



## *Can Culture Stimulate Innovation for Technopreneurship? A Grounded Theory Method*

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|                                                                                                                                                                                                                                                                              | <b>ABSTRACT</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <p>2023 Research Leap/Inovatus Services Ltd.<br/>All rights reserved.</p> <p><b>DOI:</b> 10.18775/jibrm.1849-8558.2015.74.3003<br/><b>URL:</b> <a href="https://doi.org/10.18775/jibrm.1849-8558.2015.74.3003">https://doi.org/10.18775/jibrm.1849-8558.2015.74.3003</a></p> | <p><i>Among factors influencing and shaping innovation in different societies is the prevailing culture. Most forms of individualistic cultures affect innovation significantly and positively. key factors that influence innovation among early-stage startups are government interventions, innovation policy and financing. This study has three key objectives. The first is to examine how culture influences innovation among technology startups in Malaysia. The second objective is to explore factors associated with technology innovation. The third objective is to assess how innovation influence financing for technology startups. The study employs grounded theory as the main methodological approach to analyze primary data. A qualitative survey carried out a series of semi-structured interviews with technology entrepreneurs<sup>1</sup>, relevant government agencies, industry associations, venture capitalists and leading accelerators. The study finds that culture can be an impediment to innovation. Factors such as collective culture and herd mentality behavior were identified as barriers to innovation and fear of failure was attributed to low entrepreneurial innovation. Entrepreneurial attitude, on the other hand, was identified as a significant quality that is positively related to innovation among technology startups. Data analysis reveals that technopreneurs who display a positive attitude, determination, perseverance and self-efficacy are more likely to display some form of innovation in their startup. These technopreneurs were more likely to be financed by venture capital funds and private or angel investors. Other factors that influence innovation are, the capacity to commercialize, overall entrepreneurship culture, incubators facilities and capabilities and market size. Based on the findings, the study offers a proposed framework that encapsulates elements, factors and components that affect innovation.</i></p> |
| <p><b>Keywords:</b></p> <p>Innovation, Technology, Startups, Culture, Entrepreneurship</p>                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |

### 1. Introduction

#### 1.1. Technology Entrepreneurship (Technopreneurship)

Technology oriented enterprises are commonly referred to as technology startups, they are characterized by enhanced communication, faster delivery, ease of use, and interactions among various economic agents that are involved in the production cycle (Carayannis and Von Zedtwitz, 2005). A startup that does not contribute to product innovation or services and does not bear uncertainty risk is not a startup. A definition of technology entrepreneurship can be stated as recognizing, creating and exploiting opportunities, and assembling resources around a technological solution (Bailletti, 2012). Overall, startups are associated with high exponential growth, especially at the early years of its inception. Technology entrepreneurship have developed and materialized as a result of both technology and innovation in their combined influence on production and consumption on all economic

factors, for both public and private sectors and for firms of different sizes (Levi Jaksic, Marinkovic, and Rakicevic, 2014).

#### 2. Entrepreneurship Innovation Theory

Part of Schumpeter's significant contribution to the theory of innovation is his classification of the process of innovation, which he divides into four dimensions: invention, innovation, diffusion, and imitation. He further disputes that entrepreneurs seeking profit must innovate.

Entrepreneurial innovation activities feed a creative destruction process (Schumpeter, 1942), causing endless disruption to the economic system in equilibrium and creating opportunities in the economy (Wong, Ho, and Autio, 2005). In the economic adjustment process, additional opportunities are created for other entrepreneurs to venture into the new economy as more innovations are infused into the economic system.

<sup>1</sup> Technopreneurs thereafter.

Schumpeter's theory predicts that an increasing number of entrepreneurs engaging in economic activities will lead to economic growth. According to Schumpeter (1934), entrepreneurial activities are considered instrumental for technological innovation, which is a dynamic outcome of technical knowledge. Moreover, technological output of a nation is an effective measure of its level of innovation (Coccia, 2014).

### 3. Anthropology Entrepreneurship Theory

Anthropology is the study of the origin, customs, beliefs and development of a community (Simpeh, 2011). In other words, it is the study of the culture of the people. Anthropological entrepreneurship, therefore, is a study of entrepreneurs' cultural and social dimensions. Anthropological entrepreneurship theory can be explained by individual ethnicity and cultural environment, which are considered major factors in shaping the attitudes and behavioural differences among individuals (Baskerville, 2003). Anthropological entrepreneurship is a multidimensional concept that considers entrepreneurship differently across countries and time due to cultural changes (Verheul et al., 2001). Therefore, fully comprehending the influence of national culture on entrepreneurship is of high practical and theoretical importance (Hayton, George, and Zahra, 2002). The investigations of Schumpeter (1934), Weber (1930) and McClelland (1973) on entrepreneurship, sociology and psychology have led to an early assumption that countries differ in their entrepreneurial activities and national culture is relevant to entrepreneurship, as cited by North (1990) and Shane, Locke, and Collins (2003).

### 4. Literature Review

Entrepreneurship and innovation have a strong and direct correlation (Autio, Kenney, Mustar, Siegel, and Wright, 2014). Schumpeter (1934) was one of the early scholars to explain this relationship. In his innovation theory, he explains how entrepreneurs challenge the status quo and disrupt the economy. According to Schumpeter (1934), entrepreneurs disrupt the marketplace through the introduction of innovation in the following main streams: new products, services, processes, methods of production, new markets, acquiring new sources of supply or raw material and finally, creating new business structures. However, for innovation to take place, the entrepreneur has to transform his or her creative idea into reality (Kabukcu, 2015).

Cultures that value behaviours like risk-taking and independent thinking uphold a tendency to develop and introduce drastic innovations. On the other hand, cultures that display compliance, group interests, and control over the future are not likely to be risk-taking and entrepreneurial (Herbig, 1994; Herbig and Miller, 1992; Hofstede, 1980).

Most studies pertaining to cultural entrepreneurship have been conducted in western countries and thus may not necessarily apply to Asian countries. Herbig and Miller (1992), Herbig

(1994) and Hofstede (1980) show a negative relationship between collective cultures and early stage entrepreneurship. Individuals in collective cultures are more likely to belong to a group that looks after them in exchange for loyalty (Soares et al., (2007), whereas individuals in individualistic cultures look after themselves and their immediate family independently.

Some scholars suggest that cultures that adopt individualism have higher rates of technological innovation (Bagchi, 2004); however, these studies are limited and not generalized. Meanwhile, several nations that are not individualistic in nature (e.g. Finland, India, South Korea and Taiwan) have emerged in the past two decades with significant technological innovations and have built global and competitive high tech industries (Taylor and Wilson 2010).

Studies examining cultural variance among ethnic entrepreneurs in Malaysia are limited and a literature gap does exist in ethnic entrepreneurial development in Malaysia. Despite government efforts, Malay entrepreneurship is lagging behind that of their Chinese counterparts and the impact of government programs towards ethnic groups is limited. Studies (Ariff and Abubakar 2002; Hamidon 2008; Hariri and Osman 2011; Hussain 2006; Juri 1999; Menon 2009; Nawi 2015; Zainol and Daud 2011) suggest that ethnic culture is central to explaining entrepreneurship behaviour in Malaysia. An example may be the Chinese Malaysian group's dominance in the business economy and their deterministic approach in building ventures. Moreover, the same studies indicate that Malay (Bumiputra) entrepreneurs have a relaxed attitude toward entrepreneurship and are more likely to rely on government facilities to grow their business. This cultural gap in attitudes toward entrepreneurship may be explained by historical events of immigration and colonization (Booth, 1999; Chakraborty, Thompson, and Yehoue, 2016; Noor and Leong, 2013).

Turro et al., (2014) strongly argue that innovation is a key determinant not only for firms' performance, but also for national economic performance. Recent studies have tried to explain innovation in startup firms in relation to culture, ethnicity and government role in formulating effective policies (Aggarwal and Goodell, 2014; Barakat, Boddington, and Vyakarnam, 2014; Braunerhjelm, 2010; Chakraborty et al., 2016; Coccia, 2014; Herbig, 1994; Kabukcu, 2015; Paradkar, Knight, and Hansen, 2015; S.Gans, Hsu, and Stern, 2000; Schumpeter, 1934; Taylor and Wilson, 2012; Turro et al., 2014; Yoon, Yun, Lee, and Phillips, 2015; Zhao, Li, and Rauch, 2012).

The relationship between innovation, culture and financing entrepreneurship among Malaysian tech startups is not well established in academic research and a significant knowledge gap exists. Current studies indicate that investors are less likely to finance innovative startups at the early stage (Ajagbe, Long, Aslan, and Ismail, 2012; Ismail, Aslan, and Ajagbe, 2011; Wahab and Buyong, 2008). Evidence in other countries indicate

that venture capital display ethnic bias in financing ethnic enterprises (Bengtsson and Hsu, 2015; Chand and Ghorbani, 2011).

## 5. Methodology

The study qualitative in nature, qualitative studies often use grounded theory as the choice of method (Braun and Clarke, 2006; Corbin and Strauss, 1990). Grounded theory method approach include face to face interviews with various groups in the Technopreneurship field in Malaysia. Semi structured interviews were most suited since they allow some degree of flexibility for respondents to share their insights and provide valuable feedback, unlike structured interviews (Rubin and Rubin, 2011). Interview took place with technopreneurs, government organization executives, selected incubators and accelerators, non-government organizations (NGOs) and venture capitalist (VCs) as shown in Table 1.

The study approached 22 participants for the purpose of face to face interview, however interviews conducted were 17. Data collected through interviews with technopreneurs, government agencies, associations and venture capitalists were analyzed in a similar way based on a three-stage procedure as suggested in the literature (Creswell, 2007; Miles and Huberman, 1994). Main analysis method adopted for this study grounded theory which is generally is a step by step process:

1. Obtaining open codes from the interview transcript
2. Developing axial codes as certain categories and patterns start to appear
3. Define final factors that emerge out of categories and pattern
4. Create framework or theory

Table 1 below include participants category, their Participant Identification number (PID) and nature of their organization.

**Table 1:** Main Interview Survey Participants

| MAIN INTERVIEW SURVEY SUMMARY |              |               |  |
|-------------------------------|--------------|---------------|--|
| CATEGORY                      | Participants | Type          |  |
| PUBLIC ORGANIZATIONS (7)      | R11 – R17    | Public        |  |
| ASSOCIATIONS (2)              | R9, R10      | NGO           |  |
| ENTREPRENEURS (6)             | R1 – R6      | Tech Startups |  |
| VENTURE CAPITALIST (2)        | R7, R8       | Investment    |  |
| TOTAL INTERVIEWED             | 17           |               |  |

## 6. Results

Respondents elaborate on their general views on innovation within a local and international context, they also shared their views on what they thought was most critical about innovation at this stage of development of entrepreneurship ecosystem. On the subject matter, some respondents were more engaged and elaborative than others and those who were more engaged provided suggestions and insights on the development of

innovation from a localized perspective. Table 2 include list seven factors the study present as a results of analysis on this category, factors are listed alphabetically.

**Table 2:** Innovation Factors. PID\* Participant Identification Number.

|                    | Respondents PID* |   |   |   |   |    |   |   |        |   |    |               |    |    |    |    |    |  |  |
|--------------------|------------------|---|---|---|---|----|---|---|--------|---|----|---------------|----|----|----|----|----|--|--|
| Innovation Factors | Entrepreneurs    |   |   |   |   | VC |   |   | Assoc. |   |    | Gov. Agencies |    |    |    |    |    |  |  |
|                    | R                | R | R | R | R | R  | R | R | R      | R | R  | R             | R  | R  | R  | R  | R  |  |  |
|                    | 1                | 2 | 3 | 4 | 5 | 6  | 7 | 8 | 9      | 0 | 11 | 12            | 13 | 14 | 15 | 16 | 17 |  |  |
| Commercialization  |                  |   |   |   |   |    |   |   | 👍      |   | 👍  |               | 👍  |    |    |    | 👍  |  |  |
| Entrepreneurship   |                  |   |   |   |   |    |   |   |        | 👍 |    |               | 👍  |    |    |    |    |  |  |
| Incubation         |                  | 👍 |   | 👍 |   | 👍  |   |   | 👍      |   |    |               | 👍  | 👍  | 👍  |    | 👍  |  |  |
| Innovation         |                  | 👍 |   |   |   |    | 👍 | 👍 | 👍      | 👍 |    | 👍             | 👍  |    |    |    | 👍  |  |  |
| Strategy           |                  |   |   |   |   |    |   |   |        |   |    |               |    |    |    |    |    |  |  |
| Innovation Culture |                  | 👍 |   |   |   |    | 👍 | 👍 | 👍      | 👍 |    |               | 👍  |    |    |    |    |  |  |
| Market Size        |                  |   |   |   |   |    | 👍 |   | 👍      | 👍 | 👍  | 👍             |    |    |    |    | 👍  |  |  |

### (1) Commercialization

Respondents R9, R11 and R13 emphasise commercialization as an end goal for innovative ideas and new ventures. At the early stage of development, novice entrepreneurs tend to focus more efforts on the current stage of development, neglecting commercial goals. Respondents who emphasise commercialization are those with business experience and cultural exposure. Supporting excerpts from the interviews are presented below:

“Innovation here in this country overall we hold up high... not many people take IP (Intellectual Property) into consideration. Many think about commercialization versus innovation, which in this market makes sense.” (R9)

“My question: if there are outcomes that can be commercialized, pass them on to me, as Cradle can take it from there.” (R13)

Respondent R9 and R4 highlight the issue of intellectual property rights, insinuating that ideas are not valued for their worth and can be replicated without any copyrights. This sensitive issue represents a serious threat for first-time entrepreneurs, especially those who lack both the depth of business experience and skills.

Commercialization and innovation are viewed differently, but the end point matters the most for financiers. For TSs, there exist high risk and high cost at the early stage, which results in difficulties in attracting investments at this stage (Lee, Lee, Kim, Jo, and Lee, 2016). This may be overcome in certain startup ecosystems by direct government interventions, such as startup incubation policies, promoting commercialization among TSs and enabling technology transfer.

### (2) Entrepreneurship Spirit

The influence of entrepreneurial spirit on cultural and economical advancement in recent years has been evident through the rapid growth of TSs in many countries. Additionally, entrepreneurship spirit is an important factor that contributes to meeting employment and development challenges (Örnek and Danyal, 2015). Vision, belief and desire

to succeed are some of the essential ingredients of entrepreneurship. Respondents R1, R6, R10 and R12 agree that failure is a cornerstone for most entrepreneurs: it is part of the journey that many will have to go through.

Entrepreneurs who are discouraged by failure are less likely to achieve their goals and dreams, according to respondent R1. He further states that entrepreneurs need to overcome any obstacles to progress.

“Now, in Malay culture, people boo failure, but now there is no right or wrong. When people have an idea, just present it and get validation, get ideas and feedback from others.” (R1)

Within the above context, the local culture still view failures as a taboo and this may lead entrepreneurs to avoid innovation altogether to avoid failure. Innovation is a high risk and high return scenario and innovations may be commercialized (Kesting, Peter, and Gunzel-Jensen, 2015). As an experienced angel investor and mentor, respondent R10 provides a personal view on failure and his investment preference:

“I am not in disagreement with failure: it’s fine, we see more entrepreneurs who have failed. I personally invest in entrepreneurs who have failed before and who are over 30.” (R10)

Furthermore, other respondents share their views on innovation and failure.

“The faster you fail the faster you move on.” (R13)

“You must not be afraid of failure. In Malay society, failure is a taboo, but for innovation, failure is a must, like Thomas Edison...” (R11)

### (3) Incubation

Incubators provide services to support startups at the early stage of their existence, they provide training, coaching, mentoring, working space and other resources as per the incubator mandate. Some incubators provide regional support, says respondent (R10), the objective is to link startups with their regional counterparts or with government agencies to facilitate market penetration. Incubators partner with one another, share best practices and some evolve to become venture capitalist of some kind and end up investing in startups they accept into the program.

Respondents (R1, R2, R3, R7, R11, R12 and R13) all highlight the role incubators and accelerator play in sponsoring innovative ideas. Local government is par-taking efforts on different fronts to establish a well connected entrepreneurship ecosystem, innovation remains limited.

Incubators play a fundamental role with startups in building their first Minimum Viable Product (MVP) or what is commonly referred as prototype. Incubators offer a host of other services such as, validation of the prototype or MVP, assisting teams in business planning, AB testing and finally, present and pitch to investors and venture capitalists.

### (4) Innovation Culture

Incubators provide services to support startups at the early stage of their existence. In general, incubators provide technical services, training, coaching, mentoring, working space, pre-seed funding and other resources as per the incubator mandate. Some incubators provide regional support: according to respondent R10, the objective is to link startups with regional counterparts or with government agencies to facilitate market access. Unlike local incubators, regional incubators partner with one another, share best practices and often invest in startups that they accept into their programs.

Incubation is perhaps a more general term in the context of this study, as it includes not only incubators, but also accelerators, startup training centres and startup camps. Respondents from associations and government agencies emphasise the value that incubators provide and the role they play in the entrepreneurship ecosystem, especially for a young country like Malaysia.

Respondent R17 elaborates on his role and the role MaGIC plays as a startup centre:

“we design and implement programs for developing entrepreneurs, like the accelerator program, which is an evolution of what Cheryl (ex-CEO) saw in startup Chile. So our accelerator is an evolution of that, which had criteria that matched ours. Chile has different accelerator programs to target different stages of startup life. And they are industry agnostic... we have startups in finance space, in halal space, mobile, lifestyle, quite a variety, robotics previously.” (R17)

He further elaborates on the nature of the work and the programs offered:

“Our programs are designed and tailored for different needs, so at the beginning of the program, we spend a lot of time curating the content. We have the Academy, which is like the entrepreneurship school, we have 1-2 days long programs, a week long, we have camps up to 5 weeks. And we have long courses up to 9 weeks. We cater to both tech and non tech skills.” (R17)

Other respondents (R1, R2, R3, R7, R11, R12 and R13) highlight the role that incubators and accelerator play in sponsoring innovative ideas. Local government is participating in efforts to establish a sustainable entrepreneurship ecosystem; however, supportive efforts on innovation are perceived to be limited. Respondent R1 suggests that the government develop a platform for innovation to which entrepreneurs from different backgrounds or regions can have access. Such a platform would serve as an enabler to innovation.

“In Malaysia, I believe we are innovative, most of the youngsters are innovative, but there is no special platform to park our innovations. Before I was introduced to MaGIC, during college, I invented something, but I didn’t know where to take it. (R1)

Incubators play a fundamental role with startups in building their first Minimum Viable Product (MVP), or what is commonly referred to as a prototype. Incubators offer a host of other services, such as validation of the prototype, advice on business planning, AB testing and finally coaching teams to present and pitch to investors and venture capital. Findings are highly in line with studies that examine innovation from the startup perspective, most studies stress on the role of incubators at the early stage and their ability to increase the probabilities of success for emerging entrepreneurs (Baraldi and Ingemansson Havenvid, 2016; Jansen, Van De Zande, Brinkkemper, Stam, and Varma, 2015; McAdam, Miller, and McAdam, 2016; Mian, Lamine, and Fayolle, 2016; Roig-Tierno, Alcázar, and Ribeiro-Navarrete, 2015; Soetanto and Jack, 2016).

### (5) Innovation Strategy

Respondents provided feedback of value throughout this study, most notably in articulating thoughts that addressed the challenges and remedies regarding innovation. In this section, respondents R1, R6, R7, R8, R9, R12, and R16 raised some technical points with suggestions that could be considered in improving the local approach to innovation imperfections. Respondent R1, an innovative entrepreneur, acknowledges that there is an innovation gap. He argues there are innovators but they are not plugged into the ecosystem, and there is no channel of communication with them.

“In Malaysia, I believe we are innovative, most of the youngsters are innovative, but there is no special platform to park our innovations.” (R1)

R1's suggestion is an innovation platform that serves as a base for young talent. Such a platform would provide them with the infrastructure and allow them to explore the viability and commercial prospects of their innovations.

Respondent R6, on the other hand, highlights that innovation need not be completely disruptive and suggests incremental innovation. He elaborates further that entrepreneurs can look at existing innovation models and fine-tune them to local market preferences. They can examine existing innovations that are already in the market and find ways to add value through incremental innovation. Equally, R9 states that as a country, Malaysia is committed to innovation, with countless initiatives, most notably MSC Malaysia. He further asserts that the government has perhaps shouldered too much of the responsibility for the technology industry, which should be given a chance to grow organically. R9 believes that Malaysia and South East Asian countries in general are less innovative in comparison to western countries.

“Innovation here in the country overall we hold up high... it's that not many people take IP into consideration, many think about commercialization versus innovation.” (R9)

His belief are based on market practices, which he believes make sense because most businesses are brick-and-mortar

businesses, which is why he perceives Malaysia to be less innovative. He proposes scale innovation, whereby Malaysia can be a suitable test market for innovative entrepreneurs and a base for startups to expand and scale their innovations in larger markets like Indonesia and China.

He further articulates his thoughts on the source of innovation. “Necessity is what breeds innovation, not the need for innovation.” (R9)

Respondents R12 and R16 relate innovation to ethnic clusters. In certain industry clusters, the likelihood of ethnic group concentration is high. Industries such as R&D, biomedicine, graphic design and fashion are Malay concentrated, whereas in the IT field, the likelihood of Indian groups is high, and so on. Respondents assert that innovation can be tackled in different ways, and that it is a matter of strategy and tactics: innovation is based on meeting necessities and market demand. Respondents agree that huge opportunities do exist in innovation, and these opportunities are yet to be discovered.

Startups that innovate, often are aware of the cultural elements in their environment, these startups have been shown to gain the trust of investors hence raise funds smoothly from venture capital and private investors (Boscoianu, Prelipcean, Calefariu, and Lupan, 2015; Deffains-Crapsky and Sudolska, 2014; Eniola and Entebang, 2015).

## 7. Conclusion

Building and developing innovation culture seems to be a significant contributor to building a supportive entrepreneurship ecosystem (Bennett and Parks, 2015; Coccia, 2014; Taylor and Wilson, 2012). One could conclude that innovation culture is one of the essential pillars in building conducive entrepreneurial environment that encourages innovation and tolerate failure.

Commercialization seems to be overriding factor among successful technology startups. Startups that are able to commercialize their ideas and demonstrate market traction are able to secure financing from private investors and venture capital. Fear of failure seems to be a dominant factor that derails many individuals from engaging in entrepreneurial activities according to our study. The study recommends government agencies to focus on supporting innovative ideas and entrepreneurial spirit regardless of ethnicity and background.

Respondents emphasize on the role incubation play in increasing the viability of commercial ideas among startups at the very early stage. Developing an MPV is a challenge to many entrepreneurs venturing into technology and online business. Incubators provide technical assistance, coaching, and mentoring services to entrepreneurs helping them in translating their ideas into commercial concepts (Mian et al., 2016). We anticipate incubators role to become even more important, especially in their capacity to decrease failure rate at the early

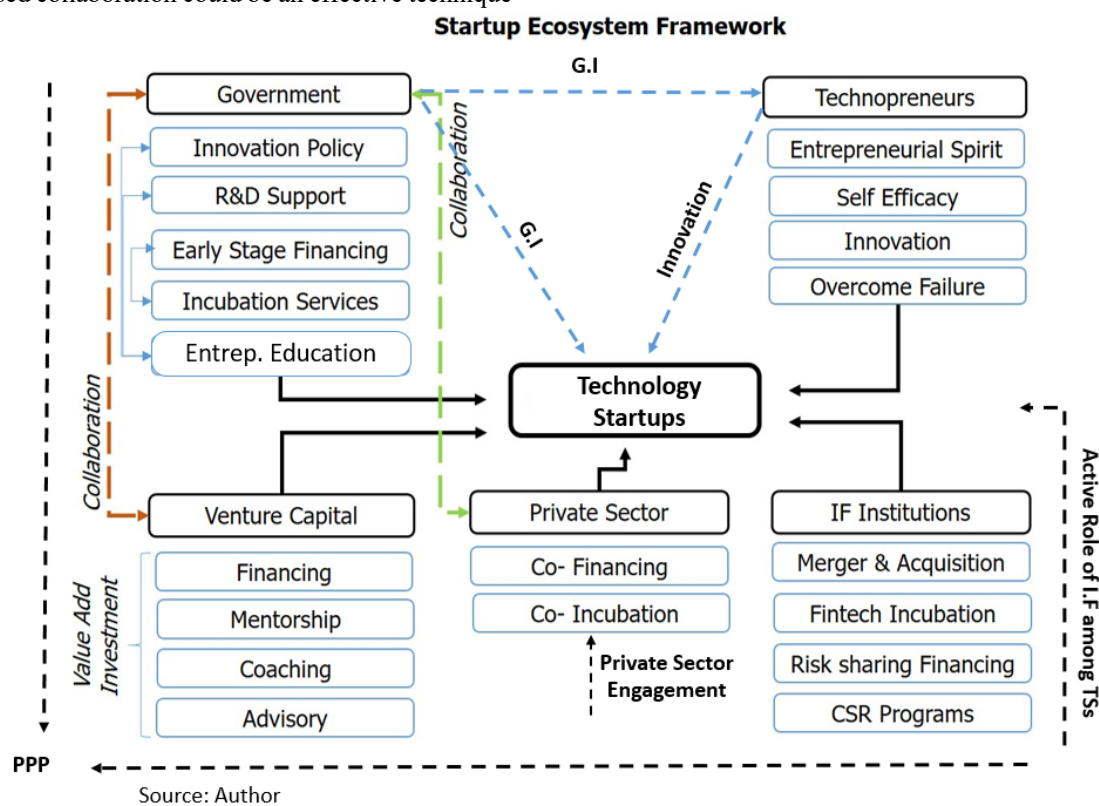
stage while increasing the startup likelihood of securing first round of pre-seed funding.

Coaching and mentoring help entrepreneurs align their short terms goals with their long-term strategy and objectives. One of Recent studies indicate strategic partnerships between corporate accelerators and startups could be an effective method for paving the way for innovation (Berger and Udell, 1998; Kohler, 2016). This partnership is based on two principles, first, startups are a source of innovation and they are continuously reinventing business models. The second is the capacity and resources corporates at their disposal. Startups may collaborate with corporates to become part of an existing corporate accelerator, or both parties can establish an independent accelerator. The level of freedom, innovation and control will dictate the nature of the accelerator. Overall, this partnership-based collaboration could be an effective technique

the reasons entrepreneurs prefer to raise funds from venture capital is the advisory benefits offered by experienced venture capitalists (Da Rin, 2016).

for the private sector to support the existing entrepreneurship ecosystem in Malaysia. Whereby corporates may benefit by raising their level of innovation and test new inventions, products or services without a considerable upfront investment. This collaboration may lead the path for significant development in the private sector and extend support to build a strong and sustainable startup ecosystem.

In conclusion, the study presents a proposed innovation framework illustrated in figure 1.1. The framework attempts to link factors, programs and initiatives needed to drive innovation culture forward for technology startups.



**Figure 1: Innovation Framework**

Current government innovation policies, seem to be strategic and supportive of both technology and innovation as key measures in the national transformation program for the country (Economic Planning Unit, 2015). The emphasis on private sector participation is crucial to the development of sustainable innovation model as proposed in figure 1.1. Private sector jointly with government funding agencies can co-fund risky venture at their early stages. Co-financing and private public partnership increases the level of support, collaboration and minimized risk involved. Efforts should be directed to building a supportive culture that is resilient and adaptive. In such cultures, entrepreneurs are inspired and encouraged to passionately engage in creating ventures that make a difference for their societies and ultimately for the world.

However, innovation culture comes at a cost, failure cost should be absorbed and welcomed, not feared. Moreover, perception of failure should be perceived as partial success not ultimate failure.

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