**Information Systems That Have Been Developed and Maintained by CICT**

UTM Support System provide the services related to the development of systems related with Teaching and Learning through UTMLead. It focus on student-centered and optimization of the use of technology in learning. In UTMLead, UTM-MOOC is used as a medium for the students from UTM KL and UTM skudai to study same subjects and share the same information and study materials. MOOC act as a platform where the students from the main and the branch of university to be united and at the same time it unified the teaching schedule. It is a good learning platform for students to study because not only students in MOOC but there are many lecturers get involved in MOOC to “supply” the study materials. Students get extra notes through MOOC that can help them to get more familiar with the syllabus.

Besides, e-learning also widely used by lecturers and students. Lecturers can upload lecture slides, rubric of public lecture or industry visit, assignments and test questions to e-learning so that lecturers are easier to send their information to all the students, just a few clicks are required for them to distribute those materials to a class of students. This ensure that no students will be missed out from being distributed those study materials. Lecture slides are very important for students to do revision or do preparation before attending the lecture, while rubric is very important for acting as a guideline for students to do assignments or reports. It help them to get more marks by fulfilling the requirement of that report or assignment. Test questions that have been uploaded by lecturers allow students to see the questions clearly and easily.

Other than that, UTM Support System also provide services related to the development of systems such as system support in Student Affairs and others Academic System, Financial and Human Resource. From the website of CICT, we get to know that CICT have build and manage Administrative, Support, Multimedia, Teaching and Learning Applications to improve university’ s service delivery and quality. They also develop new application (web base and mobile) and maintain the current UTM application base on request by PTJ in term of data requirement. The key features are Administrative Applications Development Tools/ Technology, Teaching and Learning Applications Development, Support Applications Development, Montage and Video Production, User Requirement Specification, Documentation preparation, Mobile and Web Programming.

For example, there are UTM Acad Unit, UTMFin Unit, UTMHR Unit and eLearning & UTM Support System Unit. UTM Acad Unit is about CICT develop aplications related to the annoucement review of UPU result for applicants to check their application status, Online Applications to a postgraduate program and management of academic governance and undergraduate students. The key feature and list of services are time and cost saving, provide more information for applicants, fast response, it is easier for administrator to review progress of student’s work and efficient process for management of undergraduate students.

UTMFin is a medium where CICT provide services related to development UTM financial management system such as application, approval and monitoring that are used by student, staff and vendor. They also provide services related to the development of online payment system. One of the service is Online Payment System which make the payment process easier and safer to both the student and the staff because students are not required to carry a large amount of cash to be paid at the counter of HEMA but instead, they just need to transfer those money needed to be paid to the account of UTM. These system is useful for staff and student because it can save their time and protect their safety.

UTMHR provide services related to the development of systems human resource by Registration Office. The key feature is Registration Office system services and the tools and technology used is Java Netbean 6.0. Through UTMHR, vacancy, staff directory, eTelephone and Human Resource System are provided.

One of the information system that have been developed and maintain by CICT is the ID account and access. ACID is a unique ID of the users through the authentication server to use to log in the university systems. All students have their own user ID after registering the program through their respective faculties. Meanwhile, the staff must have a mail account official UTM first before applying ACID account. With ACID, students are able to use their Wi-Fi provided by university with their own account.