





**Smart Classroom Solution** 

### **OBJECTIVE OF SMART CLASS**

- Convenient access to wide range of sources of information
- Digital tools enable better understanding of concepts
- Interactive class environment facilitates improved learning
- An ideal option for class with students of different learning abilities
- Ease of Maintenance
- Adds fun into traditional method of learning

### CHALLENGES IN CURRENT EDUCATION SCENARIO

- Lack of innovation in teaching methods making learning monotonous
- Lack of Trained and Efficient Teachers
- Lack of Quality Training in Teaching and Learning.
- Lack of efficient Supportive solutions
- Lack of Monitoring and assessment tools
- Lack of integrated and comprehensive solution
- Sluggish pace of updating syllabi
- Inefficient evaluation and feedback of learning

### CHALLENGES CONT ...

- Inability of students to keep up with lost lessons
- Lower transition rate at the Higher Secondary level
- Difficulty in managing classes with large number of students effectively
- Updating continuously teachers' in subject matter
- Slower acceptance of technology in cost oriented institutions
- Shortage of subject experts & teaching faculty
- Does not promote social learning -teacher centric

# LIMITATIONS IN EXISTING SMART CLASS SOLUTIONS

- Existing solutions are complex, expensive & bulky
- Disintegrated hardware devices
- Requirement of technical person to handle the devices
- Non usage of effective means to engage students
- Limited content offered
- Lack of learning analytics to assess student learning

### **OBJECTIVE OF THE PROJECT**

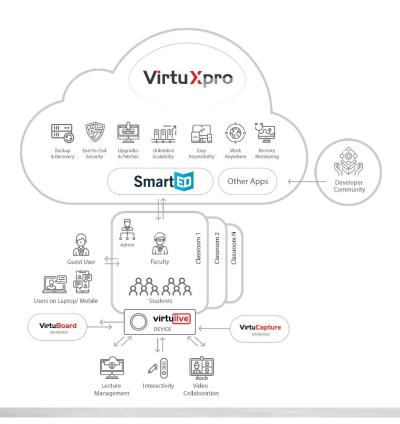
- Providing, Installing & Maintaining Smart Class Rooms
- Providing, Installing & Operating Content Delivery as per State Board Syllabus for K-12
- Enabling Virtual Lab facility
- K-12 Content Delivery over Desktop & Mobile Apps
- Learning Analytics for each classroom

### PROPOSED SOLUTION

- Integrated, Indigenous, Portable & Smart Collaboration device
- Vast repository of digital instruction materials mapped to meet specific objectives laid out by different state learning standards
- Highly animated, lesson specific, 3D and 2D multimedia modules
- Regular & All-Round support provided to enable smooth functioning

### Solution Overview



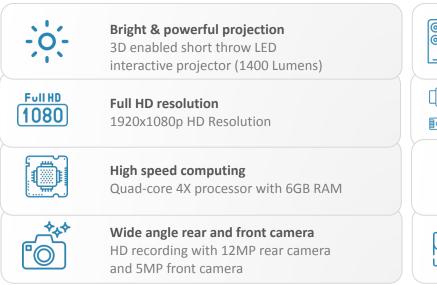


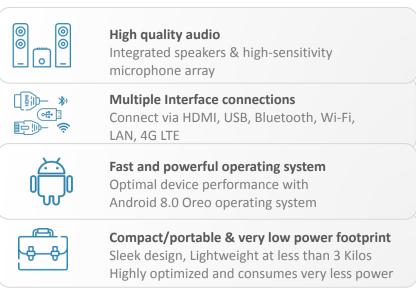
## INTEGRATED, INDIGENOUS, PORTABLE & SMART COLLABORATION SYSTEM



### Integrated Hardware - Everything in a Box!

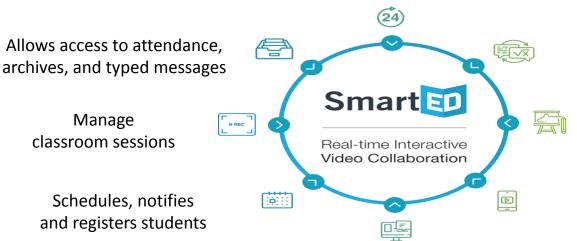
Next generation device that enables digital projection, high-speed computing, two-way audio/video communication, video streaming, connectivity, interactivity, and mobility.





### **SMARTED - COLLABORATION SOFTWARE SUITE**

Flexible teaching option as per your convenience



Customized multi-participant assignment sharing

Real-time collaboration via interactive whiteboard

View classroom sessions at your convenience

Integrated instant messaging

### Participative Multi-Classroom Teaching







**Live video lecture**Conduct real time lectures

2



Two way communication
Enhance class participation

3



Multi class view
Single view of classes across
multiple locations





Flip Classroom

Multiple instructors can
collaborate to teach live
classes

### **VirtuCapture**

### - Record and Replay Lectures

Record, Review, and Replay Lectures with ease

#### **RECORD**

Capture lectures including all whiteboard actions, shared screens, audio & video streams for future reference



#### **REVISIT**

Playback captured lectures to revise concepts, remember solution steps, learn diagrams, prepare for assignments & exams

#### STORE

Upload and archive recorded lectures to Virtulive cloud storage





#### SHARE

Trim and share relevant parts of lectures to serve as a ready reckoner

### VirtuBoard Immersive Participative Learning

### Enable participative learning through Collaborative Whiteboard

#### **IMAGINE**

Create imaginative designs and geometric shapes using color palette & shape selector



#### **ANNOTATE**

Annotate, comment, edit documents using highlighter, zoom in/out and laser pointer

#### **OPTIMIZE**

Extend the core functionality with 'Tools' such as ruler, compass, protractor, triangle, magnifier and calculator





#### **ORGANIZE**

Organize and access your collection of sounds, videos, images, shapes, animations, and interactivities

### VirtuLAB- Interactive Learning

- Anywhere Anytime Lab
- Innovative Experimentations
- Accessible through Internet
- Enables students to learn at their own pace
- Instant Feedback can be obtained

### **Advantages of Integrated Device**



#### **Easy to Use**

Integrated, Indigenous, Portable, and Smart Collaboration Solution



### Comprehensive

Complete Video Collaboration and Virtual Classroom solution



#### **Affordable**

Flexible, cost-effective, and modular



#### **Seamless**

End to end secure and scalable collaboration

### II. MULTIMEDIA DIGITAL CONTENT

- Mapped to STD 1 to 12 syllabus of CBSE, ICSE & State Boards. Offers competent courses -Spoken English, ICT, Math Lab, Science Lab, Vedic Maths
- Content for graduation courses such as B.Com, BMS, BSc, Engineering also available. Entrance Exams of Engineering, IIT - JEE, NEET/AIPMT, UPSC, CA, CS, CAT, Bank-PO for tutorials & schools
- Courses in Multimedia, Vocational & Skill Development courses are catered to institutions
- Captures Audience interest and increases engagement
- Establish identity and academic credibility of a speaker

### **MULTIMEDIA DIGITAL CONTENT**

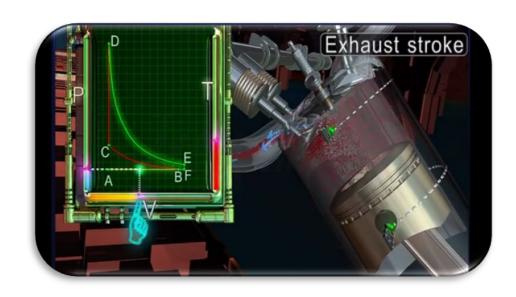
- Demonstrate complex processes and techniques
- Bring the real world in front of the audience
- Record or broadcast conference presentations and discussions
- Capture data such as focus groups, interviews, behavioural observations
- Communicate the speaker's enthusiasm for the subject

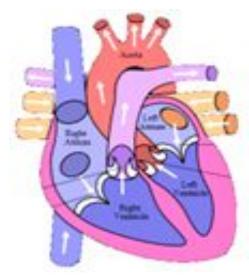
### **DIGITAL CONTENT - FEATURES**

- Content –Text, Audio, Graphic, Animation, Video
- Voice over explaining the concepts
- 2-D and 3-D animated tools help learner to understand the concept thoroughly
- Simulation based practical to involve learner and get exact knowledge of apparatus, experiments and reading
- Animations and graphics to support the explanation

### **MULTIMEDIA CONTENT SAMPLES**

Illustrations- Visualization or portrayal, such as drawing, sketch, photograph using a graphical representation





### **MULTIMEDIA CONTENT SAMPLES**

2D Animation-such as 2D geometric models, text, & digital images



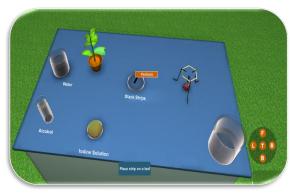


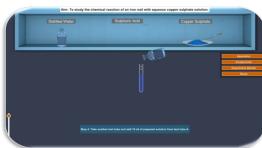
### **MULTIMEDIA CONTENT SAMPLES**

3D Animation-computer-generated imagery including both

static pictures & dynamic images







### III. CONTENT DELIVERY

K -12 syllabus as per Tamil Nadu State Board is delivered through various platforms







**Desk top/Laptop** 

**Tablet** 

Mobile

### IV. ASSESSMENT & MONITORING TOOLS

- Consists of MIS Reporting system, Question bank & data analysis system
- Question generating system & data analysis system
- Class & Subject Wise Capsule Comparative Report
- Month & Subject Wise module Usage Summary
- Class & Teacher Wise module Usage
- Month, Class, Subject & Teacher Wise module Usage

### **IMPLEMENTATION PLAN**

- Approved hardware & software deployed after thorough inspection & auditing done to ensure the quality & completeness of systems
- Hands on training provided to all teachers for effective use
- Regular MIS reports generated in order to monitor the usage of the system & shared
- Regular support given to maintain health of hardware & software as per SLA
- Schools to provide secured class room with electrical facility for hardware/software deployment
- Project implementation can be done within 8-10 weeks from date of signing agreement.

### **BENEFITS**

- Next generation hardware aiding in efficient performance
- Enables real time interactivity & collaboration between the instructor & students
- Makes classes more technology-driven & learner-centric
- Can facilitate involvement of multiple teachers
- Collaboration possible online via audio, video, & text chat
- Effective tool to manage class with different learner types
- Customizable pedagogy for teachers
- Vast range of interactive & animated content
- Additional learning enabled resources
- Efficient student learning feedback system

### **VALUE PROPOSITION**

- Simplifies collaboration through a Seamless solution
- Easy to Use- Plug & Play, Integrated, Indigenous, Portable
   Smart Collaboration system
- Affordable- Flexible, cost-effective & modular solution
- Comprehensive- Complete solution suite for multi-team, multi-location collaboration across sectors

### **VALUE PROPOSITION**

- Future Ready- Delivers secure, seamless & scalable collaboration with zero down time
- To make learning effective and engaging for students
- Enabling schools to bridge shortage of teachers through 'one teacher-to- many classroom'
- Facilitates to teach from anywhere

## **Thank You**