point for disseminating information is through E-mail. Farmers with access to Internet connectivity can receive reservoir information via email after registration. Registration in this case can also be done through the Internet. Disaster Warning Systems Another significant feature of the project is its in-built mechanism for providing timely disaster warning to the farming community, especially those on the banks of the canal. This facility provides greater security to the live, crop and livestock of the farmers by facilitating timely evacuation, if needed. This feature is also a great help during times of flooding and torrential rains, largely attributed to global climatic changes.

IS THIS PROJECT AN INNOVATION, BEST PRACTICE? Yes

ADDITIONAL PROJECT INFORMATION

To run these projects, Kerala has set in place the Mobile Governance Infrastructure. The salient features of this being: The uniquely branded Short-Code “537252” – spelling of K E R A L A in non-Qwerty mobile keypad opened across all mobile operators in the state exclusively for the Government of Kerala. The Short code is the key to M-Gov services of Kerala. Advantages – (a) The Short Code enables the Citizens to pay for the services (2 & 3Rs) ensuring sustainability. (b) Setting up an encapsulated M-Governance Service Delivery Platform (SDP) enabling the departments to easily m-power the legacy applications. (c) Multiple Touch Points and Delivery Channels - SMS, Voice, Data, USSD and Ring Back Tones The objective of the project is to integrate the advancements in mobile technology with various Government departments with an aim to create cost effective, efficient and round the clock Government information systems. A comprehensive and integrated Service Delivery Platform is being created to roll out the various services and the M-Governance strategy is being formulated. This paper examines the approach adopted to identify services and design solutions, wherein the primary focus has been to leverage the existing networks and available wireless technologies. The core platforms being used for M-Governance are based entirely on Open Source



Technologies. Kerala pioneering M-Governance & having paved the pathway for other states to follow suit, has ambitious goals to achieve in this stream after & having seen instant success, the Government is keen to extensively use M-Governance for the benefit of the public. Going forward, the M-Governance at Kerala being a trend-setter, has defined high standards that the M-Governance arena in rest of the states shall benchmark against Kerala's achievements in their pursuit of successful governance. Request you to visit our website www.itmission.kerala.gov.in for more details of such similar projects that the government of Kerala has implemented.