

**ICT Virtual Organization of ASEAN Institutes and NICT
ASEAN IVO Forum 2016
Call for Presentations**

Submission and Registration Form

I. Title—Title of presentation:

E-village Project in Ancient City Bagan

II. Author(s)—Full name (First name family name):

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III. Organization(s): 1-3 :University of Computer Studies, Yangon
4 :Myanmar Aerospace Engineering University

IV. Topic selection:

Smart Society: ICT applications for community and environment

Smart Village

IV. Abstract:

Bagan is a well-known ancient city for the presence of thousands of Buddhist temples, pagodas and monasteries that were built during the height of Bagan Kingdom between 11th and 13th centuries. In present day, Bagan was rich of more than 2,200 structures, including pagodas and temples. Bagan's economy is mainly based on the tourism. Bagan has many lacquer ware industry and lacquer ware-making process has become a tourist draw. Bagan has many hotels and most of the people in Bagan work in the hotels. Some people sell traditional food and many people including children explain the history of the Bagan pagodas. If there are no tourists, their business will down. So to attract the visitors, the culture heritage of Bagan is needed to maintain.

On August 24, the magnitude 6.8 quake was centered about 15 miles west of Chauk, a town south of Bagan. It struck quite far below the earth's surface at a depth of about 52 miles and caused at least four deaths and damaged nearly 400 Buddhist pagodas and temples. After damaging the natural disaster, analyzing and surveying the damaged region are the critical tasks. The assessment of damage level and damaged pagodas are essentially needed for renovating the damaged ancient city.

Our project is intended to renovate the pagodas of Bagan and also aim to develop the villages around Bagan as e-villages. The motivation of “E-village” is that the technology should acts as a means for development, enabling education and local business opportunities, improving health, and overall enhancement of rural village dwellers in Bagan. This project will provide to renovate the Bagan Pagodas with 3D Modelling and Mapping which is constructed using the UAV images that will acquire by Hexa-copter and processed by 3D Mapping Software. By using the result of 3D Modelling and Mapping, the damage level of pagodas can be assessed and it can also support to repair the damage pagodas. Online learning and online business will be developed for Bagan people to provide the improvement of their education and business. E-healthcare will also be developed for rural residents because some villages have no clinics and it has only one general hospital in Naung Oo city. The hospital needs advanced devices which are connected between patients and doctors. The usage devices can detect various changes in the patient including its movements, heartbeat, blood flow from the wounds and body temperature etc. These reports generated by various machines like X-rays, CT scans etc. will be sent to the doctor directly. Such services will improve the health care sector of the villages.

By using the online learning, people in the villages can be educated and can also get a better lifestyle for them. In this online learning, video games and lectures which fascinate the children will be added and can help them learn in an interactive manner rather than reading the text-books in the classrooms. The different technologies like Internet, Mobile and smart devices can assist in the learning process. In online business, billions of people around the world can easily connect to buy the traditional Bagan’s products and can also easily view these products. Therefore, the lifestyle of the rural people in bagan region will improve and they can easily connect with other countries.

Application development for solving problems in Rural Area



Education, healthcare , Agriculture, energy management, preservation of culture heritage

V. Speaker information:

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- Round trip fare at discount economy class
- Accommodation