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# **TECHNOLOGY INNOVATION AGENCY**

*RESPONSE TO THE INNOVATION SURVEY 2005-2007*

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SENIOR GENERAL MANAGER - OPERATIONS**

# Overview

- 1. Setting the Scene - TIA Mandate**
- 2. The Innovation Challenge – TIA Positioning and Instruments enterprises**
- 3. The Innovation Survey – *“Addressing What Lies Within the Innovation Chasm”***



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# TIA MANDATE

## Mandate

To **support** the State in **stimulating** and **intensifying technological innovation** in order to **improve economic growth** and the **quality of life** of all South Africans by **[supporting\*] the development and exploitation of technological innovations”**

## Vision

A **world class** innovation agency that **supports** and **enables technological innovation** to achieve socio-economic benefits for South Africa

## Mission

To **enhance** South Africa’s **global competitiveness** and **deliver socio-economic value** by **supporting technological innovation** across sectors of the economy

# Strategic Objectives

- 1. To stimulate the development and commercialisation of technology based services, processes and products**
- 2. To support the establishment and development of technology based commercially viable enterprises**
- 3. To leverage TIA funds for co-investment**
4. To optimise the implementation of statutory requirements.
5. To facilitate the development of human capital for technology commercialisation and innovation
6. To build a culture of technology innovation

# Strategic Objective 1

**Stimulate the development and commercialisation of technology based services, processes and products**

## *Some Key Performance Indicators*

- Number of high impact flagship projects per regional office
- Number of new technology based services/processes/ products developed with TIA funding
- Number of new technology based services/processes/ products commercialised

# Strategic objective 2

## Support the establishment and development of technology based enterprises

### *Some Key Performance Indicators*

- Number of technology-based enterprises supported
- Number of green technology-based enterprises supported
- Number of technology stations/platforms developed to support enterprises

# Strategic objective 3

## Leverage the TIA funds for co-investment

### *Key Performance Indicators*

- Number of new co-funded investments
- Number of TIA projects attracting second-round funding from external parties
- Number of co-funded high impact projects



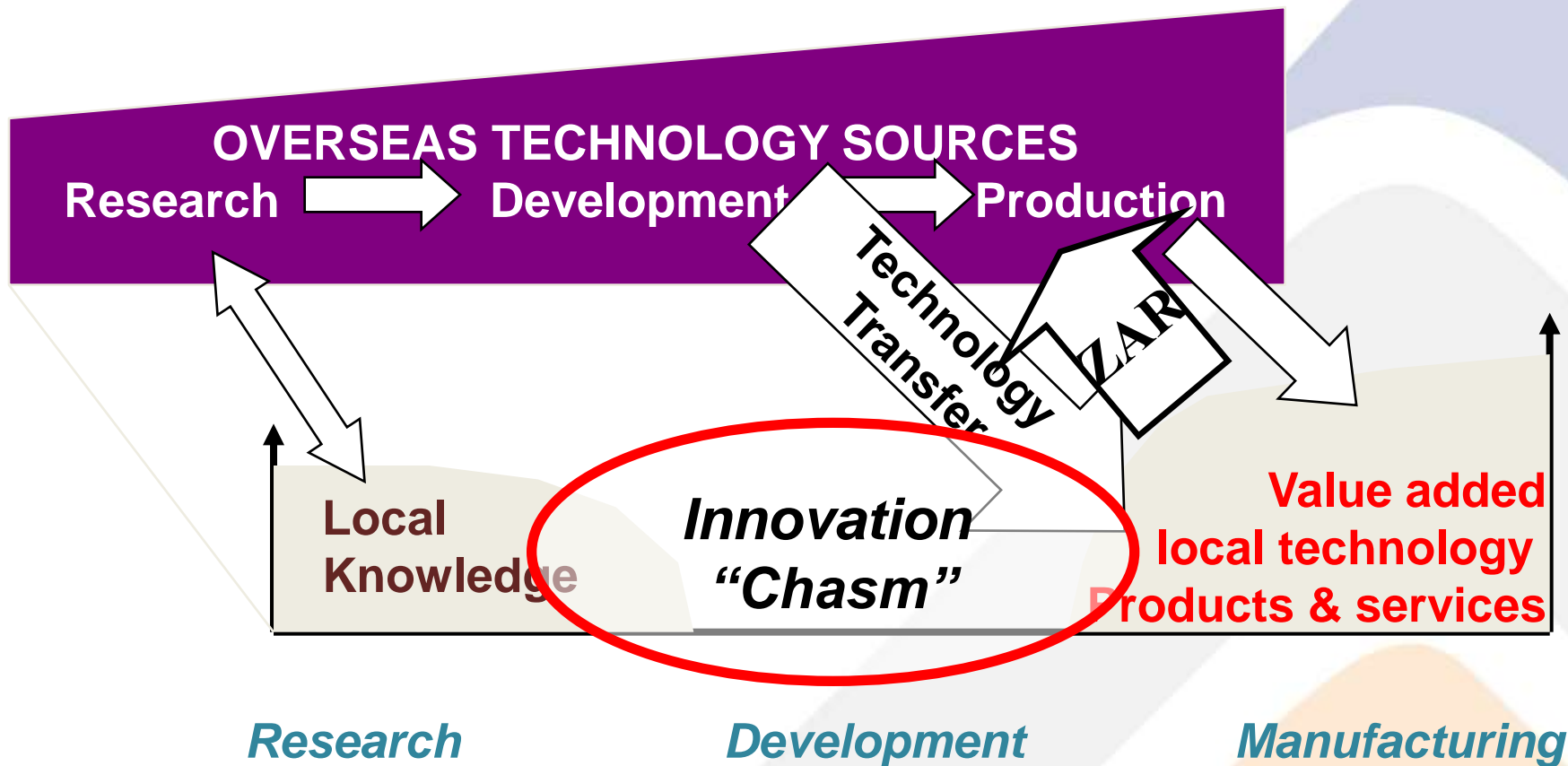


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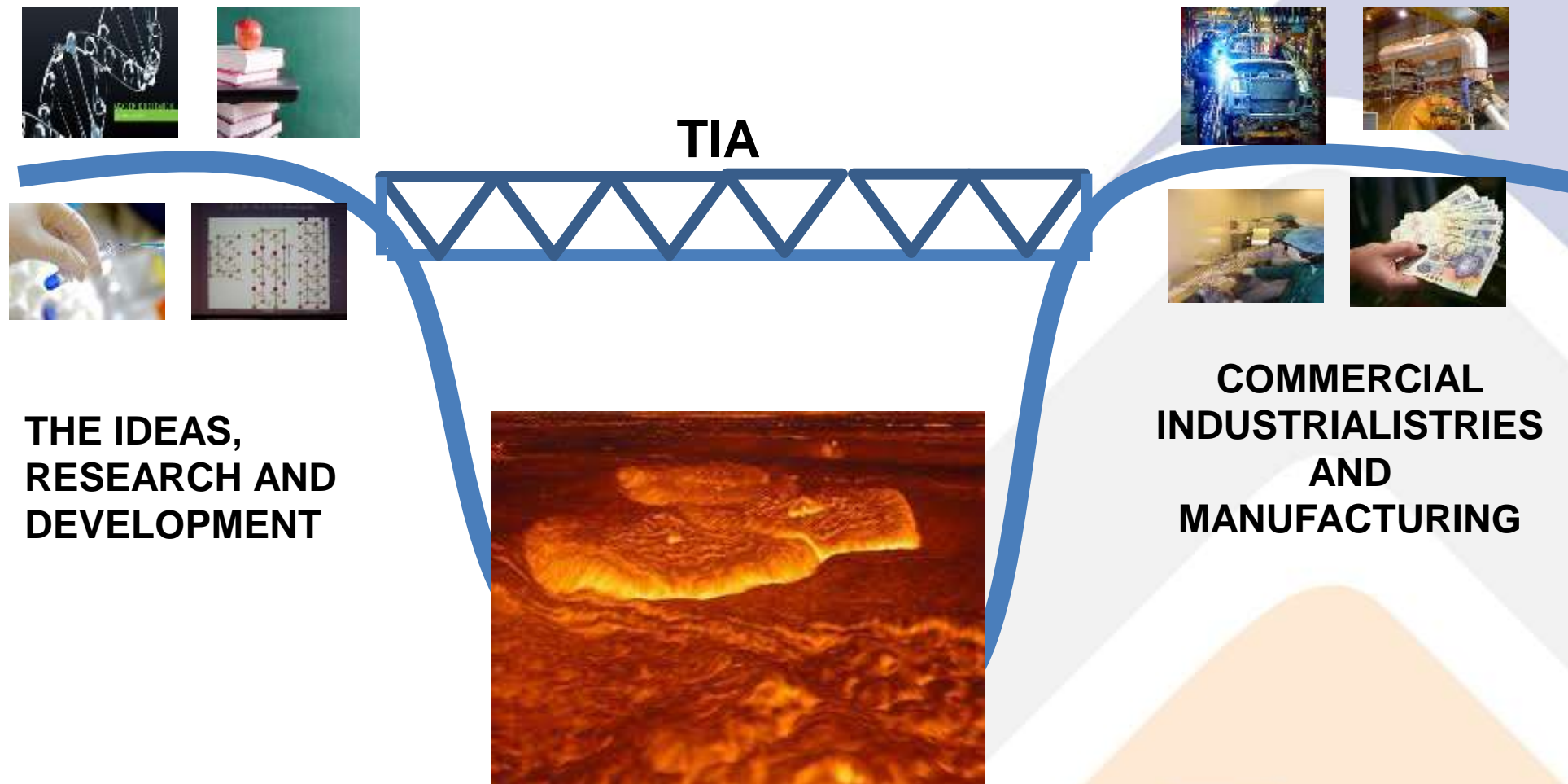
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# THE INNOVATION CHALLENGE

# The innovation chasm- the strategic challenge

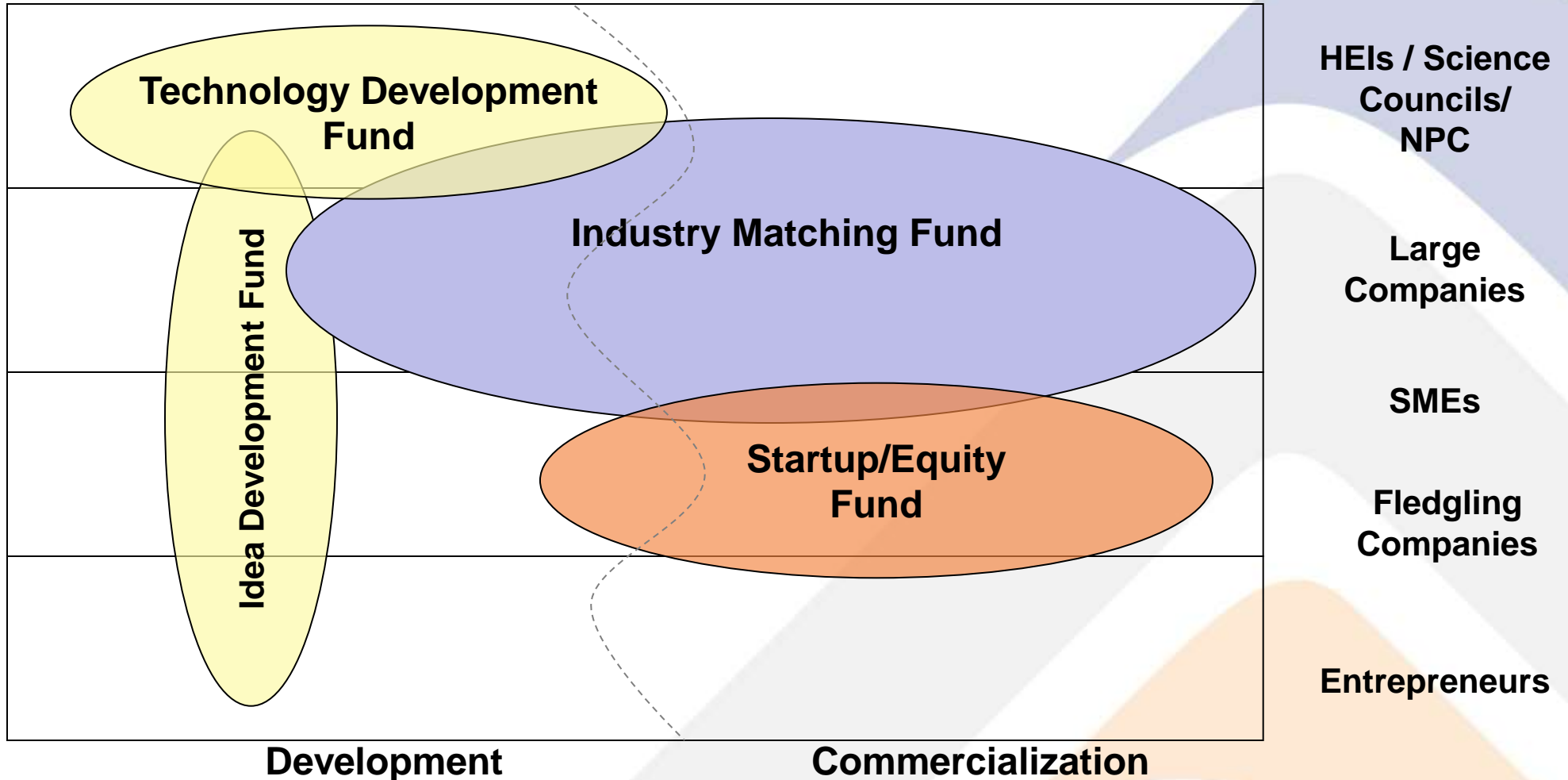


# Bridging the innovation chasm

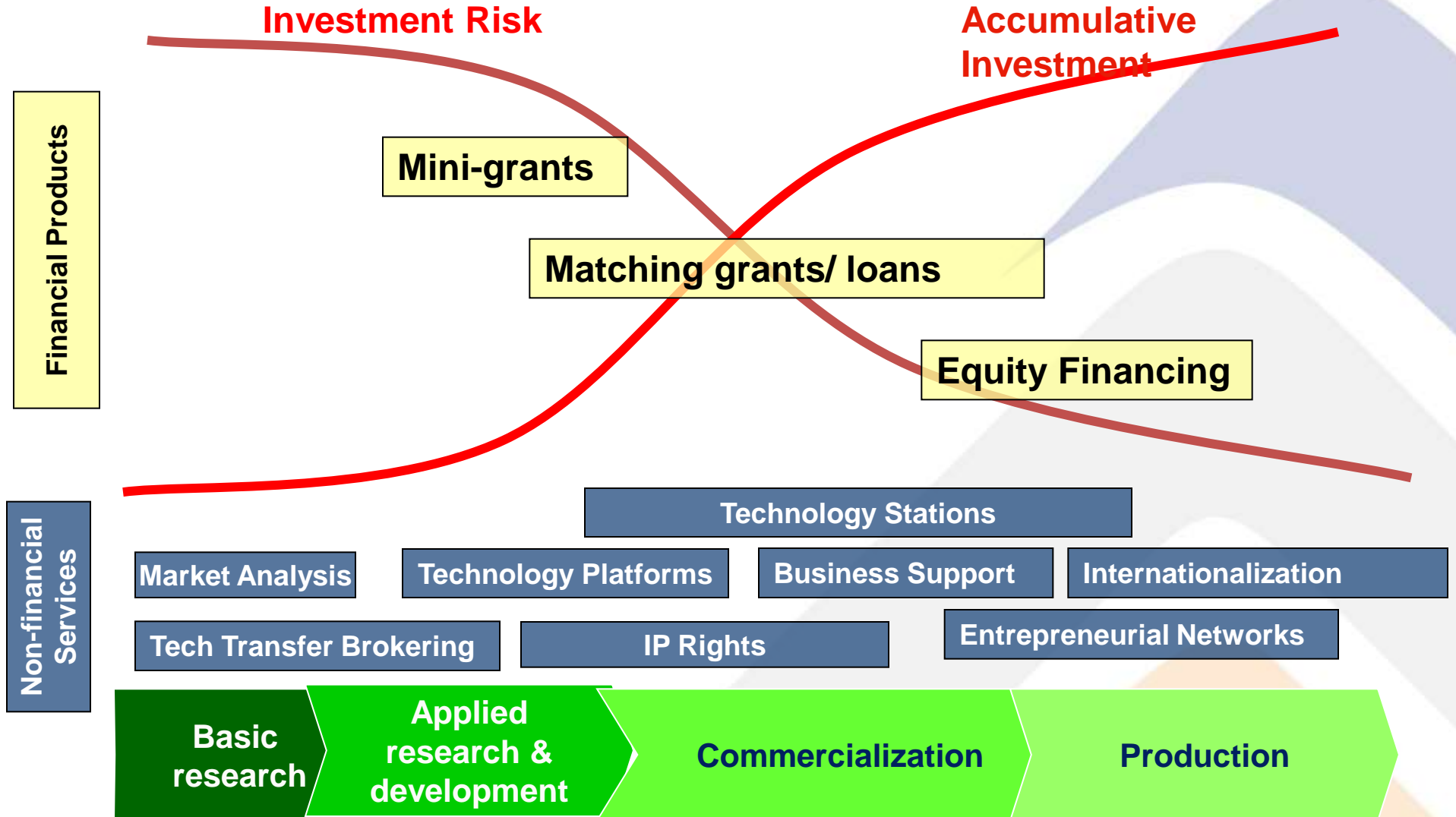


# Funding Instruments

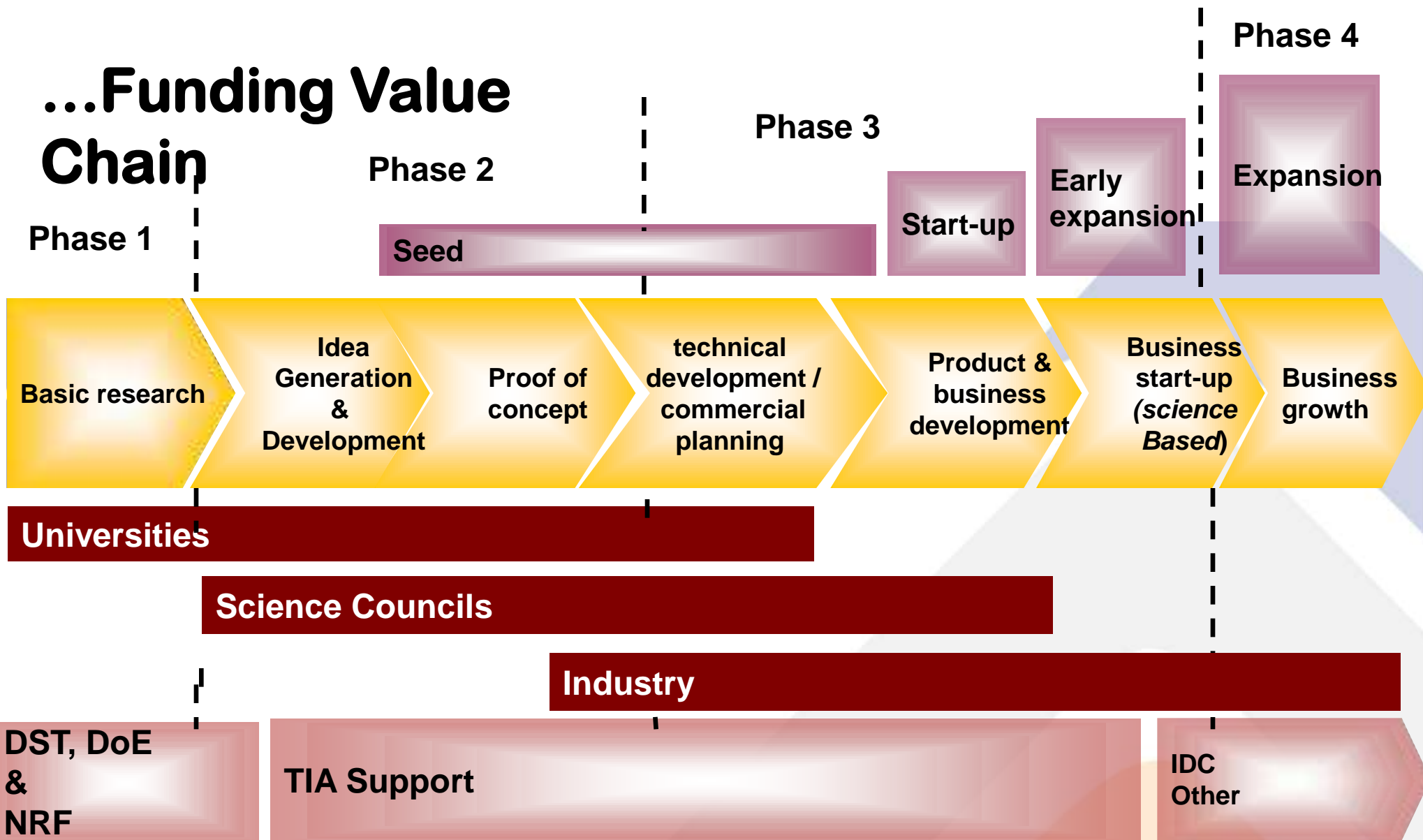
## TIA FUNDS – FINANCIAL PRODUCTS



# OFFERINGS ACROSS THE VALUE CHAIN



# ...Funding Value Chain





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**Some Factors Hampering Innovation in SA**  
*What lies within the Innovation Chasm?*

# Innovation Survey

## *Some Factors Hampering Innovation in SA*

- Lack of funds (within enterprises and externally)
- Cost of innovation

### Lessons for TIA

1. A need to promote the importance of R&D innovation activities within SA enterprises
2. Identifies a need for an early R&D instrument for companies (DST)
3. Clarity and understanding by companies of R&D Tax incentives
4. Collaboration between companies and research institutions to reduce the cost of innovation



# Innovation Survey

## *Some Factors Hampering Innovation in SA*

- Lack of funds (within enterprises and externally)
- Cost of innovation

### Current Investment Instruments of TIA

1. Idea Development Fund – focused on SMMEs and entrepreneurs to develop the idea into a fundable proposal.
2. Industry Matching Fund – to stimulate participation of companies (large and small) in R&D
3. Technology Stations and Platform that assist companies with innovation

# Innovation Survey

## ***Some Factors Hampering Innovation in SA***

- Difficulty in funding collaboration partners
- Lack of information on technology

### Lessons for TIA

1. Gap between research institutions and companies
2. Company-company collaborations preferred
3. There is a need to:
  - Leverage the benefits of SMME/large corporation collaboration
  - Promote collaboration between research institutions and companies
  - Level of spin-out in University research low (esp. without company participation in research)
4. Technology Development Fund as a starting point
5. Industry - research institution networking sessions to promote research institution capability

# Innovation Survey

## *Discussion points*

1. R18.5bn spent on R&D-generated innovations by enterprises
2. 100% Increase in innovation spend in 2007
3. 300% increase in sales of new to market products:
  - How do we leverage on this increased expenditure
  - What are the drivers for this and what is their meaning to TIA's strategic direction
  - What is SA's competitive advantage from sales point of view: products; services; processes?
  - How do we stimulate the culture of innovation in non-innovating enterprises?
4. Decrease in the percentage of enterprises with successful innovation activities, including the decrease in innovation.
5. 38.2% of innovating enterprise had ongoing or abandoned innovations activities
  - What are the reasons for abandoning the innovation activities? – Valley of Death??
  - How can TIA address these (if at all)?

# Innovation Survey

## *Discussion points*

### 1. 76% of product innovations are developed in SA

- Certainly there is a potential of SA enterprises to develop innovative products.
- What support mechanisms do we put in place for enterprises to know the potential of innovation?
- ? Is R&D core of current business, or should it be part of the future strategies?
- ? With revenues of R569bn from innovative enterprises, what benefits does it mean for SA

### 2. Intellectual Property Rights protection and conversion of IP into products

- Not used as a tool for innovation by most enterprises – There is a need for dialogue between TIA and NIPMO on protecting SA IP and commercializing such IP

### 3. Innovations for social impact

- When revenues don't count, and only social / public good is the benefit
- What is the impact and how do we measure ourselves and compare with the developed world?



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THANK YOU

# Investment Framework Policy

## Why

- Required by the TIA Act
- To be agreed with the Min S&T
- Published as Regulations to the TIA Act

## What: (A Framework)

- What TIA will invest in
- How TIA will manage the risk
- What TIA will expect to achieve
- What criteria will be used to select opportunities
- TIA's stance towards a number of investment related issues

## A Public Document

- Invites people to engage with TIA
- Is the basis for response to appeals or parliamentary queries.

## Each opportunity assessed in terms of:

- The stage in the innovation chain
- The attractiveness of the product or service in the market
- The intensity of social and economic impact that the opportunity is likely to achieve
- Alignment with TIA sectors and national policy
- The technical and commercial viability of the plan and the team
- Prior investment, partnership and leverage of other resources.
- Promotion of BBBEE
- Investment risk and expected outcomes relative to the TIA portfolio
- Potential financial return
- Availability of funds