

**Dayalbagh Educational Institute  
(DEEMED TO BE UNIVERSITY)  
Dayalbagh, Agra**

Tender No. DEI/Edu-Sc.of-Edu/Jeyam/2019-20/TDR-26

Date: **26-02-2020**

**Single Tender Inquiry**

**Subject: Purchase of Lecture Capture system.**

The request has been received from **Dr. Jeyam**, Faculty of Education, Dayalbagh Educational Institute to purchase the above item(s) from **M/s Impartus Innovations Pvt. Ltd., 884,6<sup>th</sup> and 7<sup>th</sup> Main, 22<sup>nd</sup> Cross, Sector-7 HSR Layout, Bengaluru, Karnataka- 560102, India** on proprietary basis. The Proposal Submitted **M/s Impartus Innovations Pvt. Ltd., 884,6<sup>th</sup> and 7<sup>th</sup> Main, 22<sup>nd</sup> Cross, Sector-7 HSR Layout, Bengaluru, Karnataka- 560102, India**, claiming that it is proprietary item, PAC certificate are attached.

The above documents are being uploaded for open information to submit objections, comments, if any, from any manufacturer regarding proprietary nature of the equipment/ item within 15 Days from the date of issue of this notice giving reference **Tender No. DEI/Edu-Sc.of-Edu/Jeyam/2019-20/TDR-26 dated 26-02-2020**. The necessary documents may be submitted to us in support of your intent/comments/objections for our consideration. The intent/comments/objections should be received by office of Registrar, Dayalbagh Educational Institute, Dayalbagh, Agra (e-mail: [registrar@dei.ac.in](mailto:registrar@dei.ac.in)) on or before **12-03-2020** up to 12.30 pm failing which it will be presumed that no other vender has any comments to offer, and the case will be decided on the merit.

REGISTRAR

Encl: As above



24<sup>th</sup> February 2020

To,  
**Dayalbagh Educational Institute (Deemed University)**  
Dayalbagh, Agra  
Uttar Pradesh - 282005.

**PROPRIETARY CERTIFICATE**

The intellectual and technical information contained herein are proprietary to impartus Innovations Pvt Ltd (Impartus). Dissemination of this information or reproduction of this material is strictly forbidden unless prior written permission is obtained from Impartus.

To the best of our knowledge, there is no company in India, other than Impartus which is providing automated Lecture Capture with automated audio-video quality processing and integrated with a Learning Management System on a turnkey basis. Impartus Lecture Capture is a proprietary innovation by Impartus and there is no other company providing Lecture Capture with its comprehensive features like multi view recording and on-demand viewing as well as 2-way real time live streaming.

Impartus Lecture Capture is a turnkey solution which is a combination of Hardware, Software, System Integration and Service, and has been developed in-house by Impartus and is sold exclusively by Impartus as a packaged solution to higher education institutes.

It is currently being used by 180+ leading higher education institutes including IIM Bangalore, IIT Bangalore, Manipal Group, BML Munjal University, Shiv Nadar School, AAU Anand, IAP Bangalore & Kodaikanal, VIT University Vellore, MIT University Pune, Bennett University, IIT Delhi, BITS Pilani, NIT Surathkal, COEP Pune, Kalasalingam University, MEPCO Sivakasi and TCE Madurai.

For Impartus Innovations Pvt Ltd

Authorized Signatory



Impartus Innovations Pvt. Ltd. 884, 6th and 7th Main, 22nd Cross, Sector-7, HSR Layout, Bangalore, Karnataka - 560102

+91- 80 - 46620600

[info@impartus.com](mailto:info@impartus.com)

[www.impartus.com](http://www.impartus.com)

CIN: U72200HR2013PTC051423

## # Specification of Virtual Classroom solution:

### Summary of the item

- Automated Lecture recording in multi-view like Faculty, Students and White Board
- Content Management System
- Live Streaming and Video Conferencing
- Flipped Classroom Recordings
- Tools for evaluation and collaboration
- Analytics & Reporting
- LMS Integration Capabilities

### Software Technical Requirement

- ✓ High Quality Video: Full HD Video and Audio.
- ✓ Multi view environment: The viewer should have the ability to watch all camera and/or presentation content together on the screen and then rearrange content to focus on what's most important.
- ✓ Responsive Design: View on any size or type of screen, over any connection speed. Adaptive streaming.
- ✓ Web based application for Mobile / Tablet / Laptop. Platform apps to be also provided.
- ✓ Platform should enable a faculty and/ or an Institute to schedule recording for Classroom lectures. The availability of the same for participants on demand via the Platform.
- ✓ The Platform should allow an Institute to Live Stream/video-conference any ongoing Lecture. The same lecture should also be recorded simultaneously. Viewers should be able to Login to the Platform and view the Live Lecture.
- ✓ Audio video recording should have automatic processing for quality improvement, compression for size reduction and encryption for security feature.
- ✓ The platform must create searchable metadata by auto-scanning and indexing Lecture Slides using OCR (Optical Character Recognition).
- ✓ Viewer should be able to Search People, Subjects, Lectures, Notes, Discussion. Lectures should be searchable through Topic, Professor Names and other metadata.
- ✓ Students/Participants should be able to upload additional material for a Subject or Lecture. Additional material could be pdf, MS Office files, videos, audio, images.
- ✓ Students should be allowed to create small video Bookmarks through easy interface. These Bookmarks once created must be stored at one place under a Subject or Lecture
- ✓ Platform should allow a Professor to create Flipped content and share to Students on the platform.
- ✓ Professor should be able to edit the video to remove unwanted portions and preview the edited video before publishing it to students/participants.
- ✓ Platform should come with a very strong analytics and reporting engine. It should provide preconfigured usage report as well as customizable reports to track the utility of the solution.
- ✓ Platform to provide an Admin User Interface (Web Based) to manage the repository & generate Reports.
- ✓ Platform should allow professor to create practice test and quizzes for student evaluation purpose.

- ✓ Web based Portal for Collaborative Learning and System Management.
- ✓ Ability to provide both the models: On-premise and cloud
- ✓ Regular software updates, including new and enhanced features and bug fixes.
- ✓ Related subject/topic videos from open source/Youtube platform as additional reference material to students will be added benefit.

#### Hardware Specification

2-8 Megapixel 4K or Full HD Wide Dynamic Range Network Camera (Camera safety box to be included)

- o ½.8" 2-8 Megapixel Progressive Scan Exmor CMOS Sensor
- o 25fps @1080P
- o Wide Dynamic Range
- o Auto Back Focus
- o Micro SD Memory, PoE

1/3 5-50 mm F/1.4 High Resolution Aspherical C-Mount lens

2-channel high quality microphone system

- o Specially designed for classroom environment for Faculty Audio Capture
- o Backup microphone included
- o Hands-free Infrared Wireless Microphone System
- o Ceiling Mount Receiver / Wall Mount receiver.
- o Tuner & Distribution for audio output o In-built battery – inside the microphone & mic charger

Intel Edge Capture Server

- o 9th Generation Intel Core i3- processor
- o 8Gb Dual Channel DDR3L 1600Mhz Ram
- o Intel HD Graphics 5500
- o 500GB 2.5" SSD
- o Gigabit Ethernet
- o Ubuntu 14.04 LTS Server

Media Server

- o Specifically designed as for reliable storage and fast access
- o 9th Generation Intel Core i7 Processor
- o 6 GBPS SATA (Intel Rapid Storage)
- o 16 TB Storage (4 x 4TB @ 7200 RPM)
- o Gigabit Ethernet
- o Ubuntu 14.04 LTS Server

#### Note:

- Transportation cost of all material and personnel will be borne by the bidder throughout the period of maintenance
- Successful bidder shall accord facility for inspection/testing of material at their site by a team of institute engineers before start of delivery, if deemed necessary
- All the software related to recording and transmission should be installed in our campus server and license should be perpetual.
- After successful installation and deployment of these equipment testing to all the ICT center and Distance education center will be demonstrated (where reliable connectivity of network, not less the 1Mbps, is available)

- All projects should be up and maintained up to five years. (3 years for hardware and 5 for software including updates)
- Installation and testing of recording infrastructure for each individual classroom, including:
  - Processors/Servers and storage solution
  - High Definition Video Cameras
  - Audio Recording Devices
  - Routers and Wi-Fi devices