## Chapter 24

## Online Scholarship Management System

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#### I) OVERVIEW

The main objective of the project is to improve transparency of the pre-matric and post-matric scholarships management system for students of minority community.

- To develop an online 24X7 application submission system, so as to facilitate submission of application from anywhere.
- To develop an automatic, objective rule based transparent scholarship and fee reimbursement calculation system.
- To develop efficient, effective, accurate, speedy scholarship disbursement system avoiding delays in disbursement, errors, scams, subjectivity in awarding scholarships, redundancy etc.,
- To enable students to track status of their application online.
- To publish the details of beneficiaries online.
- To enable the authorities at different levels to access the data online for verification and other purposes.

Earlier there was lot of problem in reconciliation of amount sent to the Colleges and the students through the banks in the manual system. Therefore we obtained limited connectivity between (NIC) Server and Banks' Server so that online proceedings are being sent to the banks and in turn the banks transfer the amount to the concerned student's account online and send the file back to NIC server and as soon as the file is received, automatically the amounts sent by the banks along with date appears in the appropriate box before the name of the student. This has made the reconciliation process very easy.

Earlier hundreds of students were making enquiry on daily basis in the District Offices and even Head Office regarding sanction and release of their scholarship and tuition fee and our Officers had to struggle to give them satisfactory reply. This problem was overcome by Online system of Post matric scholarships for Minority Students by giving them facility of tracking the status of their applications online by just filling their token number on our website – www.apsmfc.com, they can know the status of their application.

Earlier students were not able to write their correct course and University to which their College was affiliated. To overcome this problem we have prepared College Masters so that the students after selecting the University they get the drop down list of Colleges affiliated to the University and by selecting the College, they get the list of Courses available and they have to select their own course in which they are studying. This has made the filling up of the scholarship application very simple and user friendly.

#### II) RESULT INDICATORS

#### 1. Key Performance

a. Stakeholder services and benefits achieved through ICT interventions

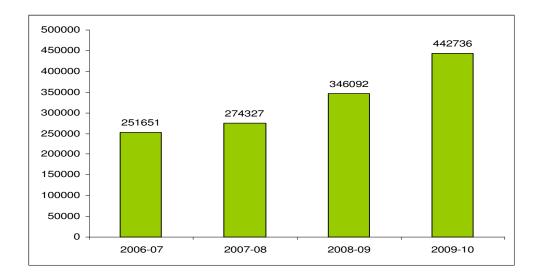
The system is highly scalable and capable of catering to thousands of students concurrently. The system scaled up to the load and served a few lakh students online with respect to accepting the applications (write operations). The system is tuned to serve over one lakh transactions per day at present. This configuration is good enough to serve the Minority student community. The Data centre of NIC which has high scalability, security and reliability is being used to host the application. The Storage Area Network is capable of storing several lakhs of student records online for any required duration of time (years).

The Students who are beneficiary of this scheme and major stake holder are able to submit their application online and track the sanction and release of fees and scholarship to them. If there in any deficiency their application i.e., also shown online with their Token No. and hence they are able to rectify defects pointed out, so that their Scholarships and Fees Reimbursement is sanctioned.

The next stakeholder is the College where the students are enrolled and studied. The Colleges have been given link to the software so that they can download sanction proceedings and to know about how many students have been sanctioned Scholarship and Fee Reimbursement and how much.

More over SMS Messages are also being sent to Students about sanction of Reimbursement of Fee and Scholarship through our online messaging system.

## b. % of services covered as ICT interventions



## c. Geographical Spread in the State achieved

All the students of Minority Community belonging to all the (23) districts of Andhra Pradesh and students of Andhra Pradesh studying in National Institutes like IITs, NIITs etc. throughout the country. **Therefore geographical reach is all India.** 

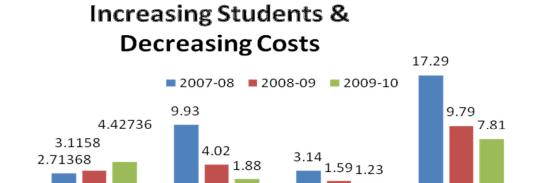
## 2. Efficiency improvement

a. Time saving / improvements in the delivering the above set of services.

Through online scholarship system for minorities every year lakhs of students are benefited. They are getting their scholarship in their own bank accounts and their fees is transferred in their College account and the Colleges have been directed by the Government not to collect advance fees from the students at the time of admission as the Government has already given guarantee to reimburse the fees for all the eligible students covered under this scheme. As the outcome user friendly online scholarship system lakhs of Minority Students are pursuing higher and professional studies, the dropout among Minority students have been reduced to large extent.

- The total administrative expenditure per student decreased drastically.
- Number of student beneficiaries increased by nearly 100% in three years as the benefits are reaching the target group transparently and efficiently.
- Duplicate claims got eliminated in the first year of automation itself.
- Processing time reduced from several months to a few days.
- Reconciliation time reduced from several months to one day.

b. Cost savings for delivering above set of services.



Postage

Stationery

TA/DA

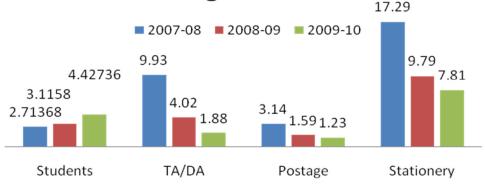
c. Cost Saving for availing these services

Students



d. Cost Saving for availing these services

## Increasing Students & Decreasing Costs



#### III) ENABLER INDICATORS

#### 1. Processes

- a. Major front end process changes and implemented
- Students need not travel to state/district authorities to apply. No need for department to enter the data again.
- Saves time of staff in receiving and segregating the applications medium wise and institution wise, class wise etc
- Saves time of officials in processing the applications like
- Filtering the duplicates,
- Validations,
- Performing the rule based calculations of scholarships & fees to be reimbursed etc
- Saves time of officials in consolidation of scholarships and fees institution wise, class wise etc.
- Saves time of officials in identifying whether an application is renewal or fresh.

## b. Major back end process changes and implemented

The system is unique and innovative in the country by harnessing Information and Communication Technology in the following areas.

**Electronic Payment**: Never before in the country any student has been delivered the scholarship amount directly in his bank account in a transparent manner electronically and securely. By establishing a unique disbursement gateway which interacts with the

bank payment gateway, the scholarship amount is being Credited automatically to the accounts of the students.

**Automatic Reconciliation**: With unique automated feed-back system established with the banks, the reconciliation is happening within 24 hours. Which hitherto used to take several months.

Efficiency Transparency: The entire workflow has been made 100% transparent, which eliminated all disputes. The workflow status gets updated automatically and corresponding reports are published online. Nearly Twenty four processes in the manual system were reduced to six processes. There is many fold increment in the efficiency due to automation of the whole processes.

**Accuracy :** The automated rule engine is incorporated in the software to make all the calculations 100% automatic and accurate. Very complicated course specific fee structures on one hand and the eligibility rules on the other hand are incorporated to prepare the rule engine to make the automatic calculations and achieve 100% accuracy.

**Empowerment**: By making students to apply online, every eligible student is empowered to submit his/her application directly to the system.

**Ease of Use:** Each key stakeholder has a single and simple interface to operate the system. Thus usability is maximum and simple.

**Authentication :** Very reliable and less time consuming online processes introduced to ensure authenticity of the content.

**Verification :** A very unique database referential integrity technique has been successfully applied to ensure verification of the credentials of students. This has resulted in eliminating several bogus records.

**Errors Elimination :** By collecting and creating the master data of thousands of educational institutes and course details and similarly standardizing the inputs based on the previous applications, master databases have been created which has resulted in eliminating the scope of data entry and associated mistakes to a very large extent.

**Timely SMS Alert:** As and when the student tuition fee amount is credited in to the educational institute's bank account, automatically an sms alert goes to the student's mobile number. So that educational institute cannot harass students regarding tuition fee again in view of the sms alerting system.

Therefore this innovation has made the whole system transparent, user friendly and innovative.

#### 2. People and Resources

## a. Project management & Monitoring – Full time team in place

A team has been formed to monitor the core project and suggest suitable measures for its improvement time to time. This team consists of Programmers and Officers of A.P.State Minorities Finance Corporation who are working day and night for the betterment and monitoring of the project

## b. Achievements of training of internal & external members on the new system

Regular trainings, Seminars and Workshops are being organized for the Programmers and the staff members who are working on this system and whenever there is any change in any application, special training programmes are also organized.

## c. Change management strategy defined and implemented

Due to change in the system from the manual system to the online system the whole strategy and mind set has been changed and in place of non-computer known Jr.Assistants and Sr.Assistants, Computer knowing personnel are placed who are working for the Online Scholarship Management System day and night. It has also changed the working of the whole office and all the data is being collected and stored in the digital form and it has become very easy for the Officers to review the progress of the work at every stage. The reports are being generated as per requirement.

## d. Leadership support (Political, Bureaucratic) and its visibility

The Online scholarship system has been accepted by the Officers as well as Political Leaders across the Party affiliation, due to its transparency and user friendliness. Due to online system the number of applications have increased year by year and it is getting full support from the Stakeholders, its beneficiaries and from the Political bosses as well as Bureaucratic bosses.

# e. Financial Model (Funding pattern , Business model PPP etc) defined and implemented

The Online Scholarship Management system is applied for scholarship and fee reimbursement schemes of Government of India as well as State Government of Andhra Pradesh. For the State Government Scholarship scheme, the funding is 100% from Government of Andhra Pradesh and for the Scholarship scheme of Government of India(GOI) i.e., for the Post matric and Merit-cum-Means Scholarships funding is 100% from GOI and for Pre matric GOI scholarship scheme, 75% funding is by GOI and balance 25% is from Govt. of A.P.

## 3. Technology

a. Disaster Recovery & business continuity plan defined & implemented

The whole scholarships system for minorities is being implemented through National Informatic Centre (NIC) and they are taking all the care for the disaster recovery.

The disaster recovery and business continuity plan has already prepared and being implemented.

## b. Technological solution cost effective and maintenance over time

As discussed earlier the online scholarship management system for minorities is very cost effective and very less cost is required for its maintenance. Earlier huge man power was required for dealing lakhs of applications of the minority students for scholarships whereas through online scholarship system, the man power is reduced considerably and it has become very efficient and cost effective and user friendly and it is being maintained.

c. Security and confidentiality standards defined and implemented Yes

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