



**RESEARCH
COMMERCIALISATION:**
Challenges and Opportunities

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A Walk Through



- Research Product Commercialisation in the University
- The Function of the University
- Challenges and Opportunities
- Intellectual Property Rights

Research Commercialisation



- “the process that involves **translating the research knowledge** into **new or improved products**, services and processes and **introducing them into the market place** to generate economic benefits” (Diane, 2004)
- “the activity in which the university **transfer the technology** in an **exchange for transferring some or all of their rights** to the industry” (Spencer, 2002)
- “**conversion of academic research output** into services, processes and products which have the **commercial value**” (Downie & Herder, 2007)

The Function of the University



- Traditional setting – **teaching and research** have been the prevalence of the university
- But **now** universities are expected to **contribute to the social and economic development** of the nation
- For wealth creation, **commercialisation** of research product in the university has become more **significant** – towards “entrepreneurial universities”
- Not to focus on “blue skies” research, but should eager to shape R&D in an entrepreneurial way

Research Product Commercialisation in Malaysia



- In the Ninth Malaysia Plan (2006-2010) and the Tenth Malaysia Plan (2011-2015) the government has spent RM795 million into 1675 R&D projects and about 487 projects are completed and **only 54 projects were successfully commercialised**: equivalent to **8.3 per cent** (Bong, 2015)
- It shows that many universities are swamped with research products and **less number end with commercialisation**
- Why are the reasons for this?

Research Commercialisation: Challenges and Opportunities



- Research Products
- Academic Researchers
- University-Industry Collaboration

Research Products: Challenges



- What **types of research products** that are **potential** to be commercialized?
- Process and effort from R&D to **produce a product and enter marketplace** successfully is more important than the product itself
- Re-align strategy with aim to commercialise
- Researchers need to contextualise product - R&D refers to a process of transferring findings into **solutions to a particular problem**.
- Product is considered as a total package, which means researchers need to know other complimentary accessories to address the market needs

Research Products



- Researchers should position their R&D products towards becoming a **leading product in the market to have a competitive advantage**
- Researchers should acknowledge there are **similar products available** in the market, and they must evaluate competitive advantage in relation to the existing products and improving his own products
- Advisable for beginners, to focus on local market

Research Products: Opportunities



- Produce a **quality product**
- Creating and producing product that manage to **solve market problem**
 - Need to tap product with the market needs
- **Uniqueness** of the research product
- Market ready products

Academic Researchers: Challenges



Existing **skills and knowledge** are **still insufficient** in helping for promoting research product commercialisation

Both technical and business related skills and knowledge are important for commercialisation

Understand **the needs** of the industry player

Academic Researchers: Opportunities



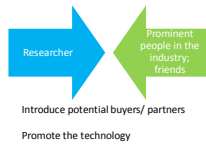
- Building up a **strong networking** with industry partner
- **Selective** in finding suitable industry partner
- Strong determination and **passionate**
- Main **motivation** for product commercialisation is for the benefit of the society, not for monetary purposes only
- Willing to sacrifice their time, money and energy
- Clear **vision, goal and objectives** for commercialisation
- **Creative and innovative** person

University-Industry Collaboration: Challenges



- Different **motivation, priorities, goals** and culture between university and industry
- **Conflicting understanding** between two players
- Clear terms of the contract
- Do not have common "language"
- Difficult to **identify the right industry partner**
- How to form a strategic collaboration?

Good Rapport with Industry Player



- Build relationship
- Build reputation
- Show good track record
- Focus on small or medium size business entrepreneur

Selecting business partner



- Basic Technical Knowledge
- Skills in marketing and sales
- Work well together
- Share common goals and interests
- Provide financial support

Ways for Improvement



- **University support** not only to facilitate but also to build, develop and sustain a good rapport
- Careful consideration to develop and **maintain good rapport** in selecting the most appropriate industry partner
- A **well-defined function and role** of the research management centre must be set up
- Dedicated office or one-stop centre for commercialisation with creative manager (strong business acumen) and management related skills; rules and procedures for commercialisation

Ways for Improvement



- **Clear responsibilities and rights** are needed for both sides to appreciate and understand rights and functions
- **Producing unique and innovative products**; commercial potential products; competitive advantage
- Academic should equip with **various skills and knowledge** including IP and business and management skills, leadership and communication skills
- **Industry partner** must be encouraged to have **basic technical knowledge**
- **understanding and adaptability** are needed to avoid mismatch; efforts must be made to achieve a common goals



THANK YOU
