

# Investment Activities and Portfolios of the Technology Innovation Agency (TIA) Entities: Systemic Challenges & Opportunities



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science  
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2. TIA Entities:
  - Geographic spread of activities
  - Funding and technology development focus
  - Practical challenges and opportunities
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4. Implications for TIA Operations



# 1. TIA Funding Context: The *Chasm* and the *Innovation Value Chain*

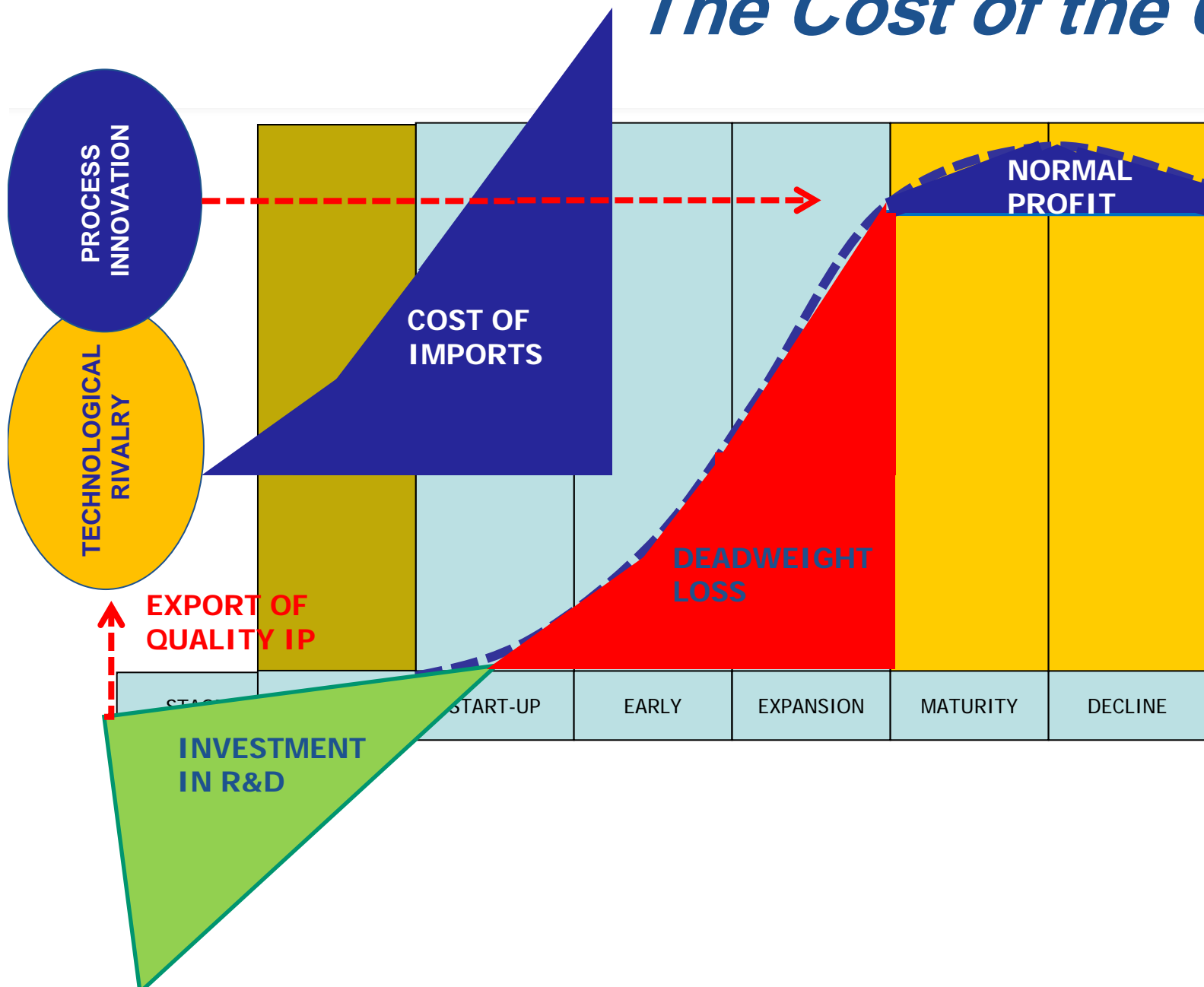


# *The Innovation Chasm*

The SA *Chasm* characterised by:

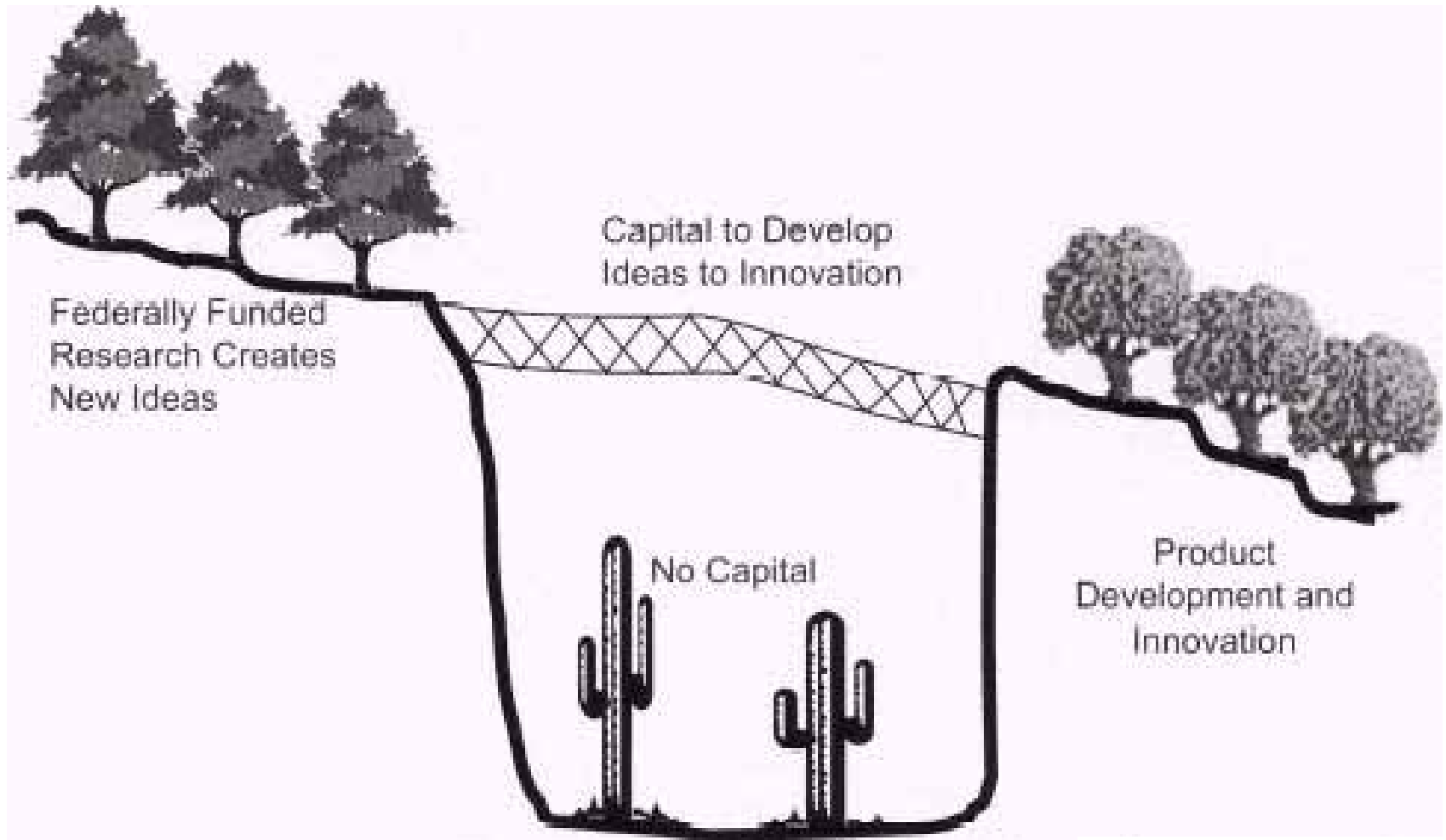
- Lack of significant funding partnerships between public research institutes and Industry [i.e. heavy reliance on govt funding]
- Sub-optimal funding mechanisms across length of *Value Chain* [i.e. disconnect along chain]
- Lack of nation-wide concept of *Innovation* [i.e. innovation culture]
- Lack of critical mass of *innovation skills* base

# The Cost of the Chasm

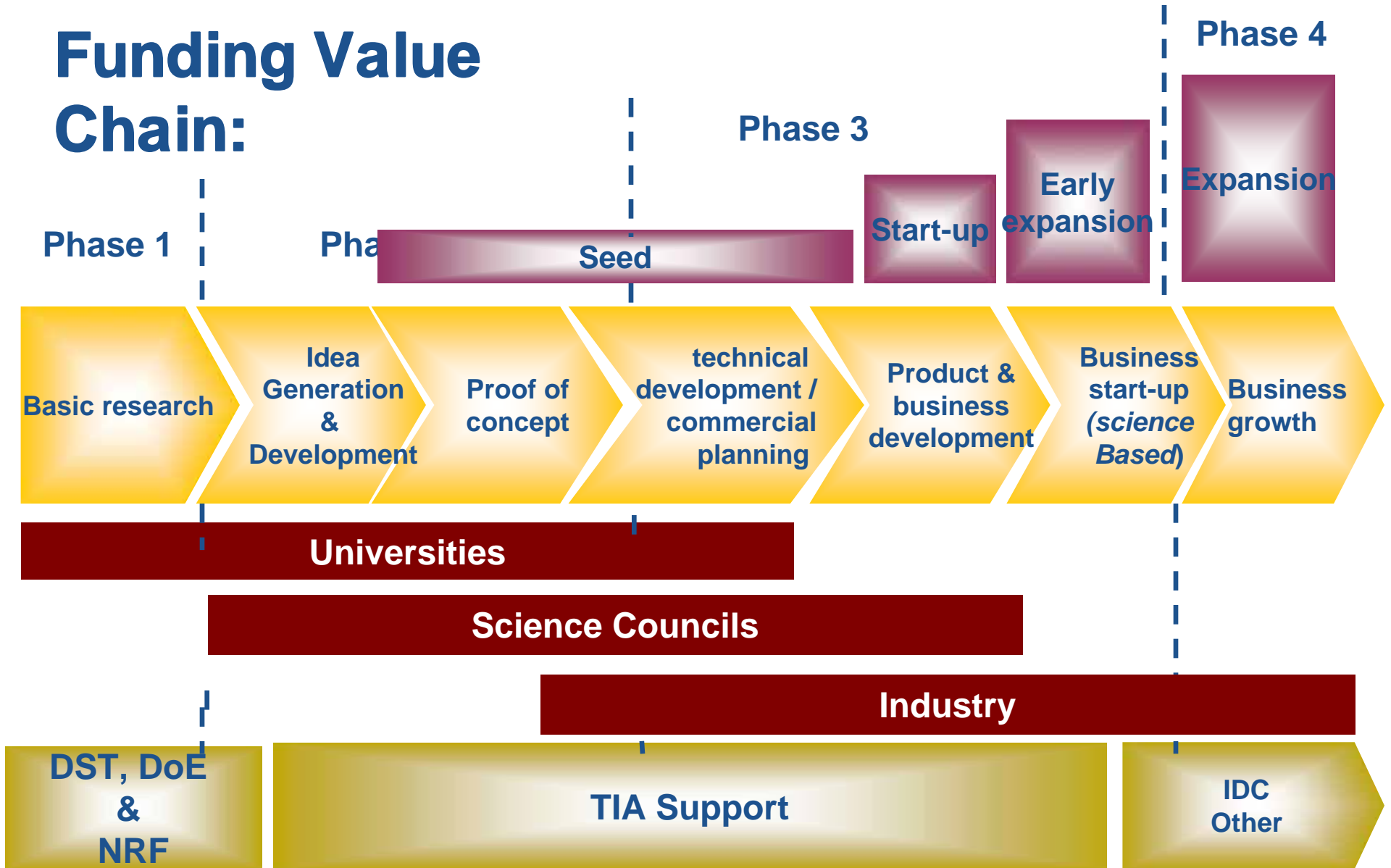




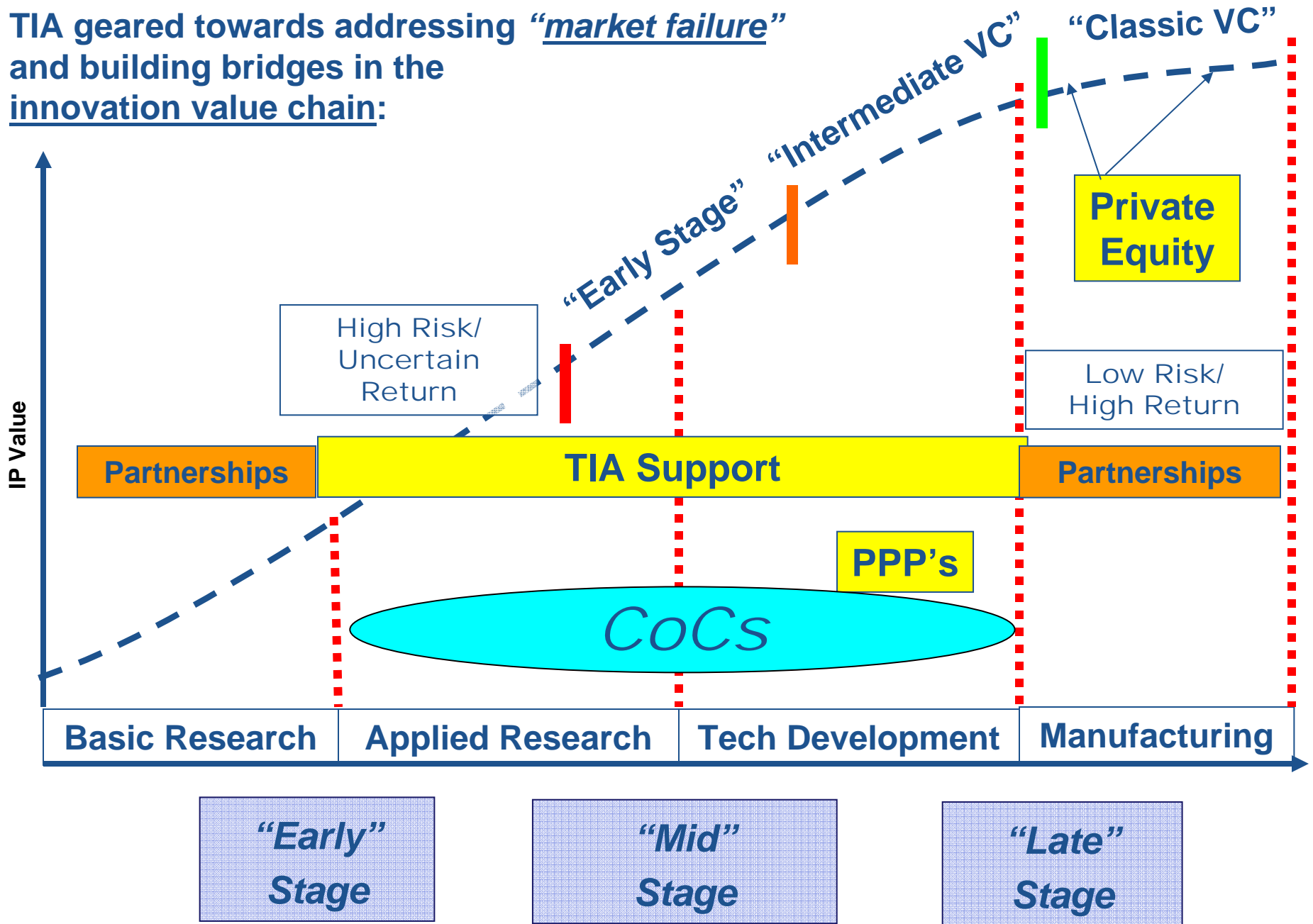
# *Bridging the Chasm*



# Funding Value Chain:



TIA geared towards addressing “market failure” and building bridges in the innovation value chain:



## 2. TIA Entities:

- Geographic spread of activities
- Funding and tech development focus
- Investment and funding landscape
- Practical challenges and opportunities (e.g. Biotech - long term funding requirements; opportunities to learn from failures etc)





## Systemic challenges:

1. Lack of significant funding partnerships (heavy reliance on DST funding)
2. Absence of meaningful industry partnerships in Centres of Competence (CoCs) impacting negatively on sustainability of CoCs (DST CoC Review, 2009)
3. Long term funding commitments required to enable learning from failures and nurturing of key tech and product developments
4. Lack of financial resources to attract appropriate skills base (Biotech Audit, 2007)
5. Support services required for international marketing, fund raising and IP management (Biotech Audit, 2007)



### 3. Critical questions for TIA funding and operations going forward?



## ...TIA Offerings:

- Technology Fund Management
- Capacity building for innovation
- Technology Nursery [technology & technology based emerging businesses incubation platform]
- Technology Commercialisation Advocacy [creating an *Innovation culture*]
- Facilitating collaboration for technology development and innovation incl. CoCs and supporting in-bound Technology Transfer

**Socio/Econ  
Impact**



## ...Considerations:

### Key factors guiding the proposed operating model:

- ❑ Capacity for thorough due diligence - capabilities in: technical (SET, IP), business (market, financial)
- ❑ Executing an enhanced funding role - incl. Seed/Grant, Loans/Equity, Venture Capital, with partners where required
- ❑ Technology Nursery – advisory services, technology incubation & technology based small businesses support
- ❑ Accommodating various types of CoCs, including technology transfer



# ...Organisational structure:

**Two TIA components:**

## **1. Central TIA proposed structure [lean]:**

- National strategy setting, planning oversight & governance (incl. Risk Management), regional support & coordination
- Fund management & approval [significant capacity]
- Executive portfolio management of investments, including monitoring & evaluation capacity

## **2. Regional TIA structures [execution & implementation]:**

- Corporate strategy execution, and regional strategy development
- Technology Nurseries: client interface and advisory services
- Identify & assess opportunities, recommend to central for funding, manage funded projects



# ...Attributes

## TIA Central & Regional perspective:

- Promotes central co-ordination and promotes accountability
- Recognises complexity of operations
  - Flat reporting structure with elements of shared or matrix operations
  - Leverages resources across the organisation
- Fosters partnerships to support execution across value chain
- Addresses regional presence & focus



**...THANK YOU**