



International Journal for Innovative Engineering and Management Research

A Peer Reviewed Open Access International Journal

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IJIEMR Transactions, online available on 27th Dec2020. Link

[:http://www.ijiemr.org/downloads.php?vol=Volume-09&issue=ISSUE-12](http://www.ijiemr.org/downloads.php?vol=Volume-09&issue=ISSUE-12)

DOI: 10.48047/IJIEMR/V09/I12/96

Title: **Future of Work in Government Sector: APSRTC**

Volume 09, Issue 12, Pages: 543-550

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Future of Work in Government Sector: APSRTC

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Introduction

ONE HUNDRED YEARS ago, employees were largely viewed as interchangeable cogs in a machine. An employee motivated to learn and grow can be much more valuable than a less interested coworker.

Many future-focused organizations today truly recognize the value of their people and devote considerable resources to creating an environment that unleashes their unique talents. These organizations aim to understand their employees and enhance their skills so they can be successful, both as individuals and as part of a team. They are reimagining the workforce to include people and machines, enterprise employees, and ecosystem talent, expanding the view of where and how work gets done.

Many of the most successful private sector firms are part of this trend, moving toward enlightened talent management. In the past, talent management was primarily about the logistics of personnel administration—tracking hours, pay, benefits, and the like. Then there is the public sector. Perhaps nowhere is the gap between the public sector and the private sector greater than in workforce management. While much of the private sector has transformed over the past two decades, the public sector, for the most part, has not. The reality is, government agencies are increasingly called upon to address society's most complex challenges

using workforce approaches rooted in the distant past. Public sector leaders know better than anyone that major changes are needed.

Change is possible—and beginning to happen.

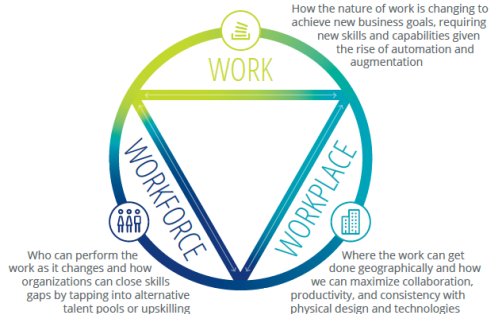
The future of government work is unfolding along three dimensions:

Work. Developments such as advanced automation and cognitive technology will change the way public sector work gets done. These emerging technologies will help employees create more value for constituents and enhance their professional satisfaction.

Workforce. Enabled by technology, government will increasingly make use of more varied work arrangements, accessing more diverse pools of skills and capabilities, both inside and outside the organization.

Workplace. Technology, and new models for employing talent, will redefine the workplace and its organizational supports. These changes will impact physical workspaces (including remote work) along with policies that promote employee well-being and productivity.

Creating value in government: How more options for work, workforce, and workplace expand opportunity



Source: Deloitte analysis.

About APSRTC

The origin of **APSRTC** dates back to June 1932, when it was first established as NSR-RTD (Nizam State Rail & Road Transport Department), a wing of Nizam State Railway in the erstwhile Hyderabad State, with 27 buses and 166 employees. During the past 77 years, it has registered a steady growth from 27 to 14,123 buses with 427 bus stations, 128 Depots and 692 bus shelters.

IT Initiatives of A.P.S.R.T.C.

APSRTC has been a pioneer in implementation I.T. in the state of Andhra Pradesh. Implementation and effective use of IT has helped APSRTC in:-

Providing better Services to Passengers

1. Reduction of passengers' waiting time at the time of ticketing & issue of bus passes.
2. Effective Managerial Controls.
3. Reduction in waiting time of conductors at the counters.
4. Effective Maintenance Management of Vehicles.
5. Faster communication of information.
6. Better inventory control.
7. Standardization and simplification.
8. Effective Transfer Pricing and better Inter-Unit transactions.

Better Service to the Employees in Welfare schemes



Bus Pass Counters



Bus

Counters

Pass

Major Areas of IT Applications

Operations

OLTAS-Online Ticket Accounting System

TIMs - Ticket Issuing Machines

PMS - Personnel Management System

OPRS - Online Passenger Reservation System

PAAS - Pass Automation and Accountal System. Implemented across the state wef. 02.06.2015.

Maintenance :

VEMAS - Vehicle Maintenance & Testing system.

Inventory Management System:

STOINS -Stores Inventory System.

OLIMS - Online Inventory Management System.

Computer Aided Design Systems:

CIVIL- CAD Work Stations.

MIS - Management Information Systems.

Accounts:

PRS - Pay Roll System.

PFAS - PF Accounting System , RM - Cobol -85 with Unix enviroment in House.

FACTIS- Financial Accounting Information System.

Welfare:

SRBS (Staff Retirement Benefit Scheme) FoxBase + under Unix Multiuser environment.

SBT (Staff Benevolent Thrift Fund) SCO - FoxBase + under SCO Unix Multiuser environment.

CCS (Employees' Cooperative Credit & Thrift Society)

HMS (Hospital Management SYSTEMS)

Platforms:

Unix/Linux Operating System , Network systems, DOS/Windows , CAD Work Stations, Computerized Vehicle Testing Equipment

Software Used : COBOL , Pro *C, FOX BASE, FOX PRO, VISUAL BASIC 5/6, ORACLE 7.X, Oracle 8g/10g. Oracle Apps and EBS(R-12)

Online Passenger Reservation System :

Booking facility through web interface is provided at various Reservation Centers that facilitates ticket issue on 'Any-where to Any-where basis'. The Online Passenger Reservation System (OPRS) is implemented at 111 Bus Stations throughout the Corporation with about 3585 services and 2051 ATB Agents (Paper ticket).

- ✓ The following features are provided through OPRS project:
- ✓ Ticket Booking Modes – Agents, Bus Stations Counters, e-Ticketing & B2C portals(Abhibus,Redbus.Paytm.Goibibo)

- ✓ 2050 + agents spread across AP, TS & TN & Orissa, Shirdi, Goa, Mumbai, Pune etc..
- ✓ Various Payment Options like Credit Card, Debit Card and Net Banking for e-Ticketing.
- ✓ Wait Listing Option for all types of buses – First of its kind in STUs across India
- ✓ Paper Less Travel – Passengers can travel showing the ticket SMS instead of carrying Hardcopy. This is an APSRTC initiative to encourage the "GO GREEN" concept.
- ✓ Connecting to the customers through social media like Facebook/Twitter. Have a dedicated team to maintain and reply to customer queries.
- ✓ Live Track and Mobile app.
- ✓ 24X7 Central Complaint cell with phone no 0866-2570005 will answer all the passenger related quarries

Benefits to Passengers from OPRS:

- ✓ Information available on fingertips.
- ✓ Ability to book tickets sitting at home using Credit/Debit Cards/Wallet & Net Banking
- ✓ Option to Purchase Waitlisted Tickets.
- ✓ Can book tickets anywhere to anywhere
- ✓ Ability to pay in cash, credit card, wallet
- ✓ Avail Value Added Services like Accommodation and Dinner On Board ,TTD Darshan etc.,

Corporate Office Networking: A well established LAN is provided in the Corporate Office located in RTC House, Vijayawada and is protected with Anti Virus. A paperless office is the aim of networking. Similarly, this office is connected with major Bus Stations,besides being connected to all the Zonal and Regional offices and Depots through RTCWAN network.

Ticket Issuing Machines (TIMs) : Ticket Issuing Machines (TIM's) were introduced in APSRTC in May 2000. The main aim of introducing TIMs is to issue tickets even after completion of ground booking and to pick up more no. of passengers en-route. Also with a view that the Management can derive information on various fronts like punctuality analysis, travel patterns of the public, economic viability of service, saving of stationery and generate MIS reports from the database. Similarly the crew will be benefited by issuing a single ticket to a group of passengers, avoiding of ticket punching and S.R. closing, instantaneous remittance of reports. At present there are 15,847 TIMs are being utilised.

Pass Automation & Accountal System (PAAS) Project: This Project is developed in three tier architecture using Oracle as back end (database) and Dotnet as front end. 58 types of passes are being issued through 135 centers across the state. Bus passes are issued from 8.00 A.M. to 8.00 P.M. on week days and 9.00 A.M. to 3.00 P.M. on Sundays and Holidays.

Computer Training: All the 4 Zonal Staff Training Colleges and the Training Academy, Gannavaram are provided with full fledged computer systems for imparting training to System supervisors on application software and system administration of operating systems.

- Regional/ Zonal core group supervisors are trained on latest developments and software maintenance.
- Assistant Depot clerks of the depots are trained on the day to day activities to be carried out on the application software and operating system.
- For advanced courses, all the categories who are using computers

are trained at reputed Training Institutes.

VEHICLE TRACKING SYSTEM:

GPS based Vehicle Tracking Equipment will be installed in the buses identified to be covered under the Project. The service/route in which each bus is operated will be assigned to each Vehicle Tracking device.

- The geographical positional coordinates (Latitude and Longitude) are captured by the Vehicle Tracking equipment and transmitted to the Central Data Center at predetermined intervals, through GPRS, for which one SIM card will be installed in each Vehicle Tracking Unit. Based on the route on which the bus travels and its current position, the estimated time of arrival of the bus at all the subsequent stages will be calculated by the application which will be installed in the Data Center. This information will then be sent to the LED/LCD displays concerned, through GPRS for which a SIM card will be installed in the PIS controller of each LED/LCD display Unit. This information is then displayed by the Display Unit.
- The project is covered in all types of buses.

Achievements in Computerization:

- All 128 Depots(100%) have been computerized.
- All Bus Stations computerized for passenger reservations.
- 100% computerization of pay rolls and P. F. accounting for all the employees.
- Complete on-line inventory management in Four Zonal/one Regional Stores.

- Design of bus body designs using CAD workstations.
- Design of Civil engineering infrastructure using CAD and STAAD software packages.
- Computerized MIS for Depots / Divisions/ Regions/ Corporate office
- Computerized vehicle-testing machine in use to check effectiveness of braking, steering, lighting and exhaust systems.
- All Regional Offices and Depots are connected to RTCWAN and provided with broad band connections.
- Computer controlled platform announcement system and electronic display boards at Mahatma Gandhi Bus Station, Hyderabad.
- Computerized On-line Bus Pass System implemented across the state wef 02.06.2015.
- Ticket Issuing Machines (TIMs) 15847 introduced, which includes 20% spares.
- Operating 24X7X365 days tollfree Central Call Centre to address the passenger complaints, grievances etc.,
- Computerised 20 dispensaries and Corporate Hospital at Vidyadharapuram which includes OP module, Pharmacy, Clinical module, Lab, Blood bank, Operation theatre, Radiology and Maternity ward.

E-Procurement:

This project is to be utilized as per the guidelines received from the Govt. of A.P. This project enables APSRTC to procure its requirements like automobile spares, general items through the e-procurement portal that is set up by the GoAP. The personnel involving in e-Procurement activity are notified and they

have to obtain the digital signatures/digital certificates for e-Procurement activity.

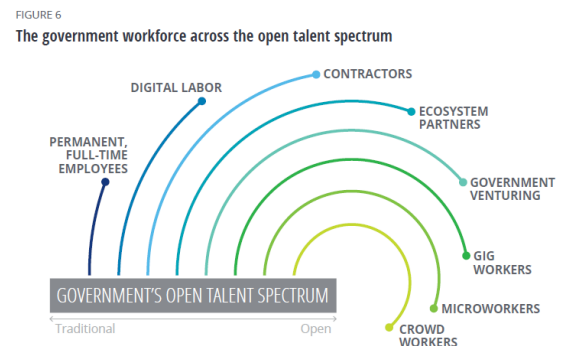
E-Auction:

APSRTC has also proposed for pilot implementation of e-auction through M/s. MSTC a Governmental agency, at two of its Zonal stores' viz. Vizianagaram. An agreement has been entered into. Interface Software is being developed for taking processed information after tendering from the firm's portal.

Workforce

Building a strong workforce requires effective hiring and retention strategies. Being able to identify the best person or right team of individuals for a job is critical,

The future of work in government



As a part, the APSRTC is recruiting Drivers and Conductors, it has a circular to create employment for retaining the employees. Instructions were also issued through Circular cited authorizing all the Regional Managers to dispose the cases of medically unfit Drivers, who opt for alternative employment, in their respective jurisdictions in relaxation of instructions by offering the posts of Conductor Gr.II and Shramik to eligible candidates, in order to mitigate the hardship of medically unfit Drivers and to implement the provisions of Section 47 of the Persons with Disabilities (Equal Opportunities, Protection of Rights and Full Participation) Act 1995.

Enable Learning in The Flow Of Work

In the future, learning and development will play a bigger role in the workplace. This will involve continual learning and reinvention: Employees will periodically refresh their skills when their work demands it. For this to meaningfully occur, the ways in which learning and training happen at work should change. Instead of being a distinct task or activity that workers need to make time for, in the future, learning will happen organically, in the flow of work. It will be baked into everyday work, at moments where that knowledge or skill is needed, through small, actionable nuggets of information or microlearning modules. Larger, more time-intensive learning programs will still be needed to help employees learn an entirely new skill from scratch, but these trainings will be complemented by microlearning on the job, which allows for periodic review and retrieval.

The focus of the training programme in APSRTC is to develop organization commitment, courteous attitude and to promote safe, reliable, regular, punctual and cost effective operations to improve customer satisfaction. Emphasis is also placed in inculcating cost consciousness in key areas of expenditure like fuel, tyres, and spares to achieve financial viability for the Corporation. Finally the aim is to achieve margins for further expansion and financial sustainability.

Types of Training:

To enhance the skills and knowledge of the employee's three types of training methodology are being adopted in APSRTC.

- ❖ **Induction Training:** This type of training will be imparted to new recruits in the categories of Officers, Supervisors and Employees

- ❖ **Refresher Training:** This type of training will be imparted to all employees to refresh their domain knowledge and update themselves.
- ❖ **Re orientation Training:** Whenever the employees are to be promoted for higher posts they will be given necessary inputs to perform their promotional posts with ease and effectiveness.

Training – In-house & External:

Training is imparted to new recruits namely OUTs, AOs, MOs, MSTs, TSTs, Dy.Supt.(Mtls), Security Sub Inspector, Jr.Asst.(F) Jr.Asst (P), Jr.Asst (Mtls), Contract Conductors and Contract Drivers, Mechanics, Artisans, Shramiks and RTC Security Constables etc. and for in-service employees, both through in-house training institutions and also by external agencies i.e. outside Organizations / Departments. The levels of training are as follows:

- ❖ In-house training
- ❖ Through outside Institutions.

In-house Training:

In-house training is conducted at the Corporate level in Transport Academy at Vijayawada and at Zonal level in Zonal Staff Training Colleges. While Transport Academy imparts training to officers and frontline Supervisors, and single categories like Regional Core Group Supervisor and Millwright mechanic etc. The Zonal Staff Training Colleges impart training to lower level Supervisors, mechanical staff, artisans, ministerial staff and the crew. Regular training programmes are also conducted at Depot level for the crew and mechanical staff by the local Officers and officers from OEMs.

Training through External Institutions:

The Officers, Senior Supervisors and staff are deputed for various types of Development Programmes such as MDP,

EDP, SDP etc. and computer related programmes conducted by reputed institutions in the country like CIRT governed by Association of State Road Transport Undertakings, (ASRTU) New Delhi, Administrative Staff College of India, Hyderabad (ASCI), Centre for Organization Development (COD), Hyderabad, Engineering Staff College of India (ESCI), Hyderabad, Indian Institution of Industrial Engineering (IIIE), Navi Mumbai, Federation of A.P. Chambers of Commerce & Industry (FAPCC&I), National Productivity Council (NPC), Andhra Pradesh Productivity Council (APPC), Hyderabad, Quality Circle Forum of India, Hyderabad and Indian Roads & Transport Development Association (IRTDA), Bombay etc. Besides the above, they will be deputed to premier institutes such as Ramakrishna Math, Brahma Kumaris, etc.

Challenge No. 1: Rigid job descriptions

Many government jobs are designed around static job descriptions and skills requirements. This has made it increasingly difficult for government agencies to compete with the private sector for talent—particularly for technology or specialized roles, such as cybersecurity. Going forward, work will need to be continually redesigned (people and machines); the capabilities people will need will include ongoing learning and reinvention.

The response: Simplify job classifications. To address this challenge, a number of state governments and government agencies have embarked on job reclassification efforts. The idea was to fill staffing needs from within the organization. In the past few years, this has enabled Tennessee to retain skilled talent by helping them into new career paths; it has also helped the state identify gaps that they have been able to fill with a training experience designed around new classifications.

Ultimately, the objective should be to create a shift in hiring criteria—from a focus on specific skills and experiences toward hiring for competencies and capabilities. The goal isn't to improve job descriptions, it's to create an adaptive workforce that evolves along with new technologies.

Challenge No. 2: Evolving jobs require new skills

In the world of human-machine collaboration, many employees will need training before they can profit from the opportunities and jobs that new technologies are creating.

The response: Continuous upskilling. As the nature of work changes, reskilling and upskilling can help employees shift to higher-value positions. A similar challenge looms in the government workforce. Bringing these employees forward will require building new skills, looking beyond the tasks they currently perform and focusing on potential capabilities. Greater resources will likely be required.

Challenge No. 3: Generalized training has become less effective

As the pace of change accelerates, the value of training for static job capabilities makes less sense.

The response: Adaptive upskilling for today's jobs with an eye to future needs. Some organizations have been retraining low-skilled workers already on their payrolls to perform more sophisticated tasks that produce greater value. Instead of delivering generalized training, this kind of effort focuses on preparing workers for particular roles that particular parts of the organization need. Using internal trainers or working with external training partners, including higher education partners, government agencies can design and, in some cases, deliver programs that create a more adaptive workforce.

Apprentices Training: As a statutory requirement, the Corporation also imparts regular stipendiary apprentice training to 1314 ITI holders, 58 Diploma holders and 12 Engineering Graduates, 58 Intermediate (Vocational) certificate holders. 50% of stipend amount prescribed by the Government will be reimbursed in respect of Diploma Apprentices, Intermediate Vocational and Engineering Graduates. In respect of ITI, the Central government has recently agreed to reimburse 25% of the stipend amount under National Apprenticeship Promotion Scheme (NAPS) program, a workforce development initiative, allows private sector employers to design the training they need for their workforces. Because the organizations' skill needs are known in advance, the program's success rate— measured as the percentage of individuals trained who then find jobs— is high.

Challenge No. 4: Traditional jobs are disappearing

Technology will eliminate or reduce many current roles in government.

The response: Reskill workers into new roles. For jobs that could be replaced by technology, government organizations can move those individuals into higher-value positions by examining their skills and then identifying other roles that require the same skill sets.

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