EFFICIENT RATION PRODUCT DISTRIBUTION SYSTEM USING RFID

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Abstract

The present ration distribution framework has the downside like wrong amount of products, low processing speed, queuing system for long in ration shop .The proposed framework replaces the manual work in all area ration shops. The principle goal is to give straight forwardness. The public distribution framework is based on smart ration card innovation that replaces ordinary ration card system.
Adhar card are given instead of conventional ration cards. Smart card based automatic ration shop is novel approach, precise automated strategy of proportion convenience .In this venture we are introducing smart card and GSM notification, for Slot and Re-slot allocation of product purchase.

Keywords:-*Automated[1], Slot Allocation[2], Re-SlotAllocation[3], SMS Notification[4].*

I. INTRODUCTION

In public distribution system, at the time of budget, funds is generated, where middle person is misusing, won't getting proper revenue to government. As we know, today everything is automation process, manpower is less. Like Adhar card details, taluk office, can be viewed online. When one government is formed, they introduce new products like rice, wheat, kerosene.forimprovements includes new products ragi, new prices for products, even result in removal of existing products. And wrong entries in stock register of shop containing wrong stock information of the products that is supplied to the public, sometimes there are chance of distribution of low quality/graded products than the actual products provided by the Government for supplying to the public, proper maintenance of how much quantity and schemes are maintained. Theft and forgery are the main reasons which is replaces to smart card and GSM for straightforwardness in product distribution.

II.EXISTING SYSTEM

Present system the ration shop provides wrong information to the needy customers, as he has committed to sell the ration products illegally for some marriages functions, hotels etc...The ration shop owners can provide wrong entries in the register seeking that the product is sold already with wrong entries and forgery to fool the government and poor customers. In manual entry, report ledgers has to be checked, like area wise, for which time is consuming.
Drawbacks: overcrowded in ration shops, resulting in long queue often not getting products to many customers. Bogus cards is generated such that duplicate ration cards is created with false details entries registering wrong entities. In existing system working hours is only from morning 10 to evening 7 which is restricted in delay of products to customers.

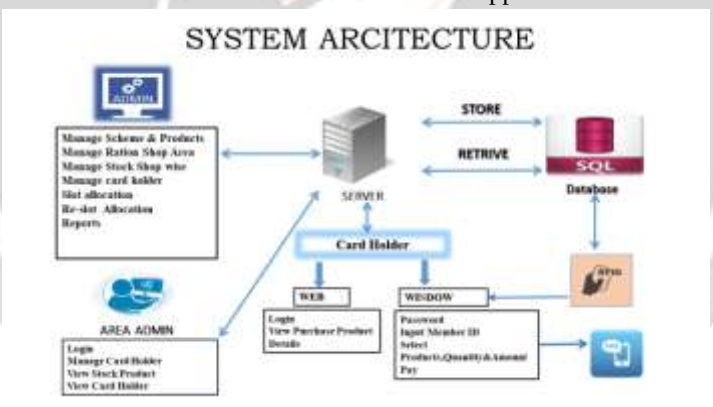
Fig 1: EXISTING RATION SHOP

III.**PROPOSED SYSTEM**

In order to overcome the existing focus on automation of ration shop. Because of this project everything is automated. Manual work is changed, stocks, revenue and returns are systematically maintained when budget is released, RFID tag we can used that contains the family details and customer needs by usage of smart card. Queuing system is changed to slot allocation on specific time using Round robin Algorithm. SMS notification is send to customer giving prior dates for the collection of products on stipulated time for every card holders, saves time by logging online and views product details. If the card holder missed the first slot allocation, gives another chance to get the products by providing re-slot allocation for the next purchase of products, in case not able to deliver products on first slot. Proper and well planning of data information. Corruption is avoided by this proposed system

V.**SYSTEM ARCHITECTURE**

Main three actors: Admin, Area Admin,
Card holder, two applications for Card holder window and web bases applications.



Admin Module:

- In this module, the system takes card holder details.
- Category of the card to which the family belongs to store in the database.

RFID Card Verification Module:

- RFID is a part of Automatic Identification RFID based Smart Card verification module.

Card holder Window

- After verification of RFID card and beneficiary's identification.
- The system will display the total quantity of the commodities that he/she wants to purchase

SMS Module:

- Intimating the cardholder about the recent transaction made, by sending him/her the message on registered number.

Area admin Module:

- The food department will send the stock to the respective distribution centers and also automatically update remaining stock**.**

VI.CONCLUSION

We have proposed a model for Smart Ration Card by using RFID, and SMS gateway technology. In the current system, there is a drawback of ration forgery.
So, in proposed system we are replacing the manual entries and thereby reducing forgery.
As we are using RFID card which contains detail information of card holder thus there is very less chances to misuse the Ration card.
Also, the system will send ration products slot allocation transaction details to the user's registered mobile number through SMS gateway thus transparency is maintained in the system.

VII.FUTURE ENHANCEMENT

- The future enhancement on this system may include to attach a weighing machine for weighing of ration products for accuracy.
- For large scale, we can expand this proposed project i.e. for all over state.
- Product purchased details receipt bill can be generated.

VIII. ACKNOWLEGEMENT

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