

Digital Learning India Award for the ICT Enabled University of the Year

Name of project: Gujarat Technological University
Implementer

Other's

Name of the University: **Gujarat Technological University**

Name of the University

Address: **L.D College of Engineering Campus,
Navarangpura,**

Address

City **Ahmedabad**

City

State **Gujarat**

State

Country: India

Country

Please Answer the following questions:

- (1) Describe the nominated programme/project description. Whom does it serve? What needs and challenges does it address? (max. 500 words)**

Gujarat Common Entrance Test, (GCET) 2009 is the nominated program for the Award

GCET 2009 is the Entrance Test conducted by Gujarat Technological University (GTU) for admissions to Masters of Business Administration (MBA) and Masters of Computer Application (MCA) courses in all affiliated Institutions throughout Gujarat.

This project serves the needs of the University in automating the examination delivery process and ensuring quicker turn around time for creating content, publishing question papers, evaluating candidate responses, and announcing results. This project also provides a fully technology based solution for student counseling thru online allocation of college seats

This project also serves the need of candidates seeking admission through the GCET entrance exam, by providing a unique student experience in test taking, by ensuring a transparent testing & evaluation process. The online counseling saves the candidates (and in many cases their parents) the hassle of travel to a central city for seat allocation.

The challenges addressed by implementing the online process of examinations & counseling are:

- Transparent exam process
- Security of exam delivery
- Strict impersonation & malpractice checks
- Creation of large question banks and randomization of question paper for each of the batches
- Instantaneous, accurate & automatic evaluation, without human intervention
- Immediate sharing of scores to candidates

- Scalable, transparent & efficient mechanism for counseling & seat allocation – eliminating the need for travel.

This was the first time in India that any State-level (Government) Entrance Exam was conducted online. The Exams were conducted from 1st July 2009 to 5th July 2009, at 37 Online Test Centers across 21 Institutions in 11 cities across Gujarat. A total of 22,797 candidates took this 2 hour Online Test, in three batches every day. The process of announcing the merit list is underway and the online counseling is due to start by 22 July

MeritTrac Services, one of India's leading assessment companies is the assessment partner. MeritTrac managed the entire technology & delivery process of the exam.

(2) **How is the programme/project innovative?** (max. 500 words)

The entire project used cutting-edge technology and offered innovative solutions to address the requirements, in the following areas:

Application Processing:

The candidate application system, enabling the students to apply for the GCET exam, was available online. This was hosted on a level-3 data centre, ensuring very high levels of uptime & concurrency. The candidate could complete the online form at his/her convenience, saving the updated information at any time, and could submit the online application, after verifying that all details were entered correctly. The candidates could also upload their photographs into the application system. After submission of application, real-time update of status was displayed to the candidates. Post candidate scheduling for the entrance exam, the candidates were able to download the Admit cards, from any PC with internet access.

Exam Delivery

The entrance exam was conducted online deploying 2100 terminals in 37 online test centers setup at 21 Institutions across 11 cities in Gujarat. The entrance test was conducted in 3 batches every day, for 5 days, and 22,797 candidates took this test across Gujarat. The test was conducted using the terminals in the college computer labs. Around 80+ servers were deployed centrally for this project and the entire set-up was pre-certified by an IT team

A massive content creation exercise was undertaken so that every batch gets a different set of questions, but with the same levels of difficulty. Over 4,000 items were generated – each with a topic/sub-topic and difficulty level tags. The Question papers for each of the batches was randomly generated and authored into an online system. The Question packs resided at the high-security CoE office located in the GTU premises. These question paper packs were securely transmitted to each of the test centers, every day, just before the scheduled exam time.

The Controller of Examinations sitting in GTU premises could see real time, the registration and progress of examinations at individual test centers thru an online dashboard with real-time information from each of the centers.

Instantaneous evaluation of candidate responses ensured that the individual candidate scores were computed and displayed to the candidate on test completion. This feature ensured complete transparency of the examination process and enhanced the candidate's belief in the admission process of the University.

Online Counseling

For the first time, the counseling for all professional courses in the state right from diploma to Post Graduate was being conducted online. All the institutions and the courses being offered are uploaded online and students log-in in the system to make their choices of courses- institutions. This is a complex, dynamic process which involves hundreds of choices and priorities that the students need to make online. The system then runs a batch process that sifts through each of the priorities of the students, and allocates seats based on their academic & GCET scores.

This software was developed for the GTU & Directorate of Technical Education, Government of Gujarat by NIC and was deployed as a candidate portal. - www.gujacpc.nic.in

(3) What are the achievements of the programme/project? (max. 500 words)

Candidates can access the information and complete the online application form, from any computer with internet access and browser. This ensured easy access to candidates. Every candidate could then download their respective “Admit cards or Hall Tickets” which had the details of their name, photo and venue and reporting time. At the time of registration there were verification checks for impersonation and records of all data were available instantaneously.

Candidates were able to take the online test at the 37 online test centers, and the state-of-the-art infrastructure at the test centers ensured a pleasant and conducive environment to the candidates for taking the test.

Benefits to candidates

- An application system where students could apply online from anywhere based on their convenience.
- Easily downloadable “Admit Cards” which ensured that they need not wait for the normal post to reach them.
- Better test-taking environment at the test venue since these were AC labs for the candidates
- Knowing their Score as soon as they submit their exam and walking out with the Printed Score Card
- Online counseling for seat allocation is very transparent & system driven

Benefits for GTU

- A system where daily reports of Application form status, location-wise made available.
- A system which ensured complete security of the Question papers.
- A system where candidates impersonation checks were carried out very well
- A real time reporting system through which the CoE gets to know the status of registration, and the exam takers at each location.
- End of the day analysis of scores
- A clean, transparent and malpractice-free examination
- Logistically free transparent online counseling process.

At the time of submitting this, the entire process of the online Entrance Exam was completed online. The Exams were conducted from 1st July 2009 to 5th July 2009, at 37 Online Test Centers across 21 Institutions in 11 cities across Gujarat. A total of 22,797 candidates took this 2 hour Online Test, in three batches every day.

The feedback from the students has been excellent. Here is one such mail received from a candidate:

Student Voice:

From: kathak mehta [<mailto:kathak.mehtaa@gmail.com>]

Sent: 08 July 2009 13:45

To: gcet@gtu.ac.in

Subject: gcet'09

Like most of the others, when I heard about GCET going online, I was a bit skeptical and apprehensive. But the apprehensiveness soon transformed to contentment as i took the test on

1st of July. The whole online system and the functioning of GCET '09 does claims a special mention. The entire system from registering at the test centre till we got the score cards was indeed commendable. The functioning was user-friendly and smooth. The online test system was devised in the most considerate way, with one question appearing on the screen at a time, facility for going back and forth and also an option to mark a particular question for review later, along with question numbers catalogued on a side panel whereby the candidate can jump to any question as required. A meticulously developed and a well maintained system for online aptitude examination. Kudos!

Kathak.

- (4) **How can the programme serve as a model that can be replicated or adapted by other educational institutes?** (*max. 500 words*)

This system is a highly replicable model that can be used by all Universities and Educational Institutions across India, where candidates would apply for appearing in an entrance exam. Of the 374 Universities across India, only a handful of large Entrance exams are conducted online, that too by private universities.

The online examination delivery engine and the online authoring tool were designed for easy setup and require minimum configuring. This ensures that the project is a highly replicable & scalable model.

The entire facilities & infrastructure was provided by the University and such kind of infrastructure is not uncommon across other Universities as well.

We believe that this model can be replicated by all other entrance exams in the country and we have set a good precedence on how it can be done.

- (5) Please furnish any other project related useful information about the nominated programme project that you have not been able to provide in your earlier responses.

This project has received wide media attention and attaching some links to press articles:

<http://timesofindia.indiatimes.com/Cities/Ahmedabad/GCET-goes-online-/articleshow/4727031.cms>

<http://timesofindia.indiatimes.com/Ahmedabad/23000-students-set-to-take-online-GCET/articleshow/4721917.cms>

http://www.dnaindia.com/academy/report_you-may-get-a-second-shot-at-gcet-in-the-same-year_1270971