SECI-SYS: Secretariat Database Management System

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Abstract— SECI-SYS is a system software developed as a platform to store, retrieve, and update data regarding information management. Secretariat, in this regard acts as the people responsible for maintaining effective records and file administration. In conjunction with 2nd Kelantan International Learning and Innovation Exhibition 2019 (KILIEx 2019), SECI-SYS is established to ensure the management of data is consistently organized and remained to be easily accessible by the end users. SECI-SYS is governed by the information processing cycle which consists of four major stages; input, processing, storage and output. In brief, the procedures include data entry (input stage) followed by data coding and updating (processing stage), data keeping (storage stage) and finally producing desired data for respective users (output stage). Due to the varying needs from multiple angles, SECI-SYS plays a pivotal role as the core data feeder to enable the committees to access the information. In the absence of SECI-SYS, missing of files, overlapping of information, and miscommunication as a whole, shall be expected to occur. Consequently, database management system for KILIEx 2019 will be dysfunctional thus, disrupt the flow of the event. With this SECI-SYS, the management of database will be made convenient due to its multiple access, user-friendly, cloud storage function and zero charge for its development. SECI-SYS allows room for additional features to be included in order to maximize the functions for advanced users such as the merging data for managing pharma commercialization due to its marketability.

Keywords — database, information management, event management, data access

I. INTRODUCTION

SECI-SYS: Secretariat Database Management System is a system software developed as a platform to store, retrieve, and update data regarding information management. Secretariat, in this regard acts as the people who are responsible to maintain effective records and file administration for the KILIEx 2019.

The management of data and information is assisted by an information system, designed to transform data to information [1]. This system (Microsoft Excel) aids people with less experience to create database and manage information at hand. Microsoft Excel makes it easy to store data, perform numerical calculations, format cells, adjust layouts to generate the output and reports to share with others. Additionally, its advanced features such as subtotals, power pivot tables and pivot charts, analysis toolkit and many other templates make it easy to accomplish a wide range of tasks as designed in SECI-SYS.

II. CONTENT DEVELOPMENT

SECI-SYS is governed by the information processing cycle which consists of four major stages; input, processing, storage and output. In brief, the procedures include data entry (input stage) followed by data coding and updating (processing stage), data keeping (storage stage) and finally producing desired data for respective users (output stage).

The use of online Excel spreadsheet in the management of database for KILIEx 2019 employs the service of cloud computing. Cloud computing is a technology that harmonizes the operations of different computer systems via a network so that file portability is improved [2]. Therefore, this enables the secretariat to deal with large data files which primarily consist of the participants' personal information, details of their research designs and innovations, as well as keeping track of their progress prior to the exhibition day itself. Generally, cloud storage does not require complex infrastructure setup nor large instruments in the management of information hence proven to be cost-friendly for the execution of KILIEx 2019[3].

Due to the varying needs from multiple angles, SECI-SYS plays a pivotal role as the core data feeder to enable the committees to access the information. In the absence of SECI-

SYS, missing of files, overlapping of information, and miscommunication as a whole, shall be expected to occur. Consequently, database management system will be dysfunctional thus, disrupt the flow of the event. [3] cautioned that it is also crucial to note that the occurrence of data loss is inevitable regardless of the infrastructure used thus, the online Excel spreadsheet for KILIEx 2019 is not an exception. Nonetheless, regular auditing of the database is one of the measures advised to be taken in order to ensure the validity of the stored data in the cloud.

III. DISCUSSIONS

With this SECI-SYS, the management of database will be made convenient due to its multiple access, user-friendly, cloud storage function and zero charge for its development. SECI-SYS allows room for additional features to be included. Any additional features required by the users will be tailored to their specific needs based on the desired functions and features.

The SECI-SYS can be utilized for various purposes related to database management of conferences and invention, innovation and design (IID) competitions. The feedback received upon this SECI-SYS system will be used for future improvement. Most of the users agreed that by using this database system, it will not only make their tasks easier but also boost their motivation to participate in secretariat team in the future events. They found that SECI-SYS is a user-friendly

database system as many teams simultaneously can update and manage the data at their convenient time and place. This special element attracts the users to continue using this database system in the future. Thus, the use of SECI-SYS database management system is proven to assist secretariat team in managing their database.

IV. CONCLUSIONS

The SECI-SYS has proven its functionality and efficiency in the database management of KILIEx 2019 processes starting from the input stage, processing stage, storage stage and the final one, output stage.

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