



"It is a very nice experience to visit UNIMAS and work with ISITI-CoERI. I am enjoying a lot in exchanging the knowledge and learning from the local researchers' work in the development and application of ICTs for rural communities. It is such a treat to receive the Malaysian hospitality and friendliness from the staff and administration of the UNIMAS. I am very delighted to see that ISITI-CoERI is providing a very good platform to facilitate local and international collaboration between researchers, practitioners, target communities, as well as policy makers who are involved with Bridging the digital Divide (BDD) and rural ICT programmes"

ISITI –CoERI Student Attachment and Talk

Ather Nawaz.

Ather Nawaz is a PhD student in the Department of IT Management, Copenhagen Business School, Denmark. He started his PhD in August 2009. Previously he was a Research Fellow at the Philips Research, Netherlands. He visited ISITI –CoERI as Student attachment for three months. He conducted a workshop presentation in the department and talked about his research. His research focuses on website structure and information classification on the websites. The research emphasizes on the internationalisation and localisation of websites from user's perspective. During his attachment, Ather Nawaz also worked as student volunteer in International Workshop on Internationalisation of Products and Systems (IWIPS 2011) that was jointly held with International Conference on IT in Asia (CITA 2011) in Kuching.

Talk.

Dr. José Abdelnour Nocera

Dr. José is Principal Lecturer and Head of the Centre for Internationalisation and usability in University of West London. His PhD research is on how virtual communities create their own cultural spaces while the key point of his current research is to assess the usefulness of theories and tools in human-computer interaction and socio-technical perspectives in the analysis of how technologies are designed and adopted by people located in different cultures.

ISITI-CoERI and Faculty of Computer Sciences and Information Technology, UNIMAS invited him to gave a talk under weekly Distinguished Speaker Series. The topic of his talk was Augmenting Usability: Cultural Elicitation In HCI. The Focus of the talk was on exploring usability/HCI related issues while developing prototype for our research.



Mobile Innovation Village (MiV) for Serasot Village

MiV Malaysian model was first led by the Malaysian Communication and Multimedia Commission (MCMC) in partnership with Maxis and Ericsson Malaysia with an aim to converge technological connectivities to communities in rural areas through leveraging community entrepreneurs in tourism, business, communication, education, health and infrastructure targeted at community-based capacity building, known as the CBC (Community Broadband Centre). There are more than 100 CBCs in all over Malaysia.

The Institute of Social Informatics and Technological Innovations, Centre of Rural Informatics (ISITI-Coeri) at UNIMAS pioneered the work in bridging the digital divide within remote communities in Sarawak, was approached, in response to the success of e-Bario project, as drivers for Kampung Serasot, Bau. The CBC at Kampung Serasot collaborated with ISITI-CoERI to conduct three main participatory feasibility studies, namely Learning and Education, Remote Health Monitoring and Group Communication. The learning and education study aims to allow students to undergo self-empowering learning and at that same time allow teachers to keep track of each child's progress and to increase ICT awareness to parents. The remote health monitoring study's objective is on improving health services and facilitate provision of medical care through remote health monitoring whereas group communication study focuses on promoting and coordinating quick and easy communication using telecommunication technologies within the community.

The different stakeholders collaborating on this project are the Serasot communities, Maxis CBC managers, school teachers and students, Ericsson team, medical lecturers from the Faculty of Medicine and Health Sciences at UNIMAS, along with research fellows attached at ISITI-CoERI, UNIMAS.

The results gathered from the feasibility studies are aimed at replicating the model at other CBCs as enablers to technology sustainability and empowerment communities in rural areas, and at the same time that suit the needs of the locals and the unique requirements of the locality.



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ISITI-CoERI.

Institute of Social Informatics and Technological Innovation –
Centre of Excellence for Rural Informatics

Upcoming Events

⇒ Third eBario Knowledge Fair 2011: ICTs for Indigenous Peoples. 16-18 November 2011, Bario, Sarawak Malaysia

The e-Bario Knowledge Fair (eBKF) is a bi-annual conference, held in the village of Bario, Malaysia, which showcases the use of ICTs for rural development. It is conducted in conjunction with the local community, bringing together researchers, practitioners and policy makers with the residents of Bario and the wider Kelabit indigenous ethnic community. The eBKF is a pioneering example of Development Conferencing, the process by which development specialists articulate their plans and share their ideas together with the people whose lives they are trying to improve, and in their own surroundings.

Information regarding the paper format and submission process will be made available on the eBario Knowledge Fair 2011 primary website: <http://ebarioknowledgefair.org>

⇒ Policy Dialogue on Community Radio in Malaysia, 21 September 2011

In collaboration with its partners, the International Fund for Agricultural Development (IFAD) and the ISITI-CoERI at Universiti Malaysia Sarawak (UNIMAS), eBario Sdn Bhd is organized a national policy dialogue on Community Radio in Malaysia. The purpose of the dialogue is to stimulate public debate among relevant stakeholders in support of policy formulations and related practices that would allow further applications and installations of community radio stations in Malaysia, in particular among the Nation's Indigenous Peoples who are less well served by existing mainstream media. It will take the form of a participatory face-to-face engagement between relevant stakeholders; senior policy makers, policy implementers, political leaders, parliamentarians, opinion leaders, media practitioners, international development practitioners, researchers, civil society representatives and others, that will promote further development of policies and practices for community radio in a manner that ensures they are advised and formulated through a process that allows for the inclusion of grass-roots perspectives. For Further details visit [ISITI-CoERI Web-site](#)



this issue

Need Analysis in Developing Telecentre Program **P.1**

Upcoming Events. **P.1**

ISITI Visitors and Talks. **P.1**

Mobile Innovation Village for Serasot Village. **P.1**

Asia Pacific Telecommunity (APT) J3 project. **P.2**

Activities in Pictures. **P.2**

New Publications. **P.2**

Needs Analysis in Developing Telecentre Programme for Orang Asli Semenanjung Malaysia

In February 2011, the Institute of Social Informatics and Technological Innovation – Centre of Excellence for Rural Informatics (ISITI-CoERI) at UNIMAS has been awarded a grant to conduct the Needs Analysis Study for developing Telecentre to Bridge Digital Divide Initiatives in Malaysia. The project is funded solely by the Economic Planning Unit (EPU) at the Prime Minister's Department and is being carried out by the ISITI-CoERI in collaboration with the Ministry of Rural and Regional Development (MRRD). Other partners in the initiative include the Department of Orang Asli Development (JAKOA – Jabatan Kemajuan Orang Asli) and the Semai communities at Pos Lenjang and Pos Sendirut in Pahang as well as the Temiar people of Pos Balar and Pos Gob in Kelantan.

Building on lessons learnt from the eBario project, which was initiated in 1999 at Bario of the Kelabit Highlands in Sarawak, the Needs Analysis initiative is based on a holistic and multi-level collaborative approach to information communication technologies (ICT) implementation among rural and remote communities. The main activity of the initiative is to conduct preliminary assessment of actual ICT needs and uses in the communities to be served by a telecentre. Secondly is to provide training to all stakeholders who are involved in the telecentre development. This training will centre on means and ways to conduct community engagement, and on how to mobilize community to develop goals towards which a telecentre is heading.

We believe that people's behaviors, customs, and motivations for usage, as well as perceptions and attitudes toward technology are all strongly influenced by their social and cultural context which has many dimensions: economic conditions, social conditions, traditions, access to resources, power structures within the community including the community's relations to the outside world. In fact, some of their needs are much more specific to the geographic area and socio-cultural context. Therefore the cultural characteristics (as well as political and economic structures) of a society (particularly of traditional communities) should be a key issue when introducing and developing emerging technologies within their environment (geographic area and ecology surrounding them).

In a sense, knowledge gained from political, economic and socio-cultural context is not only necessary for the inspection whether the services and interactions provided by science and technology truly match users' social requirements, expectations and cultural contexts, but also that technologies can be developed/designed so as to enrich and fulfill people's lives. In addition, the context must be better understood in order to examine what role emerging technologies might play and what effects they might have in different cultures. It is this increasing concern over social issues in science and technology development that shapes the focus and goals of this multi-disciplinarian approach.

Technology Enhanced Solutions for Remote Rural Communities in Malaysia to Facilitate Development of Learning and Preservation of Local Knowledge and to Create Health Awareness and Practices for Healthy Living.

Asia Pacific Telecommunity (APT) J3 project.



Associate Professor Dr Alvin Yeo Wee (left), the Director for Institute of Social Informatics and Technological Innovations, and Dr Hideyuki Iwata (right) from Telecommunication Technology Committee, who has been instrumental in the E-education research projects in Bario.



Activities in Pictures



Prime Minister Datuk Seri Najib Tun Razak visited eBario Telecentre



MOSTI / Yayasan Inovasi Malaysia present iDOLA net-book computers to UNIMAS' ISITI-CoERI



Fourth ISITI-CoERI Review meeting was held on 18th May 2011



Datuk Sri Wong Soon Koh, officiating the opening of the 7th International Conference on IT in Asia (CITA) organised by UNIMAS held at the Hilton Hotel Kuching.

The Asia Pacific Telecommunity (APT) J3 project, which ISITI was recently awarded with, is a continuation of the APT J2 project (i.e. Bridging the Digital Divide in Remote Rural Areas: a Universal Playground for Children) which ended in 2010. The APT J3 project (henceforth referred to as ISITI-J3) is funded by the Extra Budgetary Contribution from Japan which supports ICT pilot programmes in rural areas of APT Member countries. The ISITI-J3 project is entitled 'Technology Enhanced Solutions for Remote Rural Communities in Malaysia to Facilitate Development of Learning and Preservation of Local Knowledge and to Create Health Awareness and Practices for Healthy Living' and it aims to provide efficient technology-enhanced solutions for remote rural communities in Sarawak, Malaysia. Specifically, the objectives of the project are to establish optical LAN infrastructure for schools and health clinic in Bario; to develop e-Education solution which serves as digital learning repository to complement formal teaching and learning experiences of the school community in Bario, Ba'kelalan, Long Lamai and Laraman Island; and to propose a sustainable e-Health check system for use by community members in these identified remote rural communities in Sabah and Sarawak.

The ISITI-J3 project will be conducted in collaboration with researchers from Japan Advanced Institute of Science and Technology (JAIST), Telecommunication Technology Committee (TTC) Japan, Nippon Telegraph and Telephone Corporation (NTT), Mitsubishi Electric Corporation and Commutere Corporation (Sumitomo). A site visit was recently conducted to ascertain the possible locations for the optical LAN infrastructure and to gather preliminary information about the school community's technology infrastructure needs and to gain their feedback about the e-Education solution implementation plan. In addition, a site survey was also carried out at the new clinic location to determine the nature of the set-up of the optical fibre cabling implementations for the proposed LAN environment. The optical LAN infrastructure is an important linkage that will enable the other two solutions (i.e. e-Education and e-Health) to be developed in these remote rural areas. It is anticipated that with the experience gained by deploying the proposed ICT solutions in Bario, transfer of knowledge and technology into the other identified remote rural areas in Sarawak and Sabah can be expedited.

The e-Education solution aims to design and develop a digital learning repository in five areas of interest: health sciences, ICT, communication, living skills, and indigenous knowledge and culture. Learning materials will be developed in collaboration with local schools, to ensure alignment with existing learning needs of the local students. Structured activities will be carried out periodically in all these areas with emphasis given to collaborative works among the children. Web-cam activities and games will be introduced to encourage communication skills. Special emphasis will be given to the preservation of indigenous knowledge and culture. On the other hand, the e-Health solution aims to educate the local community about health issues using ICT-based tools. The e-Health check system will be introduced to children and young adults in the community to raise awareness about regular health checks which need to be performed periodically to detect and monitor common illnesses. Participants of the project will learn how to create a health check database, which records weight, height and blood pressure levels of people in the local community. With a systematic database of information available, dissemination of important health information and interventions can be deployed in a more strategic and sustainable manner.

The ISITI-J3 is currently in its system design and technical development stage. The feedback and information obtained from the recent visit to Bario will be analyzed and findings will be used to guide in the development of the technology-enhanced solutions for remote rural communities in Sarawak, Malaysia. The project is scheduled to be implemented for 11 months starting from August 2011 to June 2012. .

New publications

- Norazila A. Aziz, Souba Rethinasamy, Fitri S. Mohamad, Alvin Yeo. (28-30 June 2011). Bridging the Digital Divide in Remote Rural Areas: A Universal Playground for Children. Paper presented at 8th Asia-Pacific Telecommunications and ICT Development Forum (ADF-8), , Macao, China.
- Souba Rethinasamy, Norazila Abd. Aziz, Fitri Suraya Mohamad, Mohd Hafizan Hashim, Dayang Sariah Abang Suhai. (11-13 October 2011). Developing literacy and knowledge preservation skills among remote rural children: A collaborative project. Paper accepted to be presented at the 7th International Literacy Conference (LITCON 2011). Language and Literacy in the Local and Global Contexts : Success Stories and Unfolding Narration. Penang, Malaysia.
- Yeo, A.W., Chiu, P.C., Lim, T.Y., Tan, P.P., Lim, T. and Idyawati, H. "Usability in Malaysia: Past, Present and Future." In Douglas, I. and Liu, Z. (Eds.) Global Usability. Springer.(In Press), 2011
- Tariq, Z., Narayanan, K., & Yeo, A. W. 2011. Balanced Scorecard for performance measurement and strategic planning of Indigenous Knowledge Management. (S. Cummings, Ed.) Knowledge Management for Development Journal (accepted),

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