



# The eBario Story

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**Mar 23, 2021**  
**5:00 – 6:30 PM**  
**(17:00) CET**

**Lecture Series**

“Digital Society, Social Justice and Academic Education”

Panelists: **Saa Dittoh** (UDS, Ghana), **Narayanan Kulathuramaiyer** (UNIMAS, Malaysia), **Anna Bon** (VU Amsterdam, the Netherlands)

Moderator: **Hans Akkermans** (w4ra.org, the Netherlands)

# Agenda

- Background
- eBarrio Story
  - eBarrio as a project
  - Replication and expansion
  - Impact and indirect impact
- Digital Humanism, Community/Social values (Justice)/Engagement of research/Education program

# SARAWAK

## Land of the Hornbills

Area: 124,450 km<sup>2</sup>

Population: 2.79 million (2018)

More than 40 sub-ethnic groups, each with its own distinct language, culture and lifestyle. A magnet for researchers and nature-lovers alike, its opulent biodiversity and natural resources spell a uniqueness which cannot be found elsewhere.

Penang

Kuala Lumpur  
Learning Centre

Singapore

Kota Samarahan



Mukah Research  
Centre

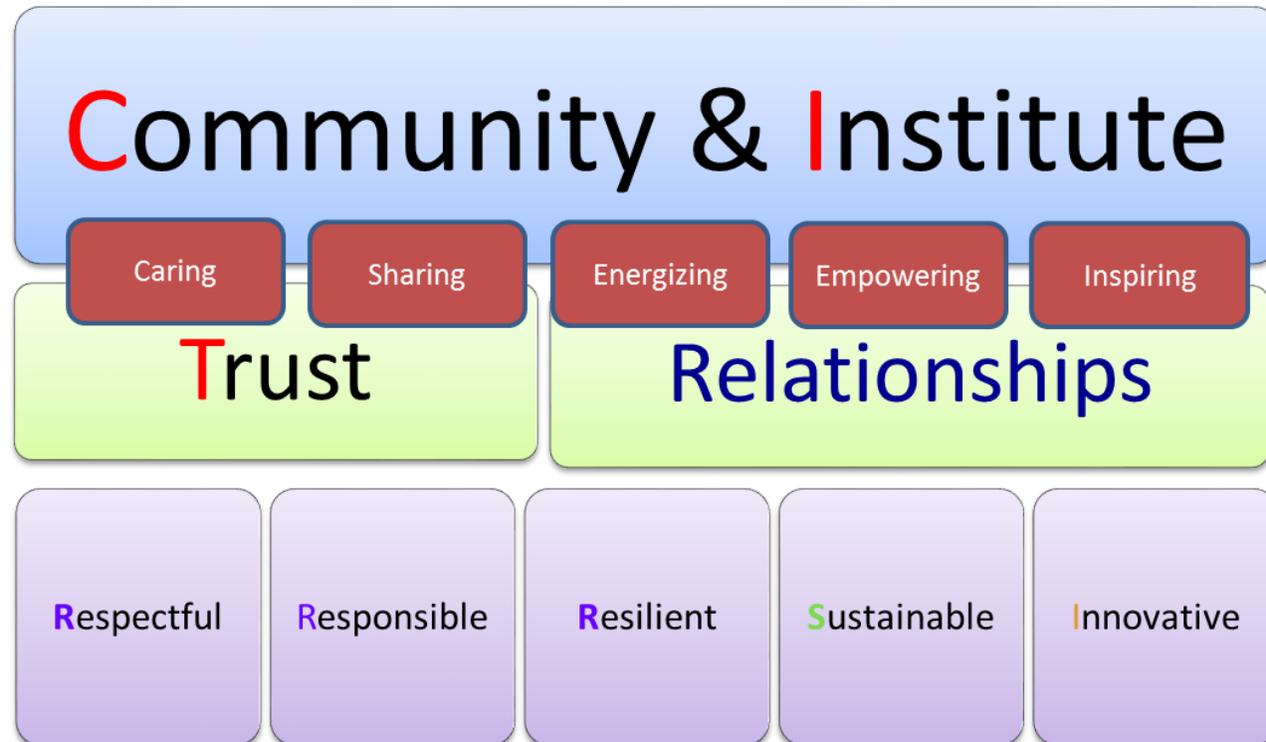


# Institute of Social Informatics & Technological Innovations (ISITI)

## VISION:

- An inclusive knowledge society comprised of communities inspired to innovate with technology towards sustainable development

## Core Values



# eBario Story



Bario



- ✦ Homeland of the Kelabit tribe.
- ✦ People are well-known for their warmth, hospitality and friendliness.



## The Kelabits of Bario

- ✦ ~1,000 tribal Kelabits remaining in Bario
- ✦ 12 villages (longhouses)
- ✦ religious community
- ✦ no telephone service
- ✦ Gravity-fed water
- ✦ electricity by generators/solar



## Objectives

- ✦ To define the extent to which contemporary ICT could deliver **sustainable social and economic development** to remote rural communities
- ✦ To identify further **needs and opportunities** within such communities that can be satisfied by the **innovative use** of contemporary ICT



*Kelabit Highlands  
Bario, Sarawak  
Malaysia*



*19 Passenger Twin Otter*



Pilot Project on Bridging the Digital Divide (1999)

A Research Project Implemented by  
Universiti Malaysia Sarawak (UNIMAS)



Supported by  
DAGS, MIMOS Bhd Malaysia, IDRC, and Telekom Malaysia



# eBario Story



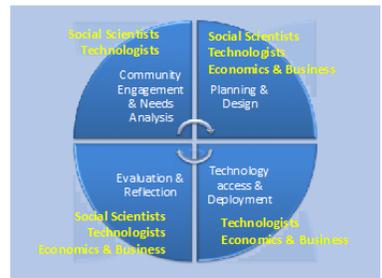
- education
- e-government services
- e-commerce
- e-health
- tele-medicine
- personal communication



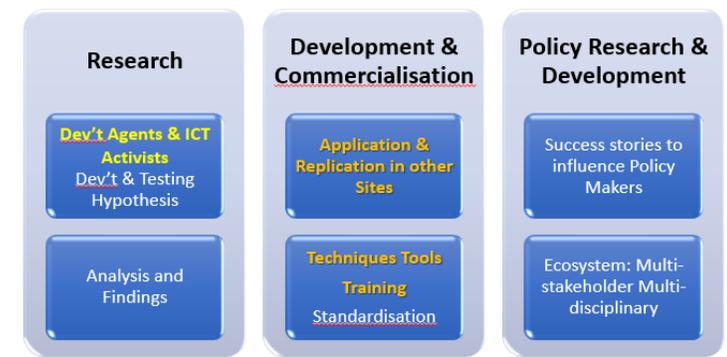
Gatuman eBario Telecentre



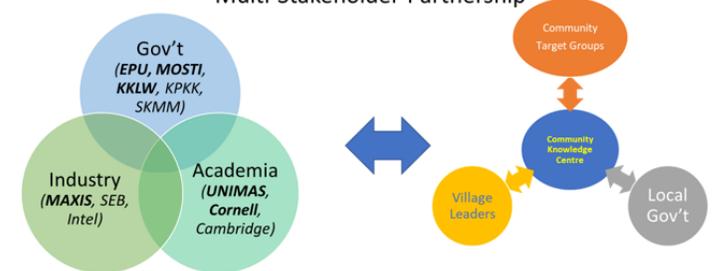
## Innovation for Impact



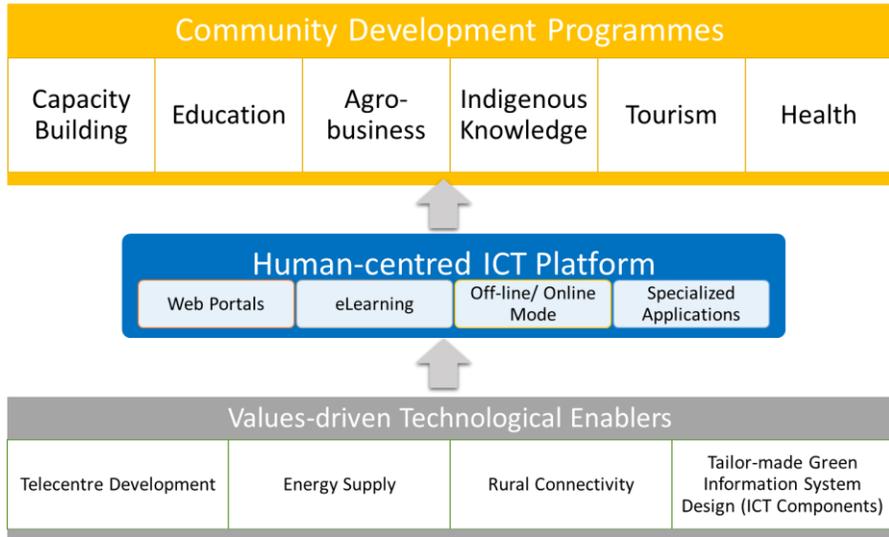
People-Centered Approach



Multi-Stakeholder Partnership



# Research & Innovation Pathway



# Research in Action



# Balanced Partnership Model

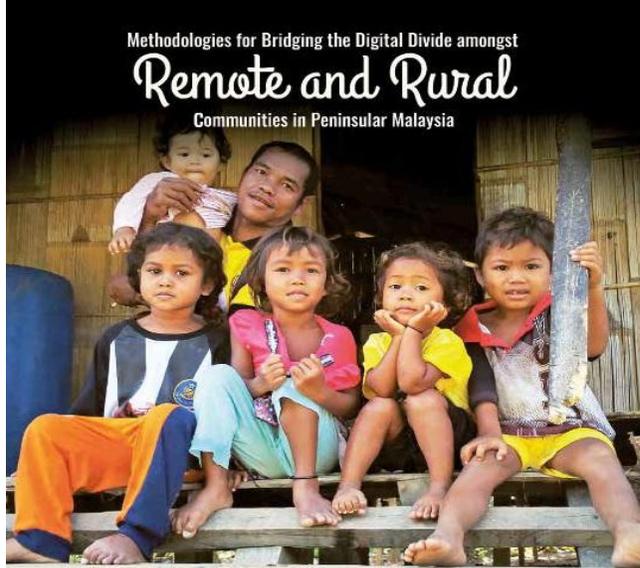


# Human Centred Technologies



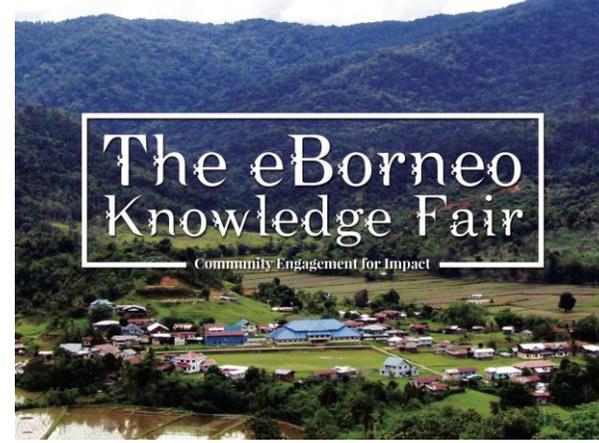
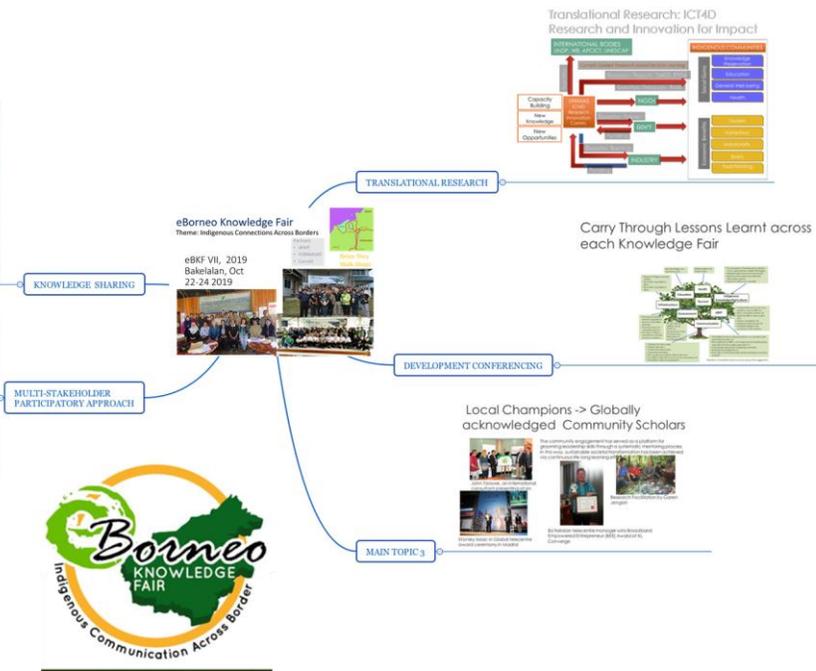


# eBarrio Journey



Rural Technology Transfer Hub

No.	Project	Year	Beneficiary	Impact	Scale	Cost (RM)
1	Using Mobile Wireless System	2015	1000	100%	1000	10000
2	Integrating Low-Cost Computing	2015	1000	100%	1000	10000
3	Community Radio	2015	1000	100%	1000	10000
4	Community-based Environment	2015	1000	100%	1000	10000
5	Mobile Village for Indigenous Knowledge	2015	1000	100%	1000	10000
6	Mobile Village for High School Application for Mobile Services	2015	1000	100%	1000	10000
7	Mobile Village for Indigenous Knowledge Management	2015	1000	100%	1000	10000
8	Mobile Village for Indigenous Knowledge Management	2015	1000	100%	1000	10000
9	Mobile Village for Indigenous Knowledge Management	2015	1000	100%	1000	10000
10	Mobile Village for Indigenous Knowledge Management	2015	1000	100%	1000	10000
11	Mobile Village for Indigenous Knowledge Management	2015	1000	100%	1000	10000
12	Mobile Village for Indigenous Knowledge Management	2015	1000	100%	1000	10000
13	Mobile Village for Indigenous Knowledge Management	2015	1000	100%	1000	10000
14	Mobile Village for Indigenous Knowledge Management	2015	1000	100%	1000	10000
15	Mobile Village for Indigenous Knowledge Management	2015	1000	100%	1000	10000
16	Mobile Village for Indigenous Knowledge Management	2015	1000	100%	1000	10000
17	Mobile Village for Indigenous Knowledge Management	2015	1000	100%	1000	10000
18	Mobile Village for Indigenous Knowledge Management	2015	1000	100%	1000	10000
19	Mobile Village for Indigenous Knowledge Management	2015	1000	100%	1000	10000
20	Mobile Village for Indigenous Knowledge Management	2015	1000	100%	1000	10000
TOTAL REPLICATIONS			20000	100%	20000	200000



## Awards and Recognition

### FORMATAT, the Winner of Equator Prize 2015

AWARDS

FORMATAT, the Winner of Equator Prize 2015

Community trans-border initiative to protect and develop sustainably their homeland divided between Indonesia and Malaysia in the Highlands of Borneo has been selected as one of the winners of the Equator Prize 2015.

RELATED LINKS

- Equator Prize 2015
- Equator Prize 2015

World Crafts Council (WCC) Award of Excellence for Handicrafts 2016 South-East Asia Sub-region

ASEAN Rural Development and Poverty Eradication Leadership Award, 10th ASEAN Ministers Meeting on Rural Development and Poverty Eradication, 2017

THE AWARDS ASIA 2019

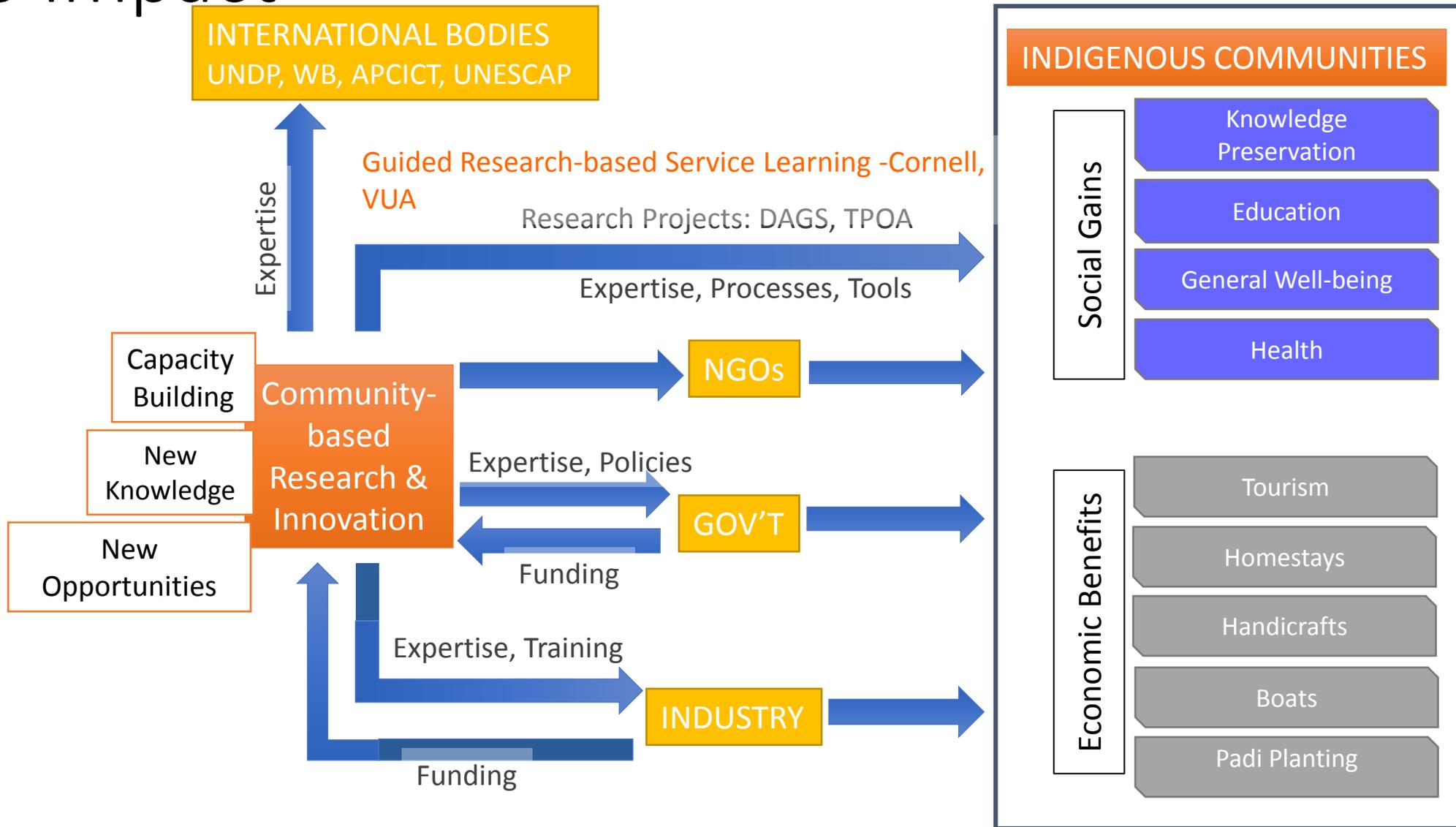
TPOA project shortlisted for the Technological Innovation of the Year Award at THE Awards Asia 2019

UNIMAS Institute of Social Informatics and Technological Innovations (ISTI)

#technologytouchinglives #livetouchingtechnology

Source: www.panda.org

# Pathways of ICT4D Research and Innovation to Impact



### Living Labs



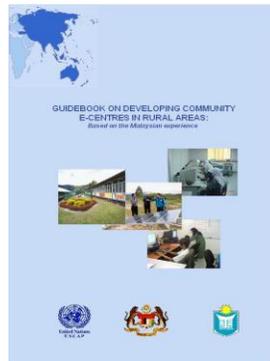
Initial exploration into Telecentres as a basis for socio-economic transformation



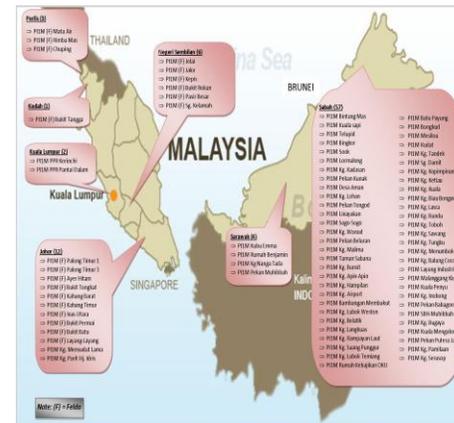
Replication of eBario model to 9 sites across the country



# What Next?



UNIMAS researchers produced the UNISAP Guidebook On Developing Community E-Centres in Rural Areas



Government adopts our model as Community learning centres

# Establish leadership in Values-Based Education & Life-Long Learning



Real Living Labs

Values-based  
Future Learning

SULAM Program

Translational Research



Sustainable Development



-  Combine classroom experience with real world experience
-  Community and university become a collective
-  Mutual Learning where everyone is teaching and learning
-  Cross cultural learning



2017-2018



2018-2019



2015-2016

## Partnerships for Community Resilience

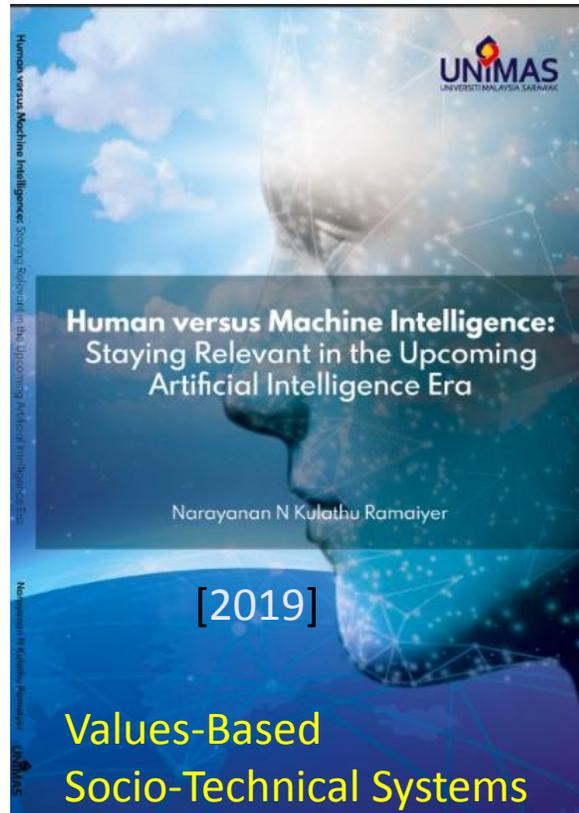
*Adapted from: Principles of Good Practice in Combining Service and Learning. Porter-Honnet and Poulsen, 1990.*



Source: Jengan, G., George, F., Alread, S., Somchanhmvong, A.K., Kulathuramaiyer, N. eBorneo Knowledge Fair, 2019



# Thank You



<https://www.isiti.unimas.my/>

<https://www.isiti.unimas.my/home/isiti-ebario-history>