

---

# Leapfrogging in Innovation & Technology: Our Strategy

2017.10.14



---

# Leveraging Innovation & Technology: Your Strategy

2017.10.14



# Objectives

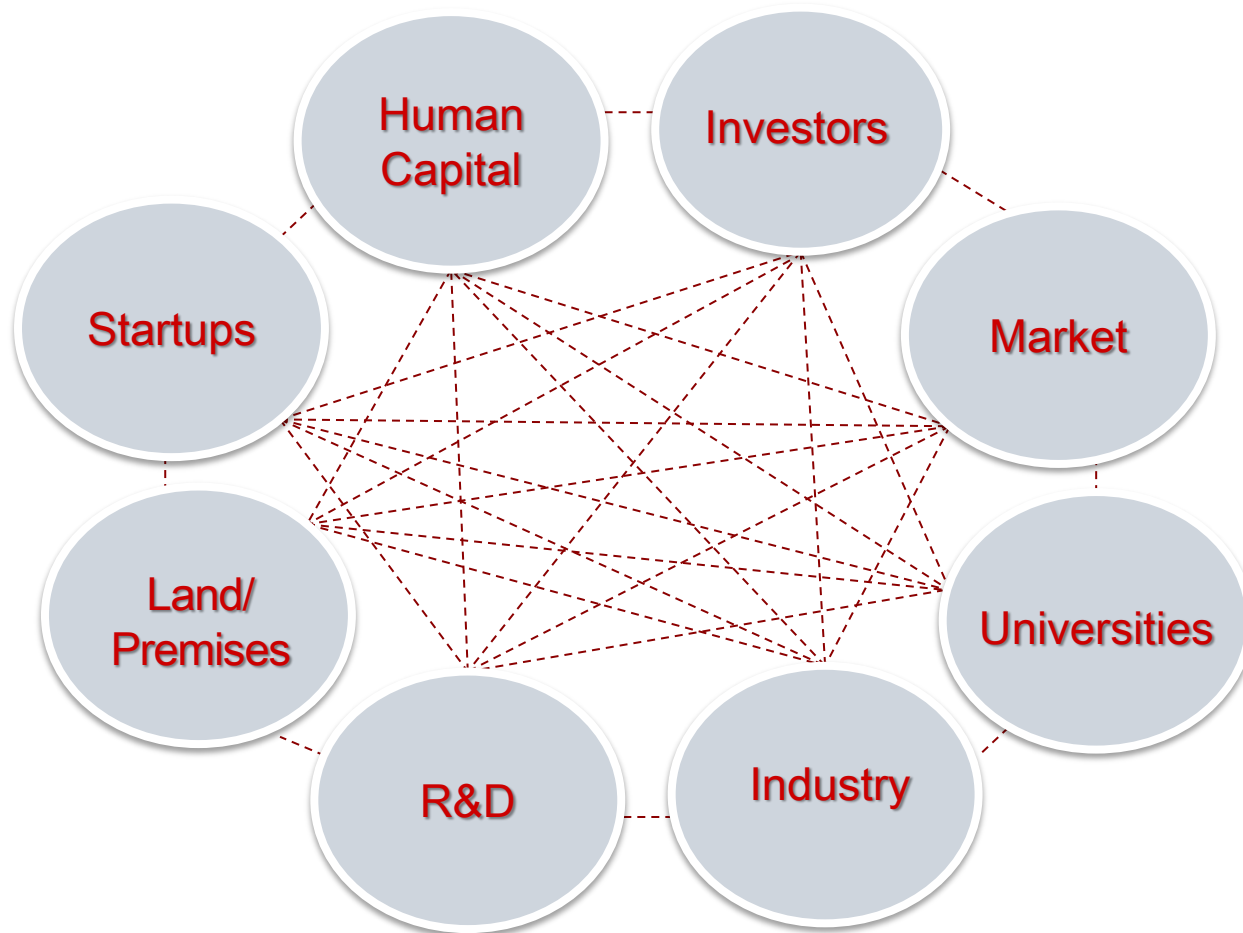
---

- *New momentum for economic development*
- *Strengthen our competitiveness*
- *Provide quality employment*
- *Improve the quality of life for Hong Kong people*



# I&T Ecosystem

---



# Strengths

---

- *World class universities & researches*
- *Rule of Law; Strong IP Protection*
- *Free flow of information/capital*
- *Proximity to Asian & China market*
- *International city; preferred by many*
- *Top 5 fastest growing ecosystem; substantial growth in no of accelerators/co-working spaces*



# Weaknesses

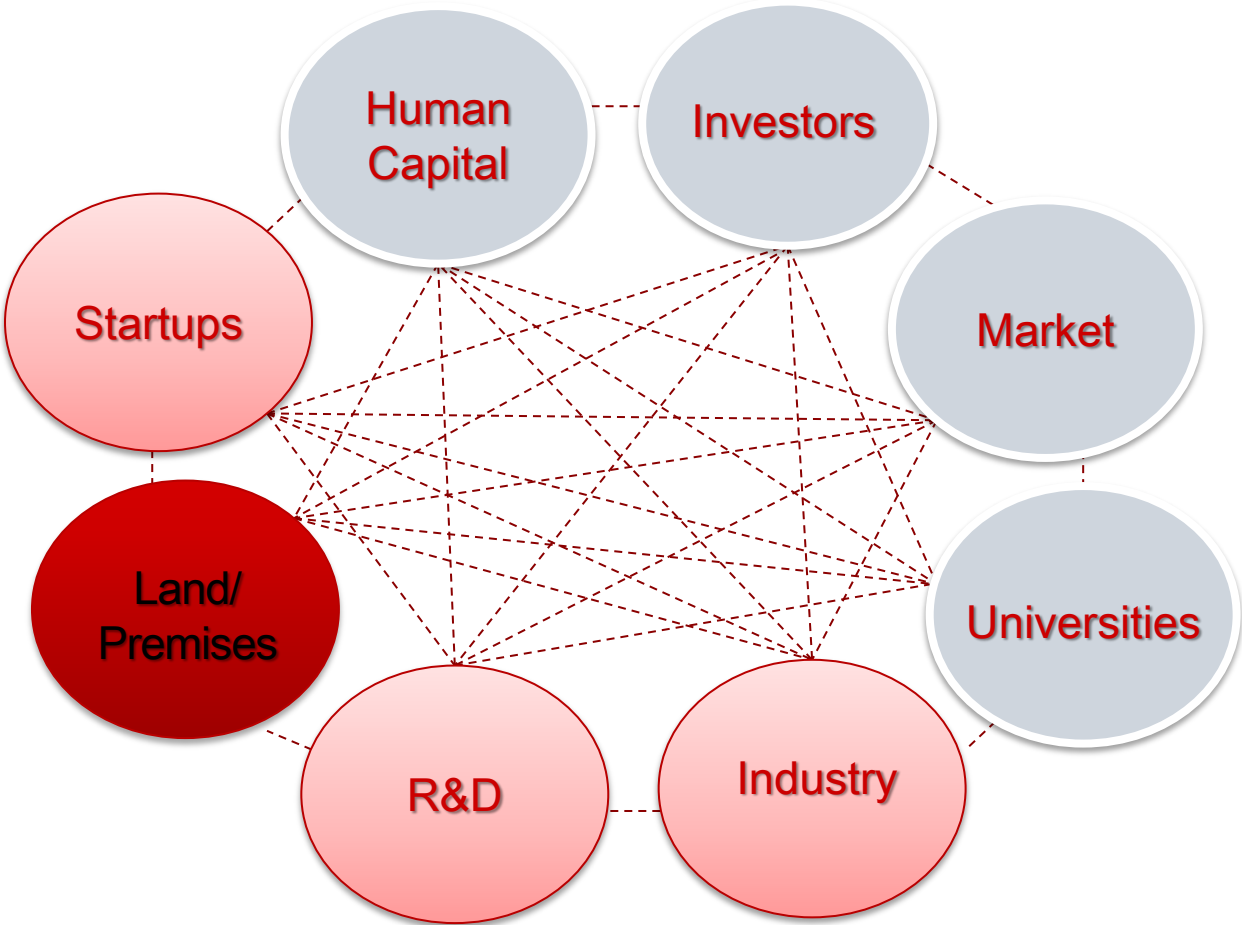
---

- *Lack manufacturing sector & defence*
- *Too many alternatives for capital*
- *Too many alternatives for careers*
- *High cost (land, manpower)*
- *Local market too small*
- *Late starter; need to leapfrog*



# Provision of Infrastructure

---



# Science Park

---

- 22 ha; ~640 tech companies
- Incubation programmes to nurture technology startups  
~260 current incubatees; >480 graduates since inception
- GFA: 3.5M ft<sup>2</sup> to increase to 4.3M ft<sup>2</sup> by 2020
- InnoCentre: 240,000 ft<sup>2</sup>; 88 cos
- InnoCell: accommodation for talents





# Industrial Estates

---

- 217 ha (Tai Po, Yuen Long, Tseung Kwan O)
- for custom-built factories; ~ 160 companies
- New Development to drive reindustrialization
  - To develop high value-added industries/production processes that are not land-intensive
  - Data Technology Hub & Advanced Manufacturing Centre (GFA ~1.5M ft<sup>2</sup>) in Tseung Kwan O Industrial Estate for rent to users

# HK-Shenzhen I & T Park at Lok Ma Chau Loop

---

- 87 ha; GFA 12M ft<sup>2</sup>
- MOU with Shenzhen on 3 Jan 2017
- Within HKSAR boundary
- Apply HK laws
- To be operated by HK-SZ I & T Park Ltd, a subsidiary under HK Science & Technology Parks Corporation
- First plot of land ready by 2021



# Cyberport

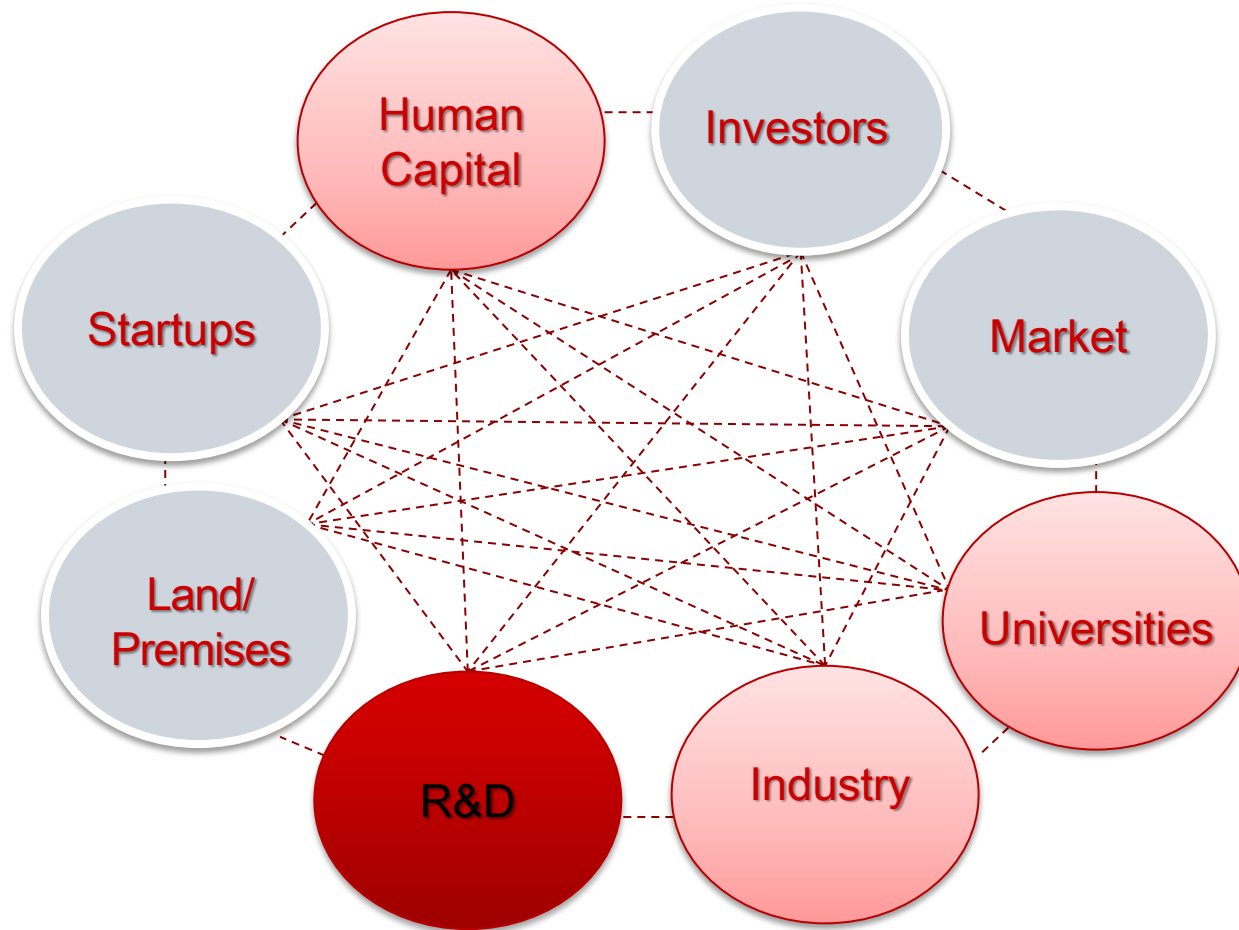
---

- *GFA: ~ 1,000,000 ft<sup>2</sup> ; ~ 460 ICT tenants*
- *To operate additional 20,000 ft<sup>2</sup> co-working space*
- *Incubation programme to nurture technology start-ups*  
*~ 190 incubatees; ~220 graduates*



# Support for R&D

---



# R&D Centres & HK Productivity Council

---



*Automotive Parts & Accessory  
Systems R&D Centre*



*Applied Science & Technology  
Research Institute*



*Nano & Advanced Materials  
Institute*



*HK Research Institute of Textiles &  
Apparel*



*R&D Centre for Logistics & Supply  
Chain Management Enabling  
Technologies*



*HK Productivity Council*

# Support for R&D

---

- *Currently about HK\$19B per yr*
- *~ 0.73% of GDP (other advanced economies: 2-4%)*
- *public 56% : private 44% (other economies: private 60-70%)*
- *Public sector:*
  - *University Grants Committee/Research Grants Council (for universities' basic researches)*
  - *Innovation & Technology Fund (for midstream/applied researches conducted by private enterprises or universities or R&D centres)*

# Support for R&D

---

- **Policy Address targets: 1.5% of GDP** (~ \$45B per yr) by 2022 + public 45% : private 55%
- *How to achieve this?*
  - **More public funding** for researches in universities and private enterprises
  - **Tax Incentive – Super Deduction**  
(300% for first \$2M & 200% thereafter)

# Support for R&D

---

## ■ **Attract top-notch R&D institutions / tech giants to HK**

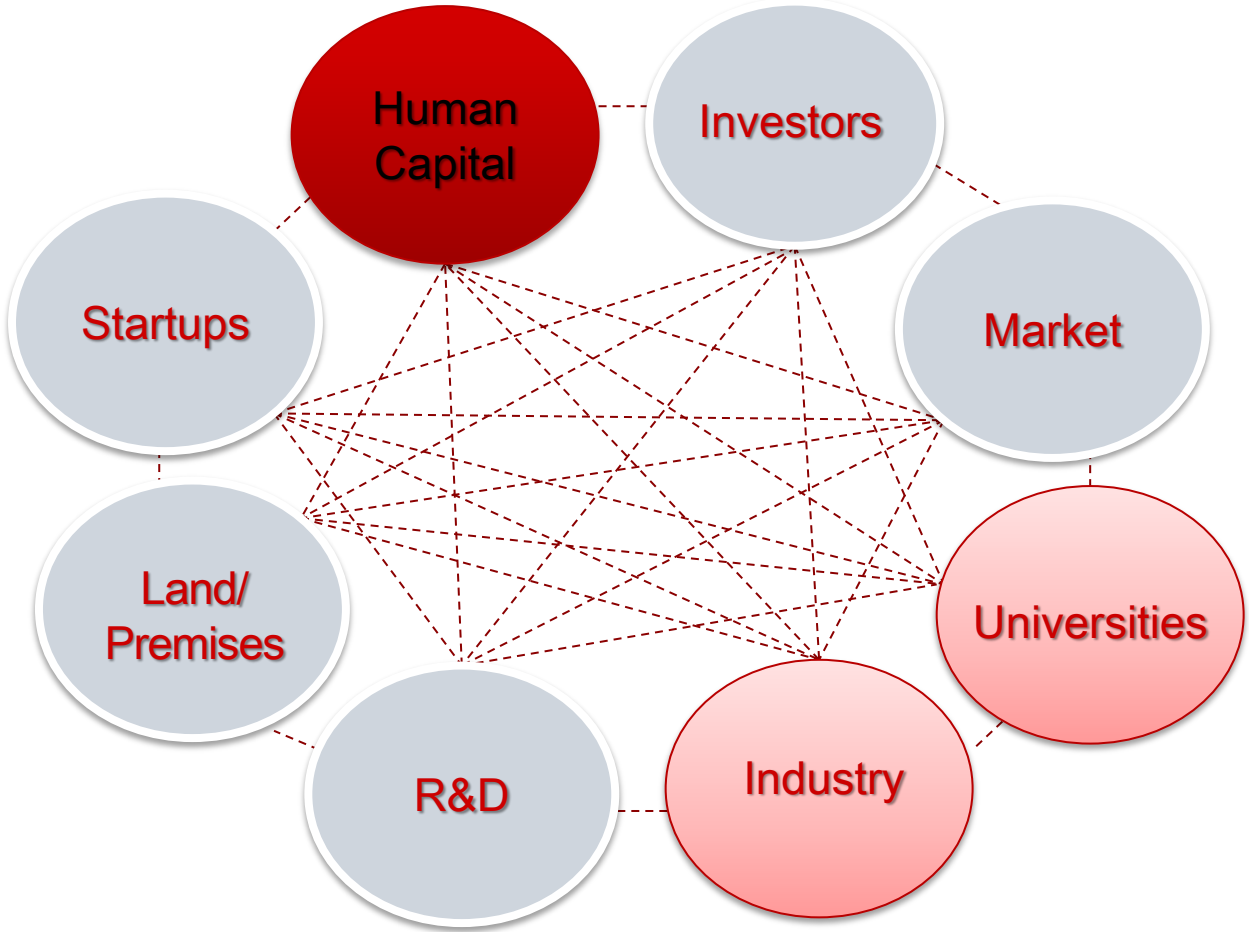
- *Massachusetts Institute of Technology: 1<sup>st</sup> Innovation Hub outside the US*
- *Karolinska Institutet: 1<sup>st</sup> R&D centre outside Sweden*

## ■ **Open Govt Data to facilitate researches (e.g. in big data analytics, artificial intelligence, biotechnology)**



# Nurture Technology Talents

---



# Nurture Technology Talents

- 9000+ local STEM graduates each year
- **Internship Programme** for STEM graduates
  - all tech companies in Science Park, Cyberport & Industrial Estates
  - 2 years
  - Monthly allowance fully paid by Govt:  
\$16,000 (Bachelor's degree)  
\$19,000 (Master's degree)



# Nurture Technology Talents

---

## ■ A \$500M “Tech Talent Scheme”

### □ Establish a “Postdoctoral Hub”

- Subsidize local enterprises to recruit postdoctoral talents for R&D work
- monthly allowance of \$32,000

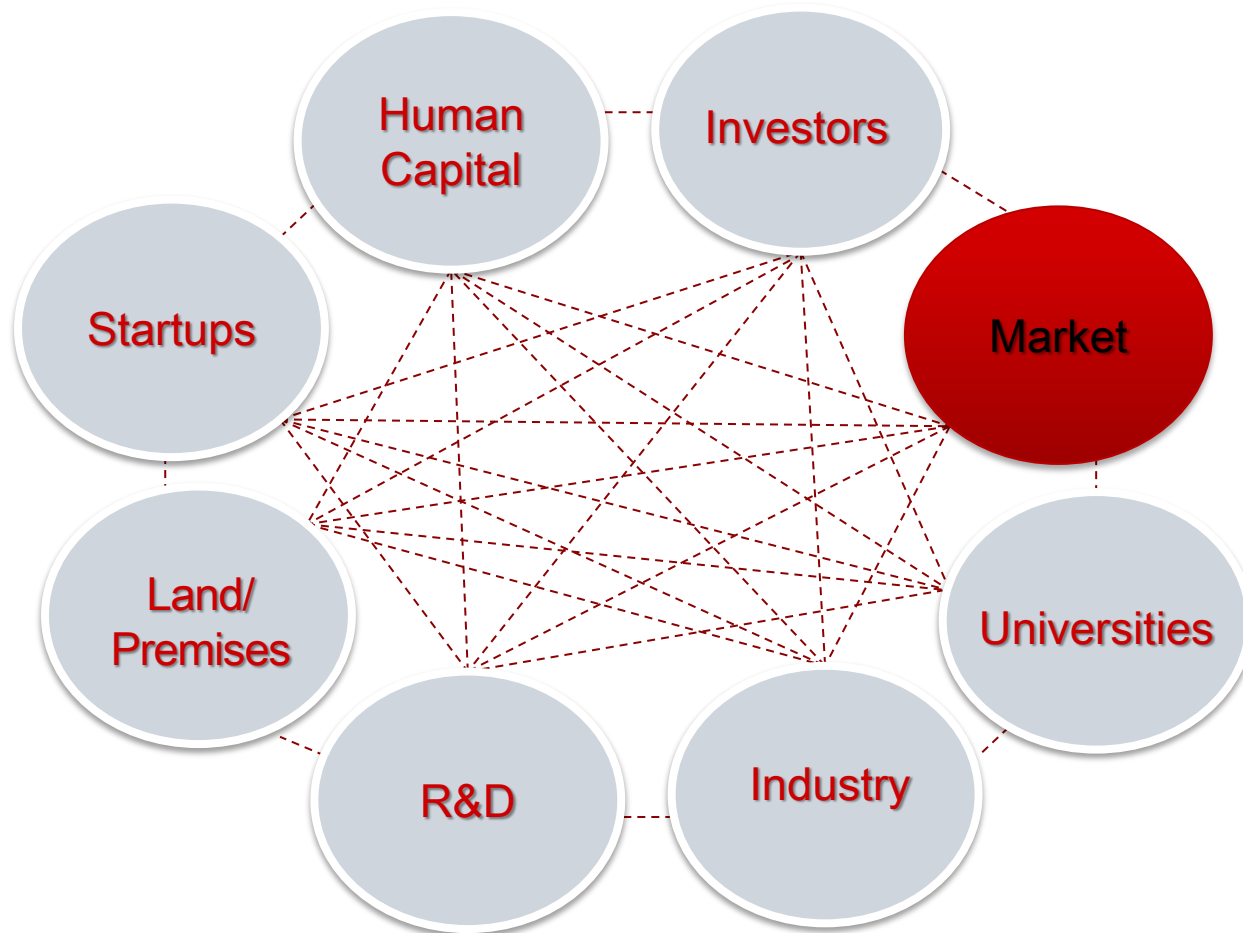
### □ Subsidize local enterprises on a matching basis to train staff on -

- advance manufacturing technologies
- especially those related to Industry 4.0

## ■ \$3B to provide studentship for STEM postgraduate students

# Market Development

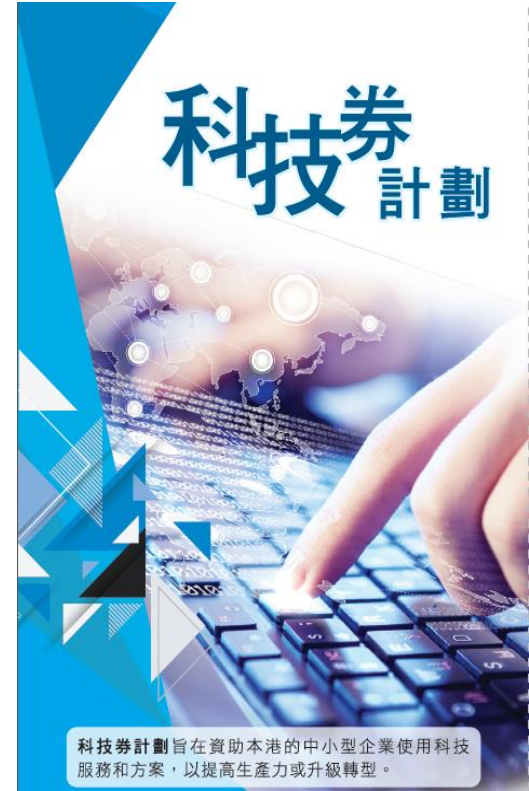
---



# Facilitate Technology Adoption

## ■ Technology Voucher:

- ❑ *Subsidize local SMEs to use technology to improve productivity, or upgrade or transform business processes*
- ❑ *Co-payment with Govt 2: company 1*
- ❑ *Maximum \$200,000*
- ❑ *Success rate in getting funding: 92%*
- ❑ *Key user groups: Wholesale/Retail, Import/Export, Professional Services, Engineering*
- ❑ *Common tech solutions: Document management system; cloud computing; mobile access system; enterprise resource planning; inventory control*
- ❑ *Note: Audit Automation System*



# Facilitate Technology Adoption

---

## ■ **Public Sector Trial Scheme**

- *Funding to conduct trials of new technologies in the public sector (Govt, NGOs, professional bodies, trade associations)*

## ■ **Fund for Better Living**

- *Funding for projects that can improve people's daily lives*

## ■ **Review Legislation**

## ■ **Govt Procurement**

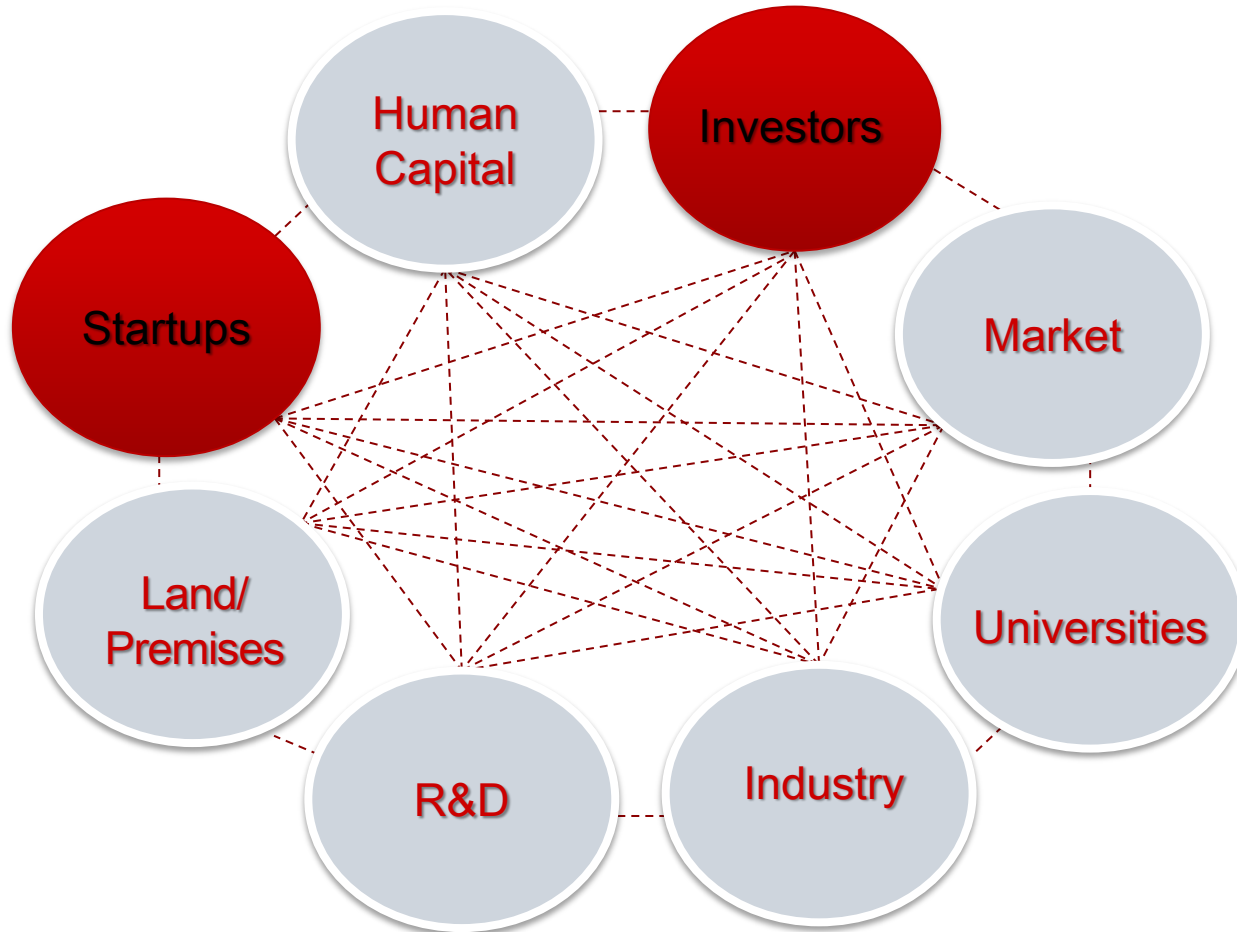
# **Facilitate Access to Mainland Market**

---

- **CEPA**
- ***Cooperation with Ministry of Science & Technology etc***
- ***Science Park to collaborate with Mainland tech incubators***
- ***HK NGO operating incubator in Qianhai, Shenzhen***
- ***Visit of young entrepreneurs to Mainland tech industries***

# Make Available Venture Funding

---





# Make Available Venture Financing

---

## ■ ***Innovation and Technology Venture Fund***

- *A \$2B fund to co-invest with private VCs in local start-ups*

## ■ ***Science Park Corporate Venture Fund***

- *Pre-A co-investment funding*

## ■ ***Cyberport Creative Micro Fund***

- *Seed fund for ICT startups*

## ■ ***Cyberport Macro Fund***

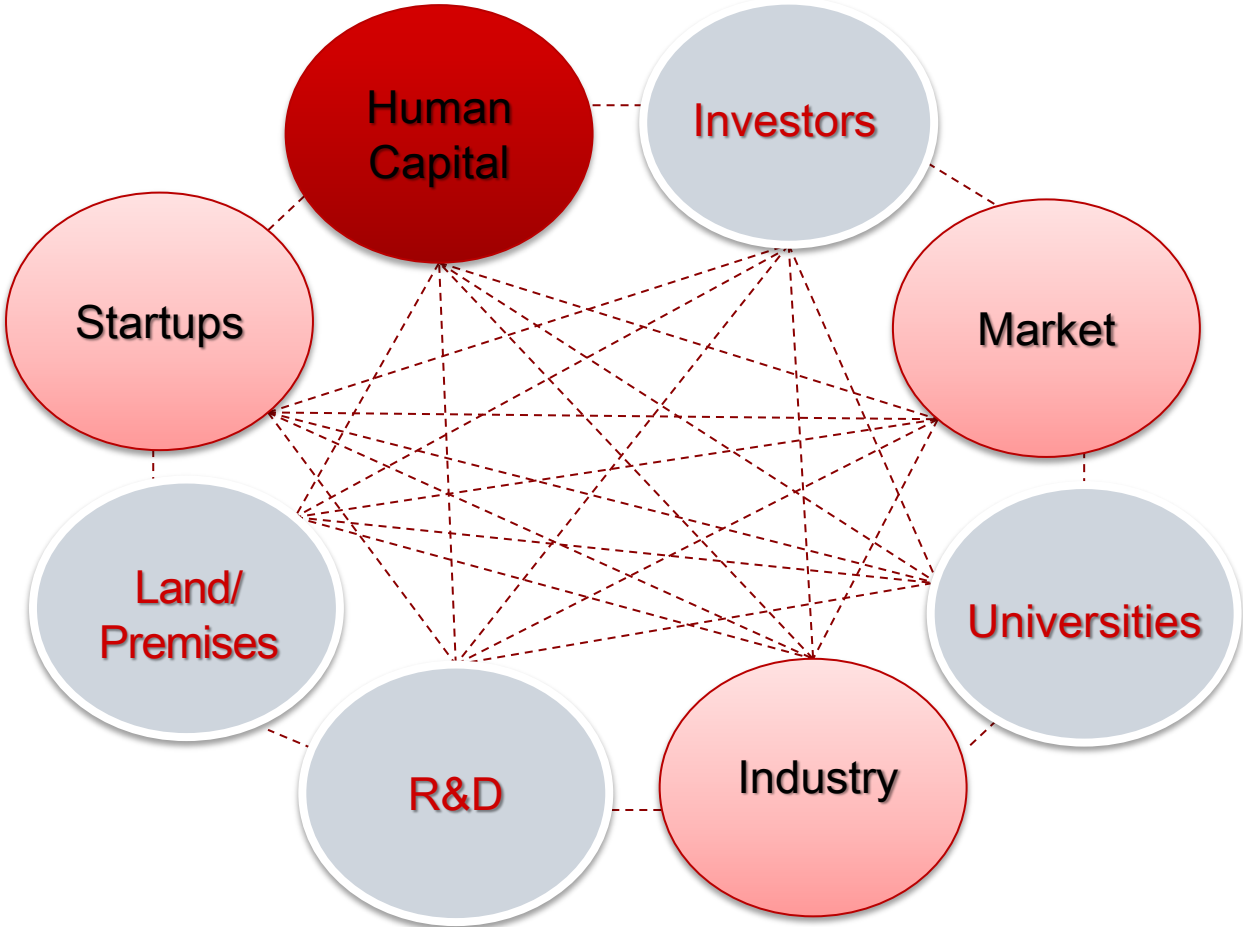
- *Pre-A co-investment funding*

## ■ ***Technology Startup Support Scheme for Universities***



# Promote Tech Culture

---



# Promote Technology Culture

## ■ Smart City Development

- eID, smart lamp posts, smart parking meters, Wifi hotspots etc

## ■ Tech is Fun!

- Science/technology competitions;
- Training in computational thinking & coding
- InnoCarnival; I & T Expo

## ■ Patent Application Grant

## ■ Media Publicity





*“ I have always been in the  
right place and time.  
Of course, I steered myself  
there.”*

*Bob Hope*

---

**- Thank You -**