

University of Malaya ICT Strategic Plan

- The objective of this ICT Strategic Plan is to outline the ICT vision, policies, goals and strategies,
- which will serve as the guiding principals for the development and execution of all the ICT initiatives in the university for the next 5 years

University of Malaya

- Vision
 - To be an internationally renowned institution of higher learning in research, innovation, publication and teaching.
- Mission
 - To advance knowledge and learning through quality research and education for the nation and for humanity.

ICT Strategic Goals

- ICT as an enabler to support University of Malaya to achieve its vision and mission by provisioning of ICT services to:
 - 1) Support and enhance the teaching & learning in the university
 - 2) Support and enhance the university's research administration
 - 3) Automate, streamline, improve and support the university's campus administration, resource utilization, performance management and statutory compliance
 - 4) Improve stakeholders' experience in UM, especially students
 - 5) Connect UM to the nation and the world
 - 6) Ensure all IT services, infrastructure and support are up-to-date, reliable, scalable, interoperable, sustainable and secured

Key ICT Trends

- External environment and opportunities greatly influence the way ICT is being delivered to support the university's vision and mission. The key ICT trends observed are as follow:-
 - 1) Collaboration – Team-based activities are essential for education delivery and research projects, both within the university and outside the university. Therefore, more and more collaborative technologies such as portal and video conferencing are adopted to facilitate these activities.
 - 2) Online services- Students are expected to obtain information on-line anytime, anywhere, 24 x 7; whether through their laptops or smart phones. Internet based information delivery is proven to reduce cost and improve efficiencies
 - 3) Mobility – University stakeholders are expected to access to information and do work from their laptops anywhere, anytime so long they are connected to internet. Therefore, web technologies are essential to support the mobility.
 - 4) Security – Security is the key concern as the number of identity and data fraud increased. Therefore, advance authentication and right management are important to avoid the security loopholes in the applications.
 - 5) Web services – Web services is the key method for system integration and to achieve Service Oriented Architecture (SOA) in the campus IT environment
 - 6) Process automation – process automation and reengineering are the key trends when resources are getting scarce and expensive. It improves corporate transparency and reduce bureaucracy, thus, enhance productivity and efficiencies.

Goal 1: ICT to Support Teaching & Learning

- Goal
 - Provisioning of ICT services to support and enhance the teaching & learning in the university
- Strategies
 - To enhance e-learning and mobile learning platforms
 - To assist lecturers to develop quality course content
 - To provide a structured repository of digital learning contents with the proper versioning and access control, as well as powerful search features
 - To provide digital classroom facilities via LCD Projector/Web/Audio/Video Conferencing

Goal 2: ICT to Support and Facilitate Research Activities and Administration

- Goal
 - Provisioning of ICT services to support and facilitate the university's research activities and administration.
- Strategies
 - To establish a secured and high performance e-Research infrastructure:-
 - Enhance research efficiencies and monitor research performance
 - Manage research performance
 - Ensure research data is properly structured, managed and protected
 - Streamline research administration efforts such as grant submission and project management
 - Facilitates collaboration between UM researches and local/internal industries and local / international researches
 - Link to various international research networks and library gateways to facilitate research material references, data collection and data sharing

Goal 3: ICT to Support University's Administrative Functions and Processes

- Goal
 - Provisioning of ICT services to automate, streamline, improve and support the university's campus administration, resource utilization, performance management and statutory compliance
- Strategies
 - To centralize administrative functions with a suite of fully integrated back office applications to enable resource sharing and enhance process efficiencies:-
 - Core Systems
 - CRM, Online admission, Student Information, HR, Finance, Course Management
 - Resource Management
 - Library, Hostel, Asset & Material (RFID enabled), Grant Management, Donor & Alumni Management, Grant, Facility
 - Performance Management
 - Scorecard enabled performance management tool, executive dashboard, business intelligence tool
 - Statutory Compliance
 - Finance Report, Academic Performance Report, HR Report

Goal 4: ICT to Improve Stakeholder's Experience

- Goal
 - Provisioning of ICT services to improve stakeholders'/customers experience in UM
- Strategies
 - To ensure information is easily accessible and searchable
 - To maximize the on-line self-service functions to provide prompt services to stakeholders
 - To provide collaborative suite to support team-base activities in the areas of research, teaching and learning
 - To provide structured and unstructured record/data repository with enterprise search features to allow quick and easy access to information

Goal 5: ICT to Support International Initiatives

- Goal
 - Provisioning of ICT services to connect UM to the nation and the world
- Strategies
 - Leverage on internet as a platform to promote the University of Malaya brand to the world
 - Leverage on online tools to facilitate international recruitment for students, researches and employees
 - Leverage on web technologies to collaborate, communicate and integrate with international research and academic communities
 - Leverage on internet technologies to build the local and international UM alumni network

Goal 6: Reliable Architecture

- Goal
 - Ensuring all ICT services, infrastructure and support are up-to-date, reliable, scalable, interoperable, sustainable and secured
- Strategies
 - Security
 - To provide a secured ICT services
 - Reliability
 - To adopt high performance and reliable enterprise applications and databases
 - Scalability
 - To ensure the applications can be easily scale out or scale up to meet the university's future needs
 - Interoperable
 - To adopt open standard to ensure integration among the applications

Single Sign On

Personalization

Student/Staff Portal

Prospective Student/Staff Portal

Alumni Portal

Management Portal

Admin/Faculty Portal

Communication & Collaboration Support

E-mail

Collaboration Suite

Knowledge Base

Document Management

Community Spaces

News Server

Search

e-Research

Research Management

Public Research Database

Research Collaboration Space/Portal

Directory of Expertise

Grant Management

Teaching & Learning Management

Courseware Development Tool

E-Learning/ M-Learning Platform

Digital Material Library

Digital Classroom

Core Systems

Student Information System

HR Info. System

Finance Accounting System

Course Management

Research Management

Resource Mgmt.

Booking System

RFID Tracking Management

Facility Management

Hostel Management

Asset Management

Library Information Management

Grant Management

Donor / Alumni Management

CRM

Event Management

Performance Management

Executive Dashboard

Scorecard Enabled Tool

Dynamic Analysis

Facts & Figures for RU, THE, MQA, SETARA

Statutory Compliance

Finance Reports

Academic Performance Reports

HR Reports

E-Gov

Student Admission DB

MyMOHEs

HRMIS

PTPTN/JPA

International

Associates

International Library Gateway

International Research Network ??

Private Sectors

e-Resume Systems

Industrial Training Management

Credit Card Online (MIGS), Electronic Fund Transfer (EFT)

Service Providers

Access Management Security Infrastructure

Campus Wide Governance and Policy Enforcement

Legend

- Yellow Font = Work In Progress
- Green Font = Completed
- White Font = In Planning

UM Portal Framework

- Controlled**
- Tightly governed
 - Push content

- Ad Hoc**
- Loosely governed
 - Push / Pull content

- Permanent**
- Executive Dashboards
 - Business Intelligence
 - Business Process Management
 - Back Office Applications

- Permanent**
- Knowledge Management
 - Information Sharing

- Short Lived**
- Collaboration

- Permanent**
- Personal Information
 - Public / Private Views

