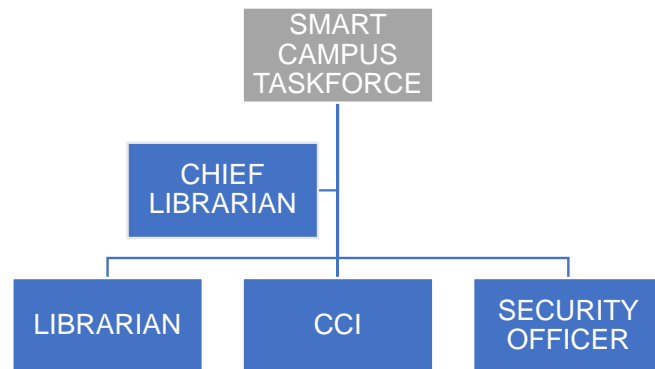# INTELLIGENT CAMPUS

Agendas

- Restructuring Intelligent Campus Initiatives governance
- Intelligent Campus Framework
- Intelligent Campus Project Implementation
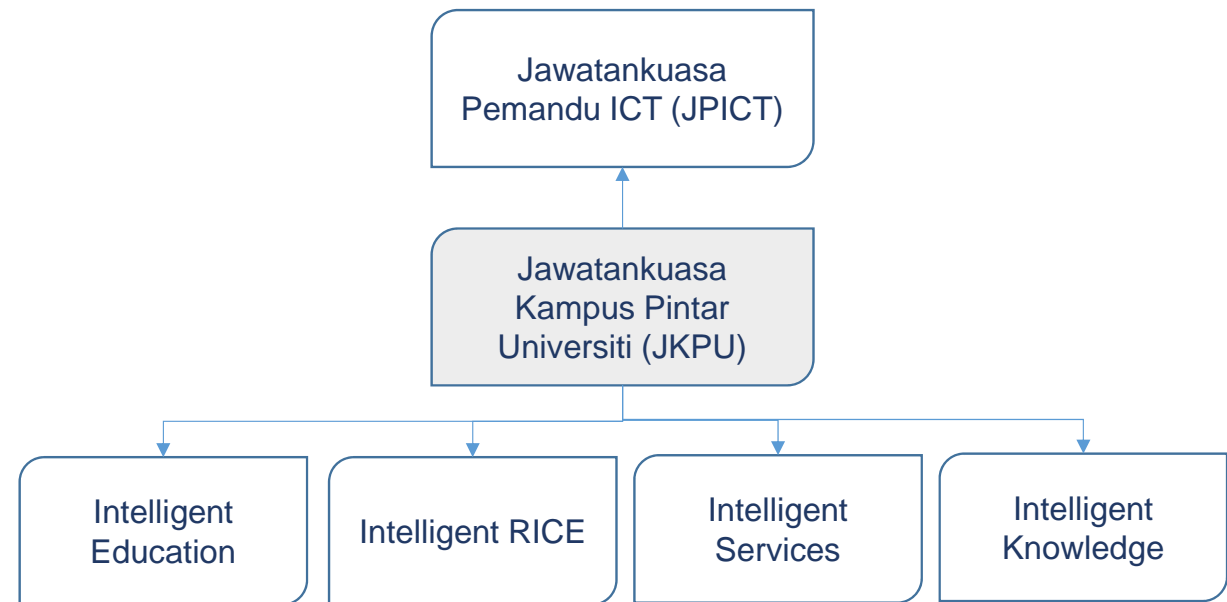- On Going Project
- Next 3 Years Project

Restructuring Governance of Intelligent Campus Initiatives

UMK INTELLIGENT CAMPUS GOVERNANCE

Previous

New Structure

Previous structure:
- SMART CAMPUS TASKFORCE
  - CHIEF LIBRARIAN
    - LIBRARIAN
    - CCI
    - SECURITY OFFICER

New Structure:
- Jawatankuasa Pemandu ICT (JPICT)
- Jawatankuasa Kampus Pintar Universiti (JKPU)
  - Intelligent Education
  - Intelligent RICE
  - Intelligent Services
  - Intelligent Knowledge

MEMBERS AND TERM OF REFERENCES
UMK INTELLIGENT CAMPUS COMMITTEE

Chairmain : Chief Information Officer / Deputy Vice Chancellor (R & I)
Prof. Ts. Dr. Arham Abdullah

Deputy Chairman 1 (Infostructure): Chief Librarian
Tn. Hj. Azman bin Hashim

Deputy Chairman 2 (Infratructure): Director of Centre of Computer and Informatics Ts. Wan Azlee Wan Abdullah

Secretary: Librarian
Ts. Amirul Firdaus Bin Zilah

Members :
1. Puan Mazula Binti Sabudin   – Registrar
2. Puan Junaidah Binti Badar   – Bursar
3. Prof. Ir. Ts. Dr. Ahmad Ziad Bin Sulaiman   – Senior Director, RMIC
4. Prof. Dr. Mohd Saberi Bin Tan Ah Chik @ Mohamad – Director, AIBIG
5. Prof. Dr. Suria Binti Baba   – Director, PKPA
6. Encik Mansor Bin Che Din @ Noordin   – Chief Information Technology Officer

Term of Reference

I. Determine the **direction and strategy** for implementing smart campus initiatives.
II. **Monitoring** the status of **implementation** of smart campus projects / initiatives.
III. **Review and recommend** project implementation related to smart campus initiatives for JPICT approval
IV. Review and recommend specific **budget** estimates related to smart campus initiatives for JPICT Approval
V. Plan and consider **strategic partnership**s with potential Technology Partners for Smart Campus implementation.
VI. Discusses **policy issues, operations** and **special** needs of smart campus initiatives.

UNIVERSITI MALAYSIA KELANTAN INTELLIGENT CAMPUS FRAMEWORK
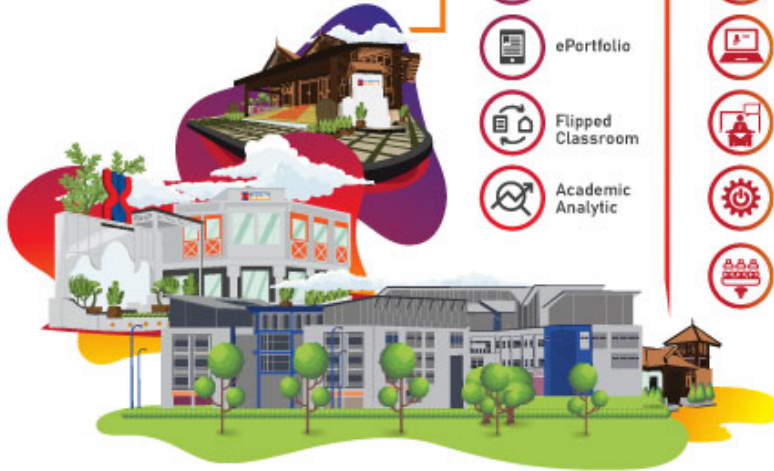
INTELLIGENT CAMPUS CLUSTERS

- INTELLIGENT EDUCATION
- INTELLIGENT R.I.C.E
- INTELLIGENT SERVICES
- INTELLIGENT KNOWLEDGE

INTELLIGENT CAMPUS INITIATIVES

INTELLIGENT EDUCATION
- eLearning
- QR Code Attendance
- ePortfolio
- Flipped Classroom
- Academic Analytic

INTELLIGENT R.I.C.E
- Unik19.com
- Triangular Incubators
- eRMS
- uNeXus
- makers@UMK
- Intelligent Farming

INTELLIGENT SERVICES
- Sinimo Portal
- Video Conferencing
- QR Code Geolocation
- Smart Tracking System
- Cashless Payment
- Healthcare System
- eCampus Mobile Apps
- Intelligent Security
- Single Sign On
- V-Integrated Screening System

INTELLIGENT KNOWLEDGE
- NextGen Repository
- MyAthens
- Business Intelligence
- Intelligent Dashboard
- Digital Reading Hotspot
- Digital Book
- Smart InfoCommon

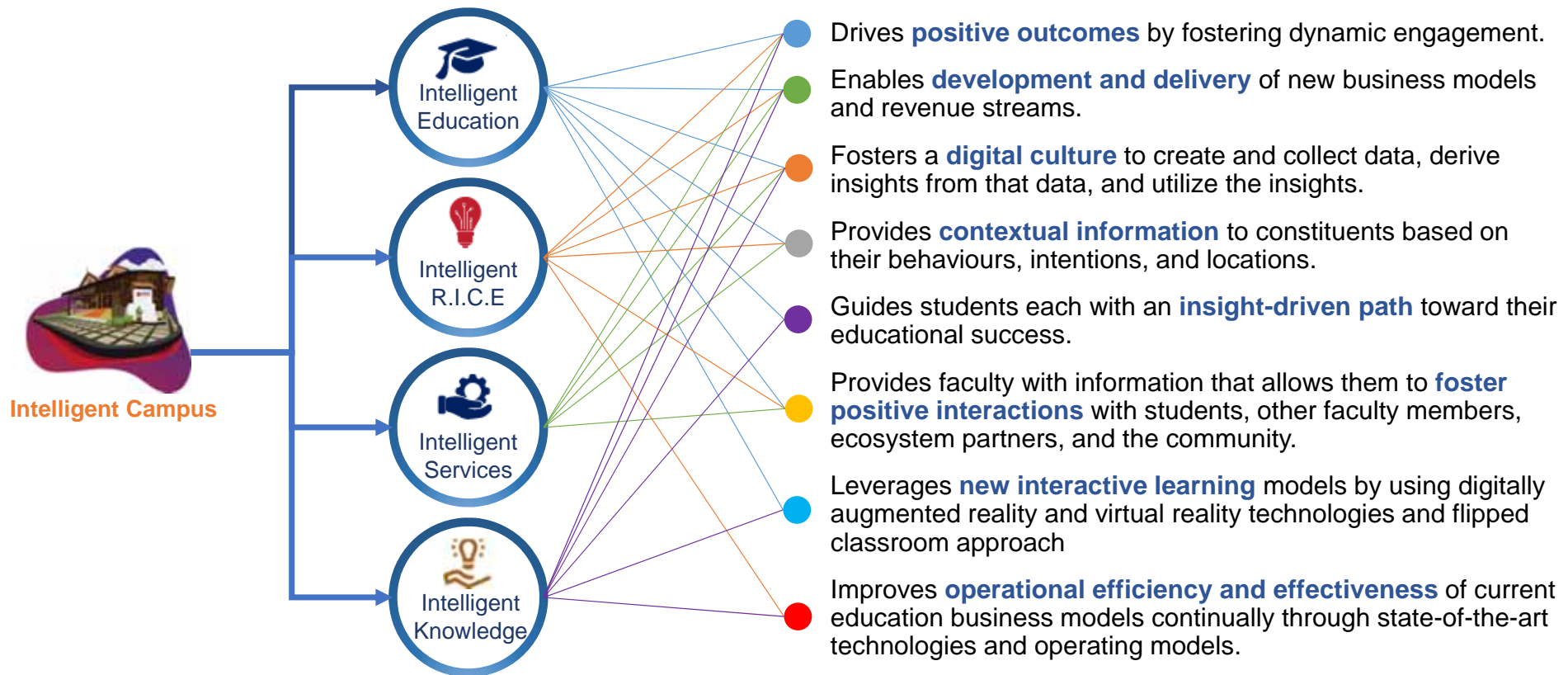## DIGITAL INFRASTRUCTURE

- Smart Monitoring
- Big Data & Analytics
- Secured Network
- Cloud Storage
- Gigabytes Network & Wifi
- Artificial Intelligent

Note:
Green wording referring to Initiatives was
implemented since September 2018 till June 2020

Outcome of **Intelligent Campus Initiatives**

Intelligent Campus

- Intelligent Education
- Intelligent R.I.C.E
- Intelligent Services
- Intelligent Knowledge

• Drives **positive outcomes** by fostering dynamic engagement.

• Enables **development and delivery** of new business models and revenue streams.

• Fosters a **digital culture** to create and collect data, derive insights from that data, and utilize the insights.

• Provides **contextual information** to constituents based on their behaviours, intentions, and locations.

• Guides students each with an **insight-driven path** toward their educational success.

• Provides faculty with information that allows them to **foster positive interactions** with students, other faculty members, ecosystem partners, and the community.

• Leverages **new interactive learning** models by using digitally augmented reality and virtual reality technologies and flipped classroom approach

• Improves **operational efficiency and effectiveness** of current education business models continually through state-of-the-art technologies and operating models.

Project Implemented

Mobile App + QR Code

QR Attendance for :
- **Event & Program**
- **Class Attendance**

User Login through Mobile Apps

02

START

Data Captured & sent to database

04

01
Admin Create event information & Generate QR Code

03
User Check In attendance via QR Code Scanner

05
Reporting & Data analytic for future Plan

Smart Campus

Project Implemented

Mobile App + QR Code

QR Attendance for :

- Event & Program
- Class Attendance

Antaramuka **Sistem e-Hadir** dan janaan **Kod QR**

Project Implemented

Mobile App + QR Code

QR Attendance for :

- Event & Program
- Class Attendance

Antaramuka **Sistem e-Hadir** dan janaan **Kod QR**

Project Implemented

Self Student Registration

- Student Information
- Subject Registration
- Student Hostel

Project Implemented

Eduroam Implimentation

What Is Eduroam :

Eduroam (education roaming) is the secure, world-wide roaming access service developed for the international research and education community

Here at Universiti Malaysia Kelantan (UMK) , Other Public University(UA) in Malaysia And Among other major University in the world refer to this site https://mon.eduroam.my & https://www.eduroam.org

How to connect :

Choose eduroam SSID

Sign in using your username@<your.university.domain> and your university wifi password on your computer or mobile phone

* EDUROAM available across campus BACHOK , CITY & JELI

Project Implemented

UMK E-Learning

http://ecampus.umk.edu.my

Project Implimented

Quick Win Project

UMK Geolocation with **QR Code**

- Help public get direction to UMK
- Deployment cost very minimum

Project Implimented

UMK SMART TRACKING REAL TIME TRACKER COVID 19

On Going Project

Academic Analytics
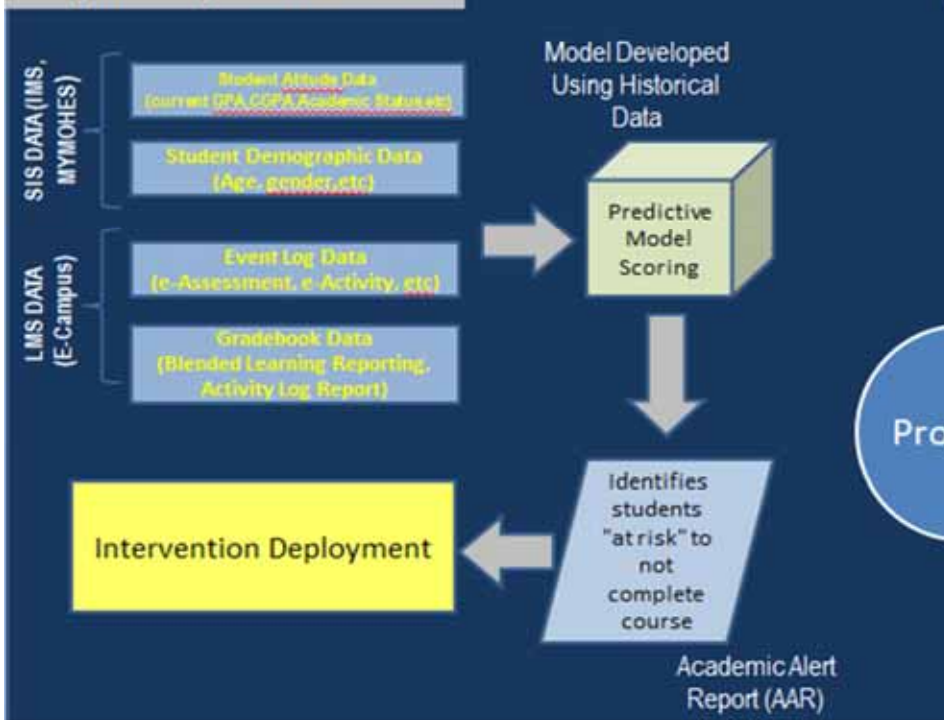
On Going Project

R.I.C.E INITIATIVES

UMK R.I.C.E ECOSYSTEM

INITIATIVES

1 Student Entrepreneurship Pathway (SEP)
Provide tracking system as a learning path for students into becoming a successful entrepreneur

2 UMK Nexus
Linked student's business with SME and international market place

3 ACEEU Accreditation
Getting accreditation for Entrepreneurial University from Accreditation Council for Entrepreneurial and Engaged Universities (ACEEU) in 2020

4 UNIK19.com
E-commerce platform (virtual mall) for UMK products

5 UneXus
Entrepreneurship portal & online community

6 UMK100
Scan and identify 100 innovation-based student products for commercialization

7 Triangular Incubator and Co-working Space
Innovation Lab (Jeli), Creative Acceleration Centre (Bachok), Business Incubator (Kampus Kota)

8 Business Space
42 kiosks for student's business

9 Entrepreneurship Executive Diploma
Introduces Entrepreneurship Post Diploma program to entrepreneurs, vocational, teachers, UMK staff

10 Established Case Studies
Teaching and training cases for students and entrepreneur
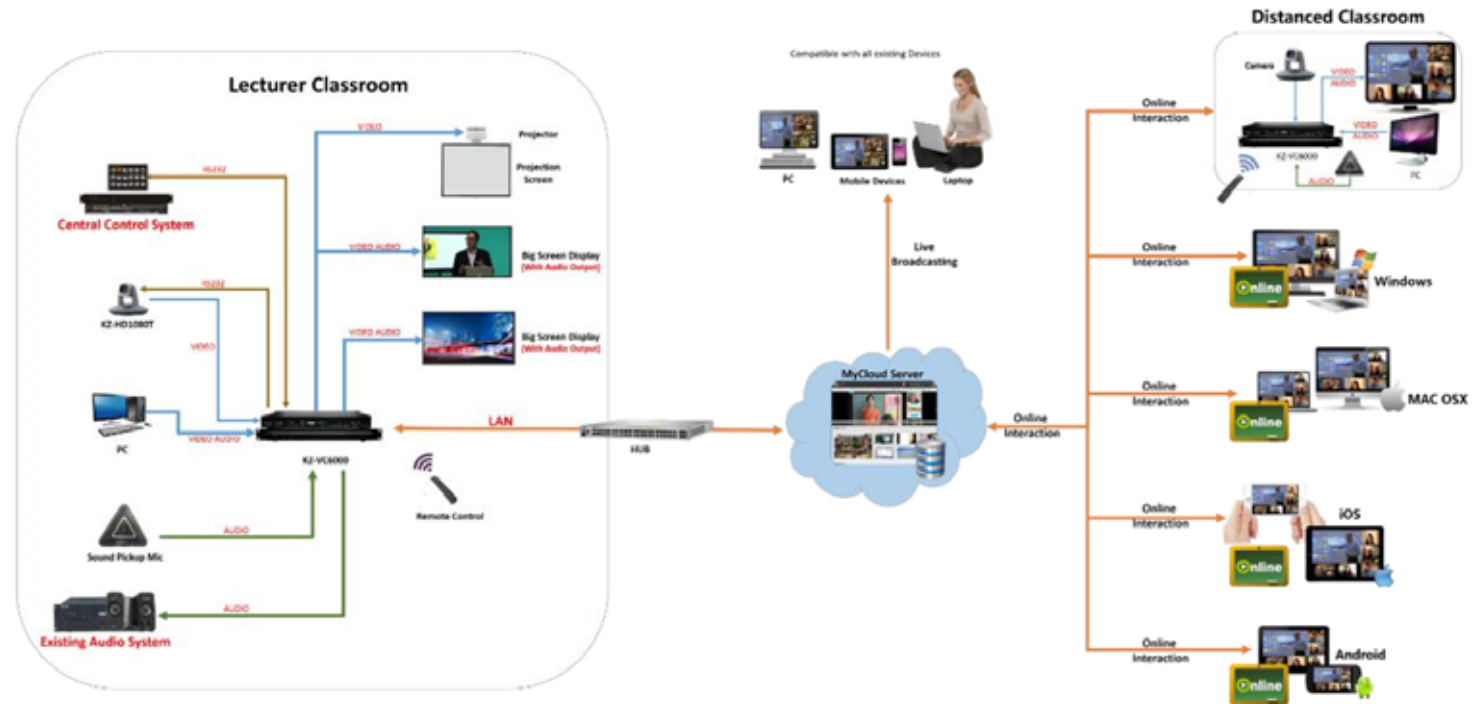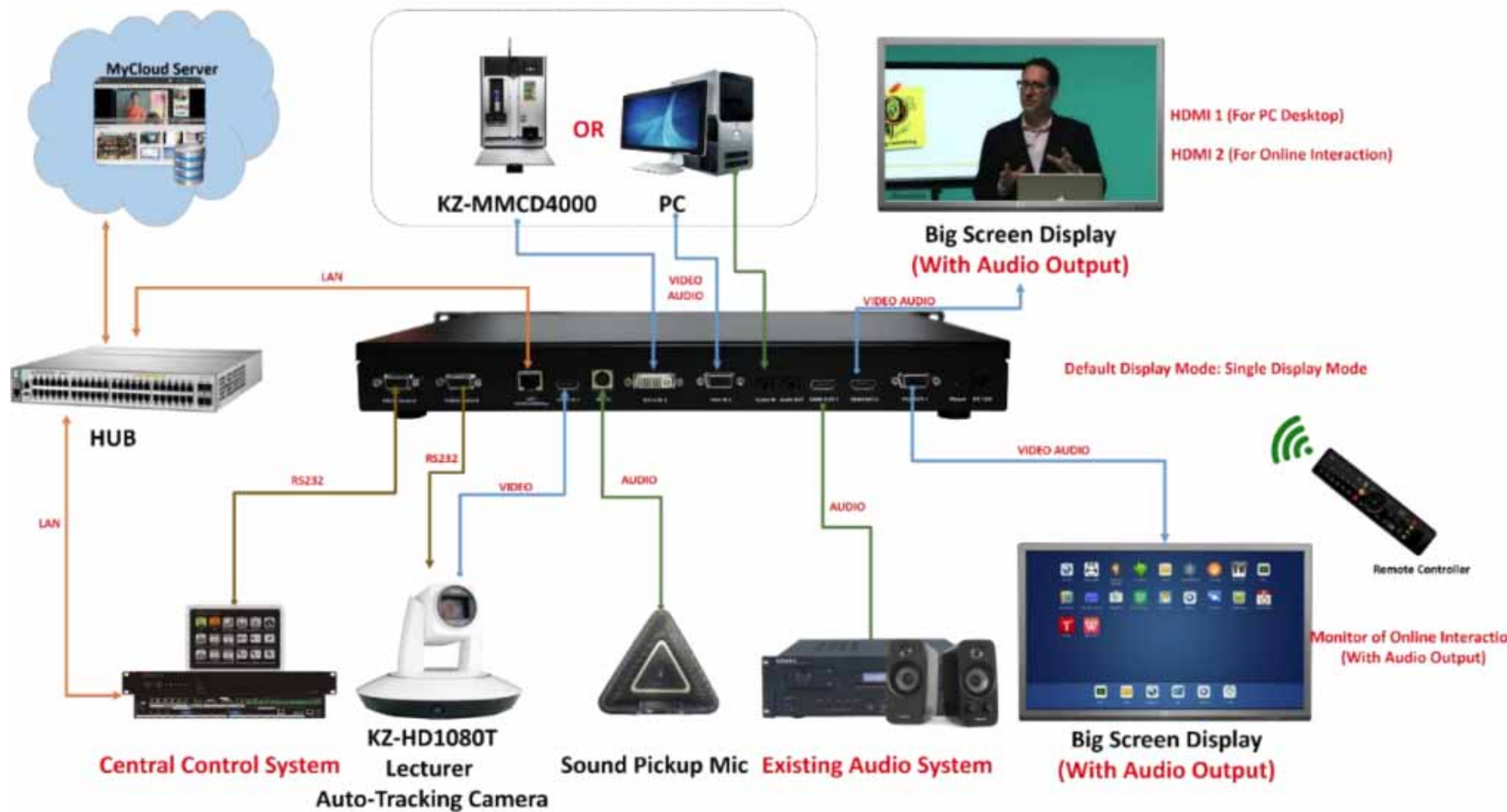
What's Next

Upgrade
Smart Classroom

Jeli & Bachok

Video Conference
Auto tracking Camera
Big Screen
Smartboard
Auto Controller

Smart Classroom

What Next

Upgrade
Smart Classroom

What Next

Smart Security & Surveillance

Thermal Detection
Plate Recognition
Face Thermal Detection

	2020	2021	2022
Deploy Smart Security Surveilance (CCTV, face recognition, plate recognition etc)	x		

What Next

ICT INFRASTRUCTURE

	2020	2020	2021
upgrade all **interbuilding** backbone to **10G**	x		
Upgrade **internet leased line** at least **1Gb** for each campus		X	
IP Phone implementation by 100% for each campus		X	
Coverage internet akses 100% kawasan berpenghuni dengan kelajuan minimum 2Mbps – Conectivity everywhere & anywhere		X	
To deploy wireless API for integration (such as ruckus API)			x
To provide & enhance visual conference / virtual meeting (use skype, hangout etc)	x		

SMART FACILITIES

	2020	2021	2022
Deploy Smart Classroom/Lab (5% from total classroom from each campus)		x	
To deploy Smart Attendance	x		
To identify & deploy Smart Lab in each campus for **MOOC** content creation and also support **MOOE**		x	
To integrated equipment in classroom for fast monitoring & asset management (such as projector)	x		
Expend Collaboration & Sharing services such as sharing realtime video semasa pembedahan (contoh di FPV)			x
Full IP Phone Implementation	x		

SYSTEM/APPLICATIONS & INTEGRATION

	2020	2021	2022
To expend **Mobile app features**	x	x	x
Virtual UMK Map – Implement AR & GIS	x		
Enhance **Eduroam** usage and experience	x		
Integrated Apps – up to 50%	x		
Student Attendance Tracking System	x		