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Abstract: The research aimed to explore the role of the business school beyond the university technology transfer office as part of empirical research. Data was gathered on alternative products, life span, market size, entry barriers, potential long-run growth rate, trend and taste of potential customers, and total market potential. The study analysed the research outputs of more than 100 products using three techniques: technology readiness levels, General Electric/McKinsey matrix, and consulting, and developed a strategy for bringing individual research-based products to the marketplace. The paper argues that the success of the research commercialisation process relies on the development of appropriate assessment criteria, strategies, business attractiveness, competitive strength of research, and researchers' willingness to commercialise. The business school's role is to formulate strategies appropriate for the circumstances. Thus, business school intervention can create mutual trust between stakeholders and contribute significantly to a thriving research commercialisation process, substantially lessening the likelihood of failure.

Keywords: consulting approach; General Electric/McKinsey matrix; research commercialisation; commercialisation; technology readiness levels; TRL; technology transfer; Thailand.

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1 Introduction

Academic research is a major significant contributor to society. However, its success in making this contribution depends on taking its research outputs and making them marketable. Although research sells at any stage, most investors prefer to obtain it when it is ready to be used in the market. This way, they can derive immediate profit rather than needing to invest significantly before the final stage of product development is complete. Therefore, researchers who want to introduce their research output to the marketplace successfully must recognise the readiness of their research, whether in the concept phase, development phase, or market entry phase.

Successful research results with high market potential that meet a real market need are good candidates for commercialisation. Khademi and Kamariah (2013) identified success factors of university commercialisation as involving researchers' perception, time, entrepreneurial team, networking, technology stage, funding, market research and the technology transfer office. These variables speed up the commercialisation process and increment the opportunity for its prosperity. Effective commercialisation is significant to a new firm because it provides a competitive advantage concerning what currently exists. However, few outputs are expected to have an actual-realm affect without a good structure to commercially viable those early-stage concepts.

Melese (2006) argues that many opportunities are lost due to the lack of a defined process. Researchers become aware of, and connected to, an existing campus of external resources, including knowledge of potential collaborative research efforts, technology resources, and corporate alliance licensing opportunities. A supportive infrastructure is another determinant of success for the researcher who wishes to move research findings into the available commercial realm (Nilsson et al., 2010). The technology transfer office plays this role within the university, identifying research with a potential commercial interest and developing strategies for exploiting it. Establishing a technology transfer office can strengthen technology transfer and is a critical way to simultaneously promote the economy, society and university (Vac and Fitiu, 2017). Factors that have been significant in explaining the productivity of technology transfer offices are systems, structure and staffing, the different technology transfer mechanisms, nature and stage of technology, faculty, university system and environmental factors.

The interaction and relationship between industry and university have resulted in technology transfers from the university to the market. The process of technology transfer is complex, involving many interlinked tasks. It requires significant resources and involves high levels of uncertainty and risk. To face this challenge, universities seek to link experts, technologies, funding and know-how. It must be noted that universities have experience in technology transfer procedures due to active interactions with industry; however, its mechanisms are informal, accompanied by poor administration as researchers do not have sufficient management skills involved in the transfer process (Bradley et al., 2013).

Taking business and scientific system technology collectively can benefit scientists and scientific applications. However, because of their different objective applications, business and scientific work process frameworks give various elements to their users (Sonntag et al., 2010). Therefore, it is not always simple for researchers to determine the technological readiness of their research or present a clear idea about the business model and how it should be operationalised to willing investors and business partners.

Tomlinson (2006) suggests that science and business are two different skills. Therefore, it is not always easy for researchers to determine the technological readiness of their research or present a clear idea about the business model and how it should be operationalised to willing investors and business partners. Most researchers who lack a business background have difficulty putting their work out to the market and only end up with publications, patent applications, and reports to the donor of the research grant. Furthermore, they are not comfortable dealing with business sectors because of the extra time and effort it takes, beyond the scope of their university work (Lalkaka, 2006). Then, all professors are subject to the pressure to perform, such as the number of papers published, the number of research grants received the number of classes taught each semester. Therefore, scientific researchers with a business mindset may accelerate the commercialisation process. However, the intervention of the business school faculty within the same university can be invaluable for those who want to focus only on their research and do not want to get involved with the business negotiation process.

For this reason, researchers, especially in the scientific area, should work with the business school to arise the right formula for each research output. They may be involved in different research projects, but they aim to bring their research outputs to the marketplace. The business school can help with this process. In this paper, we examine the current role of the business school as a substitute for the technology transfer office in commercialising a university's technologies. We explore the intervention of the business school in the university research commercialisation process, focusing specifically on the interaction and relationship between industry and university by selecting different criteria and strategies that are vital for a successful research commercialisation process. It is essential for a competitive advantage in the global economy within organisations. The decision-makers must access concepts, tools, and knowledge for commercialisation to achieve desired results within organisations (Schmidt, 2015). Scholars agree that entrepreneurship education programs may be vital for fostering technology commercialisation and entrepreneurial activity or whether entrepreneurship education can influence the intention of entrepreneurship (Martin et al., 2013; Pittaway and Cope, 2016). Ismail et al. (2015) added that researchers should participate in the commercialisation process, not merely for profit. Instead, commercialisation should

contribute to the benefit of society. This study can serve as a guide for researchers interested in successful research commercialisation.

2 Literature review

Universities are now entrepreneurial and achieve various missions by opening up to many stakeholders (Etzkowitz, 2014). Lately, and driven in many cases by government initiatives, many universities are playing and promoting research links with private entities (Greenaway and Haynes, 2000). Cooperation between universities and businesses is presented as a tool for innovation and technology transfer and is growing considerably, although it is not exempt from elements such as viability and success (De las Herras and Herrera, 2021). According to Maric et al. (2019), the focused structures of organisational forms of the university-industry collaboration comprise association contracts, innovation/incubation centres, research, science and technology parks, university-industry consortia, university-industry research cooperative research centres, subsidiary ownerships and mergers.

Baltes and Gard (2010) enumerated the attributes of science-industry intermediary institutions in open innovation, namely business incubator, science park, technology transfer office and living labs. The business incubator service provides network access to science-industry intermediary institutions in open innovation. It supports the growth and survival of early-stage ventures that foster innovative commercialisation and technology transfer with the twofold intermediary role of incubation and networking (Phillips, 2002). In an incubation role, the business incubator provides internal and external services like marketing support, assistance in obtaining equity financing, and infrastructure, including office space and shared administration services, external service class, legal and patent services, or accounting. The aim is to support early-stage ventures to focus on their business. The successful incubators provided access to a network of extensive tenants of incubation facilities and advanced firms in the networking role. It encourages frequent business relations, for instance, when buying/selling relations and exchanging know-how (Mian, 1996). The science park with cluster builders enables knowledge transfer to science-industry intermediary institutions in open innovation. The science park fosters viable ventures' formation and growth, focusing on technology-based research and development. The primary role of science park in terms of cluster building is to utilise and intensify clustering effects among tenants to enhance knowledge and technology transfer within the park and foster a region's development and competitiveness. Regarding cluster building, science park management's fundamental role is marketing to attract firms to fit into a homogenous cluster and facilitate joint projects among tenants (Phillimore, 1999).

The technology transfer office exploits shadow options and protects intellectual properties for science-industry intermediary institutions in open innovation. The technology transfer office's primary role is patenting, licensing, and providing access to the business community. Patenting and licensing by protecting intellectual properties with patents and commercialising those intellectual properties objects is one of the main focuses of the technology transfer office (Colyvas et al., 2002). In addition, accessing the business community to nurture the commercialisation process is significant in bringing the intellectual properties objects into the evoked set for possible customers. Pole (2011) discussed that the technology transfer office, which has access to enough of such objects,

increases the number of successful transfer projects, and thereby, the institution's positive feedback on their reputation contributed to more projects. The living labs offer an opportunity to join undertakings leveraging the campus as an innovation field. They offer spaces to share ideas and develop products, services, and processes under real-life conditions. Despite varying definitions of the concept, the three essential elements that characterise living labs include:

1 the combination of research and innovation processes in real-life settings

2 the inclusion of multiple stakeholders in the process

3 as well as the open and systematic approach to user co-creation (De Vita and De Vita, 2021).

When inter-organisational links related to research are promoted between companies, the relationship may present different models; the relationship may be formally established through research and development alliances (Hagedoorn et al., 2000). On the other hand, when these inter-organisational links occur between companies and educational or research entities, the collaborative processes for innovation present a model with characteristics which has generated special monitoring of the scientific community from different disciplines (Mowery et al., 2020). Furthermore, as proven by collaborative science problem-solving, the importance of teamwork leads to better outcomes (Middleton, 2022). Thus, master's or doctoral research output was developed by small teams without industry collaborations. The integrated research team collaboration is identifiable by several characteristics that reveal the ability of the group to achieve a high level of integration and interaction. For example, the group frequently has a high level of trust, and members openly share data and credit for the research accomplishments. In addition, such teams have a principal leader or co-leader, and it is often the case that additional leaders emerge from the formed team to take on new aspects of the project that then contribute to the larger whole (Bennett and Gadlin, 2012).

Technology transfer is a development in which all the involved parties share data, information, costs, and welfare. A transfer procedure consists of invention, patent, licensing, commercial use, and finally, receiving the royalties (Sankat et al., 2007). Siegel et al. (2004) proposed a linear model that depicts the technology transfer process and research commercialisation, involving the following phases: scientific discovery, invention discovery, assessment of the invention for patenting, patent, advertising of technology to firms, negotiation of license and firm license. The main results of the research into how technology transfer occurs highlighted the need for establishments and universities to comprehend that employed in collaborative technology research adds to the transformation of applied research into technological innovations that can convert society and act as a bridge between university and market environments (Chais et al., 2018). It typically involves two or more organisations, for example, universities, industry and government agencies (Rahal, 2005). The university technology transfer is not only the transfer of technology-related rights but also the transfer of technology-related knowledge (Agrawal and Henderson, 2002). The technology transfer office is primarily responsible for protecting university-created intellectual property and the commercialisation process and bringing research to an industrial product is an essential point of innovation (Markman et al., 2005; Cohen et al., 2002). The gaps between research and commercialisation need to be bridged to generate competitiveness in the

industry (Nilsson et al., 2010). In this sense, the technology transfer office can be considered a process catalyst, a knowledge converter, and an impact amplifier (Tahvanainen and Nikulainen, 2011; Battaglia et al., 2017), acting as a member of a greater alliance of the technology transfer office through either a network arrangement or the formation of a central hub where some resources are pooled and high potential technologies identified (Aragonés-Beltrán et al., 2017). Academic research within this technology transfer office appears to focus on improving efficiency, and its outputs are measured in terms of the number of patents, licenses and spin-offs (Holgerssona and Aaboen, 2019).

Eight components contribute to the sustainable commercialisation of research-based products:

1 knowledge

2 skills and personal traits of the researcher, (

3 idea creation of the product development

4 packaging and promotion of the product

5 paths of commercialisation

6 how to build competitive advantage within the market

7 how to select business partner

8 how to nurture a healthy relationship with business partner (Ismail et al. 2015).

Nevertheless, studies suggest that the technology transfer office commercialises research results ineffectively and inefficiently, especially from the wider society's point of view (Kenney and Patton, 2009). For example, Thursby et al. (2001) found that only half of the inventions with economic potential were disclosed to the technology transfer office. Bercovitz et al. (2001) examined a critical implementation issue in the university management of technology transfer and found that the organisational structure of the technology transfer office and its relationship to the overall university research administration play an essential role. Thus, universities must be transparent, straightforward, and consistent regarding their strategic goals and priorities for technology transfer. This approach will allow more efficient matching between the technology transfer office and its suppliers, namely academic scientists. Clarity and consistency of purpose will likely result in more productive interactions between the technology transfer office and university scientists (Siegel and Phan, 2005).

While most universities try to promote entrepreneurship, a lack of competencies and skills related to recognising and developing market opportunities through various channels undermine research commercialisation (Man et al., 2002). In addition, research outcomes may not fit with customer needs, there are difficulties in reaching agreements over intellectual property rights, and there is a lack of criteria with which to evaluate the research outcome, limited market access and insufficient funds (Tanha et al., 2011; Siegel et al., 2003). Adding to these barriers to commercialising research findings (Namdarian and Naimi-Sadigh, 2018), researchers lack the expertise and knowledge required to perform commercial activities and launch businesses (Wright et al., 2007; Decter et al., 2007; Moray and Clarysse, 2005; Siegel et al., 2003). Many lack entrepreneurial spirit and are unfamiliar with participatory practices (Decter et al., 2007; Salamzadeh et al.,

2011). Even partners interested in putting the research output to market have no long-term strategies, and there is no clear incentive structure for researchers (Elmuti et al., 2005; O'Shea et al., 2005).

In response to the increasing importance of commercialisation activity for economic growth and development, business schools offer major functional areas such as finance, marketing, management, operations management, and accounting, and transform these ideas into businesses, jobs and competitiveness (Bris, 2021). In addition, many business schools now include programs related to technology commercialisation, focusing on creating opportunities for the rapid and successful commercialisation of new technology. For business schools to play a more prominent role in academic entrepreneurship, there is a need to develop internal university processes and policies that promote rather than restrict internal knowledge flows between business schools, technology transfer offices and science departments (Peshev, 2017; Vohora et al., 2004). The first channel about the role of business schools for entrepreneurship at universities is to provide general business knowledge in finance, accounting, marketing, operations, and management, as well as specific entrepreneurship skills such as curiosity, time management, strategic thinking, efficiency, resilience, communication, networking, finance, branding, and sales, by way of teaching and training. The subsequent channel involves business schools straightforwardly with the beginning process either through turning into entrepreneurs themselves and starting a firm, serving as co-founders or board members of a start-up, or by playing the role of an external consultant and giving business-related information to technical practicality would-be entrepreneurs. University researchers' critical, innovative abilities often do not have the essential abilities to carry their inventions to the market or, so far as that matter, to spot new opportunities (Peshev, 2017; Vohora et al., 2004). Indeed, to boost business opportunities, business faculty members can act as a bridge to help negotiate with potential investors for scientists who own research-based products.

As the gap between theory and practice grows, business schools can provide a way to make sure that researchers are familiar with the research commercialisation process, have sufficient information to make decisions, can identify the potential market, understand the need of customers and create and build brand identity (Pellikka et al., 2012; Kaarela, 2013; Biemans and Harmsen, 1995; Tahvanainen and Nikulainen, 2011). Three embedded strengths give business schools an advantage and competitive position to transfer research products into the marketplace: connection to industry, outstanding intellectual capital and multidisciplinary environments (Maurer, 2019). Business schools can emphasise the value of research, link the scientist's ideas with business organisations, frame real-world problems with relevant university research outputs, and extend multiple disciplines between science and business. The critical role of the business school resides in creating mutual trust among the academic sector, investors, and industry to create shared values.

3 Methodology

We used three techniques for this research: technology readiness levels (TRL), General Electric/McKinsey Matrix concept and consulting. The methodology used for this study involved the analysis of research outputs from the researcher's point of view and the extent to which they viewed their outputs as ready for commercialisation. The process

began by selecting approximately 119 researches with market potential according to TRL and the General Electric/McKinsey matrix. The evaluation process for each category was carried out on two committees, each consisting of five subject matter experts in business, marketing, distribution, technologies, manufacturing and entrepreneurship. A check-sheet system was used to support this process to define the TRL status of research-based products. This study attempts to acquire an empathic understanding of the business school strategy for the research commercialisation process.

3.1 Technology readiness levels

The TRL were used to ensure we selected the proper research for commercial release. In addition, the TRL were used to assess technology's maturity and the consistent description and comparison of maturity between different types of technology readiness in nine levels (Mankins, 1995). For example, the CloudWATCH2 Project under the European Commission Horizon 2020 (H2020) program. The H2020 applied the TRL to measure technology readiness for production and services, divided into ten levels as shown in Table 1. Using TRL as a checklist, only research output scored at least at level 6 tested in an intended environment close to expected performance was selected (Straub, 2015).

Table 1 TRL scale used in Horizon 2020

Maturity level	*Description*
0	Starting from an idea: unproven concept, no testing has been performed
1	Primary research: can describe the need but have no evidence
2	Technology formulation: concept and application have been formulated
3	Needs validation: has received an initial offering from stakeholders
4	Small-scale prototype: built-in laboratory environment
5	Large-scale prototype: tested in intended environment prototype system – tested in an intended environment close
6	Prototype structure: tested in an intended environment close to expected performance
7	Demonstration structure: operating in an operational environment at a pre-commercial scale available for consumers
8	First of a kind commercial system: all technical processes and systems to support commercial activity in a ready state
9	Complete commercial application: technology available for consumers

Source: European Union's Horizon 2020 (2019) and Distanont et al. (2019)

3.2 General Electric/McKinsey matrix

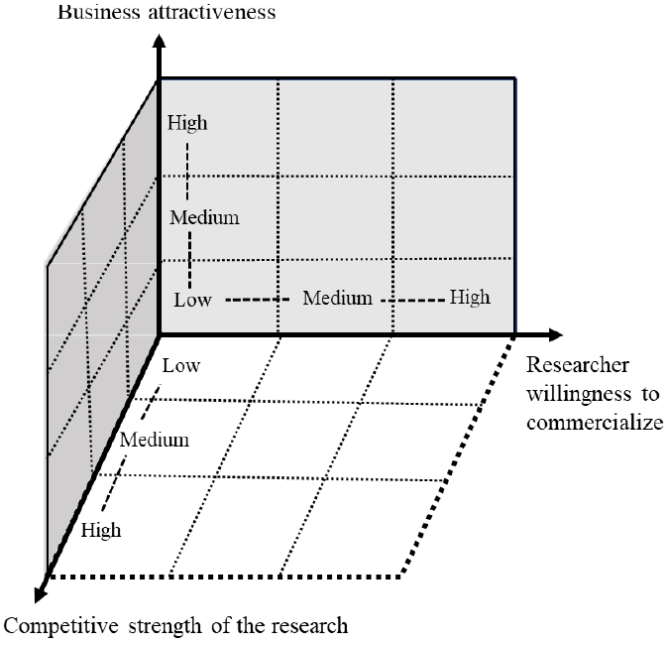
We selected the research output according to its TRL, and the strengths and weaknesses of the company in various areas were analysed using the GE-McKinsey matrix (Amatulli et al., 2011). First, we examined the university's technological outputs that are commercially viable and have the potential to become marketable products. Next, we evaluated the degree of readiness from two points of view: first, we looked at the market potential for the products; secondly, we identified the strategy that business schools

would be used to place these products in the market by selling or selling licensing. Similarly, we evaluated business potential from these two viewpoints. Next, we classified potential into three levels: high potential, medium potential and low potential. This measurement attempts to quantify each product's potential, performance, and abilities based on business strength, market attractiveness and competitive power.

3.3 Consultation approach

The consulting approach was used as a complementary method. We consulted with those who have ownership of the research and engaged with several corporations, industries, investors, and individuals interested in turning research into an extensive market. We used this consulting methodology to develop the strategy and tackle product problems that might arise from the introduction phase through the adoption, mass customisation or mass production phases.

Figure 1 Business school research commercialisation matrix



Through the consultation process, we could access the different viewpoints of our project participants. The researchers coached the project participants on seeking opportunities and developing a road map and the right solution for each project. This approach is also designed to determine how to make someone willing to pay for research-based products. The consultation members were business school professors, successful business school alumni, genuine experts in the field related to research-based products, target customers, and even students who participated in this activity.

This study aims to devise successful commercialisation strategy recommendations that fit individual products. In addition, this study explores two research questions that arise from the interaction and relationship between industry and university through

business school and how business faculty can intervene with the university research commercialisation process by working closely with other faculties in helping to promote university research in the market.

Applying the GE-McKinsey nine-box matrix, TRL, and consultation framework resulted in three-axis diagrams. Together, they comprise the business school research commercialisation matrix as a systematic approach to evaluating research output. The three axes are business attractiveness, competitive strength of research, and researcher's willingness to commercialise his research coupled with the extent to which it makes good business sense, as shown in Figure 1.

4 Results

The outcome of the TRL assessment of university research projects was reflected in Figure 2. The TRL3 score was 9%, TLR4 13%, TLR5 45%, TLR6 29%, TRL7 3% and TRL8 2%, respectively. When we analysed the 119 cases to determine which one is ready to be commercialised, we found 40 cases (34%) that fit our criteria of being at level 6, a prototype system in terms of TRL. We conducted a systematic comparable technology search based on a review process of similar technology or products available on the market. The assessment was evidence-based. We observed the available evidence and did not rely on unconfirmed reports or opinions because, most of the time, the developers of new technology will usually overemphasise its readiness and tend to downplay it (Flinn, 2019). To clarify the position of each research-based product, the McKinsey matrix was used for determining research-based products and the extent to which these products have a sustainable competitive advantage in terms of business attractiveness, competitive strength of the research, and researcher willingness to commercialise.

Figure 3 indicates a moderately strong association between the three variables. Our analysis of the 40 cases identified as being at level 6 of technology readiness comprises the interest of the investor, distributor and manufacturer. By combining TRL with the McKinsey matrix, we ascertained that all 40 cases were worth exploring their potential for development in the next phase in which the business school would build a progressive business model planning.

Figure 4 shows that most cases fall into medium to high business strength in terms of business attractiveness, the research's competitive advantage, and the researcher's willingness to commercialise. These projects are ready to be taken on by the business school team, who can formulate appropriate business strategies for each case. The strategy itself can be static or dynamic, depending on the project. For the static strategy, we work with researchers and interested audiences to make sure that all parties have the same point of view and are willing to sacrifice their time, opportunity, energy, money, and ownership to setup a blueprint that can help researchers to plan a successful business model of their invention. For the dynamic strategy, we work closely with researchers, stakeholders, and people who are interested in the research-based product and try to come up with activities that can improve the characteristics of the product in terms of quality, technicality, design, commercial viability, and how to help launch these products to market in the shortest period.

We systematically analysed 40 cases to create a working strategy for a successful research commercialisation process, as represented in Figure 4. All 40 cases were rated as medium to high on the business attractiveness axis, the research axis's competitive

strength, and the researcher's willingness to commercialise. Once a project is selected, the business school team starts by providing relevant information to the researcher who is the owner of the research-based product in terms of the current competitiveness of the product and how the product will fit into existing market trends or how to generate new business opportunities for this product.

Figure 2 The outcome of TRL assessment in university research projects (see online version for colours)

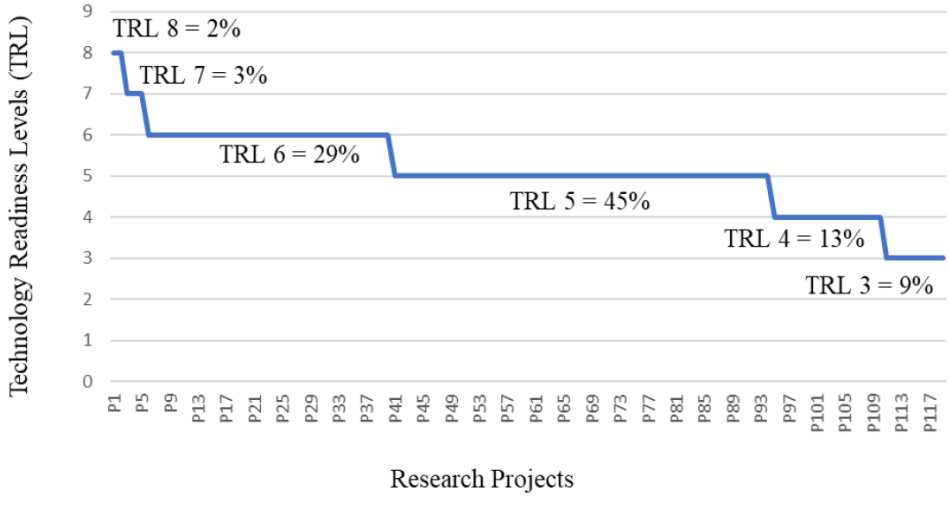


Figure 3 Scatter results of research-based product positioning (see online version for colours)

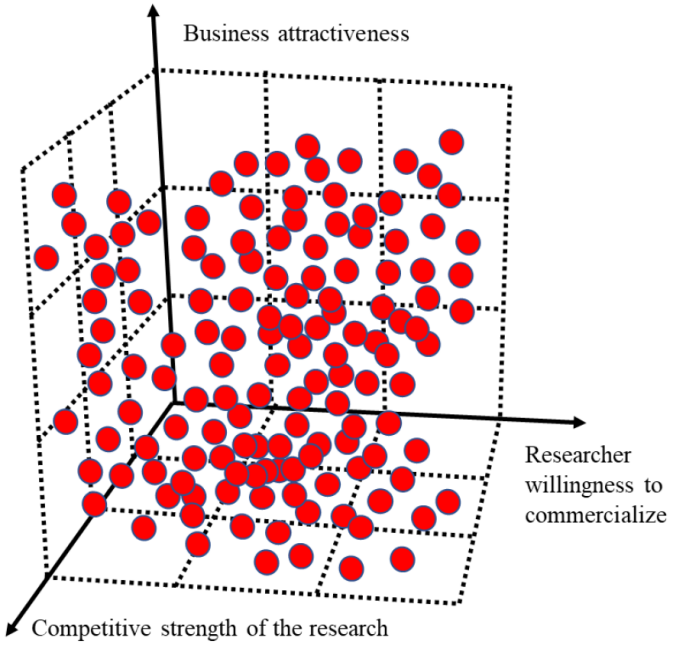
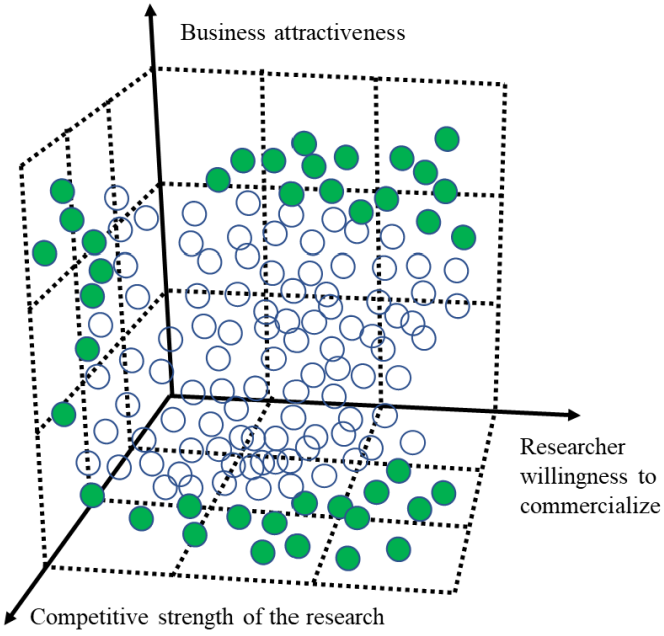


Figure 4 Research-based products ready to work with the business school (see online version for colours)



5 Applications

The study was to understand the potential role of the business school as an alternative to the technology transfer office in commercialising the university's technologies. There are 119 research results evaluated in the Kasetsart University Laboratory in Thailand to transform the results into recommendations for practice. All 40 cases were rated as medium to high on the business attractiveness axis, the competitive strength of the research axis, and researcher willingness to commercialise axis, thus indicating that there is strong potential in terms of competitive advantage for these research-based products.

To effectively promote the commercialisation of university knowledge, the technology transfer office requires tacit expertise and strong relationships with a wide-ranging faculty to acquire skills, motivations, and interests from every stakeholder interested in commercial engagement. However, many researchers are not concerned about financial rewards: their motivation to commercialise their research output is more likely to be intrinsic, such as their reputation. Therefore, commercial engagement should be encouraged not purely for financial reasons but also to build a researcher's reputation and test their abilities (Xu et al., 2011; Lam, 2011). In addition, it can be fostered by adopting a business approach from business school.

Having assessed each research-based product, we found the process of establishing a strategy for each product challenge. Firstly, we had to ascertain how to sell, license, or get financial support for these 40 products to interested people or companies with little understanding of the researcher's end goal. Secondly, it is difficult for most research-based products to scale up because it requires more investment, a new

manufacturing process, and involvement with other people. Furthermore, the scaling-up process does not fit well with the nature of many researchers who are accustomed to working independently. Therefore, the business school team's job is to mediate the discussion and negotiation process among researchers and interested parties to ensure a smooth transition. In this early stage of commercialisation, it is up to the business school team to encourage every player to focus on the interests of pushing a research-based product to the market, not the rate of return. At the same time, there must be a projected return on investment that is acceptable for every stakeholder. Naturally, there is a concern about how both sides meet their performance concerning the investment objective. Forming a smooth negotiation and strategy to move forward is the unique value proposition of the business school team.

Successful research commercialisation can be achieved if the business school team emphasises effective coordination. With fine-tuning, it must interact within a complex network to scale up from lab to pilot phase to product launch. The team would also gather information about alternative products, life span, market size, entry barriers, potential long-run growth rate, trends and tastes of potential customers and total market potential. Moving through commercialisation takes discipline and inspiration to transfer technology-based products into innovative products for customers successfully. Therefore, we must treat commercialisation as purely intuitive and creative (Nevens et al., 1990).

The role of a business school team is to look everywhere and create opportunities for the product, including managing the expectations of the researchers and all stakeholders. Researchers often hope to receive substantial money for licensing their research, and this expectation can play a role in the successful research commercialisation process. Managing expectations is very much dependent on the communication skills of the organisation, which must encourage strong belief, on the one hand, supported by substantial evidence to stakeholders on the other, that this research-based product has strong market potential. In this research, the team defined potential customers' needs and specified the obstacle of each existing research-based product. Next, the team brought experts into the product viability analysis process, working together to determine the product's practicality and how to address the challenges or obstacles that lie ahead. After addressing these issues, we shifted our focus to the tactical aspect of putting together a business model for each research-based product. Then, we focused on creating the market for a new product, financing the project, evaluating competition, communication planning, setting-up production and operation, finding staff, seeking suppliers, locating premises, sourcing equipment and measuring success.

If most of the research-based products selected are unprecedented, the team put together a demonstration for prospective customers to get as much feedback as possible for the researchers, who could then strengthen the product's functionality or improve existing features in the light of that feedback. The first version of a research-based product will always need improvement, and this feedback can also help the team plan the next version. Next, the team connects researchers with the manufacturers to validate, verify, and design a manufacturing prototype to assess performance, reliability, productivity and product costs. The team also helps develop product packaging that can provide potential buyers with appropriate information about a research-based product, enhances the willingness to purchase, and is suitable to protect a product. The procedure

takes about six months, and the team ensures that whatever is done works in the stakeholders' best interests.

Our analysis showed that research-based products related to agriculture, novel and healthy foods, health and beauty, mechanics, and invention in agricultural equipment, information technology, and application have strong potential and clear market opportunity for commercialisation.

6 Conclusions

The findings of this study have several effects on the university research commercialisation process, and we have practical suggestions about how to outline a strategy that can be used in practice. Several representative examples of commercialisation presented in this study provide a concrete empirical basis for the pivotal role the business school within a university can play in successful research commercialisation. The key to facilitating the research commercialisation process is selecting or developing appropriate assessment strategies. In our case, we utilised a research commercialisation matrix with three axes: business attractiveness, competitive strength of research and researcher's willingness to commercialise.

We argue that this was pivotal in planning and organising an evaluation of a position with strong potential in terms of competitive advantage for each research-based product. In addition, the business school focused on and analysed the results of this matrix and formulated static or dynamic business strategies depending on the product and context. Finally, the intervention of the business school as a mediator between the university and industry succeeded in creating mutual trust, thus laying the foundations for solid collaboration, thereby making a significant contribution to the research commercialisation process and substantially lessening the likelihood of failure.

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