



Innovative Technological Solution for Milk Collection Centres to help Dairy Sector in India

Case Study:
Technology Solution for Rural Areas

Executive Summary

Prompt AMCS is a digital and comprehensive solution for the dairy supply chain in India. It is an initiative by Prompt Group to empower the milk producers in India by developing innovative, automated, and technologically advanced milk collection system that gives them the right value of their milk. Prompt AMCS is a big step toward improving sustainability, and reveal opportunities for consistent growth of the Indian Dairy Industry. This case study gives an overview on Prompt

AMCS, challenges faced, how the solution solved the problems and its outcome. Prompt AMCS is:

- The most prominent IT integration in the history of the dairy industry
- A common digital platform for farmers and milk unions
- A step towards building cashless & organized milk societies

About Prompt AMCS

Prompt AMCS (Automatic Milk Collection System) is a contemporary and technologically advanced dairy solution aimed to digitize the farmers and rural areas of India. The system automates the traditional milk collection and procurement process followed by the Dairy Industry. *AMCS (Automatic Milk Collection Software)* is primarily installed at VDCS (Village Cooperative Societies) to perform operations like milk quality testing and analysis at the time of milk collection through *advanced Embedded Devices*. The tests comprise of measuring Milk Quantity, Fat & SNF, Water Proportion, and Milk Density of milk submitted by farmers. The data obtained after milk testing is recorded in the *Most Advanced Software* and stored securely over *Prompt Cloud*.

Prompt AMCS is made up of AMCS Software, Mobile Applications and Embedded Devices, mainly our products that are interconnected, have role-based authorized access to data in Prompt Cloud, and used by end-users like personnel at Milk Federations, dairy farmers, VDCS operators, and milk transporters.

Challenges

It is only in the recent years that the Indian Dairy Industry has been flourishing regarding expansion and turnover. In the earlier years, there were many challenges encountered by the initiators of the dairy industry. Some loopholes were required to be eliminated first to move ahead and establish a ground of sustainable development of the Indian Milk Federations, Milk Cooperative Societies, and Dairy Farmers. Here, we touch upon some of the significant challenges that persisted across the milk

supply chain particularly for which, Prompt AMCS was developed and implemented.

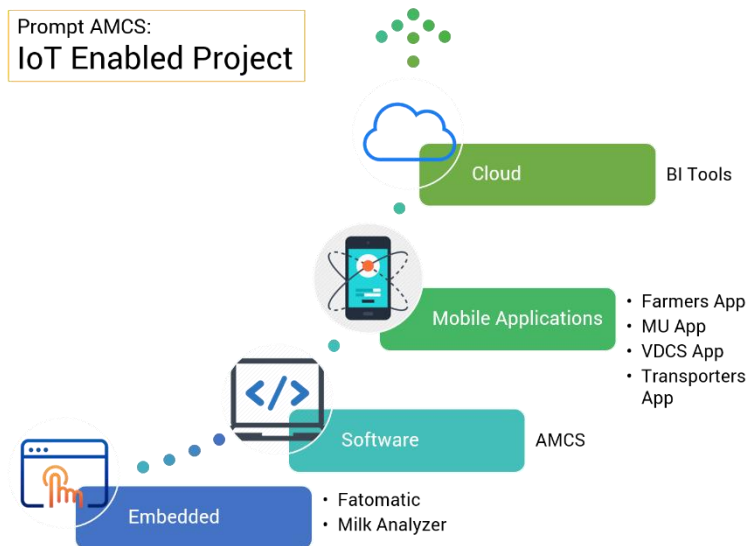
- Farmers had no access to their milk data
- The shortage of transparency between farmers and Unions
- Less value of milk given to farmers and irregularity in payments
- Inaccessibility to their milk data
- The absence of a platform where farmers could raise their queries and problems to appropriate authorities
- The deficit of opportunities for women participation

How Prompt Helped

A pool of problems had to be identified and cleared up before a definite solution could be introduced. As we acknowledged the complications, the requirements of the solution were clear and subsequently, a system conducive to an uncomplicated and easy milk collection process was built. The upshot was Prompt AMCS that utilizes the concept and implements features of the

Internet of Things (IoT), Embedded and Cloud technologies to create a technologically advanced solution for Dairy Supply Chain.

Beneath, we state a few of the features of Prompt AMCS that helped eradicate glitches mentioned afore and initiate a major revolution in the dairy industry.



Embedded:

- Fatomatic: Fully Automatic Milk FAT Measurement Embedded Device

- Milk Analyzer: Fully Automatic Milk FAT, SNF, Water Proportion, and Water Density Measurement Embedded Device

Software:

- AMCS: Automatic Milk Collection Software that automatically fetches data from Embedded Device with the help of a machine-to-machine algorithm

Mobile Application:

- Farmers App. – ([Android](#) | [iOS](#)) Farmer App enables farmers to manage their dairy business. It displays Milk Fat & SNF, milk quantity, passbook details, and a summary of bank transactions, analytics and reports.
- MU App – ([Android](#) | [iOS](#)) Milk Union App is built to manage the transparency between Societies and Milk Farmers. Milk Union personnel get real-time

visibility into the union's milk collection units and farmers.

- Transporter App – ([Android](#)) An app for transporters integrated with AMCS System which provides truck sheet data on central portal along with dipstick image.
- VDCS App – ([Android](#)) A VDCS can check its daily milk analytics on VDCS App that shows daily/monthly/yearly status of the milk data.

Cloud:

- Milk Pro Analytic: a powerful cloud-based, real-time dashboard for Milk Union

Uncovering the Possibilities

- Introduction of a technological system to digitize milk collection and procurement process
- Connection with cloud system to store and access data
- Instillation of transparency in milk data and milk rates
- A common platform for information sharing between farmers and milk unions
- Cashless payments to farmers through a direct link with banks for right value of milk
- Modern mobile application for farmers to access own milk data
- Predictive Analysis and Business Intelligence to track milk business
- Empowered women partaking in all phases of the dairy supply chain

Testimonials



Shri Govindbhai Ranpariya, Chairman of Rajkot Milk Union says, “It’s been quite a long time since we are using Prompt AMCS. It works seamlessly, provides central database and record management system that facilitates live monitoring of changes in milk price, accurate measurement of milk, and its fat

content, calculating exact price of milk automatically while saving a lot of time. Our farmers feel happy and content using Farmers App as it gives them full details of their milk, they can view various reports, analyze current milk trends and keep a record of their transactions. As a result, we have built deeper and faithful relations with farmers.”

<https://youtu.be/ZEGS2XLo6J4> (Video Testimonial)



R S Sodhi, MD of Amul, quotes, “The peculiarity of this project is that there exists just one AMCS software in entire Gujarat. A centralized data management system is maintained at one place for data analysis, milk

production estimation in any district or village or route, to identify and analyze milk production variation based on seasonal and climatic conditions and for future milk production estimations. It will enable the industry to link farmer and his village to a product made out of his milk being sold anywhere in India. Thus, AMCS software is an extremely significant project in Cow to Consumer process.”

<https://youtu.be/sfJJDj-jFgw> (Video Testimonial)



Outcome

70K+

Mobile App Users

5K+

Milk Collection Center

950K+

Active Farmers

11M+

Milk Collection Per Day

In an excerpt from an interview by Ritesh Sutaria, Director of Prompt Equipments, he was quoted saying, “The goal of developing such a system was to *connect all 3.6 Million farmers, 18.5K VDCS and 18 Milk Federations of Gujarat*. With Prompt AMCS, we have fulfilled a considerable part of it by being able to register and *connect 9.5 Lakh farmers, 5.4K Milk Societies, and 9 Milk Federations by far*. So we’re on the way to accomplish our goal which will be our ultimate feat.”