



**Regional Forum on Strategies to Enhance Innovation and
Management Capacities of Start-ups and SMEs**
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**Fostering Growth of Technology-based
Start-ups and SMEs**

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Structure of the Presentation

- 1. Innovation and SDGs**
- 2. Who produces innovations?**
- 3. Innovation ecosystems of the Philippines – what could be done for SMEs and Start-ups to innovate?**

Current Global Challenges



Climate change



**Economic
development
and employment**



**Finite natural
resources**

Innovation is the key



Innovation and Sustainable Development





Scientific discovery & Innovation

New scientific discoveries/new technologies may lead to a patent

Innovation only takes place when this novelty is used

Then the benefits for the economy will emerge



Who produces innovations?



**Large
enterprises**



**Small and
Medium Sized
Enterprises**



**Innovative
entrepreneurs**

Innovation Ecosystem in the Philippines

Innovation Inputs (126 countries participated)

Innovation input subindex	Strength	Rank	Challenges	Rank
Institutions		93		
	Ease of resolving insolvency	55	Political stability and absence of violence/terrorism	117
			Ease of starting a business	121
Human Capital and Research		86		
Education			Expenditure on education	109
			Pupil-teacher ratio, secondary	95
Tertiary education	Graduates in science and engineering	17	Tertiary level inbound mobility	104
Research and development (R&D)	QS university ranking average score top 3 universities	48		
Infrastructure		67		
ICTs	Government's online service	51		
General infrastructure	Gross capital formation	32		
Ecological sustainability	GDP per unit of energy use	20		
Market Sophistication		100		
Credit			Ease of getting credit	111
Investment			Ease of protecting minority investors	112
Trade, competition, & market scale	Domestic market scale	28		
Business sophistication		44		
Knowledge workers	Firms offering formal training	9		
	GERD financed by business enterprise	46		
Knowledge absorption	Research talent in business enterprise	7		

Source: Global Innovation Index 2018 (WIPO-INSEAD-Cornel)

Innovation Ecosystem in the Philippines

Innovation Outputs

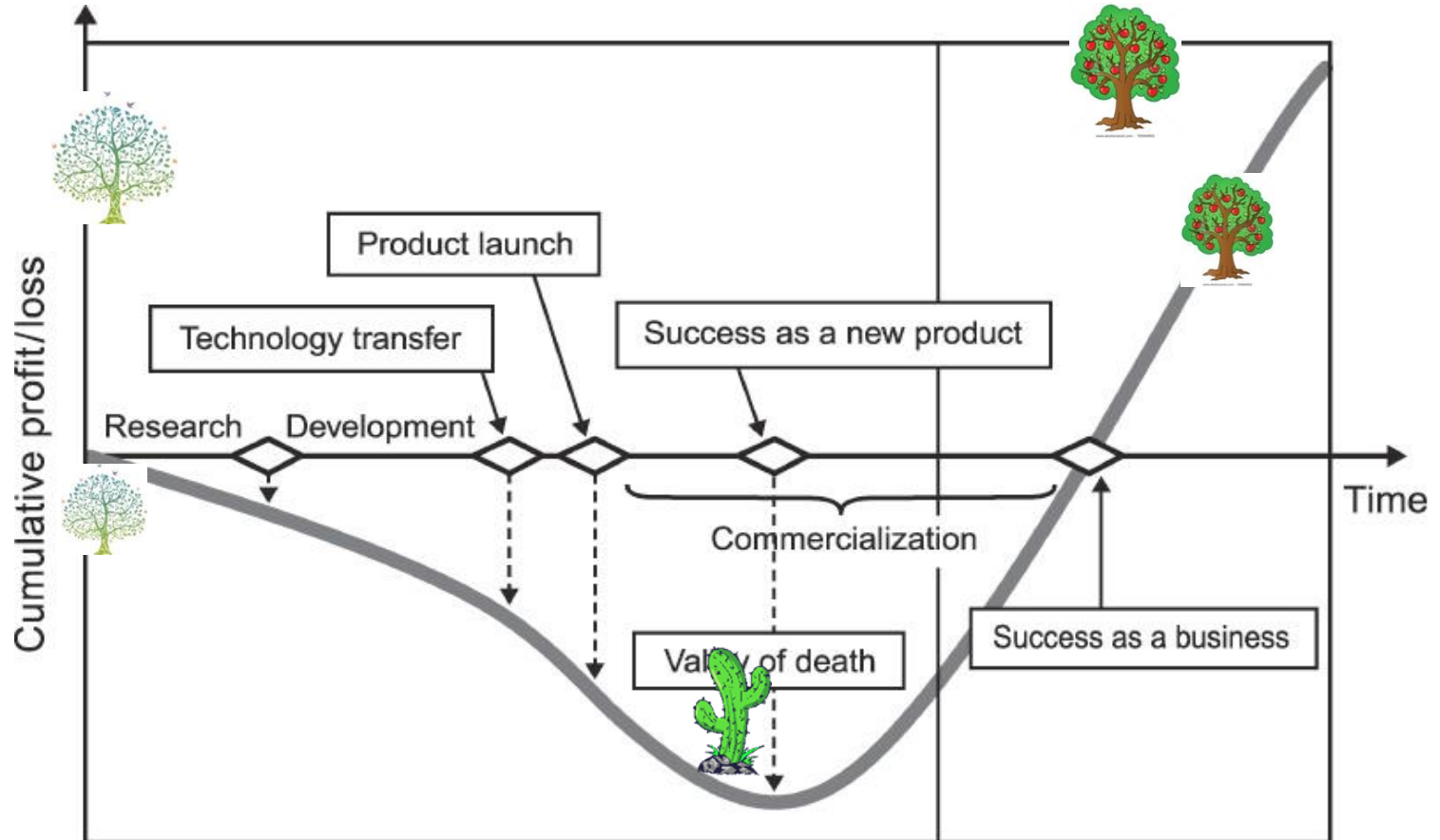
(126 countries participated)

Innovation output subindex	Strength	Rank	challenges	Rank
Knowledge and Technology Outputs		49		
Knowledge creation			PCT international applications by origin	97
			Scientific and technical publications	120
Knowledge impact	Growth rate of GDP per person engaged	27		
			High-tech and medium high-tech output	27
Knowledge diffusion			ICT services exports	8
Creative Outputs		92		
Creative goods and services	Entertainment and media market	50		

Source: Global Innovation Index 2018 (WIPO-INSEAD-Cornel)

Financing of Commercialization of Technologies - Valley of Death

Source: Osawa and Miyazaki (2006)



How to support SMEs and Start-ups to innovate?



Source: Entrepreneurship Policy Framework and Implementation Guidance, UNCTAD, 2012

How to grow the technology-based SMEs and Start-ups?

Supporting sticks

Water

Good Soil



Enabling environment

Good seed

& Government as a gardener



Optimizing the regulatory environment for innovative SMEs & Start-ups

1. **Optimize the regulatory environment:** i.e., benchmarking of time and cost of starting a business; setting up public-private dialogue on regulatory costs and benefits
2. **Minimize regulatory hurdles where appropriate:** i.e. review , reduce regulatory requirements, such as licenses, procedures and administrative fees
3. **Build entrepreneurs confidence in the regulatory environment:** i.e guarantee property protection; reduce the bankruptcy stigma and facilitate re-starts
4. **Guide entrepreneurs the benefits of formalization:** i.e. carry out information campaigns on regulatory requirements; link between regulatory requirements and available public business support services; assist start-ups in meeting regulatory requirements



Improving Access to Finance for innovative SMEs & Start-ups

1. Promote funding for innovation:

- Provide incentives to attract venture capital investors and business angels
- Encourage equity and "risk capital" financing modalities
- Facilitate the use of intellectual property as collateral

2. Build the capacity of the financial sector:

- Provide capacity-building grants and technical assistance to expand lending activities to serve start-ups

3. Provide financial literacy training to entrepreneurs



Providing Enabling Environment for Innovation



1. Foster talent and skills for innovation (i.e. high quality education, international cooperation, mobility of researchers, R&D expenditures)
2. Promote robust intellectual property right (IPR) regimes
3. Ensure consistent and clear tax regulations
4. Attract innovation-friendly foreign direct investments
5. Provide good infrastructure (e.g. greater diffusion of ICT use)
6. Promote inter-firm networks (i.e. cluster development)
7. Build bridges between public bodies, research institutes, universities and the private sector
8. Support high-tech start-ups (i.e. business incubators, knowledge hubs, science parks); commercialize innovation; provide streamlined access to cost-effective patent protection



Thank you