

DIGITAL LIFESTYLE MALAYSIA MYMAKER AND SOCIETY INITIATIVES 2017 REPORT



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Initiatives by:





Digital Lifestyle and Society Department (DLSD)
Technology and Society Division(TSD)

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FROM CHAIRMAN'S DESK

Warmest greetings.

It is my great pleasure to extend greetings to all Internet of Things (IoT) practitioners, tertiary and Makers community out there.

MCMC once again is at the forefront of initiatives and programmes that will take our nation to a new height on IoT and Maker communities development.

According to Makermedia, Makers makers community adds USD \$29 billion to the United States' economy. Currently more than 240+ Maker Faires are conducted organised around the world. It is estimated that with 26% United States U.S. cities havinge their own makerspaces, 57% of United States' US adults are makers and estimated about 1,393 makerspaces have been established worldwide.

Gartner projects that the drone market will worth more than USD 11.2 billion in 2020. Statista, meanwhile, reported that robotics market is valued at about USD 40 billion from 2016 to 2022 while it predicted that the 3D printer market would worth USD 12 billion in 2018.

Since the millennium, in tandem with the world, the lives of people have been transformed through the advancement brought about by the convergence of communications and multimedia. The next big trends are the internet of things and makers.

Hence, MCMC has formed initiatives and programmes that supports and creates the human capacity building via its myMaker initiatives and Digital Lifestyle Malaysia as a catalyst for adoption of IoT.

This booklet highlights the achievements and outcomes of Digital Lifestyle Malaysia, myMaker and Society Initiatives undertaken by MCMC in 2017.

Under Digital Lifestyle Malaysia (DLM), myMaker and Society initiatives, MCMC aims to make, promotes

and accelerates the adoption of IoT, creating more maker communities, makerspaces and create digital inclusion for all Malaysian citizen. This is to enable Malaysian to compete and at par with other countries. MCMC also aims to provide better quality of lifestyle with the adoption of IoT in the country.

Under the said initiatives, MCMC organized awareness programmes, trainings, workshops, hackerthons, makerthons and IoT proof of concept projects (POC). Various initiatiatives are established with collaboration with industries, academia, community in key strategic locations in Malaysia.

MCMC hosted the first ASEAN Makerthon, participated by 10 ASEAN countries and two dialogue partners from Republic of Korea and China to share and understand the potential of IoT in solving problem in their respective countries.

With the establishment of Experiential Learning Space(ELS), myMaker IoT lab and myMaker IoT cloud spearhead the growth of IoT adoption and creation of maker mind set supported by industries, academia and community champions. Our ELS and myMaker IoT Lab attracted visitors, tertiary and Maker community locally and overseas for study visit.

I hope that readers will come forward to play their role to ensure the success of this programme. This report provide a broad overview of the many activities and initiatives MCMC is engaged upon.

MCMC thrives for these accomplishments and from here on with the proliferation of Industry 4.0, Internet of Things and maker communities.

Thank you.

Tan Sri Dr. Halim Shafie Chairman, MCMC



EXECUTIVE SUMMA

Digital Lifestyle Malaysia, in collaboration with various partners and stakeholders, has initiated several IoT proof of concept projects as catalyst use cases to prove that IoT is no longer a myth. Many opportunities can be explored to enable IoT in the areas of transportation, agriculture, retail and payment, and healthcare ecosystems.

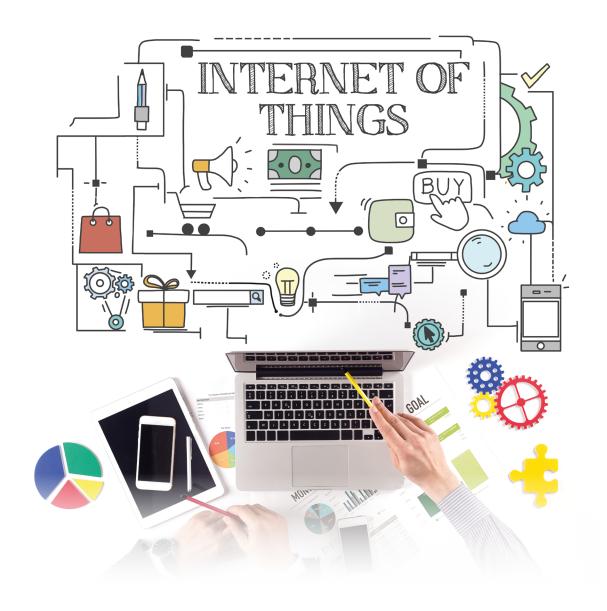
The Malaysian Communications and Multimedia Commission (MCMC) Experiential Learning Space located at the MCMC Old Headquarters showcases various IoT and Industrial 4.0 projects is hoped to further create awareness and innovation in collaboration with industry, academia and community.

MCMC also created its very own makerspace, dubbed 'myMaker IoT Lab' which serves as a platform for innovation and creativity development. The myMaker IoT Lab provides tools and venue for makers to display and advocate their projects, as well as provide a learning space for makers community. myMaker IoT Lab is a space where

people of many disciplines come together, create ideas and collaborate on projects.

MCMC through its myMaker makerspace has also initiated various collaboration with academia and local champions such as Universiti Sains Malaysia, University College of Technology Sarawak, Universiti Teknologi Malaysia, University Malaysia Perlis, and Universiti Utara Malaysia, as well as state libraries of Sabah and Sarawak and Pusat Internet Malaysia to promote makerspaces in respective regions.

A total of 2,411 participants were trained under myMaker and DLM initiatives through 42 programmes ranging from 3D printing, IoT programming, augmented and virtual reality, drone, robotic workshop and IoT seminars all conducted in 2017. The myMaker IoT Lab and Experiential Learning Spaces have also recorded visitors from local tertiary education institutions, local and international players from diverse industries and visitors from various countries.

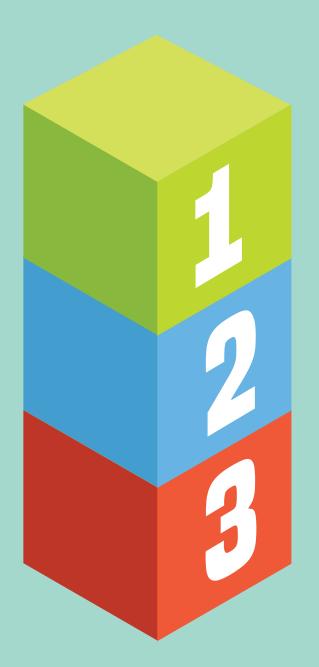


DIGITAL LIFESTYLE MALAYSIA (DLM) MYMAKER AND SOCIETY INITIATIVES

In today's world, there's no question that technology has become a crucial part of our lives. We are constantly connected and embracing new advancements in our everyday routines.

That is where Digital Lifestyle Malaysia (DLM), myMaker and Society Initiatives comes into the picture. Developed by the Malaysian

Communications and Multimedia Commission (MCMC), and led by the Digital Lifestyle and Society Department (DLSD) under the Technology and Society Division (TSD), its aim is to promote and accelerate the development and adoption of the Internet of Things (IoT) and the makers community for a better quality digital lifestyle.



OUR OBJECTIVES

TO PROVIDE A BETTER DIGITAL LIFESTYLE FOR ALL MALAYSIANS **THROUGH ICT APPLICATIONS**

TO RAISE AWARENESS AND CREATE A PLATFORM FOR THE MAKERS **COMMUNITY THROUGHOUT MALAYSIA**

TO INCREASE PRODUCTIVITY AND **SUSTAINABILITY THROUGH THE ADOPTION OF INTELLIGENT ICT** SERVICES AND THE IOT APPLICATIONS, **HENCE ENABLING MALAYSIANS TO BE MORE COMPETITIVE LOCALLY AND GLOBALLY**

DIGITAL LIFESTYLE MALAYSIA (DLM)



Figure 1: DLM logo

■ DLM Overview

DLM promotes and accelerates the development and adoption of digital applications and services. It includes the adoption of the IoT infrastructures in internet-based business transactions to promote growth and better quality of life.

By embracing ICT services and IoT environment, productivity and sustainability of the nation can be increased hence creating a more competitive Malaysia.







■ DLM Initiatives & Proof of Concept (POC) Project

Creating an ecosystem to promote the use of digital applications to increase competitiveness and enhance social lifestyle - focusing on industry and community, and linking the IoT to the Internet of People (IoP). POC projects' focus on five ecosystems can be seen in Figure 3.

Edible-Birdnest (EBN) Traceability System

The Government of Malaysia (Department of Veterinary Services) and MCMC signed a Memorandum of Understanding (MoU) to jointly design, develop and implement a traceability system, and to develop and adopt traceability standards and guidelines for the EBN industry.

Using the IoT Technology, EBN can now be traced throughout the entire supply chain. This helps in promoting consumers' confidence, especially for the China export market which is the largest market in the industry.

In December 2016, the system was successfully delivered to Department of Veterinary Services.



Rapita RFID / IoT Asset Management

This POC project is for DLM Healthcare Ecosystem. The project which is a combination of RFID and IoT solution provides Real Time Asset Tracking and Monitoring of hospital equipment.

System: RFID Tag (active & passive) + RFID Reader + WiFi/LAN + IoT Gateway + Cloud Server + Data Analytics + Mobile Apps (Android & iOS)

The project is a collaboration with Sunway Medical Centre.



Figure 3: How the system works

LocAware - School Bus & Student Tracking System

This POC project is for DLM Transportation Ecosystem. The project is a school bus and student tracking system which uses GPS/GSM/RFID/IoT technologies.

System: RFID Tag + RFID Reader + GPS Tracker + 3G + IoT Gateway + Cloud Server + Data Analytics + Mobile Apps (Android & iOS).

Stakeholders: BrainyBunch International Islamic Montessori and Universiti Tenaga Nasional.

Implementation with BrainyBunch International Islamic Montessori and UNITEN Smart University commences in 2018.

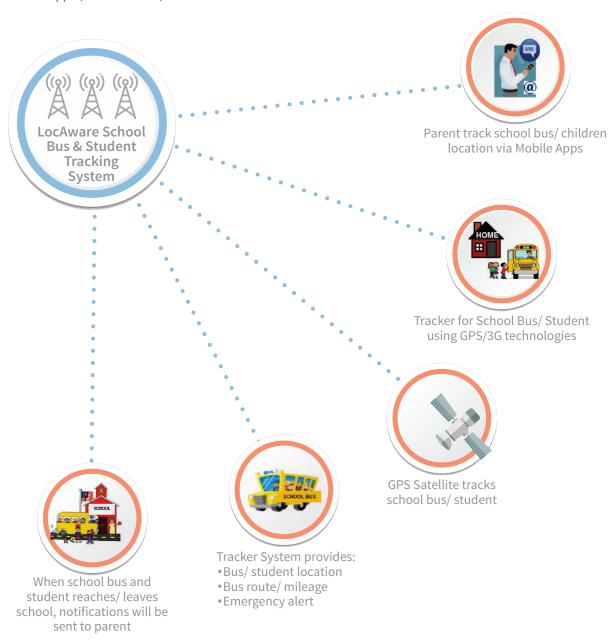


Figure 4: How the system works

Bluetooth Low Energy (BLE) Proximity Marketing for Retail Outlets

This project is for DLM retail and payment ecosystem. The system uses a combination of IoT Technology, Bluetooth 4.0 and Payment Gateway for personalised proximity marketing.

System: BLE Beacon + IoT Gateway + Payment Gateway + Cloud Server + Data Analytics + Mobile Apps (Android & iOS).

Stakeholder for the project is Segaris Art Centre (UiTM Holdings).



Greenify - IoT Technology and Precision Agriculture

Greenify is a DLM Initiative for the Agriculture Ecosystem. The application uses a combination of the IoT technology, cloud hosting and data analytics for precision agriculture.

System: pH sensor, EC sensor, temperature sensor, water level sensor + IoT Gateway + WiFi + Cloud Server + Data Analytics + Mobile Apps (Android & iOS). The indoor and outdoor unit of Greenify are displayed at DLM-ELS, MCMC old headquarter.



Figure 5: Greenify offers capability to monitor plant performance through apps







e-Book Facilities at Airport

Upon entering the e-Book zone, passengers will receive a notification on their digital devices to download the app which will grant them automatic access to specific e-Books catalogue. Once the e-Book is downloaded, passenger can read it offline and can continue reading on their mobile devices.

Location of implementation:

- Kota Kinabalu International Airport, Kota Kinabalu
- Penang International Airport, Bayan Lepas

• Senai International Airport, Johor Bahru

In collaboration with:

- Sabah State Library for linking its e-Book inventories to Kota Kinabalu International Airport
- Penang State Library for linking its e-Book inventories to Penang International Airport
- Johor State Library for linking its e-Book inventories to Senai International Airport

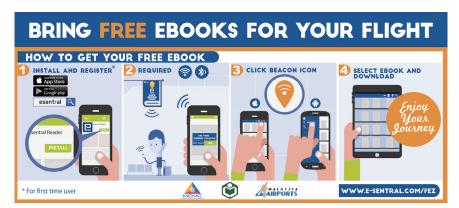
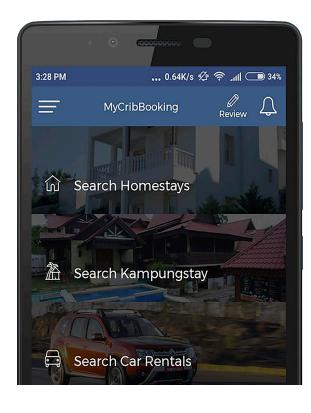


Figure 6: e-Book installation guideline using Beacon Bluetooth Connectivity Technology



MyCribBooking Unique Travelling Web Portal & Mobile Apps

DLM Unique Travelling Web Portal & Mobile Apps MyCribBooking is created for Smart Communities in Kota Belud, Lundu, Langkawi and Kemaman.

The "sharing economy" concept is adopted in the web and mobile apps.

The concept encourages community involvement in tourism entrepreneurship as part of Smart Community initiatives.

Category of services:

- Guest Houses
- Homestays
- Car Rentals
- Fun Experiences
- Tour Packages
- Places of Attractions

Smart Halal and Smart Quran

Smart Halal

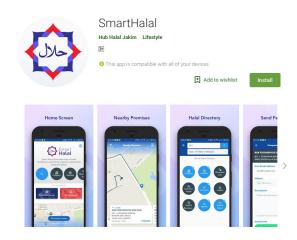
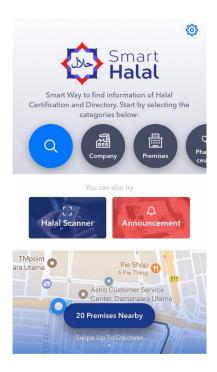


Figure 7: The Smart Halal Application can be downloaded from the App Store platform and Google Play



The app is developed under strategic partnership between MCMC and Jabatan Kemajuan Islam Malaysia (JAKIM) through the JAKIM-Jabatan Agama Islam Negeri (JAIN)-MCMC Joint Committee.

The app provides a link to JAKIM MYeHALAL system and serves as an efficient online medium to relay Halal information to the users - products, food premises and slaughter houses.

Smart Quran



Figure 8: The Smart Quran Application which can also be downloaded from the App Store platform and Google Play

	Senarai		尊
1	Al-Fatihah سورة الفاتحة Makkiyyah - 7 ayat	1	i
2	Al-Baqarah سورة البقرة Madaniyyah - 286 ayat	2	i
3	Ali-'Imran سورة آل عمران Madaniyyah - 200 ayat	50	i
4	An-Nisaa' سورة النساء Madaniyyah - 176 ayat	77	i
5	Al-Maa'idah سورة المائدة Madaniyyah - 120 ayat	106	i
Surah	Al-An'aam	100	Q arian

The app is developed under strategic partnership between MCMC and JAKIM through the JAKIM-JAIN-MCMC Joint Committee.

Smart Quran is developed based on Rasm Uthmani by An-'Asim with Tafsir Pimpinan Rahman, and fully checked and authorised by JAKIM, Ministry of Home Affairs and JAIN.



INDUSTRY 4.0

CYBER PHYSICAL SYSTEM, INTERNET OF THINGS, SMART TECHNOLOGIES

1870



1784



INDUSTRY 1.0

MECHANICAL PRODUCTION, WATER AND STEAM

INDUSTRY 3.0

AUTOMATION, COMPUTER AND ELECTRONIC

INDUSTRY 2.0

ELECTRIC POWERED ASSEMBLY LINE, MASS PRODUCTION

DRIVING DIGITAL
TRANSFORMATION

THROUGH MYMAKER EVERYONE CAN MAKE

An abundance of talents we have in our nation can only be further nurtured when they are supported by the right resources and platform.

myMaker was started to do just that. myMaker is an initiative to raise public awareness of Science, Technology, Engineering and Mathematics (STEM) by incorporating IoT development for technology enthusiasts, educators, thinkeres and students.

The platform provides the makers society an avenue for creativity and innovation development in the areas of 3D printing, drones, embedded systems, electronics, augmented and virtual reality, IoT programming and other areas. The spirit of the initiative takes true form with its tagline "Now Everyone Can Make".



Figure 9: Leonardo DaVinci Bridge printed using 3D printer during myMaker 3D Printer Workshop

Activities under myMaker

- 3D Printing
- Drones
- Robotics
- Embedded IoT Programming
- Digital Music
- Augmented and Virtual Reality
- Digital Photography

myMaker Leaves a Mark with Smart Community PIM

myMaker actively supports the Smart Community Initiative through DLM and myMaker projects in 2017. For Smart Community programmes, unique IoT and Science, Technology, Engineering, Arts and Mathematics (STEAM) are specifically designed to suit the needs of the communities in Lundu, Langkawi, Kota Belud and Kemaman. The activities include Arduino programming, drone training and 3D printing training.



Figure 10: myMaker logo



















- myMaker Drone & 3D Printing Workshop, PIM Kg Pandan, 3 March 2017
- myMaker 3D Printing and Drone Workshop, PIM Kg Pandan, 4 March 2017
- 3 myMaker Arduino Programming, 3D Printing and Drone Operation Workshop, 12 May 2017
- myMaker Arduino Programming, 3D Printing and Drone Operation Workshop, 13 May 2017
- 5 myMaker 3D Printing and Drone Workshop, PIM Kg Pandan, 4 March 2017



Figure 11: myMaker Strategic Smart Partnership at 6 regional locations

myMaker Regional Partnerships

myMaker strategic partnership aims to collaborate with potential local maker champions and IPTA/IPTS in six (6) regions. The strategic partnership activities are divided into regions to provide concentrated support to PIMs and maker initiatives community. myMaker activities are intended to bridge the digital divide between urban and rural population. It is also in line with promoting IoT and STEAM to the PIM community.





















- 1) myMaker Arduino Workshop, PIM Lekir Batu Setiawan Perak, 2-3 August 2017
- 2 myMaker Arduino Workshop, PIM Sg Pinang Penang, 21-22 October 2017
- 3 myMaker Arduino Workshop, PIM PPR Sri Wangi, Kuching, Sarawak, 27-28 October 2017
- myMaker Arduino Workshop, PIM Bukit Chandan Kuala Kangsar Perak, 28-29 October 2017
- myMaker Raspberry Pi Workshop, PIM PPR Kinarut Ria Papar Kota Kinabalu Sabah, 9-10 December 2017



Figure 12: CNC machine available at myMaker IoT Lab

A SPACE FOR IDEAS: MYMAKER IOT LAB

A collaborative space where ideas come to life. The myMaker IoT Lab is where it happens. People of different disciplines come together to create, ideate and collaborate on projects. MyMaker IoT Lab is home to equipment such as laser cutters, 3D printers, CNC machines, soldering stations, electronic labs and hand tools. The lab is open to those who are interested to become parts of the myMaker community.



Figure 13: Soldering Station available at myMaker IoT Lab

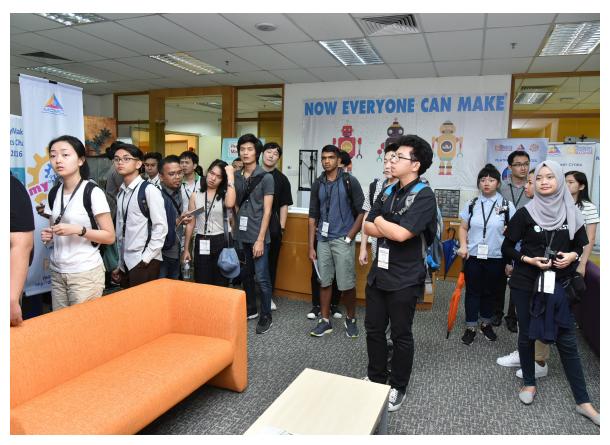


Figure 14: University students from ASEAN countries visiting myMaker IoT Lab





Figure 15: myMaker IoT Lab contact information

WORKSHOP CONDUCTED FOR YEAR 2017 AT MCMC MYMAKER IOT LAB

■ Quarter 1

Date	Title	Participants
25 March 2017	myMaker DiY Drone Workshop	Students & Adults Total Pax: 25
27 March 2017	myMaker 3D Printing - Sketch, Design & Print	Students Total Pax: 20
29 March 2017	myMaker Robotics Workshop	Students Total Pax: 25



Figure 16: myMaker DiY Drone Workshop @ myMaker IoT Lab



Figure 17: myMaker 3D Printing - Sketch, Design & Print @ myMaker IoT Lab

Quarter 2

Date	Title	Participants
18 April 2017	myMaker Workshop on Applying Arduino Skills in the Industry	Students Total Pax: 20
12 May 2017 - 13 May 2017	Workshop on myMaker Robotics Arduino & 3D Drone	Students & Adults Total Pax: 50
29 May 2017 - 1 June 2017	RoboCamp	Students Total Pax: 05 (Paid course/RM50 per pax)



Figure 18: myMaker Robotics Workshop @ myMaker IoT Lab



Figure 19: myMaker Workshop on applying Arduino Skills in the Industry @ myMaker IoT Lab



Figure 20: RoboCamp @ myMaker IoT Lab



Figure 21: Workshop on 3D Printing with RP Maker @ myMaker IoT Lab

Quarter 3

Date	Title	Participants
18 July 2017	Workshop on 3D Printing with RP Maker	40
24 Aug 2017	Arduino Internet of Things (IoT) Workshop	24
6 Sep 2017	Workshop on 3D Printing	04
8 Sep 2017	Drone Build Workshop	20
9 Sep 2017	Laser Rubber Stamp Workshop	10
12 Sep 2017	Drone Talk	19
13 Sep 2017	Tech Talk on Designing Printed Circuit Board with KiCAD	16
19 Sep 2017	Augmented Reality (AR) Workshop	16
23 Sep 2017	Woodworking Furniture Hack Workshop	15
26 Sep 2017	Open Source Robotics Introduction Workshop	08
28 Sep 2017	myMaker Robotics Workshop with DreamEdge	20



Figure 22: Arduino Internet of Things (IoT) Workshop @ myMaker IoT Lab

Quarter 4

Date	Title	Participants
18 Dec 2017	myMaker Robotics Workshop	19
19 Dec 2017	myMaker Coding for Beginner	22
20 Dec 2017 - 21 Dec 2017	myMaker 3D Printed IoT Aquarium Bootcamp	27
22 Dec 2017	myMaker D.I.Y Drone	31
27 Dec 2017	myMaker Lego Mindstorms EV3 Workshop	26

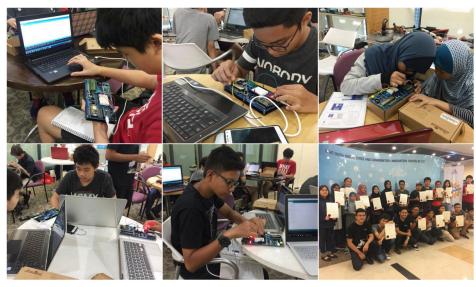


Figure 23: myMaker Coding for Beginner @ myMaker IoT Lab



Figure 24: myMaker Lego Mindstorms EV3 Workshop @ myMaker IoT Lab



Figure 25: Drone Build Workshop @ myMaker IoT Lab



Figure 26: Workshop on 3D Printing @ myMaker IoT Lab



Figure 27: Laser Rubber Stamp Workshop @ myMaker IoT Lab



Figure 28: Tech Talk on Designing Printed Circuit Board with KiCAD @ myMaker IoT Lab



Figure 29: Drone Build Workshop @ myMaker IoT Lab







Figure 31: Woodworking Furniture Hack Workshop @ myMaker IoT Lab



Figure 32: Open Source Robotics Introduction Workshop @ myMaker IoT Lab







VISITOR TO MYMAKER IOT LAB



Figure 34: YBhg Tan Sri Chairman visit to myMaker IoT Lab

Figure 35: UUM Team visiting the myMaker IoT Lab in conjunction with myIGF 2017















Figure 37: Visitors from Nigeria Communication Commission

Figure 38: myMaker IoT Lab visit by Prof Javed from USA

Figure 39: Myanmar UBuntu Loco Team







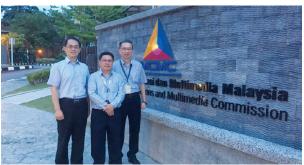


Figure 41: III team visiting myMaker IoT Lab



Figure 42: Visitors from UKM visiting myMaker IoT Lab

Figure 40: Visitors form MARA-Japan Institute Beranang



Figure 43: Uinversity Malaya Makerthon team visiting Experiential Learning Space (ELS) and myMaker IoT Lab



Figure 44: With Andri Yadi, a key Indonesia Maker Mover and CEO from Dycodex Indonesia visiting our lab



Figure 45: MARDI team visiting myMaker IoT Lab and DLM Experiential Learning Space



Figure 46: En. Malib of MARA Aerospace and Technologies and En. Najwan (MARA Japan Industrial Institute) visit to myMaker IoT Lab



Figure 47: MOHE visit to myMaker IoT Lab

MYMAKER.io **CLOUD IOT PLATFORM**

Connectivity MQTT myMaker.io IoT Server Data Push Applications

Figure 48: myMaker.io promotional banner

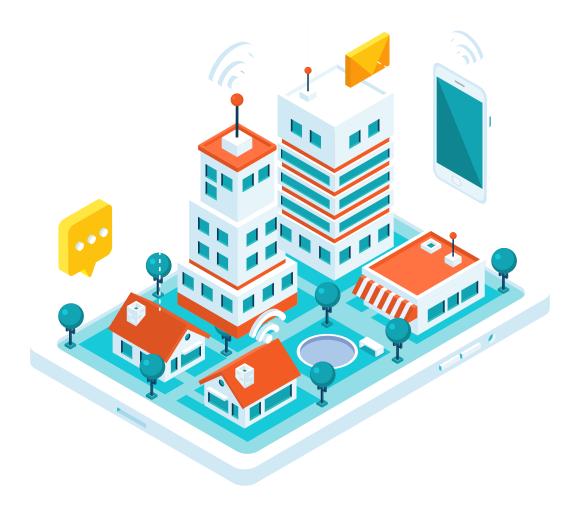
■ Driven By The Community, For The Community

myMaker.io IoT Server and Services serves as a hosting platform for polytechnics, universities and startups, enabling them to work on IoT related projects.

myMaker.io IoT Server and Services is intended to promote and raise awareness on IoT industry in Malaysia. It serves as a development platform for students, lecturers, researchers and startups for IoT projects. Through myMaker IoT Server and Services, "Proof of Concept" IoT projects can be developed in order to test out new IoT ideas, theories and potential products.

MCMC myMaker.io consists of four major elements:

- Things or any network-connected gadgets and sensors, mobile apps, connected cars, or any devices that send sensor data periodically.
- Connectivity, either wired or wireless, examples are SMS, GPRS/3G/4G/LTE, LoraWAN, WiFi, Sigfox, NBIoT and various other wireless technologies.
- IoT Server this refers to the IoT cloud platform, MCMC's very own myMaker IoT Server & Services.
- Applications this is the output of the IoT whereby summary dashboards, analysis of sensor data or graphic representation of collected sensor data are presented in a useful, user-friendly format.



IOT SHOWCASES THE EXPERIENTIAL LEARNING SPACE

The Digital Lifestyle Malaysia - Experiential Learning Spaces (DLM-ELS) is home to many informative and interactive displays on communications and multimedia and how technologies can help driving the innovation to transform, improve and create new digital services. The learning space also simulates how technologies affect many aspects of governance, business and living as Malaysia moves towards developed digital economy and becomes Smart Digital Nation, Cities and Communities Malaysia.

The central display piece is a large picture portraying a Smart Digital Nation, Cities and Communities Malaysia - characterised by the urban skyline of Greater KL, and with suburbs and rural communities

with its rivers and seas depicting Malaysia. The infrastructure and buildings with buzzing citizens supported by data cloud providing information storage and innovative applications for agricultural, environmental and management are delivered over high-speed broadband infrastructure, thus contributing to a high quality life.

The space has many points of interest; visitors may explore, interact and experience through their smartphone camera. Visitors can scan codes using their mobile devices or touch appliances on display to learn more information or experience the featured smart digital lifestyle applications. The myMaker IoT Lab offers visitors the experience on some of the IoT projects.

Experiential Learning Space is an initiative in collaboration with MCMC Academy, makers communities, academia, startups and IoT industry partners.



Figure 49: DLM LocAware POC Project Showcase at ELS



Figure 50: Smart Connected Nations at ELS



Figure 51: Overview of Digital Lifestyle Malaysia Smart Digital Nation, cities and communications innovation driven by ICT



Figure 52: Smart Applications and Ecosystems



Figure 53: Digital Library





Figure 54: One of Rumah Panjang during Society
Programme at Sibu Sarawak

DIGITAL INCLUSION

The objective for this initiative is to collaborate with the society and engage them on the ICT programmes, the IoT, and maker concept to bridge the digital gap. The activities are also intended to promote positive use of internet and quality digital lifestyle among the mass population. To further penetrate the society, collaborations are done with religious associations, NGOs, people with disabilities (Orang Kelainan Upaya), women, youths and children groups.

■ UCTS Society Engagement PIM Bawang Assan and Iban Long House Community in Bawang Assan, Sibu, Sarawak 25 – 26 May 2017

A collaboration with University College of Technology Sarawak, Sibu (UCTS), MCMC Society Initiative created IoT awareness among residents of Bawang Assan and Iban Long House by introducing drones, 3D printing and Raspberry Pi.





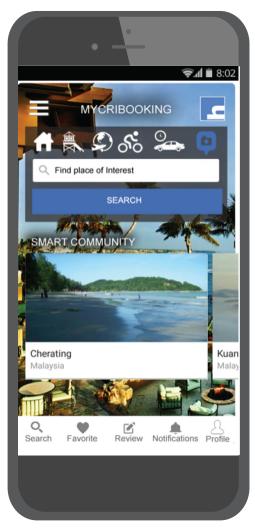




■ Society Initiative - MyCribBooking Smart Tourism Web Portal and Mobile Apps Workshop

MyCribBooking Workshop is a series of workshops organised to promote the app among local hotels, chalets, transport and tourism providers in smart community districts in Kota Belud, Lundu, Langkawi and Kemaman. Accommodation, transport and

tourism providers can publicise their services through the MyCribBooking platform. This initiative requires collaboration and engagement with various society groups at smart community districts.







■ MyCribBooking Smart Tourism Web Portal and Mobile Apps Workshop PIM Pekan Kota Belud, Sabah

Date: 16 May 2017

Number of Participants: 28





■ MyCribBooking Smart Tourism Web Portal and Mobile Apps Workshop PIM Kg. Pandan, Lundu, Sarawak

Date: 14 July 2017

Number of Participants: 31



■ MyCribBooking Smart Tourism Web Portal and Mobile Apps Workshop Auditorium LADA, Langkawi, Kedah

Date: 27 July 2017

Number of Participants: 66









Figure 57: MyCribBooking at Karnival Digital Langkawi

■ MyCribBooking Smart Tourism Web Portal and Mobile Apps Workshop

Dewan Pejabat Daerah Kemaman, Terengganu

Date: 27 September 2017 Number of Participants: 95





■ MyCribBooking Smart Tourism Web Portal and Mobile Apps Workshop PIM Pekan Kota Belud, Sabah

Date: 16 May 2017

Number of Participants: 104









HACKATHONS | MAKERTHONS SEMINARS | EXHIBITIONS

■USM Makers@APUCEN

Date : 10 & 11 March 2017 Time : 8:30am – 5:00pm : Dewan Utama Pelajar, Venue

Universiti Sains Malaysia



Figure 58: USM myMaker showcase at APUCEN SUMMIT 2017 in USM, Penang

■ NASA Hackathon Apps Challenge 2017

Date : 29 & 30 April 2017
Time : 9:00 am to 6:00 pm
Venue : Petrosains, The Discovery

Centre, Suria KLCC, Petronas Twin Towers, KL

No. of Participants: 120 teams with a total of

800 participants

NASA Space Apps is an international hackathon that occurs for over 48 hours in cities around the world. 187 cities from 86 countries participated in the NASA Space Apps Challenge Hackathon which took place on the same date.



■ IoT Transforming Business Platform Seminar

Date : 23 May 2017 (Tuesday) Time : 8:30am – 5:00pm

Venue : Auditorium, MCMC Old Office,

Cyberjaya

No of Participants: 224 participants, 8 speakers,

30 exhibitors

The seminar was conducted to raise the IoT awareness, and introduce applications and services to the industry. Carrying the theme "Digital Lifestyle - IoT Transforming Businesses", technology experts shared their knowledge, case studies and platforms to transform the IoT landscape in Malaysia.



















Figure 59: Atilze briefing Dato' Ali on IoT solution

■ Asia IoT Business Platform

Date : 27 - 28 July 2017 (Thursday – Friday)

Venue: Hotel Istana Kuala Lumpur

At the 14th edition of Asia IoT Business Platform held at Hotel Istana Kuala Lumpur, Malaysia, IoT leaders from the government, telecommunications, public and private sectors gathered to listen and discuss on the IoT and digital transformation in the country. Tuan Haji Aisharuddin bin Nuruddin delivered the keynote address which emphasised on the importance of the IoT in Malaysia and the roles of policy-making bodies in shaping the potential and benefits of the IoT.

DLSD participated in the event and showcased its initiatives.



Figure 60: DLSD and myMaker Team

■ AT&T MCMC 2017 Malaysia Developers' Day (MYDD 2017)

Date : 11 – 12 August 2017 (Friday – Saturday)

Time : 24-hours

Venue: MCMC Old HQ Cyberjaya

Organised by MCMC in collaboration with AT&T of

United States.





MYDD 2017 was a collaboration between MCMC and AT&T US, carrying the IoT as its theme and covering four (4) categories namely Smart Cities, Healthcare, Sustainability and Smart Home. The two-days event attracted 33 teams comprised of 161 local and international participants. The hackathon was officiated by United States of America Ambassador to Malaysia, Madam Kamala Shirin Lakhdhir.









Figure 61: Group photo of all 33 teams participating in MYDD 2017

■ Digital Langkawi

Date : 19 - 20 August 2017 Time : 9:00am – 6:00pm

Venue: Mahsuri International Exhibition &

Convention Centre (MIECC)

At the event which was launched by YAB Prime Minister Najib Razak, myMaker exhibited and showcased robotic, drone, 3D printing, myIoT.io platform and myMaker mini workshops on soldering, Virtual Reality and Augmented Reality.



Figure 62: myMaker team with school students at Langkawi

■ ASEAN and Internet Of Things (IoT) Information Sharing Workshop

: 8 – 10 September 2017 (Friday - Sunday) Location: Auditorium, MCMC Old HQ, Cyberjaya

The ASEAN IoT Information Sharing Workshop was held on 8 September 2017 and attended by approximately 240 participants.

20 teams of 58 participants from ASEAN, including dialogue partners from the Republic of Korea and China participated in the 30-hours Makerthon. Each team comprised of 2 – 3 members.











■ Sarawak Makersmeet 2017

Date : 21 - 22 October 2017 Time : 9:00am - 6:00pm Venue: Sarawak State Library

Makersmeet 2017 was a maker's programme organised by Sarawak State Library and supported by the US Embassy. The event intended to build a network among Sarawakian makers, communities and entrepreneurs.

MCMC participated and collaborated with Pertubuhan myMaker and UCTS for the programme. Below are the list of showcases and exhibitors:

Showcases:

- (a) myMaker Electronic Keychain
- (b) Augmented Reality by Wariscan
- (c) Virtual Reality Microsoft HoloLens
- (d) Drones DJI Spark Flying Demonstration
- (e) Ultimaker Go 3D Print Demonstration
- (f) Virtual Drone/ Aircraft Flying



Figure 63: myMaker and UCTS collaboration for Makersmeet

■ Kuala Lumpur Engineering Science Fair (KLESF) 2017

Date : 3 - 5 November 2017 (Friday – Sunday)

Time : 9:00am - 6:00pm

Venue: MIECC, The Mines, Seri Kembangan,

Selangor

Theme: Internet of Things

The Kuala Lumpur Engineering Science Fair (KLESF) was a programme jointly organised by the Universiti Tunku Abdul Rahman (UTAR), Malaysian Industry-Government Group for High Technology (MIGHT), ASEAN Academy of Engineering and Technology (AAET), and the Institution of Engineers Malaysia (IEM).

The event promoted interest on STEAM and IoT among primary and secondary school & university students.



Figure 64: YB Dato' Sri Hajjah Nancy Shukri officiated the Fair



Figure 65: myMaker team and exhibitors at KLESF 2017















■ Kita Bikin Maker Expo 2017

Date : 25 & 26 November 2017

Venue: Palm Square, Centre Point, KK Centre

Point, Kota Kinabalu

A first of its kind in Kota Kinabalu, the event was an initiative by Kinabalu Coders (MCMC's local champion for Sabah region). Kita Bikin 2017 Maker

Expo featured contents and projects from local creators, designers, inventors, makers, researchers, businesspersons or entrepreneurs, hobbyists, students, educators and tinkerers.

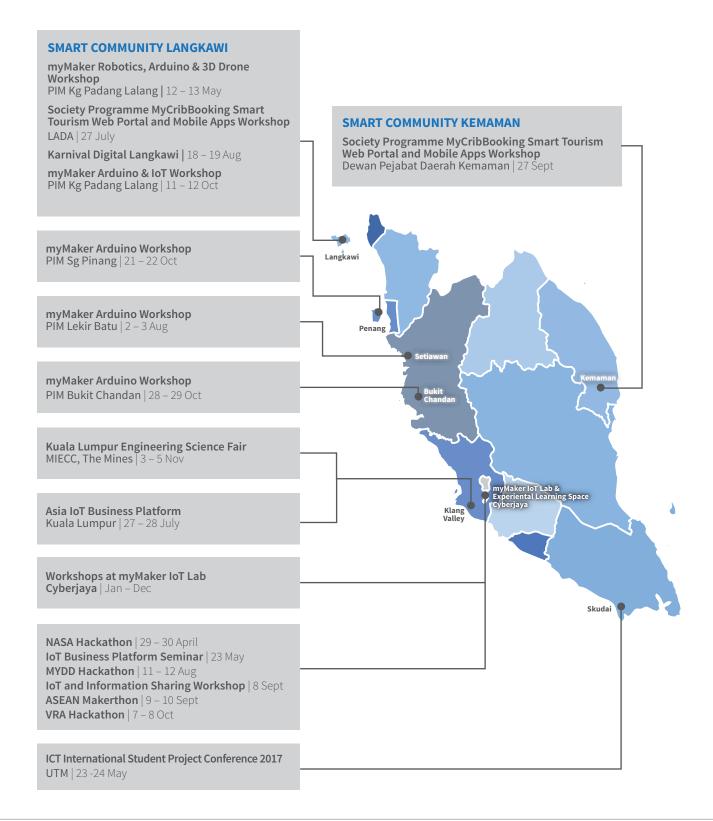
MCMC participated in Kita Bikin 2017 and promoted myMaker initiative on AR/VR activities.

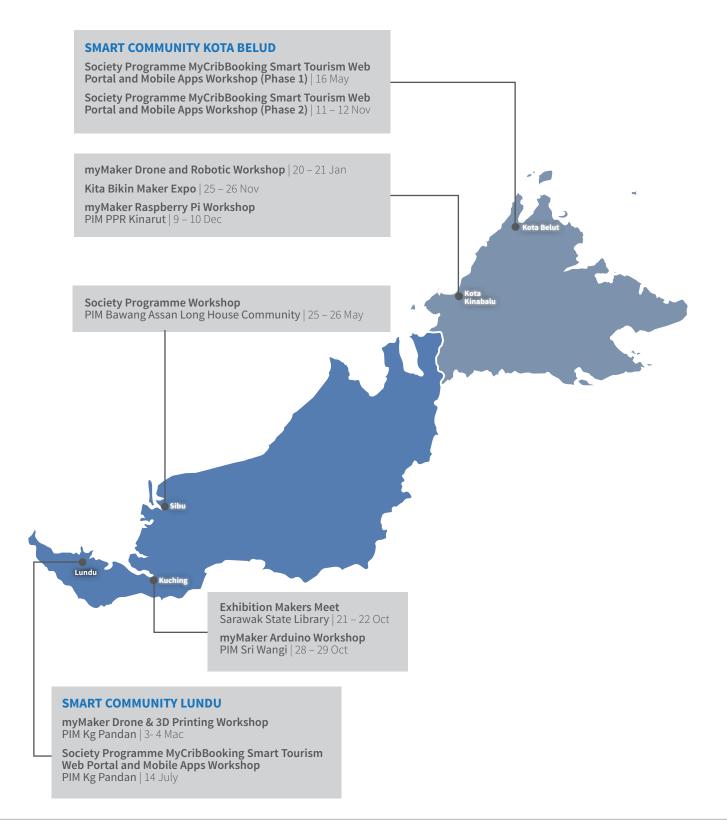


Figure 66: Group photo with Datuk Bruno Vun, Permanent Secretary to Kementerian Pembangunan Sumber dan Kemajuan Teknologi Maklumat (KPSTM), Sabah and Organiser, Mr. Athur (left).



PROGRAMMES MAP FOR 2017

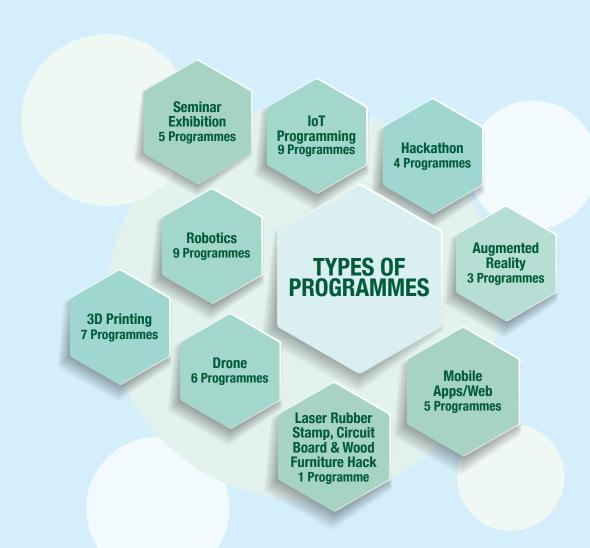






Programmes

Participants Trained



ASEAN Makerthon & Seminar 58 Developers

Virtual Reality
ASEAN Hackathon & Seminar 100 Developers

MyDD Seminar & IoT Seminar 130 Developers

HACKATHONS AND SEMINARS

KLESF & Seminar **35 Exhibitors** 61,000 Visitors

IoT Transformation Seminar 224 Participants 30 Exhibitor

NASA Space Apps Hackathon 880 Developers

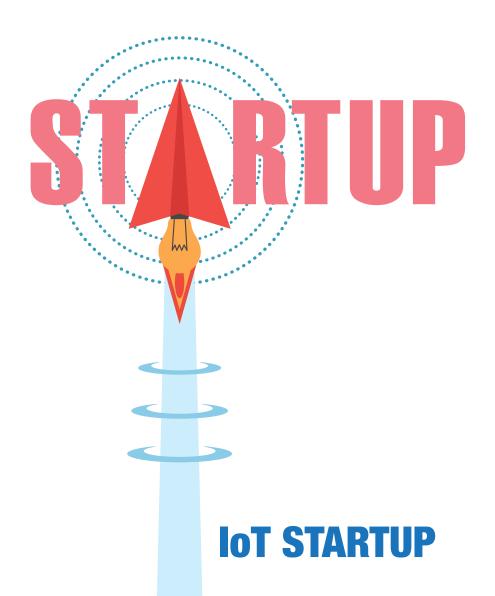




Figure 67: Kayson Choo Hui Kang and Vilson Chew Sze Soon from Team AgentC, University of Malaya won 2nd runner up during ASEAN Makerthon explaining the IoT Solution for Smart Farming.



Figure 68: Muhammad Izmed Farhan bin Shaharuzzaman and Zaim Akram bin Zuhairi attended Basic Robotic Training from myMaker and won 2nd Runner Up at RERO Annual Championship RAC'17.



Under the myMaker initiative based at myMaker Lab, myMaker collaborated with two Internet of Things (IoT) startup companies namely Poladrone Solutions and Integrated ITech Systems. The two startups specialise in drone technology and Radio Frequency Identification (RFID) track-and-trace technology respectively.

Poladrone Solutions was founded at myMaker IoT Lab. The company is at the forefront advancing Malaysian heavy industries with drone-based technology. As experts, their mission is to solve industrial problems by using aerial imaging data to improve efficiency and to create a sustainable ecosystem. The business model is to enable businesses to utilise safe and cost-efficient drone operations more often, to gather accurate data and analysis to aid decision making processes.

Initiated with by two founders, Poladrone now consists of 10 engineers. Poladrone operates its sales arm in Petaling Jaya while all development works are done at the myMaker lab.

Integrated ITech Systems, on the hand, offers solutions on RFID, Human Resouces system as well as IoT. One of their current initiatives include students monitoring RFID system. In promoting IoT in Malaysia, Integrated ITech Systems opens its doors to interns providing them with opportunities to learn further on IoT. Integrated ITech Systems aims to provide efficiency and productivity solution to its clients.

Both startups have been actively supporting myMaker Lab activities as well as open to sharing their knowledge and assisting with Techtalk for lab visitors. Poladrone and Integrated ITech Systems have regularly participated in myMaker exhibitions and seminars to promote awareness on Maker movement, IoT and Industrial 4.0 among the Malaysian public.



Figure 69: Integrated Itech Systems Sdn Bhd



Figure 70: Poladrone Solutions Sdn Bhd

CONCLUSION

Maker movement, IoT and Industrial 4.0 has garnered high interest among the Malaysian tertiary educational institutions, industry players and the general community in the last few years and this is a great opportunity to lessen the digital gap found in the country and achieve our vision of becoming a smart nation.

The myMaker initiative befits its hashtag "#EveryOneCanMake", and with the support from

industry, community and government, the maker movement may be able to reach its full potential far more compared to other advanced countries.

Moving forward, myMaker aims to facilitate more collaboration with local makerspace champions, tertiary educational institutions, and makerspace with disruptive contents communities to generate awareness, promote innovation and spur creativity to achieve a New Malaysia.



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