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Perspectives of Start-up Entrepreneurs on Challenges, Support Services and Entrepreneurial Ecosystem

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Abstract: *Purpose*: This study aims to explore the challenges nascent entrepreneurs face at the start-up stage, the support services they receive from supporting agencies and their views of the entrepreneurial ecosystem.

Design/methodology/approach: This paper employs qualitative data that come from semi-structured interviews with seven entrepreneurs who are the founders of start-up enterprises that commercialise the research and development outputs of a public university in Malaysia.

Findings: The case study brings attention to the importance of entrepreneurial support and guidance in dealing with the challenges faced by start-up entrepreneurs. It also reveals how entrepreneurs perceive the existing ecosystem for entrepreneurs in Malaysia.

Research Implications: Future researchers may benefit from the present study by extending its findings to conduct quantitative studies to understand the relationships between entrepreneur support and the challenges nascent entrepreneurs face at start-up stages.

Practical Implications: The findings are valuable to young entrepreneurs, researchers, and policy makers in understanding start-up challenges and highlighting the significant support that start-up entrepreneurs need. It also offers useful inputs to policy makers in improving the existing entrepreneurial ecosystem in Malaysia.

Originality/value: Given the lack of studies on entrepreneurial support and challenges, this paper has the merit of identifying critical support that start-up entrepreneurs need and the challenges they deal with at the start-up stage. Moreover, this paper is one of the first qualitative studies that shed light on support services provided by supporting agencies for start-up entrepreneurs.

Keywords: Support services, Start-up Enterprises, Challenges, Entrepreneurial Ecosystem.

Paper type: Case Study

INTRODUCTION

The importance of an entrepreneurialeco system has been well-recognised by academics and practitioners, as well as policy makers, due to its importance to the development of entrepreneurs that fuels the growth of small and medium-sized enterprises (SMEs) which, in turn, creates employment. New business ventures such as start-ups emerge and grow where there is a strong entrepreneurial ecosystem that offers a supportive environment for them. An entrepreneurial ecosystem is a combination of various social, political, economic, cultural, technology, market and network elements within a region that support the development and growth of innovative start-ups and assists and inspires nascent entrepreneurs to take on the risks of starting and funding high-risk ventures (Mason and Brown, 2014). The fundamental idea of an entrepreneurial ecosystem is to create an environment conducive to supporting innovation, forming new successful ventures, and generating the corresponding sustainable employment growth within a specific geographic region (Brekker, 2015; Garud, Kumaraswamy, and Karnoe, 2010). The success of nascent entrepreneurs' start-up firms depends much on various institutional supports, which is part of the entrepreneurial ecosystem. Moreover, entrepreneurs can overcome the challenges they face if there is a proper entrepreneurial ecosystem in place. In the case of the commercialisation of research outputs of universities, support from both public and private institutions and agencies plays a vital role in getting the product into the market through new venture start-ups founded and managed by young entrepreneurs.

In the context of Malaysia, where innovation and entrepreneurship are highly encouraged by the government, there is a pressing need for public universities to commercialise their research outputs, as it takes a great deal of time, as well as financial and humanresources, to produce a product or technology as the output of academic research projects. Many of the research outputs, however, are not commercialised due to the lack of resources, expertise, industrial linkages, and academic entrepreneurs who can start and manage a new venture. Recently, the Malaysian government established some institutions, agencies, technology parks, and incubators to support young entrepreneurs with their startups. Although government and private agencies provide financial and technical assistance to entrepreneurs' start-ups, many of them either are unaware of or have yet to access the support services. For example, some researchers reported that many SMEs are unaware of financial and non-financial assistance and the availability of management training programmes (Kee, Effendi, Taliband Rani, 2011;Hashim, Ahmad, and Zakaria, 2010).

Due to insufficient awareness and access to support services, nascent entrepreneurs face various challenges at start-up stages. It would be easier for nascent entrepreneurs to overcome the challenges they face if there is an adequate entrepreneurial ecosystem in place with supportive institutions to drive start-ups into mature SMEs that transform products into businesses and create jobs. Therefore, there is a critical need forstart-upentrepreneurs to be aware of, and be able to access, the available supports offered by various agencies to grow their start-ups successfully and commercialise the products. Given this need, this study aims to explore:1) the challenges start-up entrepreneurs face at thepre-start-up stage; 2) the support services that are accessible to the start-up, and 3) their perception of the entrepreneurial ecosystem for start-ups in Malaysia. This study contributes to start-up entrepreneurship literature by analysing the findings to determine what kind of support is critical to overcoming the challenges and, as a result, improve the existing support system, which is an integral part of the entrepreneurial ecosystem.

CHALLENGES OF START-UP FIRMS

Although in general SMES is the engine of growth in Malaysia economy, their performance and survival rate is worrisome. SME Masterplan 2010-2010 revealed that nearly half of the SMEs (45%) are young, operating for less than five years. The failure was most evident among microenterprises. Malaysia SMEs are far less productive than those in high-income countries. For example, SMEs in Singapore are four times more productive than Malaysian SMEs while SMEs in United Stated are seven times more productive. According to SME Corp (2012), the main challenges faced by Malaysian SMEs are innovation and technology adoption, human capital development, access to financing, market access, legal and regulatory environment and infrastructure.

Previous studies have addressed the challenges faced by SMEs in various industries in Malaysia (e.g., Igel and Islam, 2001; Mohan, 2006; Sarif and Ismail, 2006; Khin, Ahmad, and Ramayah, 2010). Mohan (2006) found seven major challenges confronting start-up firms in Malaysia, namely market access, advancement of technology, innovation and creativity, access to financing, access to information, and human resource development. In an international context, Iakovleva et al. (2013) have highlighted the specific challenges and opportunities in the entrepreneurial environment that influence female entrepreneurs in Russia and Ukraine.However, literature addressing thechallenges faced by nascent entrepreneurs,particularly at the start-up stage,to assessthe support provided by entrepreneurial supporting agencies that are an integral part of the entrepreneurial ecosystem is scarce. This study, therefore, fills this research need by exploring the entrepreneurial challenges at the start-up stage. It is important for potential entrepreneurs to be aware of the possible challenges they have to overcome at the start-up stage so they can be better prepared and can seek support in advance. The awareness of the potential challenges may also help entrepreneurs avoid fundamental mistakes in managing their business and equip themselves with the adequate skills that enable them to make better decisions. Therefore, the insufficient number of studies on entrepreneurial challenges and the critical need to be aware of possible start-up challenges warrant this study of the entrepreneurial challenges at the start-up stage.

Many studies have found that entrepreneurial support is essential to small business success (e.g., Yusuf, 1995; De Faoite et al., 2004; Petridou, &Glaveli, 2008). Some studies suggest that entrepreneurial support is not well-accessed in some countries, especially those that have just started to encourage entrepreneurship. Based on the data collected from staff working directly with entrepreneurs through interviews in Russia and Ukraine, Iakovleva, et al. (2013) found that the entrepreneurs interviewed did not receive substantial support from the government for entrepreneurship. They had not heard about the government's educational and other support programmes related to female entrepreneurs. This literature finding warrants this study to investigate start-up entrepreneurs' experiences in accessing support services and what other support they still need to overcome and challenges facing them.

SUPPORT SERVICES IN ENTREPRENEURIAL ECOSYSTEM

Understanding the role of entrepreneurial support in start-upsis particularly important in light of the entrepreneurial ecosystem**.** There are many government and private agencies that support the ongoing growth of entrepreneurs and businesses in the countries where entrepreneurship is encouraged. Suresh and Ramraj (2012) have developed the eco-system model from a framework of eight systems of support and several factors contributing to the structure of a single support system, namely government assistance

and moral, financial, network, technology, market, social and environment support. The present study was designed to shed light on these four clusters of support—technology-related, market-related, finance-related, and soft-services as identified by Heydebreck et al. (2000)--to assess the accessibility of start-up entrepreneurs to support services provided by various agencies in Malaysia.

In the context of Malaysia, the government plays an active role in supporting and encouraging entrepreneurs by establishing institutions, technology parks, and incubators to nurture young entrepreneurs and technopreneurs. Some key institutions or agencies are Technology Malaysia Park (TPM), Malaysian Technology Development Corporation (MTDC), Small Medium Enterprise Corporation (SME Corp), and Malaysian Global Innovation and Creativity Centre (MaGIC). In addition, the emergence of a variety of financial institutions enables the nation's funds to be channelled productively and efficiently to investment activities. Among the sources of capital that are open to entrepreneurs in Malaysia are the banking system, development finance institutes, venture capital funds and other private funds (Ariffand Abubakar, 2002). According to Ariff and Abubakar (2002), although there are many programmes and financial support systems for entrepreneurs, they have not been as effective as they should be. Recently, the Malaysian government has launched a new programme, called, '1Malaysia Young Entrepreneurs Challenge' (1MYEC) on 28 Mac 2011. This programme aims to inculcate an entrepreneurship spirit among university students and encourage them to participate in entrepreneurship programmes (MITI, 2011). Despite the reported efforts of the Malaysian government to promote entrepreneurship, there is still need to identify whether those efforts meet the need of nascent entrepreneurs and what kind of support still is necessary or should be improved.

TECHNOLOGY-RELATED SUPPORT

Start-ups, in general, need technological support to develop further and differentiate a product to suit a market need. This is especially true for start-up firms that commercialise the research outputs from the universities. The start-up entrepreneurs may have limited knowledge of the products because the products are developed by the researchers from the universities. The start-up entrepreneurs have to go through a technology transfer process to acquire products and technological knowledge from the researchers who developed the products. The more support and advice were given by the researchers, the more likely the start-up entrepreneurs to produce and market the product. This is especially the case when the product to be commercialised involves new or sophisticated technology because the researchers and the entrepreneurs have to work in close collaboration until the product is ready to go to the market.

Besides research universities, technology-related support for product development could be provided to entrepreneurs by government entrepreneurial supporting agencies, incubation centres, technology parks, and educational institutions such as research universities. These agencies facilitate and nurture business start-ups by providing, technological expertise and skills, product know-how, advice on R&D for innovation and intellectual property.

MARKET-RELATED SUPPORT

Heydebreck et al. (2000) suggest that market-related services consist of assistance in the marketing of products and technologies, a search for customers and suppliers, and assistance with new product launches. Market support is vital for nascent entrepreneurs in tackling the target market to develop the new business

because a product will not sell well without the right marketing mix. Start-ups usually need market support regarding conducting market feasibility studies of the product, linkages to related industries and potential customers, and platforms for them to promote their products such as trade fairs and exhibitions. They also need training, mentoring and guidance in how to set marketing strategies and position the product to suit the target market.

Prior research has proven that training, guidance and mentoring to improve marketing skills in start-ups are crucial in developing their business for commercialisation. Besides market-related competence and knowledge, Kee, Effendi, Talib and Rani (2010) found that building and developing the right networks is the most critical key success factor for SMEs. A survey carried out by Wall Street Journal reported that over 800 SMEs found that most of them are unsure how to use social media, which ones to use, or whether it was worth the time and effort (Maltby and Ovide, 2013). Social media has become popular for all businesses because it allows them to communicate with, listen to and learn from their existing and potential customers in a way they have never been able to do before (Grewal and Levy, 2013; Smith and Wollan, 2011). The lack of marketing knowledge and skills are part of a more general lack of business and management skills in many cases of young entrepreneurs (Moi et al., 2011). It has reshaped the way businesses distribute their information and the way customers search for information.

In the context of Malaysia, Malaysia External Trade Development Malaysia (MATRADE), The Technopreneurs Association of Malaysia (TeAM) and Agency Innovation Malaysia (AIM) are the agencies that provide market-related services by linking the start-up entrepreneurs with a network of potential suppliers and distributors, as well as SME associations. Supporting agencies such as the Malaysian Technology Development Corporation Sdn Bhd (MTDC) arrange trade shows and exhibitions for entrepreneurs to showcase their products.

FINANCE-RELATED SUPPORT

Finance-related support includes financing the entrepreneurs to start their ventures. The financial assistance for start-up capital may come from various sources such as family, friends, relatives, banks, venture capitalists, government institutions, angel investors, and small investors. The research finding of Jasra et al. (2011) shows that SMEs perceive financial resources as the most important factor in the success of business. Similarly, other studies have also found financial resources as critical success factors for technological entrepreneurs (Song et al., 2008). On the other hand, some mixed findings on the impact of financial support on entrepreneurial success were reported in prior studies. Based on research on Jamaican micro-entrepreneurs, Honig (1998) indicated that although additional starting capital played an important role for businesses, increasing amounts failed to differentiate the success of those firms that were already operating in the higher technological tier. Obtaining a small business loan acted in a similar manner, enhancing the profitability of all businesses, except those segmented into a high technological tier.

Financing business is one major obstacle and challenge to start one business. Many potential entrepreneurs struggle to raise funds for their start-up capital. Recently, crowd funding is getting popular among entrepreneurs, but it still needs more proven results in many countries. In Malaysia, some government agencies such as the Malaysian Technology Development Corporation Sdn Bhd (MTDC) encourage start-ups by providing funding.

SOFT SERVICES SUPPORT

Soft services refer to more general types of support, comprising seminars and providing information, education and teaching programmes, training programmes and consulting, and mentoring and coaching (Heydebreck et al., 2000). The importance of soft services support to start-ups and SMEs has been highlighted in a couple of studies (e.g., Faoite et al., 2004; Deakins et al., 1998). Spigel (2015) suggests that soft services are essential to promote and stimulate an intellectual, creative and innovative community for the development of the knowledge-based economy by establishing of strategic business and technology linkages between research institutions, academia, the financial community and industry, local and global industry. For nascent entrepreneurs, who lack business management skills, soft services support provided by supporting agencies will be helpful in managing the various challenges even before the operation starts. Several studies also have supported the positive impact of mentoring support. Based on interviews with new entrepreneurs engaged in such a mentoring relationship, a study undertaken in Scotland by Deakins et al. (1998) suggests that such a relationship is beneficial. Similarly, Delanoe (2013) found that the positive effect of professional preparation support on start-up outcomes is apparent in the results. The preparation support in that study is meeting with a counsellor or a specialist or taking some training. Moreover, Erikson Are Gjellan, (2003) concluded that soft supports such as real-life, hands-on start-up experience also has resulted in increased competence and motivation.

Malaysia government supportemanates from clusters like educational programmes from Micro SMEs, incentives, incubation centres, infrastructure facilities, awards and legal procedures, schemes, policy, and other programmes. The current supporting agencies involved in assisting start-up enterprises are Agency Innovation Malaysia (AIM), The Technopreneurs Association of Malaysia (TeAM), the Malaysian Technology Development Corporation Sdn Bhd (MTDC), the Ministry of Science, Technology and Innovation (MoSTI), the Malaysia Digital Economy Corporation (MDEC), and the MiMalaysian Global Innovation and Creativity Centre (MaGic).

RESEARCH DESIGN AND METHODOLOGY

Miles and Huberman (1994) used a qualitative approach based on words rather than numbers to obtain a holistic picture that would be rich in understanding. To obtain an in-depth investigation and rich description, Darke, Shanks, and Broadbent (1998) used a single case study approach. A case study with symbiosis as the main context of by Darke and Shanks (1997) suggests that single case studies are more suitable when cases are unique or extreme. Further, as Benbasat, Goldstein, and Mead (1987) found, case study allows the study of a phenomenon of interest in its natural setting. In this case, the challenges and support related services were not generalised or understood using results from a survey, but rather explored and understood in the context of spin off and symbiosis organisation ecosystem. A case study approach seems to be appropriate since this paper is an exploratory study that aims to develop a better understanding of the challenges faced by start-up firms and identify the support services used. One of the reasons why we chose this population - the firms that commercialise university's research outputs - is that the universities spend substantial grant money on research projects, but only a small percentage of outputs are commercialised (Zakaria and Arnold, 2012). So the present study will uncover the challenges that are the potential barriers to commercialisation. Understanding and recognising challenges and

supporting factors will help them generate an economic return on the investment made to commercialise research projects.

DATA COLLECTION PROCEDURE

Sevenstart-ups were selected for this study. The common selection criterion to these start-ups was that they were funded by a government agency that provides funding and basic support to start-ups that commercialise research products from public universities in Malaysia. All of the seven start-ups were selected for a funding programme by the funding agency to commercialise different products from the same public university under a product licensing agreement. The operational site or offices of the respondents' firms are located in the Northern region of Malaysia. The respondents founded their company when they received the funding more than two years ago, and, thus, are in their third year of the start-up stage when they were interviewed for this study. They are at a similar stage, as they are in the process of up-scaling the products, setting up the production line and trying to develop their business. Average owner age was between 25 and 35, and most of them were recent graduates, except for two interviewees who have had some working experience after graduating.

We took a qualitative approach, using seven semi-structured interviews. The interviews were conducted in December 2015. We sought voluntary participation in the study and assured the respondents of confidentiality. Semi-structured interviews were administered on the same day. We operationalised our inquiry by asking the participants open questions about the challenges at the start-up stage, support services they have received and still need, as well as their comments on the entrepreneurial ecosystem in Malaysia based on their opinion and experience. Consent was obtained from respondents to record the interview. All of the questions were open-ended. The interviews lasted for an hour on average. The semi-structured questions were structured as follows to cover three main areas ~~S~~ challenges, support, and the entrepreneurial ecosystem.

1. What are the major challenges you faced at the start-up stage?
2. What kind of support have you received from supporting agencies? What support do you still need:
    a. Technology and product-related support?
    b. Financial-related support such as funding?
    c. Market-related support?
    d. Soft services support?
3. What do you think of the current entrepreneurial ecosystem in Malaysia for entrepreneurs?

DATA ANALYSIS

All interviews were recorded and transcribed verbatim into English. We first coded the data on different themes. A qualitative thematic strategy was used to analyse and make sense of the data (Boyatzis, 1998). We used the constant comparative method to identify major themes (Glaser and Strauss, 1967). Through constant comparison, we identified subthemes under each major theme as properties or descriptors to

reveal the underlying nature of the themes. The data were presented thematically, and the relationship between the findings and current literature was integrated into the discussion of themes (Glaser and Strauss, 1967).

FINDINGS

The findings from the interviews are presented in three main themes: (1) Challenges faced by interviewees at the start-up stage; (2) Support and assistance that they have accessed and needed; and (3) Perceptions on the entrepreneurial ecosystem.

Theme 1: Challenges

This theme described a shared perception of respondents regarding challenges that they faced in the start-up stage. Due to the small size of operations and the dual roles of the interviewees as both owners and managers, the respondents faced major challenges in strategy formulation and implementation and manpower.

This section answers the research question: *What are the major challenges you faced at the start-up stage?* The common challenges encountered are up-scaling the product, setting up the lab/production, business development/marketing, requesting funding, and various operational problems. Operational problems included product production, inventory management, staff recruitment and purchase of equipment. As one of the intervieweesnoted, he did not even know what problem he had because of he and his partner lost in the direction of their business. It shows that they needed someone to guide them in the early stages until they can stand on their own feet.

"We did not know what problem we had in early years. When we are awareof the problem, we canstrategise. We were too slow. It was like we did not know what to do, lost in the direction. Just recently, we only identify and understand what we are going to do. Gained insight and now we know what we want to achieve."

One of the critical problems interviewees faced is up-scaling the product for mass production because the products they were commercialising were research outputs from the University, which were produced at lab-scale, not production scale.

"For the up-scaling process, we have several problems. To develop the product from lab scale to pilot scale, we have to adjust the parameters. So far we have not got the high yield, so we still have to several batches to get exact parameter to optimise the production. So, we are still doing R&D as we have no experience in setting up the facilities. We require someone expert in fermentation, to optimise the production and upscaling process."

Another interviewee commented,

"We had achallenge in setting up the lab and the up-scaling the technology. We need to understand the technology first, and then we need to upscale. We require very long time to do that. A company from Japansaid they took six years for R&D for asimilar product. We are just two years plus, need more years to settle down."

The three interviewees also commented on the difficulty in getting the funded money from the funding agency to purchase equipment and materials required for operation. Although all the interviewees were granted the funding, the time needed to get approval for the money to be paid for the equipment was so long that it caused adelay in their operational set-up. It is worth noting that in these cases the money was

paid by the funding agency directly to the equipment suppliers and not deposited in the interviewees' bank accounts. The funding agency did this because it was a policy designed to curb the potential misuse of funding by entrepreneurs in general.

"We faced a challenge in getting the grant money from the funding agency to purchase the equipment. The documentation to get the money is the problem. We must get the quotation first, and then, submit the claim form to funding agency before we can buy the equipment."

The other interviewees commented:

"One more thing is about funding. The money is there, but the way to use it is such a pain. It is because of the funding system. You need to search for extra money first to pay and reimburse later. Imagine you do not have any money, you need to borrow money from family and friends, or you need to sell your stuff. You also need to plan well and ensure that it is with in your budget. When the money comes, you need to know how to manage it because the money will go to suppliers and contractors, not to me."

"Buying things is a problem…the documentation part of claiming for equipment. We have to claim first, get money and buy. They should make it easier to get the fund for purchases."

The other challenge after setting up the operation was the commercialisation of the product. As most of the interviewees had no prior experience and knowledge in bringing the product to market, it was hard for them to figure out how to reach potential customers and what kind of marketing strategy would suit their product and market without any guidance. Therefore, the interviewees described the challengesin gettingclients and buyers as follows.

"The challenge we face now is to get more customers; it is business development problem."

"*The getting customer is another challenge. When we joined exhibitions, we found that the clients cared about price rather than abenefit. Compared to other products, our price is reasonable. They try to compare with conventional products in the market, but ours is totally different, healthy product."*

The interviewees also shared operational challenges as follows.

"The first challenge is to find the right team. The second challenge is to make research output become a sellable product. To get this research output become a product, you need manpower, space, equipment, know-how. It is very easy for me to sum them up, but if you go through it, it is not that easy as you think."

"When the lab is ready, you need the product, so you need to make sure the product can work. We need to try again and again. That is the main challenge I am facing in setting up this company."

"We had basic challenges like inventory, stock, staff, management, client, standard operating procedure, Business administration, cash flow, documentation."

"Setting up is not a problem because we have a mentor introduced by our researcher from the University."

Theme 2: Support Services

To answer the research question: *What kind of support have you received from supporting agencies? Theme* 2 describes the support services that interviewees received at the start-up stage. Table 2 shows their accessibility to support from various entities in four categories— technological, financial, marketing, and soft services.

The interviewees sincerely expressed their opinions on the support that they received from various agencies such as the government's funding agency, the university where their product was developed and transferred to them, as well as the Northern Corridor Implementation Authority (NCIA), which is responsible for providing direction and devising policies and strategies in relation to socio-economic development in the Northern Corridor Economic Region, which encompasses 21 districts in the north of Peninsular Malaysia in the states of Kedah, Perak, Perlis and Penang. The interviewees also mentioned that they received help from industry either through their personal network or their funding agency. The personal network and social capital played a major role in getting the support they needed. Moreover, learning from industry was a great help for the entrepreneurs, as many of them had no idea how to set-up the whole operation.

TECHNOLOGY-RELATED SUPPORT

First, interviewees were asked about the technology-related support they have received. All of them mentioned that they received technology and product knowledge from the same university. However, not all of them received a sufficient level of support in up-scaling the product, developing it into different products, or setting up the lab and production line to make the product. Some of them needed to spend a substantial amount of time adjusting the product to meet the required quality standard could not have been met without help from University researcher who developed the product. Fortunately, a few of the interviewees received support from industry in product development. The interviewees commented as follows on the support they received in relation to the technology transfer from the University.

"The researcher from the University helped me with consultation, lab set-up and SOP (Standard Operating Procedure). Then we tuned the product ourselves. We want to work close with USM, so we do not move into NCIA."

"On the paper, it is nice…the university as the technology provider…However, then, how technology was transferred is dreadful… We did not get the knowledge that we need… We had to share the lab with students."

"We received this technology from the University… Our company bought the license from USM, and the researcher has done the technological transfer. She is very dedicated. She gave us consultation and advice. Her former student has set up tissue culture lab. So she can share with us."

"Regarding technology support, I think it is very little, not enough. Product development is on our own. Researcher in the agreement is not there to support us. So it was quite difficult for us to start in the early stage. She gave us the steps in how to make banana flour. However, regarding advice, she is not there. Even the product development recipe when we asked for advice, she did not give. She gave us the steps for banana flour but not the recipe to make the noodle. So we have to figure it out. Ido not know what the problem with the researcher is. It is the problem that we countered. During the development process, we were on our own. We do not know whether our product meets the originalquality standard. We just produced it, tried to optimise parameters, and sent to the lab, compared it with the researcher's past research. So regarding technology, it was notenough. Everything we research."

"We got technology support from the University; we have done our technology transfer. We also met a company that also produce the same product for different market. They helped us with analysis of our product result."

FINANCE-RELATED SUPPORT

To understand to what extent financial assistance helped the interviewees, they were askedwhatthey think

about the funding they received - whether they believe that it was enough and how important the funding agency was. Most of the interviewees said that the funding was sufficient although they found it challenging to claim the money to pay for their equipment, as was reported in anearlier section.

"The funding helped us a lot. The agency provided us the salary and allowance for 2+1 years (a total of three years). We have no other funding support. I can apply for other loans, but Ihave not. Moreover,I have to pay back the loan. Maybe we need more funding for product promotion."

"Our funding agency is quite good because they offer to fund for various stages.From Seeds fund, business growth fund, business start-up fund, and then... if your company is successful, they will venture into it. The funding agency is helpful".

"The funding is enough for our project. It is like claim-based. They can pay directly to the supplier, but we make a claim, which sometimes takes long."

MARKET-RELATED SUPPORT

Two kinds of supports were noticed from the interviewees' responses when they were asked about market-related support. The first support was linking them with potential buyers or customers, which was done by their funding agency. The other kind of market support was the market feasibility study and the marketing and promotional servicescarried out by marketing companies.

"Whenever our funding agency finds industry people who are in therelatedfield, they would link us to them. We got some lead from there. They gave this kind of networking support, or platform to meet people or to do exhibitions. Luckily, we got all these supports."

Only one of the interviewees responded that the funding agency had conducted amarket feasibility study for thecommercialisedproduct;it was done before they got the funding and started the venture about four years ago. Therefore, the study was no longer relevant when they were ready to market the product.

"Our funding agency had done the market study before the funding was granted. It is helpful, but the constraint that we have is time. They did that before they grant us the funding. So it was like threeyears ago. When we got the funding, the study was already outdated.We need to change the business model to suit the market changes."

One interviewee was fortunate to have a marketing services company thatprovidedselling and marketingservices for him.

"We have a company that does market research for us. That company helped us with marketing, for example, what to sell and how to market our products. So now we focus on manufacturing."

SOFT SERVICES SUPPORT

Soft services include training and workshops to improve entrepreneurial and business management skills, advice and guidance, linkages to related entities as well as mentoring. First, the interviewees were asked what kind of training and workshops they received, whether it was helpful enough and whether they needed any other training. Although all of them received a crash course after they joined the funding programme from the same funding agency, some of them commented that it was too basic and, thus, they expressed their need to receive ahigher level of training in business management-related areas. The interviewees responded as follows regarding the training they received.

"We attended training and Seminars by Equipment suppliers."

"We got a crash course which was very basic provided by our funding agency in the first three weeks. I can rate itoneon 1-10 scale… They got good intention but, the support they gave us was not really at the right timing."

"We got very little or poor training from the funding agency.We need training on finance and marketing."

"Maybe the participant should be given enough training and understanding. We have to prepare the business plan. We could just estimate."

"I joined marketing training programme under our funding agency, and it helped us so much because we were able to meet people from the industry and they provided us the right direction to position our product."

"For training, we had aworkshop every month at our funding agency. So we joined that seminar. We still need training on management."

"We need anadvanced level of training in HR and accounting. We know only basic things. We did receive the training but not enough for us. We want to learn deeper on labour law, agreements, and also need a production consultant."

As for the advice and guidance, interviewees commented as follow.

"Some staff from our funding agency can share knowledge, but it is limited. Most of the officers can give advice, but they are not from industry. Only those worked in theindustry understand how things work."

"We need to cope with the surrounding. What they give is just space and deep water…. Whether you want to dive in, or you want to catch fish…. They just provide us with someideas, and we have to find our way and walk by ourselves."

Some of the interviewees also received industry linkages from the funding agency or the researcher from the University.

"NCIA also supported us in networking, because they know the people in thenorthern region, but we do not know. So they can connect us to relevant entities in the north of the country. It is a good thing because they can identify excellent resourceful people for us. As the research comes from the University, for consultation and services, they were there."

With regards to mentoring, almost all interviewees expressed their common view that they needed mentoring support, which they found the most valuable.

"I wish they give us a mentor first. However, nobody gave us advice or direction where to go, whom to approach, how to go,etc."

"Particularly in this industry, agricultural biotechnology, we need someone to guide us, maybe a mentor. "

Fortunately, some of the interviewees had a mentor from industry,so they did not have much of a problem with production set-up.

The first thing we need was a mentor when we were in the dark. Then, we got to know someone from my personal network by chance. That mentor took us to industry to see how things run in the industry.That is the most valuable support that I appreciate… I can say that Idid not need anything else.

The interviewees also expressed their need for other support as follow.

"I need to cover all the areas such as technology, and the marketing as well; I need to do all these work by myself. Maybe

somehow, someone could help me on HR (human resources) or set up the accounts. I did it everything by myself. So, these are the kind of support that I need. I am from science background… Business management and accounting are not myareas."

"Right now, we need any support they can give us to generate cash. Business development supports and generates sales. This isour top priority. Free space, free advertising, market, and businessopportunity.Anything that can help us. We need resources support."

"It would be helpful for us to meet related industrial firms and see how they operate and what they are doing."

Overall, the interviewees expressed their opinions that, because they needed help in various areas such as up-scaling the product, setting up aproductionline and business development, they could have used some expertsin therelated field asmentors or advisors to guide them in startingupthe operation.

Theme 3: The Entrepreneurial Ecosystem in Malaysia

Although the interviewees have slightly different ideasabout theentrepreneurialecosystem in Malaysia based on their experience, most of them believe that it has room for improvement. One of the interviewees commented that it was challenging to develop and commercialise atechnological product that is innovative and could be differentiated from other products. This implies that the choice of product is more important than the entrepreneurialecosystem given the challenge of innovation. This comment also sheds light on the importance of the innovation ecosystem,especially for technological entrepreneurs or technopreneurs who commercialise technological products.

"If you talk about entrepreneurs in Malaysia, people who are developing certain things, the environment is there. Many agencies are supportingthem, but they need to choose the product in the industry that they want to involve in. For me, from what I see, the area or industry that they should choose in Malaysia is IT, food and beverages, but little in technology because thecertain thing in thetechnology itself is somehow quite challenging for us to develop. Unless we get technology already there from outside. To develop our technology is something challenging. We are facing this pressure to innovate and differentiate from others for our product identity. That part is quite difficult for me to move on quickly.

"Overall, we are far away from Silicon Valley. Silicon Valley is a good model. We still have many things to improve. We want the agencies to get feedback from entrepreneurs."

"Entrepreneurial Ecosystem is OK but using the funded money is aproblem, other than that is fine."

"Our entrepreneurial ecosystem should be improved. I think there should be more studies on technologies whether it is acceptable in Malaysia… Feasibility of the technology. Our product is not something Malaysians can absorb yet. When you talk about gluten-free, it is all about theoversea market. Maybe in anurban area in Malaysia, people are more aware….. The start-up is very new in Malaysia. So there is ahiccup here and there. More support should be available for start-up. There must be a way for astart-up to have the fund already in the bank account. We are fresh graduates with no working experience. Moreover, wedo not have amanagement background. For managing our own business and accounts, there is much more to learn. That takes time."

"Ithink for the start-up is quite tough for thetechnologybasedcompany to grow because in term of funding, regardingmarket itself. We required capital and also continues R&D. It is quite challenging for us. For a start-up, we are still young, we do not have much experience in the industry, and we need some knowledge to understand the entrepreneurial ecosystem...So before we go into industry, maybe we can have some attachments at a company in related technology."

"The government agencies do try to consolidate many services to theone-stopcentre like MIDA. MIDA is quite useful. For start-up stages, government agencies do give muchsupport, but they are inclined towards established companies. If you register with MATRADE, they can bring them abroad for exhibition or sponsoryou if you have aproduct ready. However, fornewcomers like us, we have to prove ourselves first."

DISCUSSION AND IMPLICATIONS

The findings of this study add value to the existing literature by highlighting the importance of entrepreneurial support that could help start-up entrepreneurs in dealing with various challenges. Based on qualitative data, the present studyidentifies the main challenges faced by the respondents, thesupportthey received, and their perception on the entrepreneurial ecosystem in Malaysia.

Although intervieweescommercialise the different products from the same university, they received technology support from variousresearchersinvarying degrees.While some of the respondentswerehappy with the technology or product knowledge, help, and advice they received from the researchers, some were not.The reason why some of the interviewees think that the researchers' knowledge sharing was insufficient could be because the university researchers' cooperation and contribution to the technology transfer process are merely based on a licensee-licensor relationship, as the researcher has no stake in the venture. In some cases, the respondents had to struggle in up-scaling the product, as well as with production and R&D, to meet the quality standard(s) set by the University researcher. Those challenges could be mitigated if the researcher could contribute more in transferring the technology to ensure that the products meet the required quality standard(s)so as to expedite the commercialisation process.This finding with regards to technological challenges entrepreneurs face at the start-up stage draws attention to the importance of thetechnological support they need and the need to make the technology transfer process more effective. The universities should also consider allowing the academic researchers to hold a stake in the venture in the form of spin-off firms. Although some public universities in Malaysia allow academic entrepreneurs to get involved in spin-offs, others still do not.

Because all the respondents received financial support from a governmental funding agency, getting the investment capital or managing the financeswas not thegreatest challenge for them. The interviewees were happy with the funding amount that covered their operational needs,although some of them expressed difficulty in getting funds to pay for required machinery and equipment. Therefore, the funding agency may look into hastening the claim procedure to speed-up the production line set-up since the funded entrepreneurs have limited time to generate their sales and profit and survive on their own after the third year of start-up. Since most of the respondents are fresh graduates without any personal savings, it is challenging for them to support themselves when the funding period of three years is over.

The other main challenge to highlight is associated with managing the overall operation from production to marketing and human resource matters, which could be better dealt with if the entrepreneurs have prior working experience and the relevant educational background. Soft support such as training and skill development programmes in business management should also be beefed-up to alleviate the challenges related to operational and business management. Therefore, this finding on operational challenges calls for supporting agencies to consider funding entrepreneurs with prior experience and a relevant background and also providing more exhaustive skilldevelopment and hands-on programmesto expose them to related industries.

Another significant finding regarding the challenges in business development a few of the interviewees faced could also be linked to the market-related support they need. One of the respondents has engaged a private company to carry out marketing services for him, and as a result, the interviewee has no concern over marketing his product. This allows the interviewee to concentrate on production and product development and also feel positive about the venture's future. Moreover, some of the interviewees also appreciate the trade fairs and product exhibitions and marketing training provided by their funding agency. Only one interviewee mentioned the timeliness of the market feasibility study that was done about four years before he was ready with the product. This sheds light on the critical need to evaluate the market viability of the product seriously to avoid commercialising products that get obsolete quickly or need quick entry to the market before the competition.

Importantly, soft service support such as mentoring andlinkages to industry and marketswere found to be critical for their start-up progress,especially in production set-up and business development. We believe that entrepreneurs could overcomemany of the challenges they face at the start-up stage if they have someone who can mentor or guide them. Since the funding agency does not have an assigned mentor for the funded entrepreneurs, the entrepreneurs may consider finding theirown mentors.Entrepreneurs should also attend training and seminars,not just to get knowledge, but also to socialise and build up their business networks with other industrial players who might be able to help them by providing advice or links to related entities.

The perceptions of interviewees on the entrepreneurial ecosystem is avaluable input to the policy makers as it highlights the need to put more effort in evaluating the market feasibility of the product. More studies should be done to predict what will happen to product demand in five to ten years' time rather than right now. The significant comments that are worth noting are,first, about the importance of the right choice of technology or product due to difficultiesincommercialisingcertain technology and also in getting consumers' acceptance of acertain product. Second, about the importance of having prior experience and business management knowledge and skills, as it takes time for fresh graduates to learn what marketing or operation management is all about. If the entrepreneurs are already equipped with the required knowledge and expertise, start-up progress will be faster, and there will be fewer failures. Last, the comment that one of the government agenciesis inclined towards established companies calls for the government agenciesalso to help nurture new start-ups with no proven success rather than just helping rising stars.

This study offers directions for future researchers to explore the relationships between entrepreneurial support and start-up challenges, as well as how existing support systems should be improvedto build a better entrepreneurial ecosystem. Among the types of support that this study underlines, technological support and mentoring support deserve more research attention in countering entrepreneurial challenges and achieving success at thestart-up stage. Future researchers may also look into the possible moderating role of technological and mentoring support on the effect of thechallenges to start-up success.

CONCLUSION

The importance of entrepreneurial support, especially in the context of nascent entrepreneurs, has been addressed in several studies(e.g. Yusof, 2010). However, the opinion of nascent entrepreneurs with regard tothe challenges they are facing, the support needed, and the entrepreneurial ecosystem in which

they operate has not been reported sufficiently. To fill this research gap, the present study firstidentified challenges nascent entrepreneurs faced while addressing what kind of support is still necessary to manage those challengesgiventhe existing entrepreneurial ecosystem in Malaysia. Second, it puts forward the proposition that the challenges faced by nascent entrepreneurs could be mitigated, and the start-up stage could be faster, if they receive the support they need and can make the best use of it.Third, the findings of the present study entail that the government should improve the entrepreneurial ecosystem by providing more effective and efficient support programmes and services, and also that universities should improve the technology transfer process, as there is a serious need to convert academic research outputs into commercialised products before they become obsolete. The improved entrepreneurial ecosystem will act as the key instrument in nurturing nascent entrepreneurs because the well-integrated support from various elements of the entrepreneurial ecosystem will help mitigate the challenges they encounter.

In summary, the present study offers valuable contributions to practitioners, researchers and policy makers. Practically, by addressing the need to improve entrepreneurial support so as not to waste the R&D efforts of researchers, this study contributes to start-up entrepreneurs, universities, academic researchers and the nations that are striving towards knowledge-based, innovation-driven economies, where entrepreneurs play important roles. Theoretically, this study adds value to the existing literature by bringing up important factors such as mentoring support, links to industry, social networks, the prior work experience of the entrepreneur, the feasibility of technology, the product and the market, etc. that deserve more research attention tobetter understand start-up success as well as dealing with entrepreneurial challenges. More empirical research into those factors will lead to extending the existing related theories such asresourcedependence and institutional theory.Moreover, the findings on entrepreneur support call for future researchers to delve into the impact of start-up support on start-up success, and also on dealing with start-up challenges. From a policy perspective, the study reveals a great need for the development of policy instruments that improve the entrepreneur support system.

REFERENCES

Abdullah, F. Hamali, J. Rahman, D. A. Saban, G. and Zainoren, A. A. (2009), "Developing a framework of thesuccess of Bumiputera entrepreneurs,"*Journal of Enterprising Communities: People and Places in the Global Economy,* Vol. 3, No. 1, pp. 8-24.

Ariff, M., and Abubakar, S. Y. (2002), "Strengthening entrepreneurship in Malaysia,"*Malaysian Economic Outlook: 1st Quarter 2002 Update*, pp.1-22.

Benbasat, I., Goldstein, D.K. and Mead, M. (1987), "The case research strategy in studies of information systems,"*MIS Quarterly*, Vol. 11, No. 3, pp. 369-386.

Bhide, A. (2000),"The Origin and Evolution of New Businesses,"New York: OUP.

Boyatzis, R. (1998),"Transforming Qualitative Information: Thematic Analysis and Code Development,"Sage, Thousand Oaks, CA.

Brekke, T. (2015),"Entrepreneurship and path dependency in regional development,"*Entrepreneurship & Regional Development: An International Journal*, Vol. 27, No. 3-4, pp.202-218.

Bridge, R. (2012), "How to start a business without any money,"United Kingdom: Virgin Books.

Certo, T.S. Moss, T.W. and Short, J. (2009), "Entrepreneurial orientation: An Applied Perspective,"*Business Horizons*, Vol. 52, pp. 319-324.

Danneels, E. (2004), "Disruptive technology reconsidered: A critique and research agenda,"*Journal of Product InnovationManagement,* Vol. 21, pp. 246-258.

Darke, P. and Shanks, G. (1997), "User viewpoint modelling: understanding and representing using users viewpoints during requirements definition,"*Information Systems Journal*, Vol. 7, No. 3, pp. 213-239.

Darke, P., Shanks, G. and Broadbent, M. (1998), "Successfully completing case study research: combining rigour, relevance and pragmatism,"*Information Systems Journal*, Vol. 8, No. 4, pp. 273-289.

Dougherty, D. and Heller, T. (1994), "The illegitimacy of successful product innovation in established firms,"*Organization Science*, Vol. 5, pp.200-2018.

Dubini, P. (1989), "The influence of motivations and environment on business start-ups: Some hints for public policies,"*Journal of Business Venturing*, Vol. 4, No.1, pp. 11–26.

Garud, R., Kumaraswamy, A. and Karnøe, P. (2010), "Path dependence or path creation?" Journal of Management Studies, Vol. 47, No. 4, pp.760-774.

Glaser, B. and Strauss, A. (1967), The Discovery of Grounded Theory: Strategies for QualitativeResearch, Aldine, Chicago, IL.

Grewal, D. and Levy, M. (2013),Marketing, McGraw Hill Publishing, NY Han, L. and Benson, A. (2010). "The use and usefulness of financial assistance to UK SMEs,"*Environment and PlanningC-Government and Policy,* Vol. 28, pp. 552-66.

Hashim, M. K., Ahmad, S. A. and Zakaria, M. (2010), Internationalisation Incentives and Problems: Insight from Malaysian SMEs. World Review of Entrepreneurship, Management, and Sustainable Development, 6(1-2), 100-112.

Heydebreck, P., Klofsten, M. and Maier, J. (2000), "Innovation support for new technology-based firms: The Swedish Teknopol approach,"*R&D Management,* Vol.30, pp. 89-100.

Honig, B. (1998), What determines success? Examining the human, financial, and social capital of Jamaican microentrepreneurs.*Journal of business venturing*, *13*(5), 371-394.

Hsieh, T. (2010), *Delivering happiness: A path to profits, passion, and purpose,* New York: Business Plus.

Isenberg.D. (2010), "The Big Idea: How to Start an Entrepreneurial Revolution."*Harvard Business Review,* Vol. 88 No.6, pp. 41-50.

Igel, B. and Islam, N. (2001),"Strategies for service and market development of entrepreneurial software designing firms", *Technovation*, Vol. 21, pp. 157-66.

Choudrie, J, andCulkin, N. (2013), "A qualitative study of innovation diffusion: the novel case of a small firm and KTP,"*Journal of Small Business and Enterprise Development*, Vol. 20 No. 4, pp. 889 – 912.

De Faoite, D., Henry, C., Johnston, K., & van der Sijde, P. (2004), Entrepreneurs' attitudes to training and support initiatives: evidence from Ireland and The Netherlands. *Journal of Small Business and Enterprise Development*, *11*(4), 440-448.

Deakins, D., Graham, L., Sullivan, R., & Whittam, G. (1998), New venture support: an analysis of mentoring support for new and early stage entrepreneurs. *Journal of Small Business and Enterprise Development*, *5*(2), 151-161.

Delanoë, S. (2013), From intention to start-up: the effect of professional support. *Journal of Small Business and Enterprise Development*, *20*(2), 383-398.

Jasra, J. M., Hunjra, A. I., Rehman, A. U., Azam, R. I., & Khan, M. A. (2011), Determinants of business success of small and medium enterprises. *International Journal of Business and Social Science*, *2*(20).

Kee, D.K.M. Effendi, A.A. Talib, L.S. and Rani, N.A.B.A. (2011), "A preliminary study of top SMEs in Malaysia: Key success factor vs. government support program", *Journal of Global Business and Economics*, Vol. 2, No. 1, pp. 48-58.

Khin, S., Ahmad, N.H. and Ramayah, T. (2010), "Product innovation among ICT technopreneurs in Malaysia," Business Strategy Series, Vol. 11, No.6, pp. 397–406.

Klofsten, M. (2005), "New venture ideas: an analysis of their origin and early development," *Technology Analysis & Strategic Management*, Vol. 17 No. l, pp. 105-119.

Knockaert, M., Vandenbroucke., E and Huyghe., A. (2013), "Unraveling the need for innovation support services in new technology-based firms: The impact of commercialization strategy."*Science and Public Policy,* Vol.40, pp. 85-96.

Knockaert, M., Ucbasaran, D., Wright, M. and Clarysse, B. (2011), "The Relationship between Knowledge Transfer, Top Management Team Composition and Performance: The Case ofScience-Based Entrepreneurial Firms,"*EntrepreneurshipTheory and Practice,* Vol. 35, pp.777-803.

Lee, S.M, Peterson, and Suzanne, J. (2000), "Culture, Entrepreneurial orientation and global competitiveness."*Journal of World Business,* Vol. 35 No. 4, pp.401.

Lundqvist, M.A., Karen L. and Middleton, W. (2013), "Academic entrepreneurship revisited – University scientists and venture creation,"*Journal of Small Business and Enterprise Development,* Vol. 20 No. 3, pp. 603 – 617.

Lynall, M., Golden, B. and Hillman, A. (2003), "Board composition from adolescence to maturity: a multi-theoretic view,"*Academy of Management Review,* Vol. 28, pp. 416-432.

Madhoushi, M. Sadati, A. Delavari, H. Mehdivand, M. and Mihandost, R. (2011), "Entrepreneurial orientation and innovation performance: the mediating role of knowledge management,"*Asian Journal of Business and Management*, Vol. 3, No. 4, pp. 310-316.

Mason, C. and Brown, R. (2015), "Entrepreneurial Ecosystems and Growth Oriented Entrepreneurship."Background Paper Prepared for *The Workshop Organised By The OECD* Leed Programme and The Dutch Ministry of Economic Affairs on Entrepreneurial Ecosystems and Growth Oriented Entrepreneurship The Hague, Netherlands, 7th November 2013.

Maltby, E. andOvide, S. (2013), "Small firms say LinkedIn works; Twitterdoes not," available at http://online.wsj.com/article/SB10001424127887323926104578273683427129660.html (Accessed 7 April 2016).

McRae, H. (2010), *What work: Success in stressful times*, Great Britain: Harper Press.

Miles, M.B.,and Huberman, A.M. (1994), *Qualitative Data Analysis*, Sage Publications, Thousand Oaks, CA.

Mazidah, S. Hayati, T. and Burairah, H. (2014), "Profile of ICT innovativeness in Malaysian SMEs from Services sector based on core ICT indicators,"*The Journal of Technology Management and Technopreneurship,* Vol. 2, No.1, pp.51-70.

Mohan, A.V. (2006), "The entrepreneur development programme in Malaysia's MSC cluster –theTechnopreneur Development Flagship (MTD) Programme", paper presented at the National Workshop on Sub-national Innovation Systems and Technology Capacity Building Policies to Enhance Competitiveness of SMEs, Kathmandu, 21-22 December.

Nazir, T., and Shah, S.F.H. (2014), "Mediating effect of knowledge sharing betweenparticipative decision making, transformational leadership and organization performance."*Journal of Management Info*, Vol. 1 No. 1, pp.58-66.

Ornek, A.S., and Danyal, Y. (2015), "Increased Importance of Entrepreneurship from Entrepreneurship to Techno-Entrepreneurship (Start-up): Provided Supports and Conveniences to Techno-Entrepreneurs in Turkey. *Procedia-Social and Behavioural Sciences,* Vol. 195, pp.-1146 – 1155.

Petridou, E., &Glaveli, N. (2008), Rural women entrepreneurship within co-operatives: training support. *Gender in Management: An International Journal*, *23*(4), 262-277.

Pugliese, A., Bezemer, P., Zattoni, A., and Huse, M. et al.(2009), "Boards of directors' contribution to strategy: a literature review and research agenda."*Corporate Governance: An International Review,* Vol.17, pp. 292-306.

Prahalad, C. K. (2005), "*The fortune at the bottom of the pyramid: eradicating poverty through profits."* Saddle River, NJ: Wharton School Publishing.

Ramlan, J. and Musa Ahmed, E. (2010), "The impact of ICT in Malaysia: A simultaneous equations approach,"*World Journal of Science, Technology, and Sustainable Development*, Vol. 7,No. 1, pp. 61 – 72.

Sarif, S.M. and Ismail, Y. (2006), "Technology parks, knowledge transfer and innovation: the case of Malaysia's information and communication technology (ICT) small and medium enterprises", *International Journal of Information Systems for Logistics and Management*, Vol. 1, pp. 133-42.

Smith, N. andWollan, R. (2011), "The power and business risks of social media," *The Social Media Management Handbook: Everything You Need to Know to Get Social Media Working in Your Business*, John Wiley & Sons, Hoboken, JN, pp.33-15.

Sobry, O.F.Z.D. (2014), "R&D SyokSendiri," available at http://www.bharian.com.my/node/11472(accessed 12 March 2016).

Spigel, B. (2015), "The Relational Organization of Entrepreneurial Ecosystems," *Journal of Entrepreneurship Theory and Practice,* Doi: 10.1111/etap.12167.

Song, M., Podoynitsyna, K., Van Der Bij, H., & Halman, J. I. (2008), Success factors in new ventures: A meta analysis. *Journal of product innovation management*, *25*(1), 7-27.

Suresh, J. and Ramraj, R. (2012), "Entrepreneurial Ecosystem: Case Study on the Influence of Environmental Factors on Entrepreneurial Success." *European Journal of Business and Management,* Vol 4, No.16, pp. 95-101.

Svensson, R. (2007), "Commercialization of patents and external financing during the R&D-phase," *Research Policy,* Vol.36, No. 7, pp.1052-1069.

Wright, M., Birley, S. and Mosey, S. (2004a), "Entrepreneurship and university technology transfer," *The Journal of Technology Transfer*, Vol. 29 No. 3/4, pp. 235-246.

Wright, M., Lockett, A., Clarysse, B. and Binks, M. (2006), "University spin-out companies and venture capital," *Research Policy,* Vol. 35, pp. 481-501.

Yasin, N.M. and Osman, M.H.M. (2015), "University Spin-off for Economic Development in Malaysian Universities," *International Journal of Economics and Financial Issues*, Vol. 5, pp. 135-138.

Yin, R.K. (1994), *Case Study Research: Design and Method, 2nd ed.*, Sage Publications, Thousand Oaks, CA.

Yusuf, A. (1995). "Critical success factors for small business: Perceptions of South Pacific entrepreneurs," *Journal of Small Business Management*, Vol. 33, No. 2, pp. 68-73.

Zakaria, N. and Arnold, G.C. (2012), "Do Malaysian Focus-Increasing Spin-Off Firms Underperform?" *Asian Academy of Management Journal of Accounting and Finance,* Vol. 8 No. 1, pp. 91–123.