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Putra
Malaysia

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AGRICULTURE • INNOVATION • LIFE


PUTRA SCIENCE PARK INNOVATION




Technology Transfer Office
PROSPERING THROUGH INNOVATION

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BERILMU BERBAKTI

PUTRA
SCIENCE
PARK

Putra Science Park Technology Transfer Office

PSP is involved with **technology transfer activities** in Universiti Putra Malaysia (UPM), moving **potential technologies** and inventions from **the laboratories to the marketplace**.

PSP assists in securing and protecting novel innovations through intellectual property processes and identifying applicable **commercialisation strategies** for the created intellectual property.



Micro World-A Board Game for Infectious Disease Awareness

AR2022W03519

- A board game as a tool for students in health sciences to learn about zoonotic infections.
- This game is also a tool that creates awareness for the public, on the association between human, animals and the environment, pertaining to infectious diseases.
- **Market** : game application / educational



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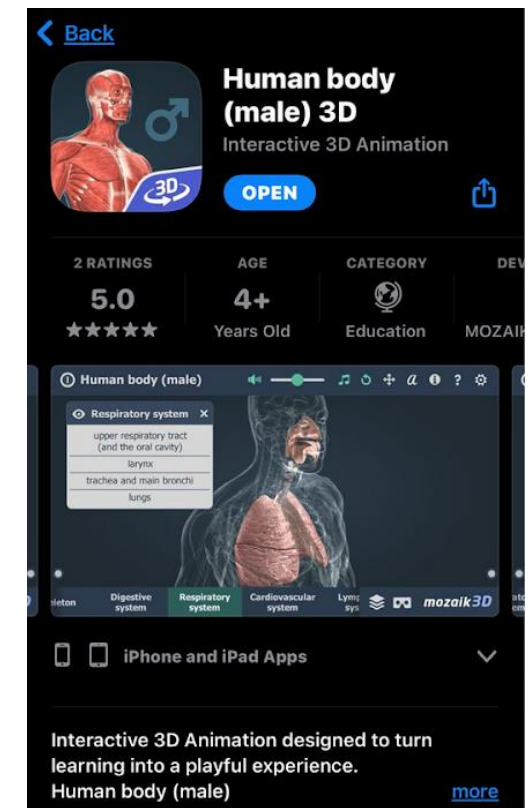
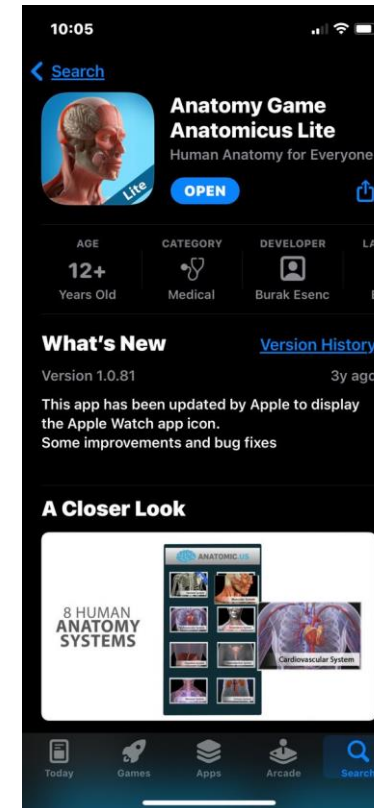
Arespiratory mobile application

LY2022W03517

- Developing a mobile application on Android Operating System to help in their learning of the respiratory system.
- This app provides a sleek, sophisticated interface, offering minimal text, more of animation and interactive activity with inclusion of AR model of the respiratory system which makes it unique.
- Features : Type of quiz audio-prompted quiz vs drag & drop quiz.



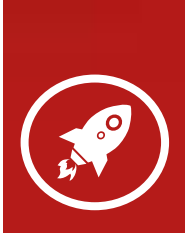
Dr Rafidah Hod
Faculty Of Medicine And Health Sciences
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Market :

Medical and health sciences students

TRL 6



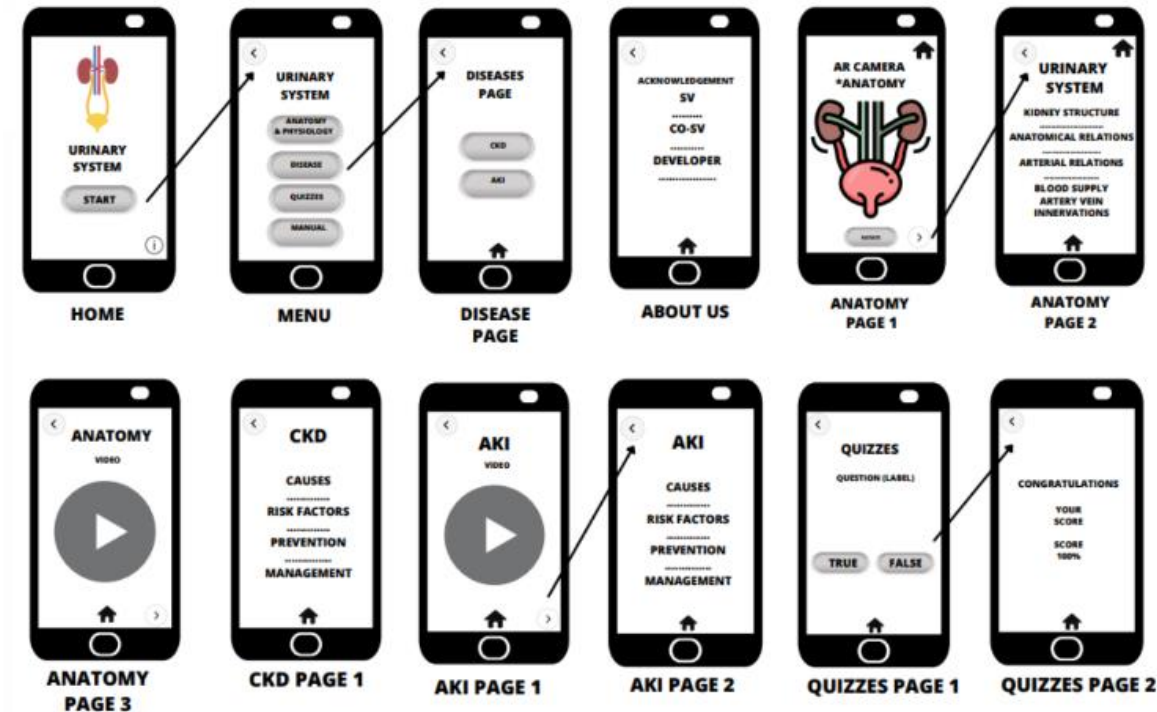
Arenal : augmented reality mobile application

LY2022W03516

- Aims to facilitate medical students in understanding urinary system (US) better by implementing Augmented Reality(AR).
- Arenal able to spin around a detailed 3D kidney model on a phone/ tablet. Notes, videos and quizzes are provided in this application.
- **Features :** For 3D model, some alterations in model colour and labelling, for diagram and pictures, adapted and redrawn from anatomy and physiology lecture notes, for video, original self-recording performed, all consents acquired



Dr. Nurul Hayati Mohamad Zainal
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Market :

Undergraduate medical/ nursing/ physiotherapy/
biomedical/ health sciences student
that are learning the anatomy and
physiology of kidney.

TRL 6



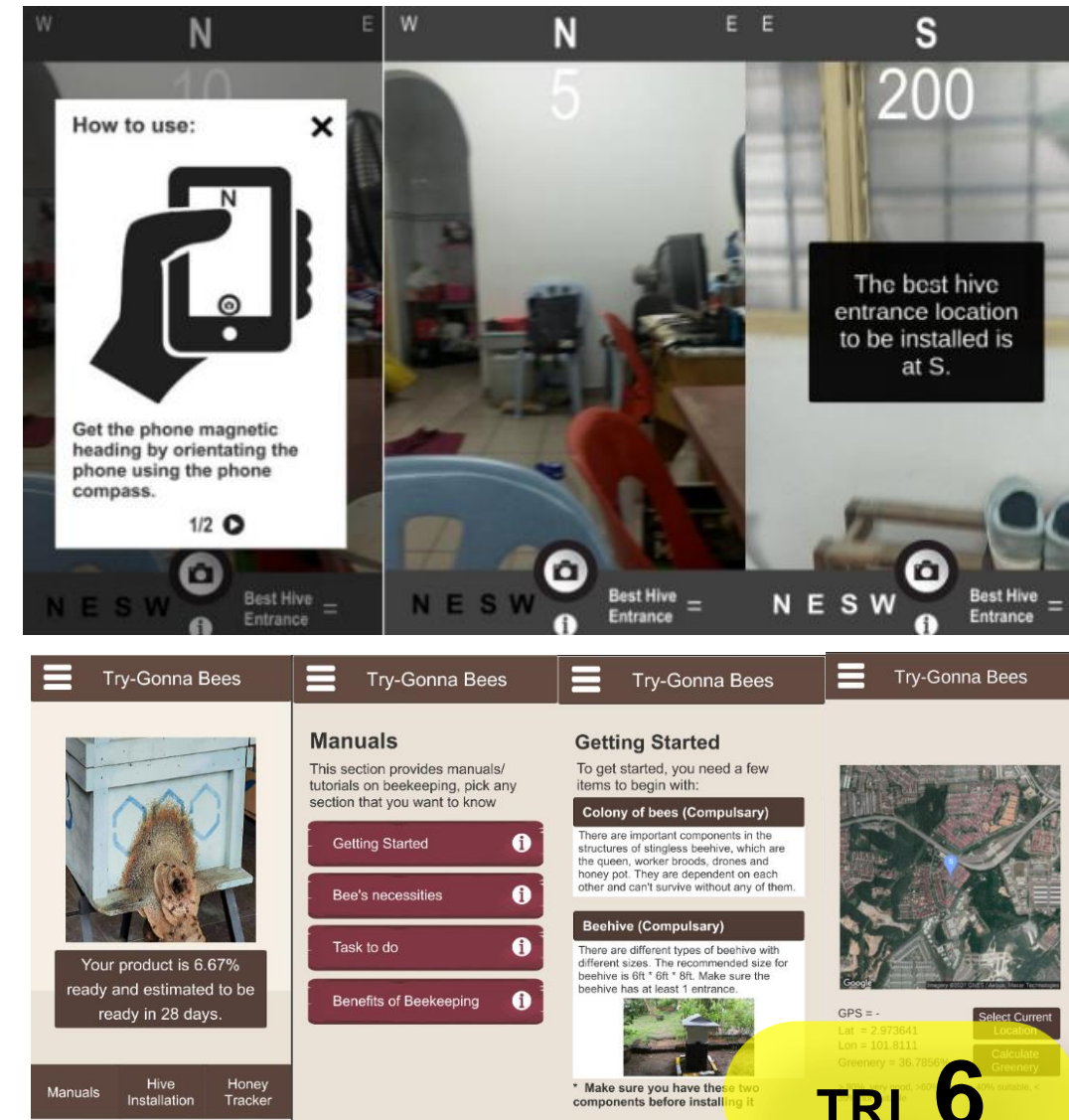
Try Gonna Bees Apps

LY2022W03512

- This application is designed to guide user on how to beekeeping by providing a few manuals as well as functions which includes suggesting suitability of a possible location to install a stingless beehive and keeping track beekeeping activities.
- The original of the work is that it can detect a suitable place to install beehives using greenery and luminance detection algorithm.
- **Market** : Inexperienced beekeepers who want to try urban beekeeping, School / college science project, Educational science startup kit set.



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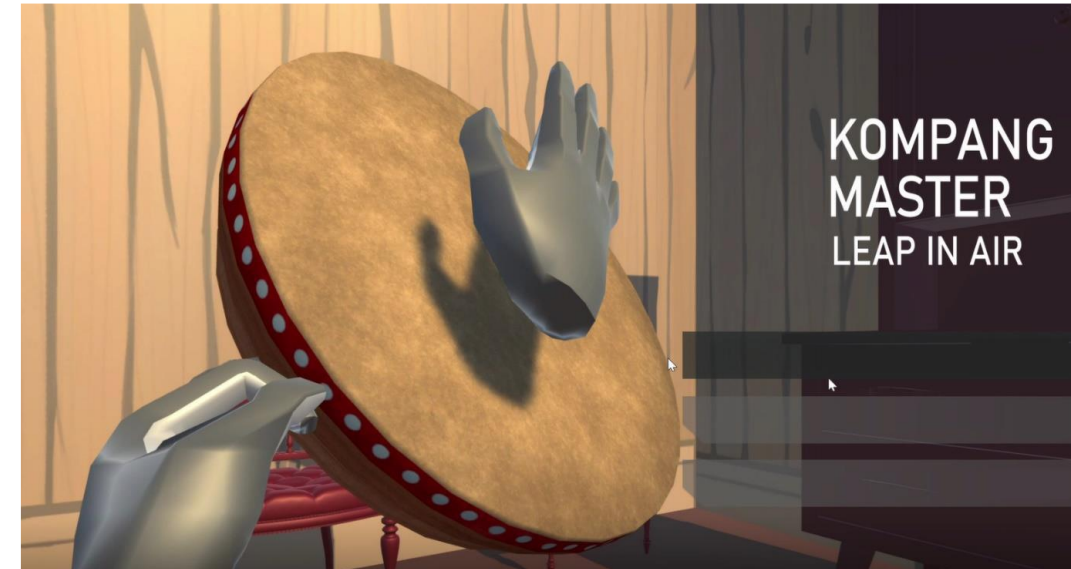
TRL 6



VirLeap : Virtual Kompang Apps

LY2022W03513

- VirLeap Kompang is developed to be played on a desktop VR using Leap Motion as the controller.
- The Leap Motion controller is a tiny USB device that can be attached to any laptop or desktop and through the use of cameras with infrared light, it can detect users' hands and fingers as well as the gestures made like pinching, holding, or hitting an object.
- In VirLeap Kompang's case, the spatial information on where the hitting gesture is made is directly mapped to the notes in the Kompang, i.e. Bum and Pak. Like many other Digital. Musical Interfaces, the sounds produced are all pre-recorded and its likeness is similar to playing a virtual piano or virtual guitar apps.



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Market : School / college project,
Educational startup kit set.

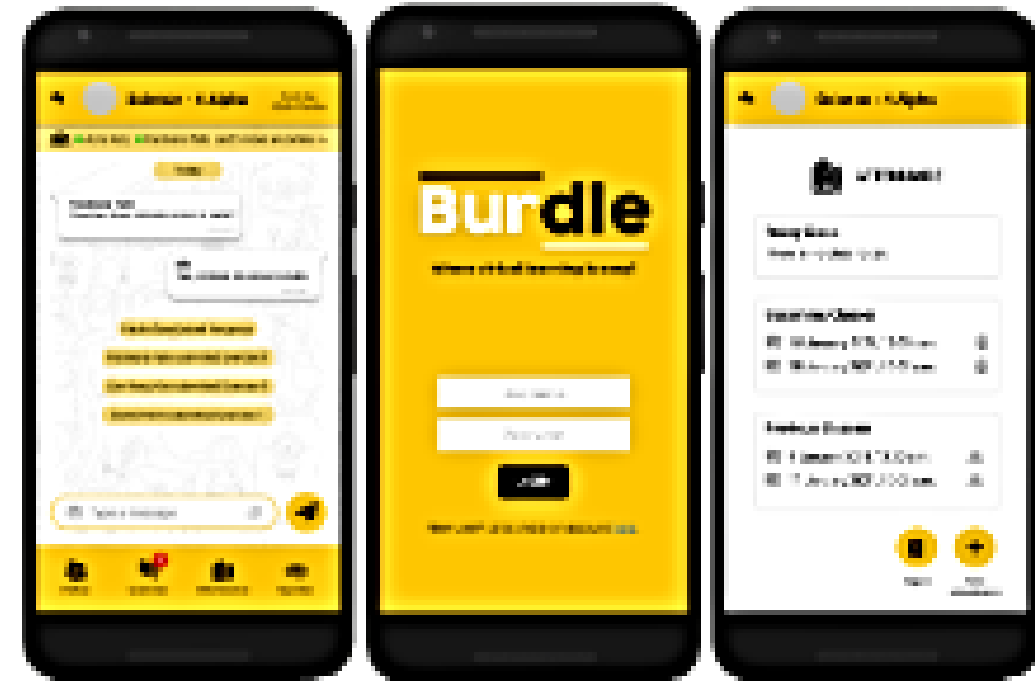
TRL 4



BURDLe : Bridging the Urban-Rural Gap in Dissemination of Knowledge in Learning Apps

LY2022W03514

- BURDLe is a web app (an application program that is stored on a remote server and delivered over the Internet through a browser interface), which is aimed to use lower bandwidth, provides better immediacy and intimacy to its users.
- It is developed specifically to help students from the rural area which have lesser facilities and limited Internet accessibility.
- Compared to other virtual learning platforms, BURDLe takes up less data and is more intuitive as it is designed to have the look and feel of other social media platforms.



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Market : School / college project,
Educational startup kit set.

TRL 4



INNOVATION DIRECTORY – ONLINE

[www.sciencepark.upm.edu.my / industry](http://www.sciencepark.upm.edu.my/industry)

The screenshot displays the 'Available Technologies' page on the UPM Science Park website. The page features a navigation bar with links like 'ABOUT US', 'OUR SERVICES', 'RESEARCHER', 'INDUSTRY', 'UPM-PRODUCTS', 'eDU-PARK', 'INNOHUB', and 'PUTRA E'. A prominent banner on the left shows hands working on a circuit board with the text 'INOVASI - PELESENAN - PERNIAGAAN BAHARU' and 'PENKomersilan TEKNOLOGI UPM - TEKNOLOGI UNTUK DILESENKAN'. The main content area is titled 'Available Technologies' and includes a list of technologies under the category 'PERTANIAN - Tanaman | AGRICULTURE - Plant'. A magnifying glass icon with a shopping cart symbol is overlaid on the right side of the page.

Available Technologies

Sila lihat teknologi yang sedia untuk dikomersilkan oleh industri. Hubungi kami bagi mengetahui maklumat lanjut. We welcome you to browse our list of available technologies. Please contact us, for more information about the technologies.

PERTANIAN - Tanaman | AGRICULTURE - Plant

1. Plant-based Extract Formulation For Controlling BPH In Rice Field
2. Putra Pro-Cut & Putra Fast-Snap : Innovative Apparatus for Mechanical Harvesting
3. Intelligent VRT controller for variable rate liquid fertilizer application
4. NPK Data Recording System for Digital Soil Test Kit & Method
5. A Method For Identification Of Seaweed Samples With High Accuracy
6. Grey Mushroom Irrigation System
7. SumoSack - Ergonomic Pineapple Harvesting Basket
8. Agrivoltaic Kitchen Garden
9. New Harvesting Machine for Agrivoltaic Herbal Crops
10. Crude Palm Oil Vacuum Clarifier
11. Rotadisc -Mesocarp And Drupe Nuts Separator For Higher Oil Recovery
12. Composition For Suppressing Pest (Bagworm) Infestation
13. Date Palm Seed Coffee, A High Performance-Enhancing Beverage
14. Passive Arm Assist Exoskeleton System
15. Padi U Putra
16. Plant Cyborg Hybrid
17. Rotating Blade for Natural Fiber Extraction Machine
18. TrichoMax: Encapsulation of Biological Agents
19. Agro wastes to organic amendments improves
20. HARVAST Photosynthesis Enhancer
21. Biosensor for Rapid Plant Root Detection

TECHNOLOGY CATEGORY

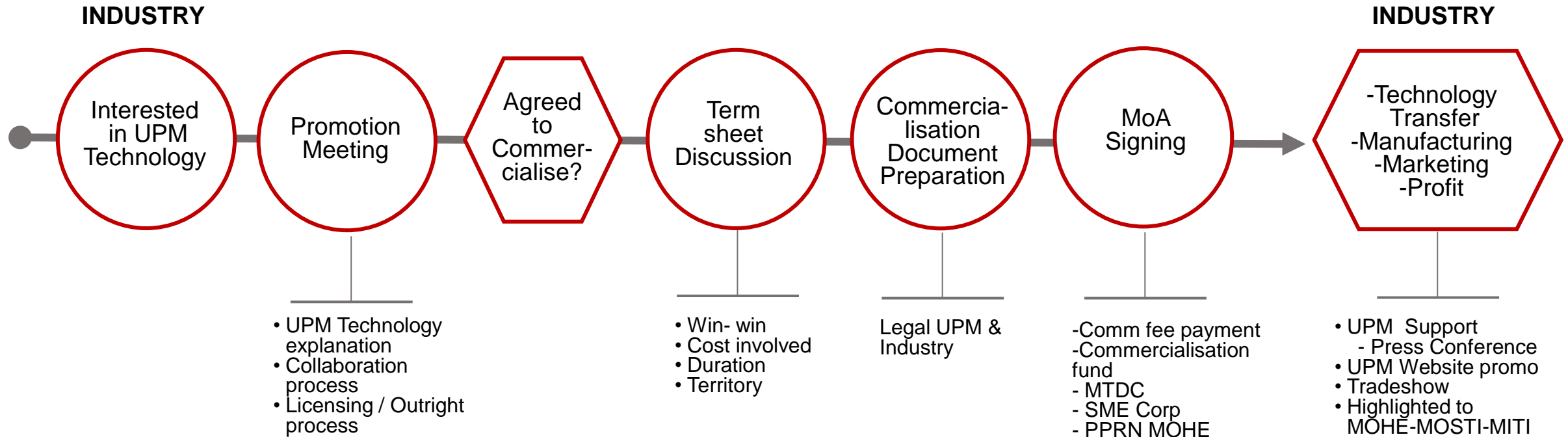
- AGRICULTURE - Plant (45)
- AGRICULTURE -Livestock (14)
- BIOTECHNOLOGY (24)

Sistem Penyampalan Nano Antikulat bagi Rawatan Penyakit Ganoderma untuk Kelapa Sawit

Inovasi ini menggunakan rawatan fungisida dan/atau fumigasi bersama dengan sistem nanomaterial untuk mencegah penyebaran penyakit Ganoderma dan meningkatkan hasil kelapa sawit.

https://sciencepark.upm.edu.my/#c_slider_aktif untuk mengahala

UPM- INDUSTRY Commercialisation Process





AGRICULTURE & FOOD
(AF)



APPLIED SCIENCES & ENGINEERING
(ASE)



BIOSYSTEM & BIOTECHNOLOGY
(BB)



BUSINESS ECONOMIC & GOVERNANCE
(BEG)



ENVIRONMENT & ENERGY
(EE)



FORESTRY & BIODIVERSITY
(FB)



HUMANITIES & NATION BUILDING
(HNB)



HALAL SCIENCES & MANAGEMENT
(HSM)



HEALTH & WELL BEING
(HWB)



MATHEMATICAL SCIENCES & ICT
(MSCIT)



MATERIAL SCIENCES & TECHNOLOGY
(MST)



IP CLUSTER



www.sciencepark.upm.edu.my/industry-2263

- AGRICULTURE - Plant **(18)**
- AGRICULTURE – Tools/Machine **(19)**
- AGRICULTURE – System **(6)**
- AGRICULTURE - Livestock **(15)**
- BIOTECHNOLOGY **(24)**
- HALAL **(6)**
- FOOD **(26)**
- HEALTH & MEDICAL **(27)**
- HEALTH & MEDICAL - Equipment **(28)**
- ELECTRIC & ELECTRONIC **(8)**
- ENGINEERING **(27)**
- MATERIALS **(14)**
- ENVIRONMENT **(7)**
- TIMBER **(6)**
- ICT & SOFTWARE **(29)**
- EDUCATION **(18)**



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**INDUSTRY &
COMMUNITY**

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