

# Collaboration of Public Agencies in Innovation and Startups in Malaysia

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# Background

- The implementation of creativity and innovation in public administration is crucial to driving Malaysia towards becoming a developed country.
- Indeed, many governments have embarked on the innovation aspects of the agenda of policymakers.
- The adoption of innovations in the public administration sector is seen as a complex process.
- Innovation implementation in public administration depends on the individual's motivation to innovate as well as their readiness to adapt innovation implementation to the environment.

# Background

- The importance of the roles of public administration in enhancing entrepreneurial activities is undeniable especially in the startups context.
- The Malaysian government has formed many public and private agencies to assist and monitor the startups eco-system such as Startups Malaysia.org, National Innovation Agency (AIM) and Malaysian Global Innovation and Creativity Centre (MaGIC). These agencies are responsible in nurturing creativity and innovation among the startups.
- From the perspective of SMEs, there are various obstacles in nurturing a culture of innovation such as lack of financial resources, lack of skilled and motivated workers, weaknesses in external information and linkages, and difficulties in coping with the government's regulations.

# Startups

- Start-ups are defined as new business ventures that strive in the phase of developing a business model that is scalable, repeatable, and profitable (Rabideau et al., 2016).
- Luger and Koo (2005) classified new small firms as start-ups. They defined start-ups as “a business entity which did not exist before during a given time period (new), which starts hiring at least one paid employee during the given time period (active), and which is neither a subsidiary nor a branch of an existing firm (independent)” .

# Startups

- Klyver and Terjesen (2007) classified a young firm as running a firm for less than 42 months, whereas an established firm – has run for at least 42 months.
- Orford et al. (2003) described start-ups as those that have paid salaries for less than three months, new firms as firm that have paid salaries for 3 – 42 months, and established firms that have operated for more than 42 months.
- Start-ups - firms who have operated for less than six years (Brush & Vanderwerf, 1992; Zahra, et al., 2000).

# Creativity and Innovation

- Anderson et al., (2014)- “Creativity and innovation at work are the process, outcomes, and products of attempts to develop and introduce new and improved ways of doing things. The creativity stage of this process refers to idea generation, and innovation refers to the subsequent stage of implementing ideas toward better procedures, practices, or products.
- Creativity and innovation can occur at the level of the individual, work team, organization, or at more than one of these levels combined but will invariably result in identifiable benefits at one or more of these levels of analysis” (p. 1298).

# Creativity and Innovation

- In essence, because creativity centers on idea generation and innovation emphasizes idea implementation, creativity is often seen as the first step of innovation (Amabile, 1996). As far as innovation is concerned, new ideas and practices implemented in an organization may be generated by employees in the focal organization (Janssen, 2000).
- However, idea generation by employees in the focal organization is not a prerequisite for innovation—the new ideas and practices may also be generated by employees outside of the focal organization (Zhou & Shalley, 2010).

# Creativity and Innovation

- Yuan and Woodman (2010)- innovation has been recognized as essential for the long-term survival of the organization.
- Unsworth and Parker (2003, p.180) - innovation as “the process of engaging in behaviours designed to generate and implement new ideas, processes, products, and services regardless of the ultimate success of the phenomena”.
- Creating a start-up is a difficult process with high uncertainties.
- Siaw and Rani (2012) - more than 30 per cent of start-ups failed in the first year, about 43 per cent failed within 3 years and 57 per cent failed within 5 years of business.

# Index

- Global Competitiveness Report 2014 – 2015, innovation is one of the 12 pillars in measuring the Global Competitiveness Index. For the sub-pillar of innovation - capacity for innovation, Malaysia scored 5.2 out of 7, while the score of company spending on R&D is 4.9 out of 7 with the ranked 9th/144 countries (World Economic Forum, 2014).
- Malaysia was ranked at 35th out of 128 countries with the score 43.4. Previously, Malaysia was ranked 32nd in 2015 with the value of 46.0 and 33rd in 2014 with the value of 45.6.
- The innovation efficiency index ranked Malaysia at 59th position that measure the innovation performance through innovation ratio of input and output sub-index. Both innovation input sub-index and innovation output sub-index were ranked 32 and 39 respectively. In sum, the scores value for all years are still below half of the total score (100) (Global Innovation Index, 2016)

# Startups in Malaysia

- The role of start-ups is crucial as their innovativeness contributes to the development of the nation (Lanyi, 2016).
- As the second highest performer in innovation among the upper-middle income countries, Malaysia strives at stimulating the innovation initiatives in all sectors including services, manufacturing, construction, mining and quarrying, and agriculture.
- Notably, innovation and entrepreneurship such as start-up and small medium enterprises are crucial for the social and economic development of Malaysia.

# 11<sup>th</sup> Malaysia Plan

- For the term 2011 – 2015, report shows that services sector is the largest contributor to the GDP of Malaysia followed by the manufacturing sector. As highlighted in the Eleventh Malaysia Plan, the aim of becoming a high value and knowledge based economy with a strong focus on the services and manufacturing sectors will very much rely upon innovation. Thus, innovation is a crucial factor to raise the overall efficiency and thus the productivity of each sector.
- In the 11<sup>th</sup> MP, the Services Sector Blueprint serves as a guideline in transforming services sector to become knowledge intensive and innovation-led. Therefore, five strategies have been developed in order to achieve its target with the expectation to grow at 6.9 per cent per annum, contributing 56.5 per cent to GDP in 2020, and providing 9.6 million job opportunities.
- The strategies comprise of fostering a dynamic environment for knowledge-intensive services, implementing comprehensive and integrated governance reforms, stepping up the internationalization of services firms, enhancing the management of investment incentives, and expanding modern services.

# 11<sup>th</sup> Malaysia Plan

- 11<sup>th</sup> Malaysia Plan highlighted five strategies to expand and energize manufacturing sector, which include moving towards complex and diverse products, enhancing productivity through automation, stimulating innovation-led growth, strengthening growth enablers, and ramping up internalization. It is hoped the strategy of producing diversification products anchored on creativity and innovation will lead in producing high-value products. In addition, the utilization of technology and automation is pertinent to increase productivity.
- The recommended strategies focus on three sub-sectors, namely electrical and electronics, chemicals, and machinery and equipment due to capabilities to deliver more complex and high value added products. However, these three catalytic sub-sectors will be benchmarks for another 11 related sub-sectors. Under the 11th MP, these sectors are expected to grow at 5.1 per cent per annum, contributing 22.1 per cent to GDP, and providing 18.2 per cent of total employment in 2020.

# Public agencies

- Given the many set up of active agencies in nurturing the start-ups ecosystem, particularly the services sector, such as SME Corporation, Start-up Malaysia.org, Perbadanan Usahawan Nasional Berhad (PUNB), Malaysian Global Innovation and Creativity Centre (MaGIC), Malaysia Industry-Government Group for High Technology (MIGHT), and TERAJU, creativity and innovation infrastructure is being formed.
- As at the end of December 2016, the total number of Start-ups companies was 1318. Many of these new businesses are entrepreneurial firms which were granted a loan and also participated in the programs under SME Corp, PUNB, TERAJU, MIGHT, MaGIC, and FMM. The services sector was dominated by Food and Beverages, Beauty and Fashion and ICT and Multimedia sub-sectors.

# Establishments (sector)

- Table 1 shows the number of business establishments by sector for the year 2011 in Malaysia. The table indicates that services sector for micro-level enterprises has the highest number of business establishment, followed by manufacturing sector with 462,420 and 21,619 units respectively. There is a huge difference in the value between micro and small enterprises for the services sector where micro enterprises registered 462,420 units, while small and medium enterprises registered 106,061 and 12,504 units respectively.
- Besides, micro enterprises also occupied the leading position in the manufacturing sector, followed by small and medium enterprises with the total registered units 21,619, 13,934, and 2,308 respectively.
- In other words, the larger the number of micro enterprises in the marketplace, the bigger the contributions they give to the Malaysian economy. Overall, almost 77 percent of business establishment in Malaysia are dominated by micro enterprises with the total of 496,458 units compared to small enterprises (128,787) and medium enterprises (18,891) units

Table 1: Number of Establishment by Sector  
(SME Corp, 2015)

Sector	Micro	Small	Medium	Total SMEs
Manufacturing	21,619	13,934	2,308	37,861
Services	462,420	106,061	12,504	580,985
Agriculture	3,775	1,941	992	6,708
Construction	8,587	6,725	3,971	19,283
Mining & Quarrying	57	126	116	299
Total SMEs	496, 458	128,787	19,891	645,136

# Conclusion

- The significant contributions of entrepreneurial activities including startups, to the nation and the economy cannot be denied due to the rising number of business establishment in the services and manufacturing sectors related to micro-level enterprises in Malaysia.
- It was evident that the majority of business establishments, which represented 78 percent, were from micro-level enterprises or (startups) compared with small and medium level enterprises that contributed 22 percent.
- The good performance of services and manufacturing sectors in terms of GDP, employment rate, and gross output value as discussed earlier indicates the importance of enhancing the sectors through the inculcation of creative and innovative elements. This can be implemented from the early stage of business development in order to distinguish itself from its competitors and hence, remain in the marketplace.
- Startups can increase the desire to seek creative and innovative elements by producing new products and offering new services. Overall, startups are seen as the best platform to nurture creativity and innovation at the national level.