Newsletter





Featured THINK Article

Online Learning

Like many other countries, Covid-19 has exposed the inequalities underlying internet access in Malaysia particularly in Sarawak, and has affected the education sector tremendously. Not only do rural and urban students find themselves on the opposite sides of the digital divide, the gap also exists among urban students of different economic backgrounds. The authorities have been hyping on online lessons and lectures as a viable substitute but the unequal and intermittent internet access has meant the experience is vastly different depending on location and affordability. This is particularly important from the standpoint of the student whose quality of experience in doing online lectures and lessons hinges on the mobile phone versus the laptop or personal computer, as well as good home support to handle online education.

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For the less fortunate, they don't have home wi-fi, rely on the mobile phone's 4G signal at best which is not equally reachable nor reliable in all areas, leaving some studying in unimaginable places and deprived conditions in order to join classes online. For most in the rural areas, erratic electricity supply is another major problem and this can affect not only observing and listening to their teachers, but also watching videos, downloading or even keeping the phone charged.

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The student's ability to partake and engage with their teachers and peers depends on the number of devices the household has, the quality of the device, the connectivity and the timing of the lessons or lectures. Other issues that may crop up include: Is teaching excellence more important than how lessons are delivered? Will the absence of peer interaction deprive motivation and retard learning outcomes? Will not different approaches to online learning be necessary to meet different types of content and students? The questions therefore have moved from whether a student can access the internet to how does the student do it, whether the teacher alleviates the education divide or inadvertently deepens it; which begs the final question on whether online education is a fair option at all.





 $This\ article\ was\ published\ on\ the\ SDI\ website\ on\ 11\ October\ 2021.\ To\ read\ other\ THINK\ articles,\ click\ on\ the\ logo.$

Commentaries from SDI Members

YBHG. PROFESSOR DATU DR ANDREW KIYU, UNIMAS

We have to accept the fact that the digital infrastructure for online learning in most of Sarawak range from non-existent to mediocre. For most of the pupils in rural areas, online learning has been a bane. At the post-graduate level, I find that online learning went on well as the students are mostly residing in urban areas where the digital infrastructure is relatively good. In addition, the post-graduate students have almost mastered the art and skill of learning. For post-graduate students, online learning is a good complement to face-to-face learning, but I do not think it can replace face-to-face learning anytime soon.

MR RAVI GOPAL, IPG BATU LINTANG

Schools and teachers with internet connectivity face challenges in preparing suitable activities and evaluation for students for online classes. Students' attendance may differ from one subject to another depending on the method chosen by teachers. Teachers have to share information among one another to find the best solutions possible to attract students attending their online classes. There are even teachers who seek IPG lecturers' assistance to coach them in finding solutions for current online teaching-learning problems, in particular suitable pedagogical and assessment method for students.

Featured SDI Corporate Member

Sarawak Energy Berhad

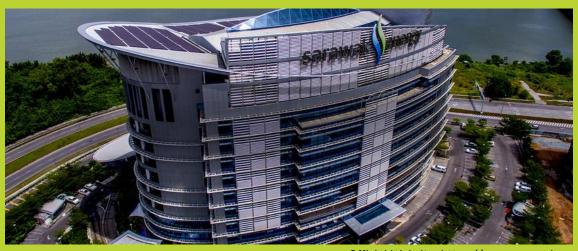
Sarawak Energy Berhad is an energy development company and a vertically integrated power utility with a vision to achieve sustainable growth and prosperity for Sarawak by meeting the region's need for reliable and renewable energy - providing electricity to 3 million Sarawakians in urban and rural areas.





Built on a foundation of 100 years of experience, our role is to provide reliable, safe, and competitively-priced power. Our energy predominantly comes from Sarawak's rich hydropower resources, making our energy supply environmentally friendly and sustainable. We are the primary electricity provider in Sarawak, with an expanding consumer base of more than 740,000 account holders throughout Sarawak and a growing multidisciplinary workforce of 5,400. Sarawak Energy is the largest employer of Sarawak's professional talent.

We are now taking bold steps to support Sarawak's goal of achieving developed status by 2030. In advancing the agenda of sustainable and continuous growth, a strategy roadmap is designed to consolidate, protect and optimise the value created from the transformation of a traditional utility into a corporate power house and digital utility of the future by focusing on excellence in operation and Health, Safety and Environment (HSE), project delivery and talent management enabled by a high performance organisational culture.



Past Activities and Events

Brown Bag Talk | 20 May 2021

Reforestation and Circular Economy in Sarawak

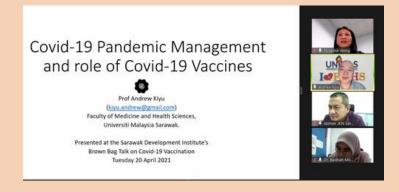


Dr. Henry Chan, Conservation Director of WWF-Malaysia and member of SDI, shared in a Virtual Brown Bag Talk on the reforestation effort in all the degraded and deforested areas that have been designated for forest cover under the State's policy goal to gazette 1 million hectares of Totally Protected Areas and 6 million hectares of Permanent Forest Estates. He emphasized that reforestation project is a costly exercise that requires about USD 1500 per hectare and a minimum of five continuous years to maintain the growing trees. It is only after the fifth year that the planted trees will be able to overcome the surrounding shrubs and creepers from overwhelming and strangling them.

For further read, click here

Brown Bag Talk | 20 April 2021

Sarawak Covid-19 Vaccination Campaign



The special edition Brown Bag Talk on Sarawak Covid-19 vaccination campaign via Zoom received an overwhelming response where 370 participants joined to listen to YBhg. Prof. Datu Dr. Andrew Kiyu Dawie Usop, Professor of Public Health, Faculty of Medicine & Health Sciences, University of Malaysia Sarawak (UNIMAS) and also Chairman of the Sarawak Covid-19 Vaccine Advisory Group (SCoVAG) in the Sarawak Disaster Management Committee as well as a member of SDI, Dr. Radziah Mohamad, Public Health Specialist, Principal Assistant Director, Family Health Development Section, Sarawak State Health Department and Haji Aziman Mahdi, Principal Assistant Director, Health Promotion Section, Sarawak State Health Department.

Meetings and Discussions

9 February 2022

Luncheon with Sarawak Metro Sdn. Bhd.





Mdm. Lelia Sim, CEO of AZAM Sarawak and SDI, Ms. Rosalind Yang Misieng, Deputy CEO of AZAM Sarawak as well as Mdm. Rosalind Wong, Deputy GM of SDI attended a luncheon organised by Sarawak Metro Sdn. Bhd.(SMSB). Representing SMSB were Mr. Alexius Barieng, Director of Corporate Communication, SEED Programme, and Bumiputera Relations, and Mdm. Letitia Samuel, Media Manager. The luncheon discussed potential collaboration ideas on the Socio-Economic Enhancement Development (SEED) Programme by SMSB as well as ideas for an event on railway systems.

11 February 2022

Courtesy Visit by UNICEF







Members from the Social Policy Team (Mr. Stephen Barret, Chief of Social Policy and Ms. Amarpreet Kaur, Knowledge Management Officer) of the United Nations Children's Fund (UNICEF) Malaysia paid a courtesy visit to SDI and were welcomed by Mdm. Lelia Sim, Mdm. Rosalind Wong, and Mr. Kamarrudin Sajeli. The visit was in line with UNICEF Malaysia's focus on Sarawak as part of their country programmes planning for 2022-2025. The meeting discussed potential work linked to socioeconomic studies and social protection mechanism linked to children and women in Sarawak through institutional mapping of stakeholders and the various issues and challenges faced.



Heard of NFT?

adapted from https://www.forbes.com/advisor/investing/nft-non-fungible-token/

An NFT (Non-fungible Token) is a digital asset that represents real-world objects like art, music, in-game items and videos. They are bought and sold online, frequently with cryptocurrency, and they are generally encoded with the same underlying software as many cryptos.

Although they've been around since 2014, NFTs are gaining notoriety now because they are becoming an increasingly popular way to buy and sell digital artwork. A staggering \$174 million has been spent on NFTs since November 2017.

NFTs exist on a blockchain, which is a distributed public ledger that records transactions. You're probably most familiar with blockchain as the underlying process that makes cryptocurrencies possible.

Specifically, NFTs are typically held on the Ethereum blockchain, although other blockchains support them as well. An NFT is created, or "minted" from digital objects that represent both tangible and intangible items, including art, GIFs, videos and sports highlights, collectibles, virtual avatars and video game skins, designer sneakers, music, and more!

Upcoming Activities and Events



The ASEAN Australian Engineering Congress 2022 (AAEC2022) aims to foster excellence in the practice of "Engineering Solutions in the Age of Digital Disruption". The Congress presents an opportunity for consulting engineers, researchers, designers, contractors, local councils, implementing government agencies and suppliers to discuss engineering research and solutions for achieving Industry 4.0 and digital transformation while maximizing process efficiencies in the industry for optimizing safety and sustainability.

The Congress also provides a forum to review knowledge, disseminate information, promote awareness, facilitate collaboration, and make recommendations. Innovative engineering projects and potential solutions will be presented in the form of technical presentations to encourage constructive discussions and to also provide a networking opportunity amongst university lecturers, students, staff of government implementing agencies and practicing consulting engineers.



Upcoming Activities and Events



23 March 2022 | 2:30PM | Zoom

Digital Health Research and Development in Sarawak

By: Professor Dr. Patrick Then, Centre of Digital Futures, Swinburne University of Technology Sarawak Campus

The talk will cover the research collaboration work on digital health conducted since 2008 which aims to support and improve the efficiency of hospital care, health screening and diagnostic of illness. Some of the research work include the award-winning health screening using AI which is able to discover unknown risk factors among the healthy population who have developed diabetes; the AI and data science algorithms for detecting heart abnormalities, Eye for the Future which encompasses state-of the-art AI algorithms which can detect retinal vein occlusion diseases at more than 90% accuracy; AI algorithms to detect Covid-19 from cough sounds and AI Geofencing techniques embedded in a fully automated Stay-Home-Notice surveillance system to monitor the conditions (blood pressure and body temperature) of the Covid-19 patients.

13 April 2022 | 2:30PM | Zoom

Digital Inclusion Policies in Sarawak: Are we missing something?

By: Associate Professor Dr. Tariq Zaman, University of Technology Sarawak

Malaysia is often lauded for internet access and broadband penetration rates. Although the national statistics for the country are impressive[1],[2], they usually do not cover the status of internet and broadband access in indigenous and rural communities. According to the Malaysian Communication and Multimedia Commission (MCMC), the mobile broadband penetration rate in Malaysia is 120% compared to 37% fixed broadband[3]. However, during the COVID-19 pandemic, the digital divide or gap between the connected and the unconnected in Sarawak was widely exposed[4]. With low population density and with rural communities scattered across remote areas, Sarawak is a geographically challenging region for private telecommunication companies and the current spectrum policies are not able to address the issue of the digital divide in remote Sarawak. Therefore, the recent deliberations of the government "Internet as a third utility"[5] and "Internet access a human right"[6] are bringing the rights-based perspective to the discussions on digital divide. In this Brown Bag seminar, the speaker will highlight the key challenges for digital inclusion faced by the indigenous and rural communities of Sarawak. The speaker will also share some of the initial findings from the two most recently initiated research projects to further explore, document and address these challenges.

- [1] https://a4ai.org/affordability-report/data/?_year=2020&indicator=INDEX
- [2] https://theinclusiveinternet.eiu.com/explore/countries/SE/?category=readiness&year=2021
- [3] https://www.mcmc.gov.my/skmmgovmy/media/General/pdf/Q1-2021-C-M.pdf
- [4]https://www.freemalaysiatoday.com/category/nation/2020/11/19/sarawak-students-take-3-hour-hike-for-internet- access/
- [5] https://www.freemalaysiatoday.com/category/nation/2021/06/03/after-water-and-electricity-internet-now-a-public-utility/
- [6] https://www.mcmc.gov.my/en/media/press-clippings/internet-access-a-human-right-annuar

Upcoming Activities and Events

18 May 2022 | 2:30PM | Zoom

Smart City Development Initiatives in Sarawak

By: Sarawak Information Systems (SAINS)

The talk is proposed to cover the vision of smart city planning, current on-going projects and future pipeline plans for the state. It is also to highlight SAINS's role in the development of the smart city initiatives, the expertise involved, and to ensure the success of the smart city initiatives for the State.

On-going Research Projects

Cultural Resource Mapping: Exploratory Project for Kuching Division

2022-2024

A joint effort between the Ministry of Tourism, Creative Industry & Performing Arts, Sarawak Development Institute, and University of Technology Sarawak (UTS), the project aims to collect and catalogue as much and as widely as possible, the tangible and intangible cultural heritages present in Kuching Division as well as to develop an information technology platform with geo-located technological features for mapping.

Baseline Study on Sago Production and Downstream Activities in Betong and Mukah Divisions

January 2022 - December 2022

The main aim of the study, commissioned by CRAUN Research Sdn. Bhd., is to compile and create baseline data on sago production activities (including both upstream and downstream activities where available) in the Mukah and Betong Divisions (recognised as the main sago production divisions in Sarawak.) Among the specific objectives of the study are to determine the domestic production of sago starch, domestic consumption of sago starch, and the domestic market for sago starch as well as its processed end-products and identify existing technology adopted for downstream activities.



Assessing Local Population Needs in Relation to Services Provided by the Digital Community Centres (DCC) in Sarawak

January 2022 - December 2022

The main aim of this survey, commissioned by the Sarawak Multimedia Authority (SMA), is to assess the needs of the local population in relation to the capacity building activities provided by the digital community centres. In line with the aspiration of the Government to transform Sarawak through digital economy, Digital Community Centres (DCC) have been established to empower the community with skills and abilities so that they will not be left out from the digital economic transformation mainstream. The establishment of DCC is expected to improve the socioeconomy, quality of life of the community as well as the development of local businesses.