

# INTERNATIONAL JOURNAL OF RESEARCH IN COMPUTER APPLICATION & MANAGEMENT

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# CONTENTS

<b>Sr. No.</b>	<b>TITLE &amp; NAME OF THE AUTHOR (S)</b>	<b>Page No.</b>
1.	IMPROVING THE EFFECTIVENESS OF e-GOVERNANCE PROJECT IN PUBLIC DISTRIBUTION SYSTEM (PDS) OF GUJARAT <i>PARIKSHIT TIWARI &amp; RAVI GOR</i>	1
2.	A SURVEY ON TRUSTBASED SECURE AODV IN MANET: A LITERATURE REVIEW <i>V.VALLINAYAGI</i>	5
3.	A STUDY ON THE PERCEPTION AND AWARENESS OF THE PEOPLE ABOUT THE DIGITAL INDIA INITIATIVE OF THE GOVERNMENT OF INDIA <i>DR. ASHA NAGENDRA, ANUKRITI PANDEY &amp; VISHAKHA BABBAR</i>	8
4.	IMPACT OF ICT & OPENNESS ON STUDENTS' PERFORMANCE IN QUANTITATIVE SUBJECTS <i>SHILPA MUJUMDAR, DR. H. S. ACHARYA, DR. TEJASWINI APTE &amp; VENKATESH IYENGAR</i>	11
5.	RISK ANALYSIS OF EXCESS AND OBSOLETE INVENTORY IN A COMPUTER COMPANY: A CASE STUDY <i>KUSHAL NAGENDRA &amp; DR. ASHA NAGENDRA</i>	17
6.	A STUDY ON PURCHASE BEHAVIOR OF CONSUMERS TOWARDS E-RETAILING <i>DR. G. PRAKASH RAJ, DR. A. PAPPU RAJAN &amp; DR. J. MICHAEL SAMMANASU</i>	20
7.	TRAINING FOR SKILL UP-GRADATION IN SELECTED IT ORGANIZATIONS: A SAMPLE SURVEY <i>S. S. K. SASTRY AKELLA &amp; DR. K. VENKETESWARA RAO</i>	24
8.	INFORMATION TECHNOLOGY AND INDIAN ECONOMY: A DISCUSSION <i>DR. BANDANA PATHAK</i>	30
9.	DIGITAL ACCESS SKILL IN THE WEB AMONG LIBRARY USERS OF PATRICIAN COLLEGE STUDENTS: A STUDY <i>G. MEENAMBIKA, S. MAIDHILI &amp; DR. N. THILAGAVATHY</i>	35
10.	AN APPLICATIONS OF DATA WAREHOUSING <i>PADMANJALI.A.HAGARGI</i>	39
11.	A REVIEW OF E-BANKING SERVICES IN INDIAN BANKING INDUSTRY <i>DR. AVNEET KAUR</i>	44
12.	ASSESSMENT OF TEMPERAMENT, EMOTIONAL STABILITY AND SELF-CONFIDENCE AMONG DEAF AND HARD OF HEARING ADOLESCENT STUDENTS IN VELLORE DISTRICT <i>K. ELAMATHI</i>	48
13.	CONVERGENCE OF IFRS <i>SHAILAJA D.KELSHIKAR &amp; DR. MANOJ D SHAH</i>	54
14.	FARMERS' ATTITUDE AND SOCIO ECONOMIC STATUS TOWARDS DRIP IRRIGATION SYSTEM IN COIMBATORE DISTRICT <i>DR. P. MAHESWARI</i>	58
15.	WATERMARKING USING ARNOLD TRANSFORMATION AND PRIVATE KEY <i>HARJOT KAUR &amp; GURINDER SINGH</i>	61
16.	BARRIERS OF USING AND PRACTICING ELECTRONIC SHOPPING (AN EXPLORATORY STUDY OF VIEWS OF A SAMPLE OF CONSUMERS IN IRAQI KURDISTAN REGION ERBIL CITY) <i>ZANA MAJED SADQ, JAMIL ABDULKARIM ABDULLAH &amp; SAID MOHAMMAD KARIM</i>	66
17.	RELATIONSHIP BETWEEN KNOWLEDGE MANAGEMENT PROCESS AND CREATIVITY AMONG FACULTY MEMBERS: A CASE STUDY OF SAMBALPUR UNIVERSITY <i>SWAGATIKA NANDA</i>	71
18.	RATIO ANALYSIS BETWEEN PRISM AND RAMCO CEMENT <i>INNA YADAV</i>	74
19.	DIGITAL MARKETING AND ITS EFFECTS ON CONSUMER DECISION MAKING PROCESS <i>MONIKA BANGARI</i>	81
20.	A STUDY ON EMPLOYEES' MOTIVATION IN A SHIPPING COMPANY <i>P. ANBANANDAN</i>	84
	<b>REQUEST FOR FEEDBACK &amp; DISCLAIMER</b>	87

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# IMPROVING THE EFFECTIVENESS OF e-GOVERNANCE PROJECT IN PUBLIC DISTRIBUTION SYSTEM (PDS) OF GUJARAT

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## ABSTRACT

*E-Government refers to the delivery of national or local government information and services via the internet or other digital means to citizens, business and other stakeholders. Providing integrated citizen centric services like PDS (Public Distribution System) at different level of state and grass root level Government bodies is a key objective of e-Governance initiatives. Effectiveness can be measured in terms of timely response, better service delivery and cost to citizens. This will give empowerment of the user through access to information / service. E-Governance is incomplete unless government services are made available to the citizens in a hassle free and 24x7 manners. When it comes to e-Governance, there is no doubt that Gujarat is one of the top states in the country. With a strong structure of Networks and Applications, and effective execution of policies, Gujarat has emerged as one of the most e-ready states in the country with efficient citizen service delivery as the central focus. The main objective of the research is to derive a set of parameters to ensure e-governance so that, projects are successful, implementable, usable, transparent, time effective, affordable, interpretable and accurate from citizens' point of view and focus also on service delivery and interoperability in various department of the e-Government with specific reference to PDS.*

## KEYWORDS

e-Governance, citizens, PDS, business, stakeholders, government services.

## INTRODUCTION

 *governance is the application of information & communication technologies to transform the efficiency, effectiveness, transparency and accountability of informational & transactional exchanges with in government, between govt. & govt. agencies of National, State, Municipal & Local levels, citizen & businesses, and to empower citizens through access & use of information.*

E-Governance in India has steadily evolved from computerization of Government Departments to initiatives that encapsulate the finer points of Governance, such as citizen centricity, service orientation and transparency. Under the National e-Governance Plan (NeGP), it takes a holistic view of e-Governance initiatives across the country, integrating them into a collective vision, a shared cause. Around this idea, a massive countrywide infrastructure reaching down to the remotest of villages is evolving, and large-scale digitization of records is taking place to enable easy, reliable access over the internet. The ultimate objective is to bring public services like PDS (Public Distribution System) and HMIS (Health Management Information System) closer home to citizens, as articulated in the Vision Statement of NeGP.

*"Make all Government services accessible to the common man in his locality, through common service delivery outlets, and ensure efficiency, transparency, and reliability of such services at affordable costs to realise the basic needs of the common man"*

We as citizens, especially those from the urban area, are aware of the penetration of ICT (Information and Communication Technology) in our daily life. Whether it is withdrawal of cash from bank, purchases, travel, education, medical, pension, insurance, event management, real estate deals, purchase of sharers, marriages or entertainment, use of IT has become a necessity. The private sector firms have made rapid strides in the user-centric applications of the ICT (Information and Communication Technology).

The same cannot be said about the Government sector, especially when it comes to citizen-centric services. A comprehensive definition of electronic governance, given by the Council of Europe covers the use of electronic technologies in three areas of public action – relations between the public authorities and civil society, functioning of the public authorities at all stages of the democratic process (electronic democracy) and the provision of public services (electronic public service). Looking at all the three areas stated, it is commonly believed that the government sector in India has not delivered in terms of e-governance, despite huge budgetary allocation. Registration of property, railway reservation, electricity and water billing, examinations results, birth / death certificates, educational admissions, land records, taxation, domicile certificate, and driving license possibility etc are some of the e-governance projects which have been initiated in the recent past. Some of these are useful to citizens but their impact is low in terms of transparency, ease of use, availability, information dissemination and integration. If we compare similar applications in advanced countries, our CCEG (Citizen Centric E-Governance) projects seem to lag in terms of their impact on the society due to long delivery process.

Spread of ICT (Information Communication Technology) in the rural area is meager as compared to urban area.

Integration across government departments is often not planned properly. The famed single window concept does not work. The citizens still have to visit different citizen centers spread within cities or towns; delivery process is also very long.

As stated earlier, the scope of e-governance is not merely restricted to public services. The citizens expect a lot more from e-governance projects than merely improvement in service delivery in terms of time saving and sophistication. Huge funds are planned to be disbursed every year to citizens under a number of different schemes. PDS (Public Distribution System) is one of the largest projects in India which directly deals with Citizen, for which huge funds are provided to taken care of BPL cardholders / Citizens. Political decisions for launching new schemes, if based on correct data, will genuinely benefit the citizens. E-governance services such as issuing a ration card or BPL card driving still require hiring of middlemen. Citizens expect that they themselves should be able to interact with government for all their needs.

## PDS IN GUJARAT

The State has a long coast-line of about 1600 kms. and is the longest among all States in the country. For the purpose of administration, Gujarat State at present comprises of 33 districts, sub-divided into 294 talukas, having 18618 villages and 242 towns. Gujarat has geographical area of 1.96 lakh sq. kms. and accounts for 6.19 percent of the total area of the country. According to the Population Census 2011, the population of Gujarat, stood at 6.03 crore. The density of Gujarat is 258 persons per sq. km. in 2001. About 42.6 per cent population of Gujarat resides in urban areas. According to the population census 2011, the total numbers of households were 1.21Cr.

PDS in the State functions in two ways: one is Department of Food, Civil Supplies and Consumer Affairs. This looks into allocation of PDS food grains to the Districts, grant of licences for FPS, ration cards and Vigilance & Enforcement. Gujarat State Civil Supplies Corporation (GSCSC) looks into the distribution of allocated food

grain from FCI to the State godowns maintained by GSCSC. Thereafter it is the FPS owner who lifts the entitled stock from the State godowns. After the introduction of fortified atta scheme, Corporation transports the allocated wheat from FCI Godown to specified flour mills. Fortified atta is then lifted by the Corporation from the flour mills. Atta bags are then lifted by the FPS owner from the State Godown as per their respatoant entitlement.

State Government has done pioneer work in the fields of establishing Model Fair Price Shops; supply of fortified 'atta' (wheat flour) instead of wheat to PDS beneficiaries with computerization to envisage scheme of Smart PDS i.e a complete e-Governance solution of PDS.

It is certainly heartening to note that Gujarat Government had started model Fair Price Shops in the State. This innovative concept introduced by the State helps FPS dealers to establish higher level of accountability, besides attracting customers in large numbers. With a view to make FPS more viable its dealers are encouraged to convert their routine FPS into model FPS. FPSs were supported by Gujarat State Civil Supplies Corporation (GSCSC), as a facilitator to avail loan facilities from Nationalized Banks. If FPS operator got a loan of Rs.1.00 lakh, the amount of Rs. 15,000/- was paid by the Govt. as margin money (subsidy). Government of Gujarat encourages suppliers to provide goods to model FPS at reasonable rates. State Government had planned to convert all FPSs into Model FPSs by 31.3.2010. There had been 13,452 model FPSs that out of the total 17,251 FPSs as per 2011 data. Total ration card that time in the State was 123 lakhs. Out of these AAY cards are 8.1 lakh, BPL cards 25.7 lakh and APL cards 89.5 lakh. (APL is further classified into APL-1 and APL-2).

### CITIZEN CENTRIC E-GOVERNANCE APPLICATIONS PDS IN GUJARAT

Gujarat has been one of the frontline State in the implementation of e-governance policies & projects in India. Independent agencies have rated Gujarat as one of the most e-prepared State in the country. State Govt. has adopted innovative / progressive policies for promotion of e-governance in the State. This research has taken case study of PDS (Public Distribution System) related to citizens of different sections of the society which have been acknowledged as successful e-governance projects in Gujarat. It may be mentioned that e-governance projects involve access to confidential and sensitive information and procedures. It is not easy to obtain information.

Public Distribution System (PDS) is undoubtedly a closable food distribution network of this kind in the works. The procurement, storage in godowns is undertaken by FCI (Food Corporation of India) a central government agency, allocation of food grain to the States is Central Government responsibility. Distribution is done by respective state through FPS (Fair Price Shops). Licensed by them identifying BPL- AAY population as per the estimation provided by the Planning Commission. Central Government is proposing to introduce National Food Security law to provide statutory framework, providing food security to one and all. The proposal which is yet to become a law, makes provisions for supply of 25 Kgs. of food grain to every BPL family every month at an average rate of Rs. 3/- per kilogram. But the law will be rendered futile like PDS if it does not come up with an appropriate mechanism for its implementation. Introduction of e-Governance i.e. ICT (Information Communication Technology) has also played a pivotal role for the effective implementation of the system and give more accountability and transparency to the system.

State Government has proposed Smart PDS project and IT solution for better implementation, increasing effectiveness and efficiency of TPDS. The system is in place but has been kept on hold because of Unique Identification Project by the Central Government. The Unique Identification Authority of India (UIDAI) is a body of the Central Government and is responsible for implementing the envisioned Multipurpose National Identity Card or Unique Identification Card (UID Card) project in India.

**TARGET PUBLIC DISTRIBUTION SYSTEM:** The Government of India has introduced a new scheme namely "Targeted Public Distribution System" (TPDS) effective since 1st June-1997. The Government of Gujarat has also implemented this scheme, which was initially divided in two parts APL and BPL, but due to implementation of "Antyodaya Anna Yojana" since July-2001, it is divided into three parts i.e. APL, BPL, AAY.

The State Government has divided beneficiaries in 4 categories as under:

1. Above Poverty Line-2 (APL-2) families, having annual income above one lakh.
2. Above Poverty Line (APL-1) families, having annual income above Rs.11000 and less than one lakh.
3. Below Poverty Line (BPL) families, having annual income of Rs.11000 or less.
4. The poorest of poor families among the BPL families (Antyodaya Anna Yojana).

There are 1,23,19,318 ration cards in the State. The State has divided PDS beneficiaries into APL-2, APL-1, BPL and AAY. Total no. of Ration Cards in the State

AAY	-	8.1 LAKHS
BPL	-	25.7 LAKHS
APL	-	89.4 LAKHS

#### ABOVE POVERTY LINE SCHEME

1. Under Above Poverty Line -1 Scheme, wheat is distributed at the rate of 2.5 kg. per head and 10 kg. Maximum per card per month at the rate of Rs. 7.00 per kg. and rice is distributed at the rate of 2.5 kg. per head and 10 kg. maximum per card per month at the rate of Rs. 10.00 per kg. to the APL card holders.
2. Beneficiaries under Above Poverty Line-2 category are not getting any commodity under TPDS

#### BELOW POVERTY LINE SCHEME

Under this scheme, 1.5 kg. wheat per head and maximum 9 kg. wheat per card per month is distributed at the rate of Rs. 2 per kg. 1 kg. rice per head and maximum 3.5 kg. Rice per card per month is distributed at the rate of Rs. 3 per kg. to the BPL card holders. In addition of above quantity 5 kg. Wheat @ Rs. 5 per kg and 2.5 kg. Rice @ Rs. 6.70 per kg is distributed to the BPL families. Presently this scheme covers 25.7 lakh families of the State.

#### ANTYODAYA ANNA YOJANA

The poorest of poor families are covered under this scheme. As per the target given by Government of India, the State Government has covered 8.1 lakh families. The scheme has been implemented since July-2001. Under this scheme 28 kg wheat was given at the rate of Rs. 2 and rice was distributed 7 kg. @ Rs.3 per card per month from October- 2004 to May-2006. From June-2006 Government of Gujarat has decided to distribute 19 kg. Wheat and 16 kg. Rice i.e. 35 kg. total food grain. The distribution price has been kept the same. However, presently 16.7 kg wheat atta @ Rs. 38 per bag and 16 kg Rice@ Rs. 3 per kg is given to every AAY family.

Free of Cost food grain for attaining Food security for starving and malnourished.

State Government has decided procedure to give food grain free of cost to prevent deaths due to starvation or malnutrition. District Supply Officer and Taluka Mamlatdar are empowered to give 10 quintal food grain per month to actual beneficiary of scheme after self-verification and inspection. Under this scheme following persons are entitled to get food grain free of cost. Person / Family who has no ration card.

1. Poor shelter less persons and hospitalized patients who require food grain
2. Labourers who are unable to work
3. Every such family is eligible for 10-15 kg food grain free of cost per month for six months.

#### MODEL FAIR PRICE SHOPS

Gujarat is the first State in India, which has presented a new concept of Fair Price Shop viz., a model centre, which would be beneficial to the shopkeepers running the FPS and also attract more customers to these shops. At present, the shopkeepers of the FPS get Rs. 1500/- to Rs. 3000/- per month towards commission or even suffer loss depending upon the number of cards attached to the FPS.

To improve the economic viability of the FPS, the Government of Gujarat has permitted the FPSs to sell other items. They can have distributorship or agency of various products, so that they can sell a variety of goods and services, in addition to rationed (essential) commodities. These are now called the model Fair Price Shops (MFPs) and are run on the concept of village malls.

With a view to increasing their income, MFPs are allowed to sell various commodities, like packaged foods, cosmetics, mobile recharge coupons, non-subsidized LPG cylinders, fertilizers, certified seeds, toiletries detergents, etc. Other products include PLI policy, ST bus bookings, STD telephone, pharmaceuticals and bio-diesel.

To increase the clientele and attract more consumers, the MFPS are going through a face-lift in looks as well as attitude which is expected to be consumer-friendly. The MFPSs owners have been given training at Ahmedabad Management Association. An MFPS requires two or three windows, the articles arranged in an attractive manner, facility of sitting for the consumers.

In order to see that, they may be able to effect the said changes, financial linkages have been provided to FPSs. For Upgradation, the State Government ties up with the State Bank of India to advance loans to FPS owners. The State Bank is holding "Loan Mela" in all Districts to promote renovation of MFPSs.

National Institution of Designing (NID), Ahmedabad has developed uniform design and color code for the MFPSs.

Formation of Vigilance Committee at Village level would take stock of the MFPS activities and ensure that there is no diversion of the quota, and at the same time demand, supply and nutrition issues are converged at village level.

With the initiation of such Fair Price Model Centers, a variety of articles, which are useful to the customers, will be made available at these shops and the business of the shopkeeper also will increase, and his profit will also rise. At the same time, the goods, which were used to be diverted and disposed elsewhere from such FPS, would also stop. The scheme has raised the monthly income of the shopkeepers, which is estimated to be Rs. 2,000/- (Rupees Two Thousand) to Rs. 10,000/- (Rupees Ten Thousand).

One more advantage of the said MFPS is that, because of their creation in the villages, the people residing in the rural areas would get such articles and services in their own villages and they would not have to go to the cities for getting the same. As a result, time and money of the people living in the rural areas would be saved. Thus, this mall may also be styled as the 'Rural Mall'.

## ASSESS THE ORGANIZATION

An organization must evaluate its core services, goals and measures of success on a consistent basis in order to ensure employee and customer needs are being met, that decisions are made with overarching strategic goals in mind and that the organization's practices, work and culture are aligned with its mission, vision and values.

**VALUE CHAIN ANALYSIS** is a strategic prioritization tool that you can use to discover how you can create the greatest possible value for your stakeholders.

Value Chain Analysis is a three-step process:

1. Activity Analysis: First, you identify the activities you undertake to deliver your product or service;
2. Value Analysis: Second, for each activity, you think through what you would do to add the greatest value for your customer; and
3. Evaluation and Planning: Thirdly, you evaluate whether it is worth making changes, and then plan for action.

## ACTIVITY FLOW OF PDS FOR FOOD GRAINS

<b>Scheme wise Allocation of food grain</b>	GOI allocates Wheat & Rice under the Targeted Public Distribution System (TPDS) of the scheme Antyodaya, Below Poverty Line (BPL) & Above Poverty Line (APL)
<b>District wise scheme wise allocation by GOG based on no. of ration cards</b>	In view of the allocation made by central Govt., State Govt. carries out Districtwise schemewise allocation based on no. of ration cards
<b>Procurement, Storage and Distribution by GSCSC</b>	State Govt. has assigned task of Procurement, Storage and Distribution of food grain to GSCSC
<b>Payment made in advance as per the rate fixed by the Central Govt.</b>	Corporation make advance payment to Area Manager of the Food Corporation of India (FCI) (Ahmedabad, Vadodara, Rajkot, Bhuj) as per the rate fixed by Central Govt.
<b>Issue of Release Order (RO) and availability of stock at Godowns</b>	District offices received Release Order (RO) from Area Manager and lift the stock by authorized transport contractor for availability of stock at Godowns.
<b>To receive permit</b>	Earlier Taluka mamlatdar of the District issue the permit to Fair Price Shopkeeper as per the number of card with FPS. Now this work is computerised so FPS can generate permit at their own.
<b>Receive the essential stock on submission of permit</b>	Related FPS owner deposit the money through any bank in the bank account fixed by the Corporation and essential commodities stock made available at the FPS through Door Step Delivery Scheme on submission of permit and receipt of the payment made at the Godown. FPS distribute commodities at fixed rate to beneficiary.

## CRITICAL SUCCESS FACTORS - COMPUTERIZATION OF GODOWN ACTIVITY

Computerization of TPDS in Gujarat has been divided into the following three parts:

- creating and updating beneficiary database
- stocks management from Food Corporation of India (FCI) till Fair Price Shop (FPS) and
- sale of commodities at Fair Price Shops.

The stock management from FCI till FPS is related to GSCSC.

This particular business area mainly covers the following transactions:

- Purchase of food grains/ coarse grains from FCI or under MSP
- Getting Release Order (RO) for lifting of grains from FCI godowns.
- Assigning RO to District Godown Inspectors (DGI), Lifting Inspector (LI) and Transport Contractor for lifting of grains from FCI godowns
- Lifting and Transportation of grains from FCI godown to GSCSC godown
- Receipt of grains at GSCSC godowns
- Standardisation of grains received from FCI in 50Kg. bags
- Issue of grains to FPS through door-step delivery transport with on-line delivery challan.

The software development for issue/sale from godowns of GSCSC to FPS has been made on line using GSWAN / VPNoBB connectivity.

To cover the computerisation of lifting from the godowns of FCI to the godowns of GSCSC, programmable Hand Held Terminals (HHTs) are used. The software development and integration of HHT and receipts with the main system is over. E-Payment by FPSs has been introduced.

It has been planned to display information related to the lifting from FCI, issue to FPS and godown stock position on the public domain as soon as the software development work is completed.

**ENSURING DELIVERIES:** Elimination of bogus cards in itself does not guarantee delivery. In the case of Gujarat's TPDS Reform Model, elimination has been achieved with the help of these innovations i.e. Bar Coded Ration Card (BCRC) and Bio-Metric based Bar Coded Coupon System. Their pilots are operational since 2011 in more than 200 FPS' areas across the state in the ratio of one FPS in each Taluka. A BCRC contains 2D Barcodes which store vital information about the card holder including the EPIC of one family member. A photograph and Bio-metric details of at least one adult from the cardholder's family is taken before issuing the BCRC.

## CONCLUSION & RECOMMENDATION

- Information must reach the cardholders well in advance per period (month) regarding arrival and distribution of items through the FPSs,
- There has to be regular distribution of items throughout the period (month),
- There has to be provision for the poor (BPL) households to get the items from the FPSs in installments, there should be a body mechanism for on the spot redressal of different grievances in a prompt manner. For this purpose, there should be an ombudsman to tackle the situation.
- Ensure reduced number of FPSs for vigilance by a single supply Inspector. The State Supply Department is expected to collect information from the 'Vigilance Committee' voluntarily formed by the consumers (households) at the village level regarding the functioning of the PDS at the local level.
- Though computerization is done for public distribution system in state with the help of National Information Center with the object of issuing 'Smart PDs', but, for the present it has been kept on hold, due to the advent of unique identification project.
- In the end to sum up I must say that the present system in Gujarat, with its all handicaps, by and large is giving a very good account of itself, which is probably the best in the country.

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