

## **BEST PRACTICE – I**

### **1. Title of the practice: IN-CAMPUS STUDENT ADMISSION PROCESS**

#### **2. The context that required the initiation of the practice (100 – 120 words)**

In TamilNadu, for all Colleges the BE/BTech, ME/Mtech, MCA and MBA admissions are done through common single window online counseling in various rounds according to their rank based on the norms specified for admission. At the end of each round of online counseling the respective colleges can download the list of candidates allotted to the college containing all the details of the candidates. The counseling authority also specify the date before which the candidates have to get admitted the respective colleges. Every academic year more than 1000 students (approximately) are to be admitted to various programmes offered by the college.

#### **3. Objectives of the practice (50 – 60 words)**

The objectives of best practice are

1. To implement a systematic in – campus student admission process for completion of academic enrolment in a shorter duration of time.
2. To provide an initial exposure for the newly admitted students on smooth transition from school to college life to meet out the expectations of various stake holders by In-campus top level authorities.

#### **4. The Practice (250 – 300 words)**

In PSG College of Technology, the admission schedule containing admission details (branch, date & time of admission and College & Hostel fee to be paid at the time admission, Commencement of orientation programme etc.) is uploaded in the website for each round of allotment. The admission process for the allotted students is scheduled on Friday, Saturday and Sunday, so that it is convenient for the working parents and also for the college with no hindrance to the regular work.

The Students union of the College helps the college authorities in the admission process. The students report for admission in batches. After verification of all records, the students are provided with a dummy Roll number and a temporary Identity card and an admission slip containing the name of student, branch, roll number and the fee amount to be paid to the college. The Principal gives final approval of admission and the candidate pays the college fee in the accounts office. For the convenience of the candidates and parents, the hostel admission process is also completed in the college premises including room allotment and the payment of hostel fee.

For BSc & MSc Science Programmes the admission is done by the college. Applications are invited from the students. The applications are scrutinized and the list of shortlisted candidates for counseling/ written test is uploaded in the college website. For BSc (Applied Science) and MSc (Fashion Design and Merchandising) the admission is done through direct counseling based on merit. For BSc (Computer System and Design) and Five-Year integrated MSc Programmes shortlisted candidates are called for an online written test based on the 12<sup>th</sup> standard Mathematics and Physics

marks and the written test mark. The entire admission process is based on communal reservation as per state Government guidelines.

**5. Obstacles faced if any and strategies adopted to overcome them (150 – 200 words)**

The obstacles faced in the in-campus admission process are

1. Completion of admission process for the increasing number of students getting admitted every academic year effectively in a shorter duration of time.
2. Satisfaction of expectations of the stakeholders during the admission process.

The strategies adopted to overcome are

1. Transparency in the admission procedures.
2. Effective use of college website and other communication methods to coordinate and rationalize various phases of admission procedures.
3. Efficient use of student union, college authorities, student volunteers and college resources to guide students / parents during the admission process.

**6. Impact of the practice (100 – 120 words)**

The following are the impact(s) of this best practice.

1. In – campus admission of more than 1000 students per academic year without any misperception and/or delay in 3 days of time.
2. Well-organized usage of college resources for provision of conducive environment to students and parents for successful completion of the admission process.
3. Exposure on opportunities available for students to improve their knowledge and overall personalities by eminent speakers.

**7. Resources required**

1. One high-end server for hosting the college website.
2. A local area network (LAN).
3. UPS system.
4. A skilled system administrator.
5. A resourceful experienced coordinator.

**8. About the Institution**

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|------|------------------------------------|---|
| i.   | Name of the Institution            | : PSG College of Technology               |
| ii.  | Year of Accreditation              | : 2019                                    |
| iii. | Address                            | : Peelamedu, Coimbatore                   |
| iv.  | Grade awarded by NAAC              | : A                                       |
| v.   | E-Mail                             | : principal@psgtech.ac.in                 |
| vi.  | Contact person for further details | : Principal,<br>PSG College of Technology |
| vii. | Website                            | : www.psgtech.edu                         |

## **BEST PRACTICE II**

### **1. Title of the Practice**

#### **UP GRADATION OF NETWORKING INFRASTRUCTURE SOLUTIONS**

### **2. The Context**

Everyone expects the right information to be available at the right time, at the right place. As an educational institution grows this becomes a huge challenge as they often must compromise on the time factor. In this competitive world, students and staff alike need to keep their knowledge updated by accessing academic websites and watching video lectures on latest state of the art technology. Thus, considerable bandwidth is required to satisfy their needs. Almost all the departments in the Institution are conducting periodic workshops and conferences which require an access to the various websites and the experts in a timely manner. Hence, this mandates the necessity of Internet connectivity with zero downtime. Previously, a total of 12 websites and 10 Intranet sites were maintained in a single data centre. The single data centre was made available to all the departments and centers by having a single connection. Students and staff could access the intranet and internet only through the networked desktops available at the department/laboratory. Students have to follow protocols to express their grievances to the concerned authorities and in many instances the status of action taken may not be known.

### **3. Objectives of the Practice**

1. To upgrade the network architecture to provide the most scalable and resilient solution
2. To increase the bandwidth for the students and staff to access and download various materials from different websites for their academic and research purpose.
3. To provide a grievance redressal system for the students.
4. Web site development and maintenance with redundant connectivity.

### **4. The Practice**

1. A new data centre with the following facilities has been created: Cisco Prime Infrastructure with Network management solution has been implemented with Virtualization and SAN storage. Virtual Switching System has been implemented with the old and the new Data centre in order to have automatic Disaster Recovery (DR). Thus a 3 tier (Core, Distribution and Access) network architecture has been implemented.
2. Wi-Fi has been enabled for the entire Campus with a Wireless controller, Indoor and outdoor access points, including L3 distribution switches with high speed internet connection. This facility will allow the students and faculty to access the internet at any time and any place round the clock.
3. Bandwidth has been increased in the following manner based on the needs of the user:

48 Mbps in 2013  
215 Mbps in 2014  
280 Mbps in 2017  
1230 Mbps in 2018  
1300 Mbps in 2019  
1400 Mbps in 2020

4. A Grievance Redressal Portal is in place to receive and act on grievances, reported by the faculty, students and staff.

## **5 Obstacles faced**

A huge investment with an approximate cost of 1.6 crores was required to implement the new Data Centre with networking facility. Management of PSG Institutions has sanctioned the fund keeping in mind, the growth and welfare of the student community. To implement this state of the art facility, experts in various domains with rich experience were required. Hence, a team of experts in various fields have been formed and by using their expertise and contribution, a fully fledged Data Centre with a sophisticated network facility has been created.

## **6 Impact of the practice**

1. Faculty can set up assessments and enter assignment marks through their mobiles.
2. Students can leverage the World Wide Web to explore new ideas, prepare for projects/Seminars, and submit assignments round the clock.
3. IP based cameras setup throughout the campus and hostels make the campus environment more safe and secure as well as ensuring discipline.
4. The Grievance Redressal Portal in place enables the authorities to take timely actions on any issue raised by the students and hence avail services in a more effective manner.
5. Cisco Prime Infrastructure provides a managed service that gives continuous operation, support, security and flexibility.
6. Improvement in core services results in greater profitability, by moving away from daily management of IT infrastructure and problem solving.
7. Risk Management: Data is safe as it might reside in two data centres( data duplication)
8. Redundancy: The Data centres provide redundant solutions for power, cooling, bandwidth, networking & Compute Nodes in Virtual Clusters.
9. WAN Bandwidth: 1 Gbps provided by NKN National Knowledge Network is the Primary ISP for the campus network footprint for internet services and a Secondary Backup is provided through Tata/Airtel service providers, which furnishes the Campus Networks with high Availability on Internet Connectivity.

10. LAN Network: LAN Network Compromises of 20G LAN Uplinks from Redundant Core Switches which is deployed in VSS (Virtual Fabric mode) providing seamless connectivity and hitless failover for the users.

## **7 Resources Required**

- i. 42U Netrack- Network and Server Rack
- ii. Dell EMC Power Edge 740 512 Gb Ram and 3 Tb Hdd
- iii. Dell EMC Power Edge 640 128 Gb Ram and 3 Tb Hdd
- iv. VMware and Venter Standard with Production Support (Academic Version) 8 core License
- v. Dell EMC Unity 300 Storage -20 Tb Hdd
- vi. Server Monitoring and Network Monitoring Software (Zabbix)
- vii. Cisco Prime and Monitoring Device
- viii. Cisco 6880x Core Switch
- ix. Cisco 3650 Distribution Switch
- x. Cisco 2960 Access Switch

## **8. About the Institution**

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- ii. Year of Accreditation : 2019
- iii. Address : Peelamedu, Coimbatore
- iv. Grade awarded by NAAC : A
- v. E-Mail : principal@psgtech.ac.in
- vi. Contact person for further details : Principal, PSG College of Technology