

Visvesvaraya National Institute of Technology, Nagpur

Academic Information Management System



FACTS

Company

**VISVESVARAYA NATIONAL
INSTITUTE OF TECHNOLOGY**

Industry

Academics

Geography

India

THE COMPANY

Visvesvaraya National Institute of Technology, Nagpur is one of the thirty National Institutes of Technology in the country. The Govt. of India conferred on the Institute, the Deemed to be University status (under University Grants Commission Act, 1956 (3 of 1956)) with effect from 26th June 2002. Subsequently, the Central Govt. by Act of Parliament (National Institutes of Technology Act, 2007 (29 of 2007)) declared VNIT Nagpur as an Institute of National Importance along with all other NITs. The Act was brought into force from 15th August 2007.

Earlier, the Institute was known as Visvesvaraya Regional College of Engineering (VRCE). It was established in the year 1960 under the scheme sponsored by Govt. of India and Govt. of Maharashtra. The college was started in June 1960 by amalgamating the State Govt. Engineering College functioning at Nagpur since July 1956. In the meeting held in October 1962, the Governing Board of the College resolved to name it after the eminent engineer, planner, and statesman of the country Sir M.Visvesvaraya.

Every NIT, engineering college or a University, are complete enterprises in their own capacity. Their complexity of the working, huge infrastructure & manpower, the educational quality all are at stake when it comes to the performance monitoring & overall management.

Customer's current working Scenario & its challenges

In order to meet these challenges, VNIT, Nagpur, like any other institute striving hard to come to terms and has tried using few in-house software for their daily routine work including admission process, attendance, marks allotment to students, results generation etc.

Till now all the systems were either desktop applications or LAN based which did not serve any purpose for:-

- Technology constraints with VB.Net with manual patch updation system on every system
- Student's progress, attendance was never available to their parents unless contacted by the authorities for any eventuality.
- The error prone manual system of excel based marks allotment and uploading to system by MIS user
- Branch wise result declaration due to manual processing system, resulting in dissatisfaction among students and parents
- Manual Attendance system
- Manual exam forms filling system
- Manual admission form filling system

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Due to these issues, there were frequent instances of delayed attendance updation, Marks uploading in the system, resulting in delayed results declaration much to the dissatisfaction of the students and management.

In the wake of recent changes in the HRD ministry which has decided now to have a completely credit based system for all NITs and Engineering colleges, the VNIT management decided to scrap the ongoing manual + LAN based system and to go for a completely web based system to be customized as per their requirement & upcoming credit based evaluation.

SOLUTION

After tendering process, Micropro Software Solutions Pvt. Ltd., Nagpur was selected to provide a completely web based solution of Academic Information Management System with the latest technology choice of the customer. After a detailed study with the VNIT team headed by Prof. Deshpande Following are the salient features of the Solution provided:-

- A centralized web based application on Java + Oracle Platform
- This is a 3 tier system
- In first phase only 2 modules were to be developed:-
- Student Registration & Admission
- Examination & Results
- Online student registration for exam, result updation & Attendance
- Online approval of Advisory faculty for course selected by students
- Separate Student's login, HOD Login Faculty Login, Parent Login
- Portal for student / Parents
- Automated result processing for all branches
- Online reporting for any query

TECHNOLOGY USED

- Front End: - ADF Rich Client Open Source Version
- Back End: - Oracle 10g onwards
- Middle ware: - Glassfish

The system was made live after almost 6 months of relentless efforts of Development and Implementation and the online results of the students have been generated in this session much to the satisfaction and expectation of the management, students and parents.