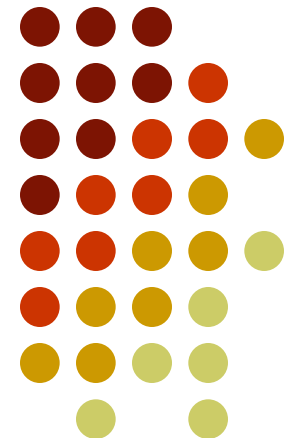


# Technology Incubation Scheme Briefing

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**28 Aug 2009**  
**The Treasury, Auditorium**

**National  
Research  
Foundation**



# Agenda

- Introduction to National Framework for Innovation and Enterprise (NFIE)
- Overview of Technology Incubation Scheme
- Q & A
- Discussion

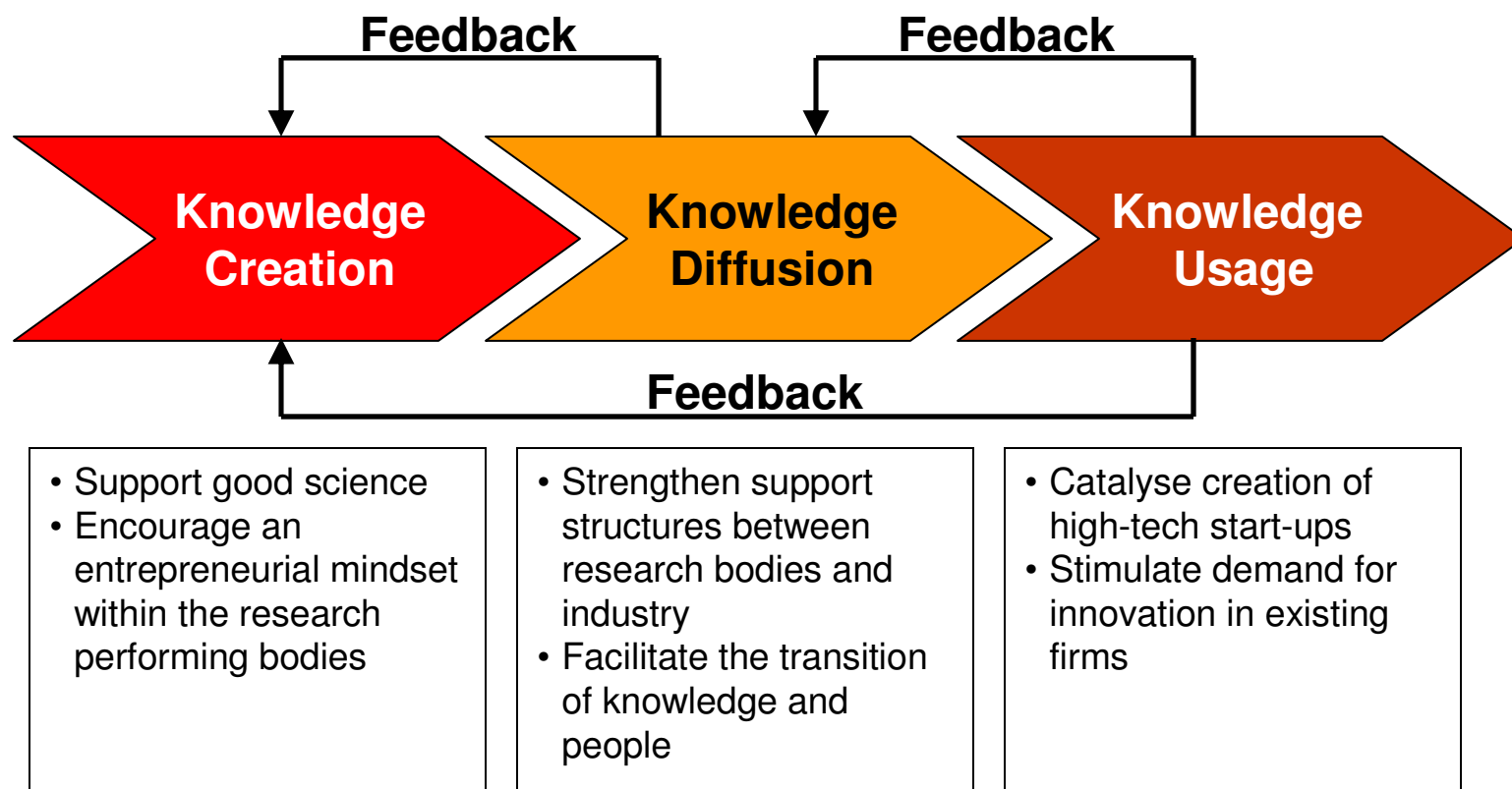
# Innovation and Economic Growth

The National Framework for Innovation and Enterprise (NFIE) is motivated by the following premise:

- Innovation is key to sustained economic growth
- High-tech start-ups are responsible for most breakthrough innovations, job and wealth creation
- Large established firms offer economies of scale to bring innovations to global markets
- A robust innovation-driven economy needs a healthy mix of both types of firms
- Singapore needs to transit to such an innovation-driven economy

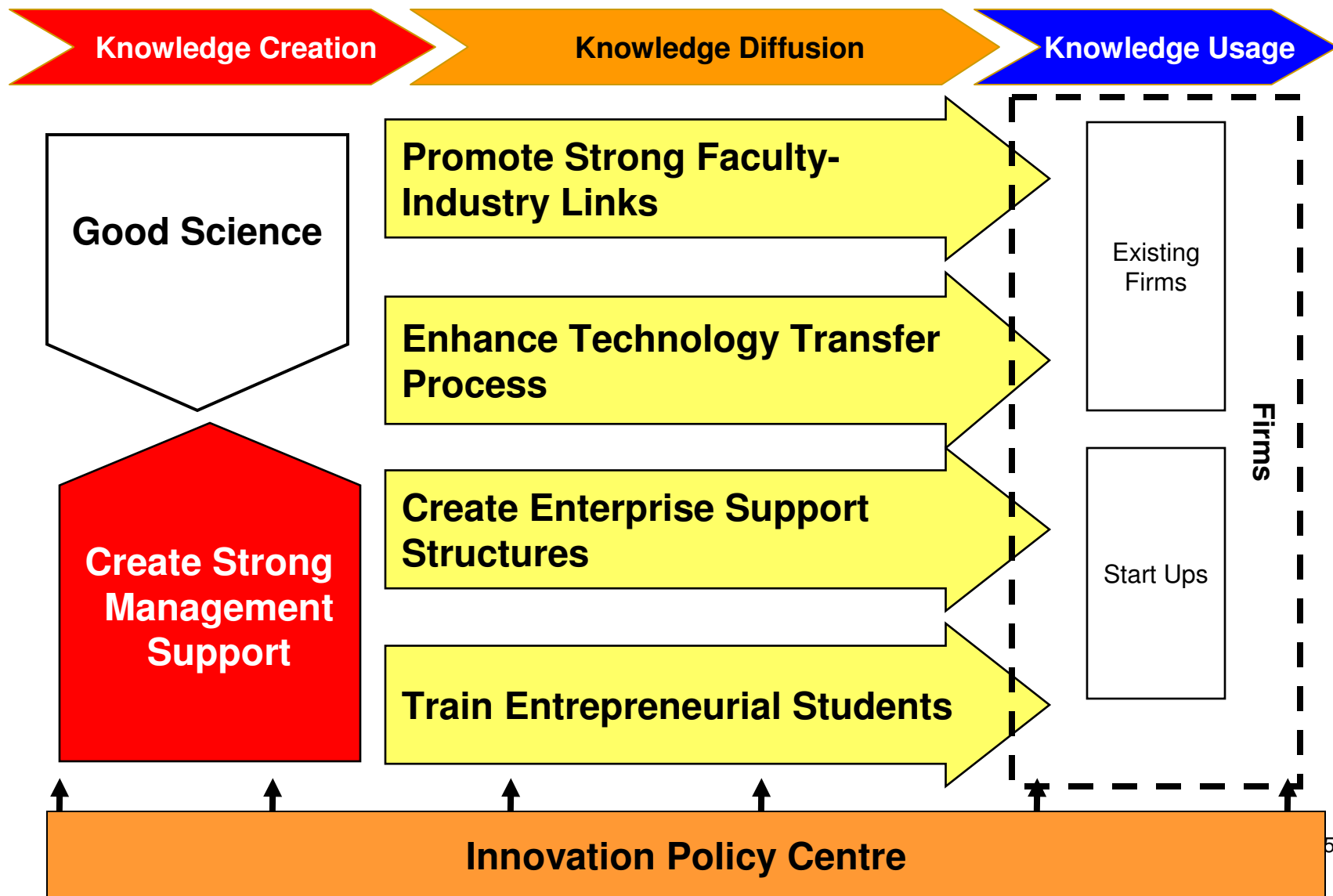
# National Framework for Innovation and Enterprise

## Encouraging Academic Entrepreneurship

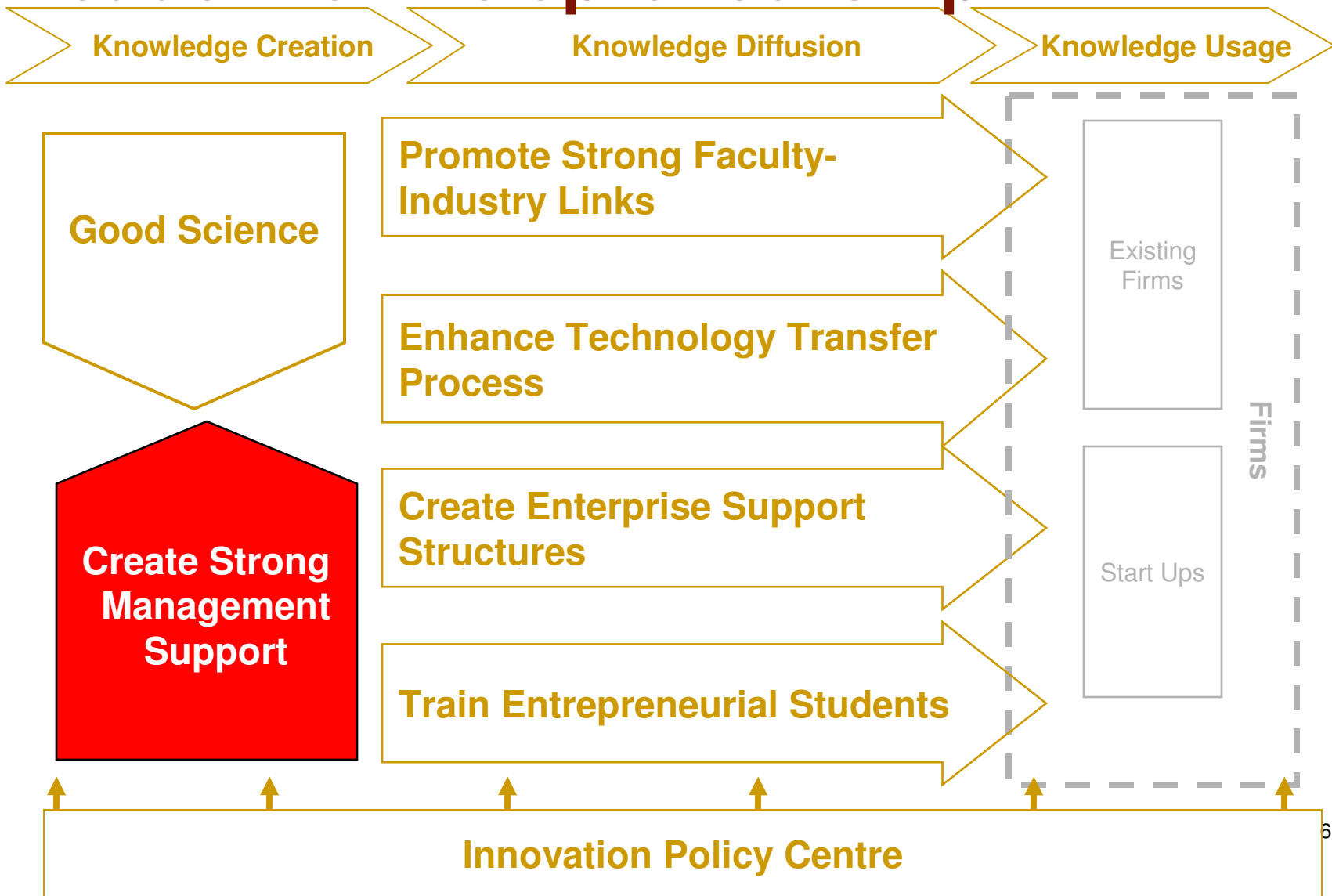


*\* Academic entrepreneurship is broadly defined as the involvement of academics, scientists and researchers in innovative activities with economic or societal impact*

# Overview of NFIE



# Strong Management Support for Academic Entrepreneurship

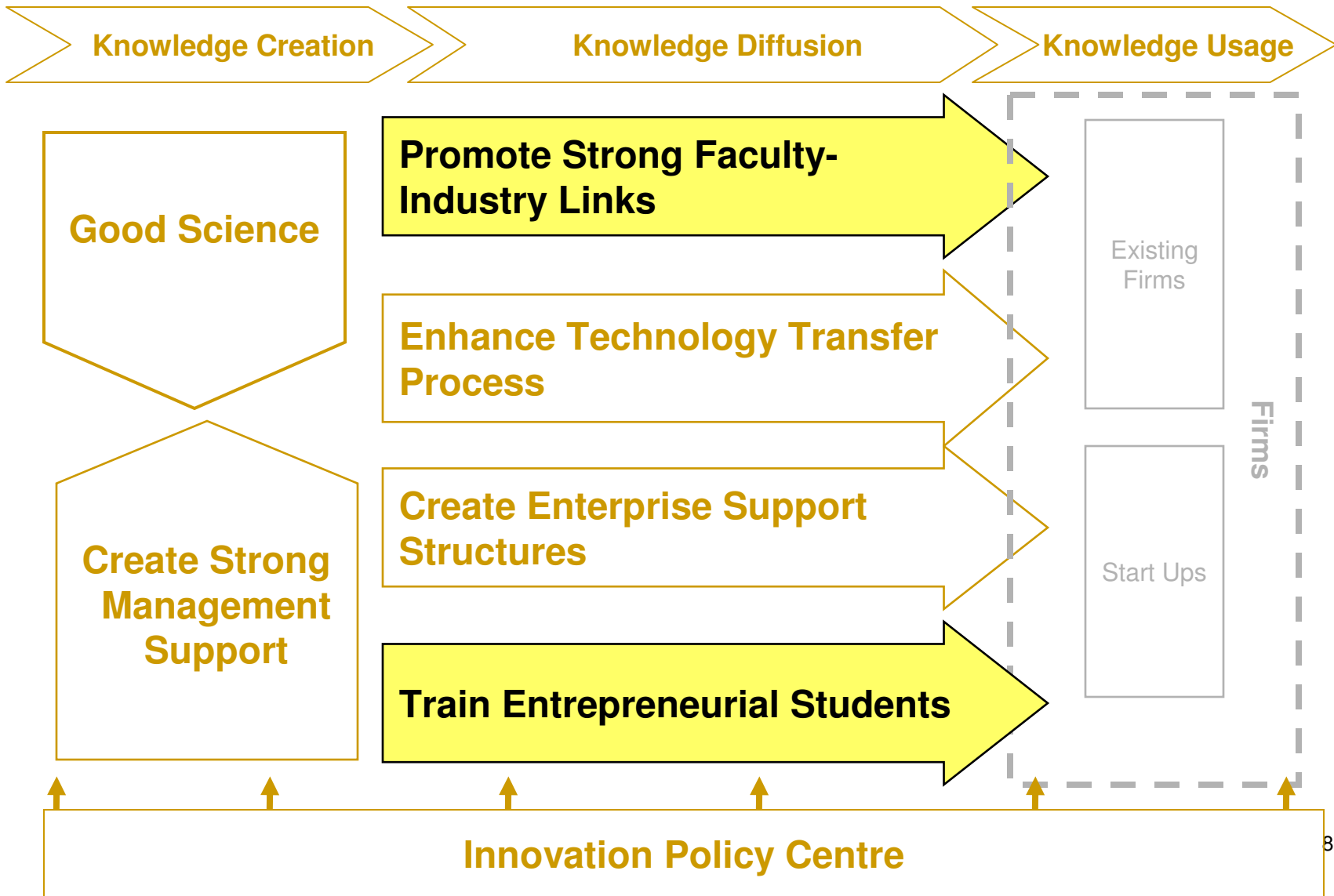


# Strong Management Support for Academic Entrepreneurship

## Enterprise Board

- High level Enterprise Board to be established in each university
  - Send strong visible signal of support for academic entrepreneurship
  - Fund, govern, and direct all innovation and enterprise activities
- Representation at highest level within university
- Comprise members with the right experience and expertise

# Strong University-Industry Links



# Strong University-Industry Links

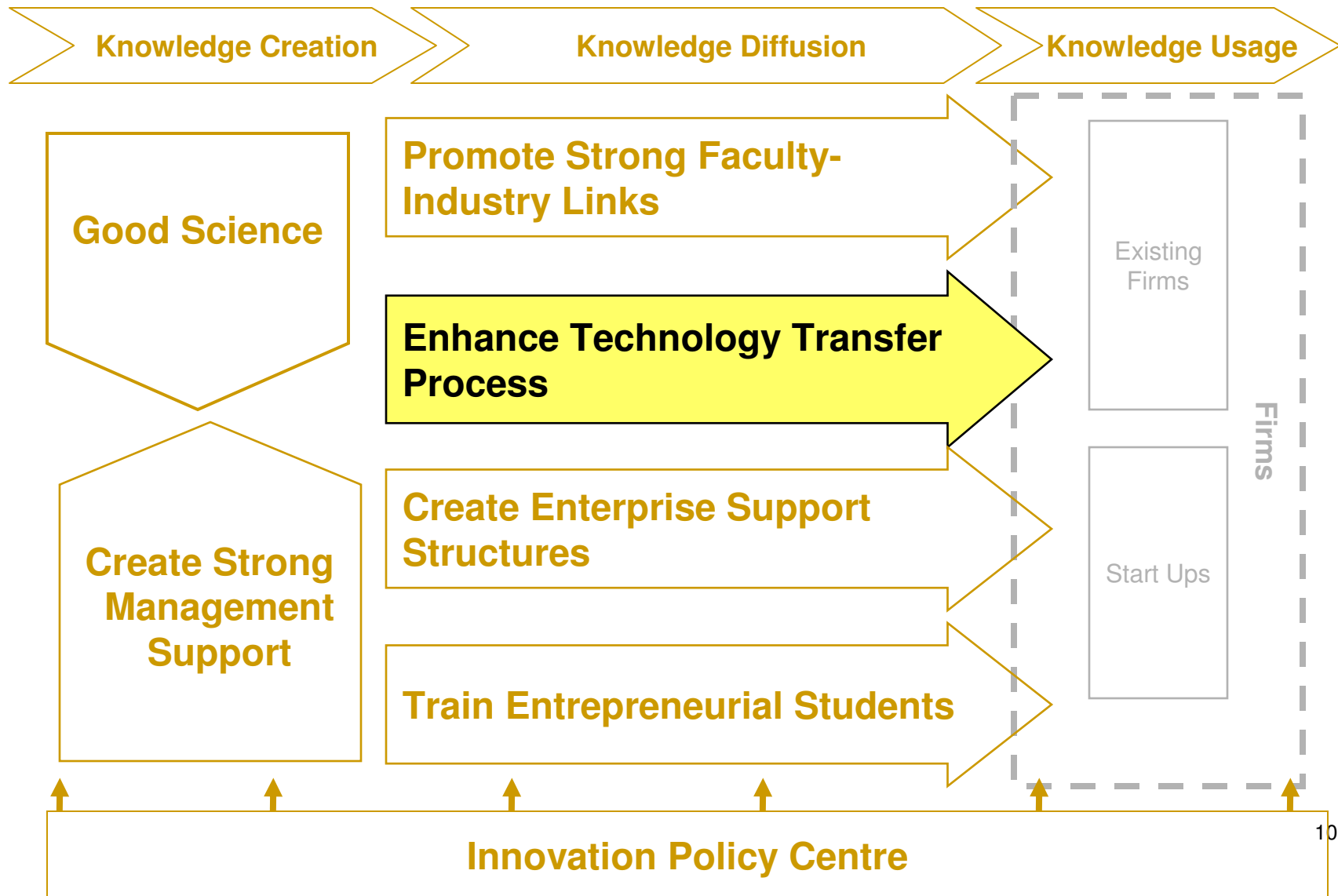
## University Innovation Fund

- An Innovation Fund is created in each university to jumpstart and support entrepreneurial activities such as
  - Fellowships for immersion in entrepreneurial environments
  - Entrepreneurship training
  - Outreach programmes to industry
  - Institutional recognition & awards
- Use of Innovation Fund governed by Enterprise Board
- NRF to provide initial grant, sustained financing to come through overhead component in competitive R&D grants offered by NRF and MOE



UIF press conference at SMU on 19 May 2009

# Enhance University Technology Transfer Process



# Enhance University Technology Transfer Process

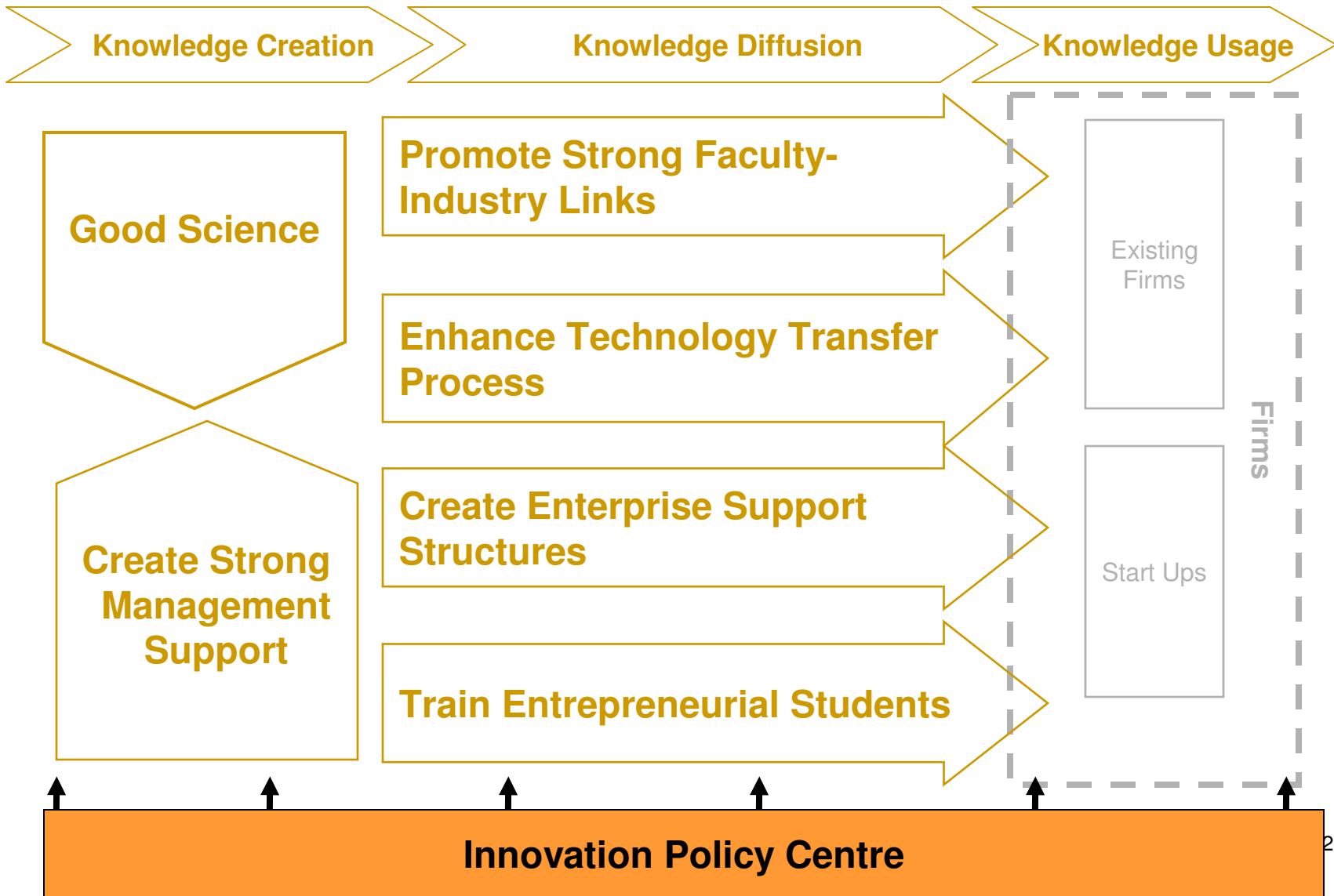
- **National IP policy** to encourage industry-academia collaboration
- **Translational R&D Grants for Polytechnics** to commercialise university research
- **Innovation vouchers** for SMEs to procure R&D services from IHLs and public research institutions



**TRD Grant press conference at Nanyang Poly on 11 May 2009**

# Innovation Policy Centre

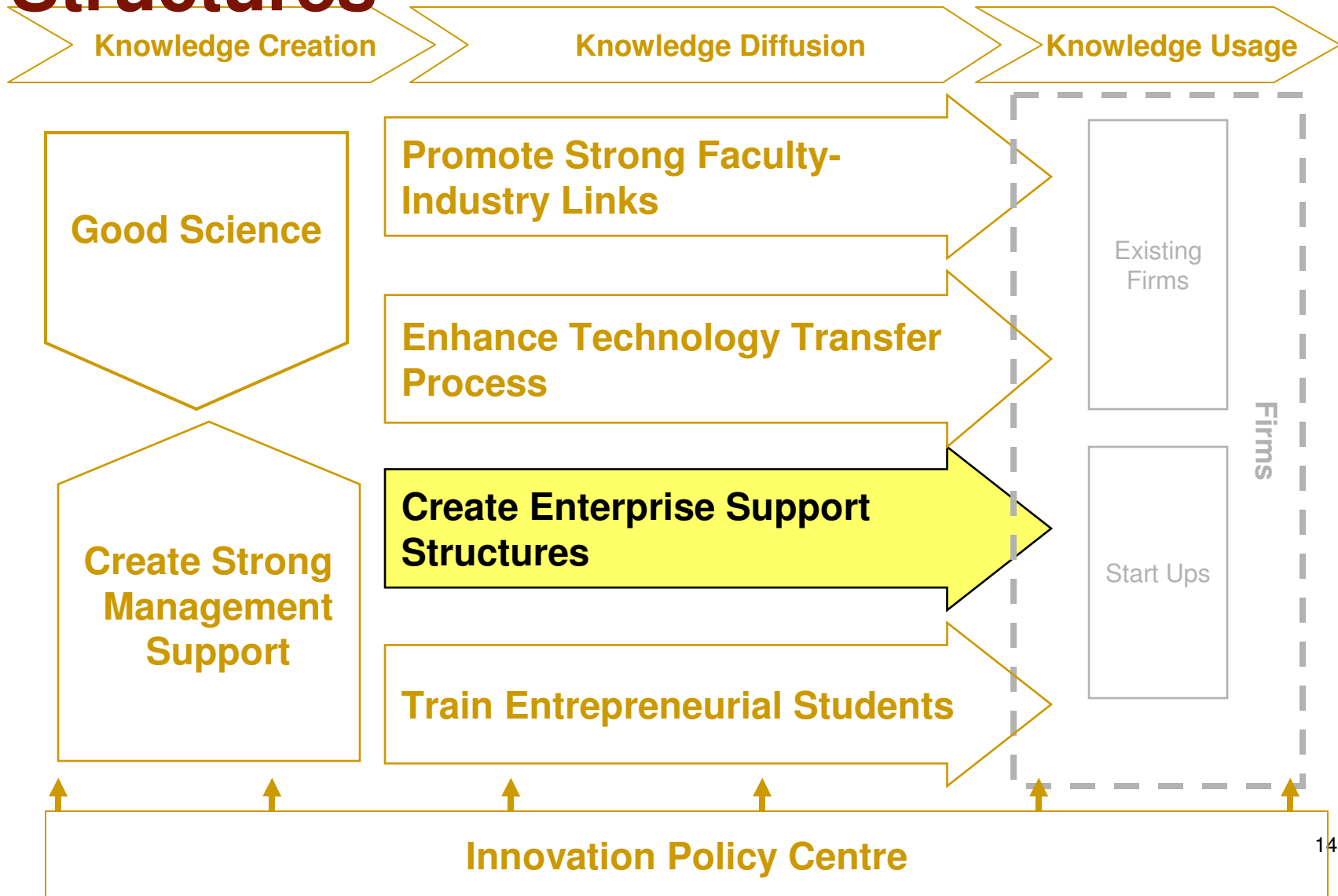
National  
Research  
Foundation



# Innovation Policy Centre

- Set up **national centre for innovation studies** similar to the US Kaufmann Foundation
- Centre to develop sustained policies and initiatives to encourage innovation in both private and public sectors
- Possible projects are a National Innovation Index, technology forecasting & IP mapping
- Centre can draw together expertise from various institutions

# Create Enterprise Support Structures



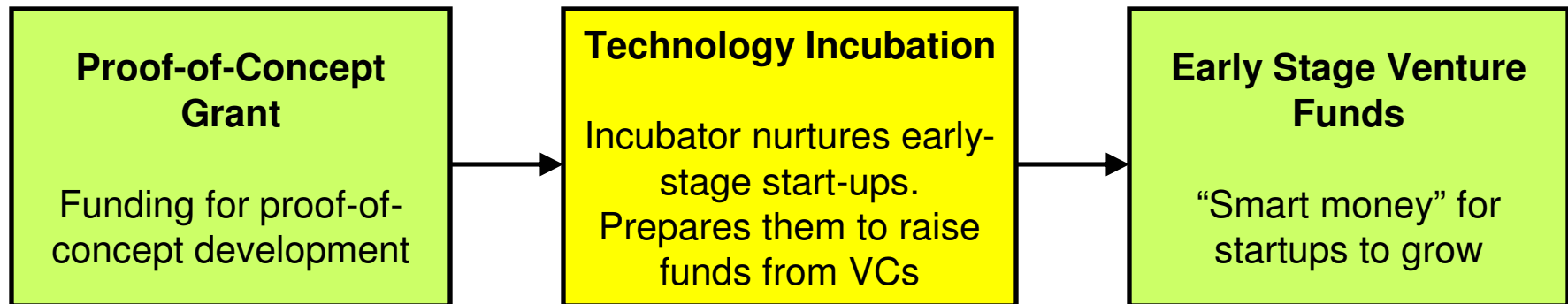
# Create Enterprise Support Structures

- **Proof-of-concept grants** to individual researchers or companies to pursue innovative ideas
- Systematic nurturing of seed companies in **technology incubators**
- Identification and support of startups with **disruptive technologies**
- **Early stage venture funding** to support start-up companies

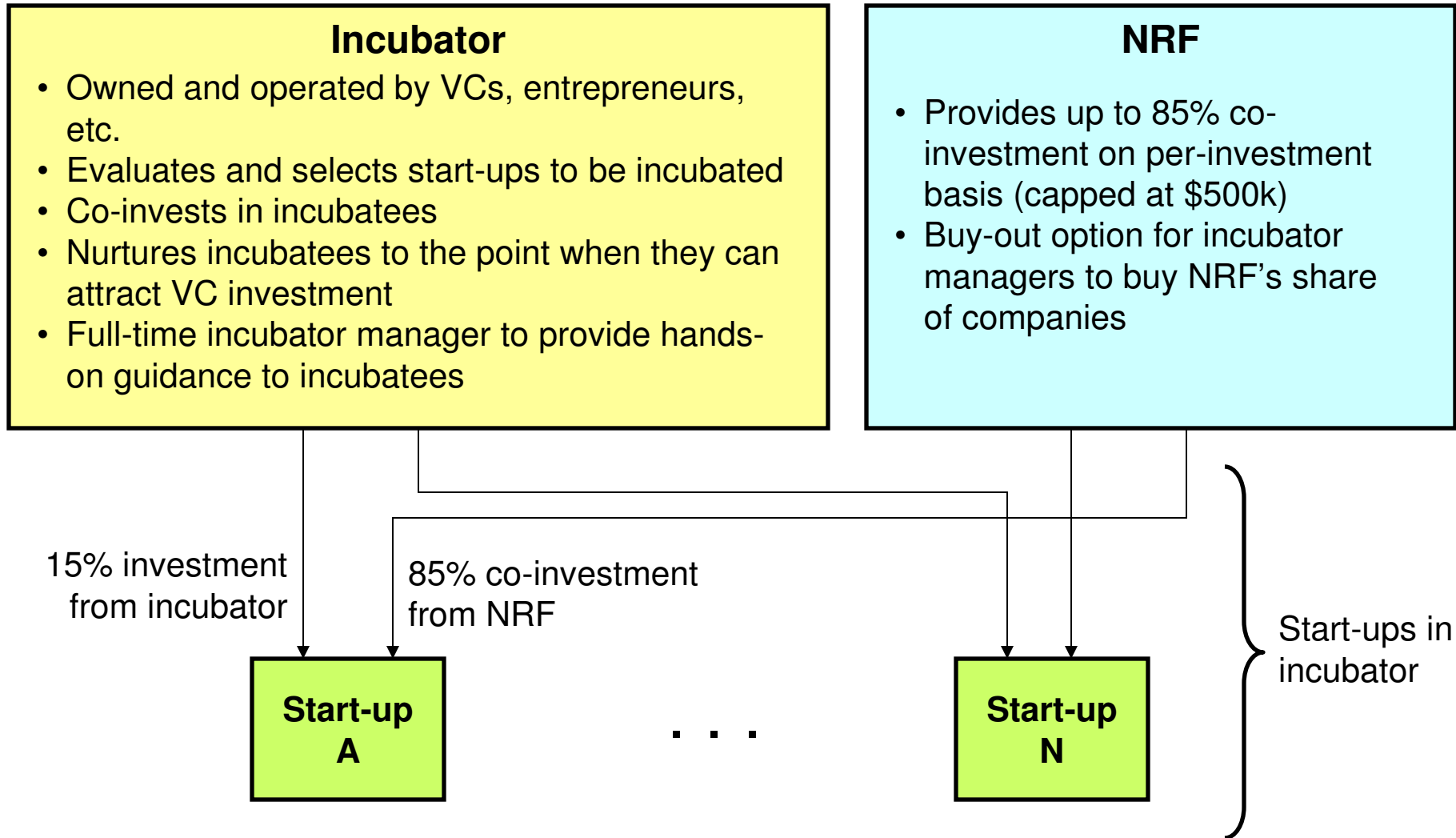


# Enterprise Support Structures

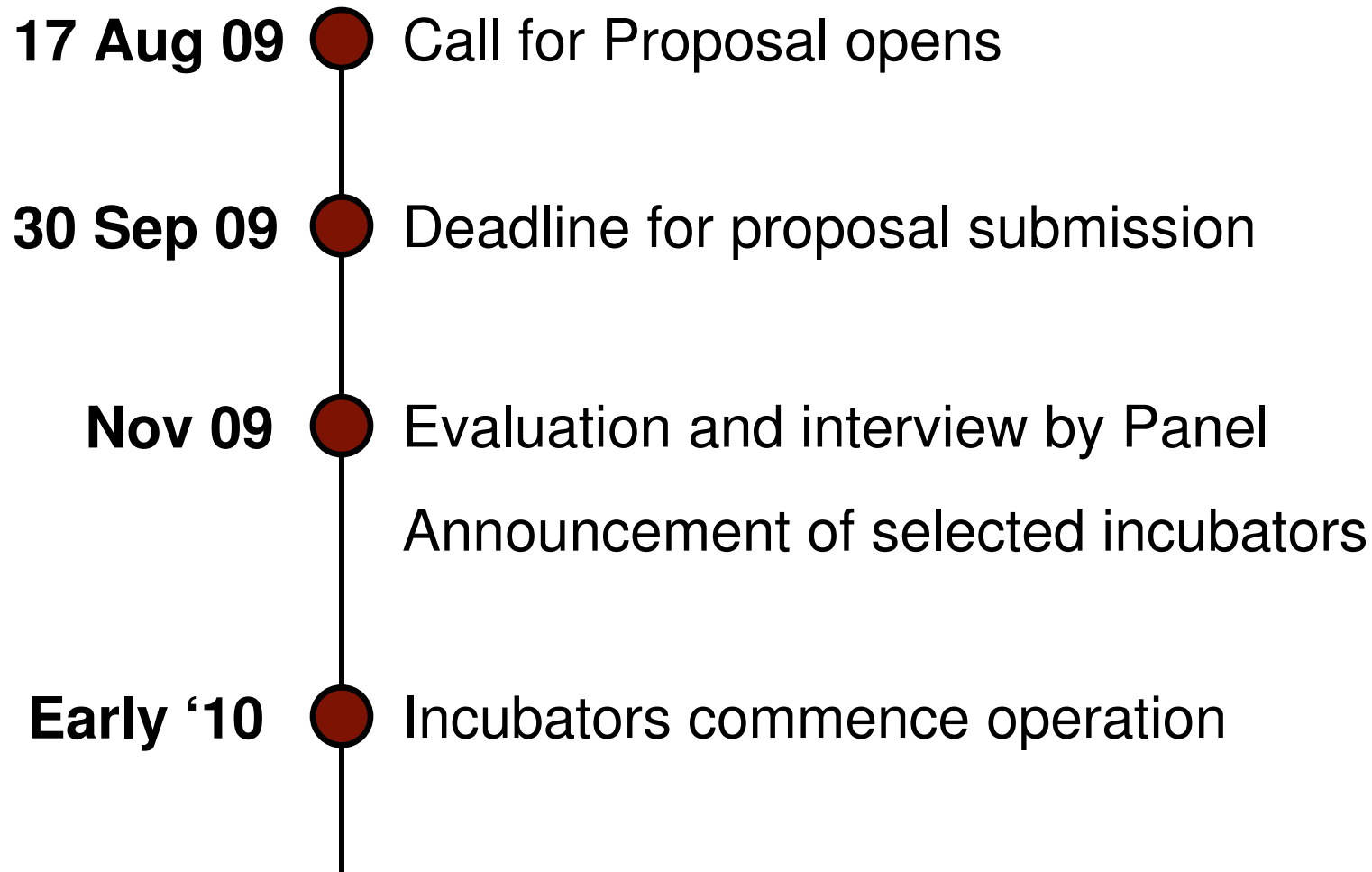
Technology Incubation Scheme (TIS) fits between the Proof-of-Concept grant and the Early Stage Venture Fund



# Technology Incubator Concept



# Timeline



# Terms of Scheme

## Co-Investment

<b>Funding Quantum</b>	<ul style="list-style-type: none"><li>• NRF co-invest up to 85% of total investment into each incubatee, capped at S\$500,000</li><li>• Incubator manager provides remaining 15%</li></ul>
<b>Equity Stake</b>	<ul style="list-style-type: none"><li>• NRF and the incubator manager to take equity in incubatee</li><li>• This will be in the form of a convertible bond.</li></ul>
<b>Maximum Share of Company</b>	<ul style="list-style-type: none"><li>• The investment in the company should not dilute the founders' share of the company to less than 50% as a general rule.</li></ul>
<b>Buyout Option</b>	<ul style="list-style-type: none"><li>• Option for incubator managers and other investors to buy out NRF's share</li><li>• 1.1x in 1<sup>st</sup> 2 years, 1.15x in 3<sup>rd</sup> year (aligned to DI scheme)</li></ul>

# Terms of Scheme

## Requirements on Incubators

<b>Incubator Manager</b>	There should be at least one full-time incubator manager to provide active mentoring to incubatees.
<b>Link to IHL</b>	There should be a link to the IHL.
<b>Physical Space</b>	The incubator should provide a physical space to house the incubators.
<b>Operating Expenses</b>	Operating expenses will not be provided by the scheme. Incubators should demonstrate the ability to cover their operating expenses.

# Q & A