

Peel Investment Seminar

29 August 2019



WELCOME

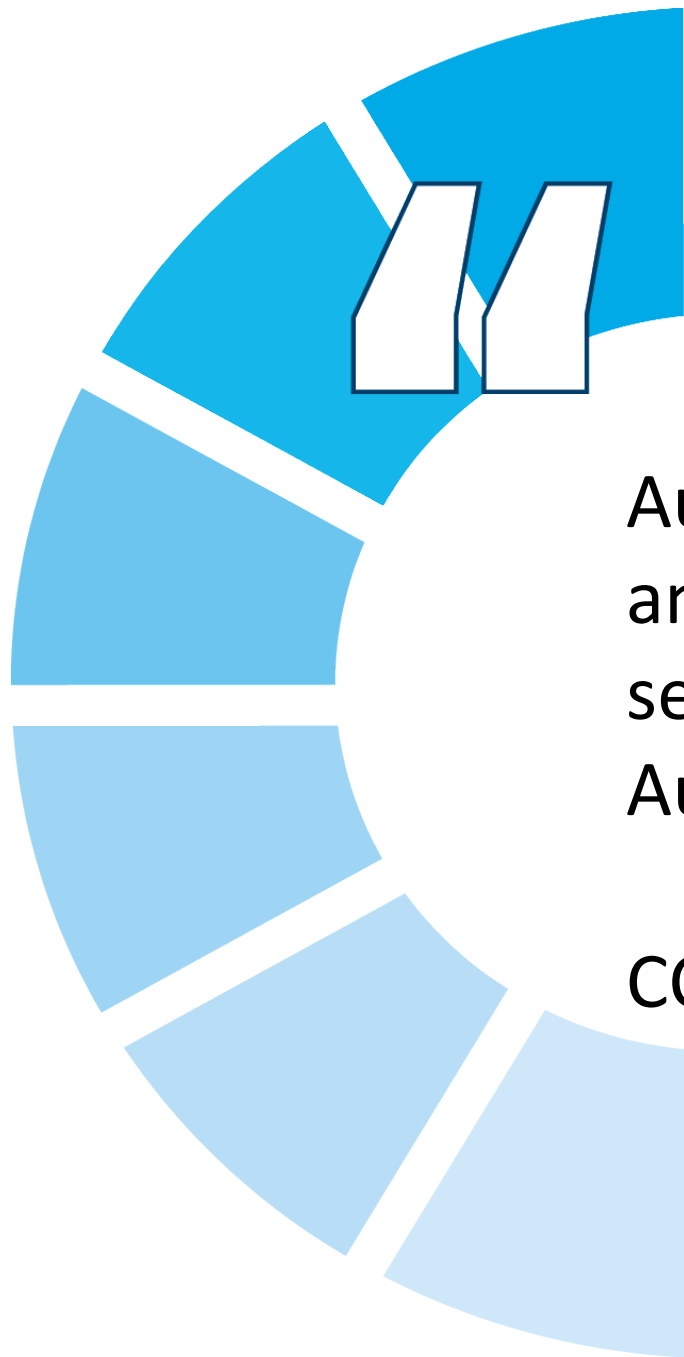
Dr Ian Martinus



Growing Australia's Cybersecurity Sector

The Vertical as a Horizontal

@AustCyber | wacyberhub.org



AustCyber supports the development of a vibrant and globally competitive Australian cyber security sector that enhances Australia's future economic growth

CC

CI

BD

The Thinking

Grow Australian ecosystem

- National network of cyber security innovation nodes, with local capability strengths
- National infrastructure for incubation, acceleration and export capability
- GovPitch and Sky's the Limit
- Proof of concept (PoC) and procurement disruption

Export capabilities

- Access expertise to build repeatable models for scaled service delivery
- Trade delegations and missions to targeted, high value markets
- Cyber security specific cohorts in Austrade Landing Pads - San Francisco & Singapore

Education flow

- Attract and retain best & brightest technical and non technical talent to cyber security to service industry
- TAFEcyber (Cert IV & Adv. Diploma) and pathways to university and entry level/transition jobs
- National program of cyber security challenges (CTF/B-Sides)

Docs

Sector Competitiveness Plan 2018

Industry Roadmap

www.austcyber.com | @AustCyber

Fortescue Future of Mobility Centre Project 412 Living Lab

- March 2019 announcement FMG
- Mobility-as-a-Service (MaaS)
- Autonomous Trucks, Autonomous EV
- **Smart Cities** (infrastructure impact, IDS)
- Personal Identification, Facial Recognition
- Similar to Smart Rider (tag on/tag off)
- Traffic Signalling
- Drone Monitoring & Surveillance
- Force regulatory reform
- Aim – produce consumable product

Fortescue to establish Future of Mobility Centre
in Karratha

Mar 21, 2019





DELIVERED IN PARTNERSHIP WITH



Canberra
Innovation Node



MISSING
PERSONS.GOV.AU



OCT.
11

National Missing Persons Hackathon 2019

by AustCyber - Canberra Cyber Security
Innovation Node

Follow

\$35



Tickets

Description

National Missing Persons Hackathon 2019

'Cyber Trace a Missing Face'

What is the National Missing Persons Hackathon?

The [AustCyber Canberra Innovation Node](#) has partnered with the [Australian](#)

Date And Time

Fri., 11 October 2019

9:30 am – 6:00 pm AEDT

[Add to Calendar](#)

Location

Various Adelaide, Brisbane, Canberra



AustCyber - The Australian Cyber Security Growth Network Ltd

4,766 followers
7h

Thanks to our partners - the [Australian Trade and Investment Commission \(Austrade\)](#), [Australian Landing Pads](#), [SGInnovate](#) and [RSA Conference](#) - for the opportunity to showcase Australian capability last week in Singapore.

We look forward to ongoing collaboration!

[FifthDomain](#), [Entersoft Security](#), [Red Piranha](#), [Aiculus](#), [Cydarm Technologies](#), [SecureStack](#) and [Archimigo](#).

[#OzCyberinASEAN2019](#)



13

[Like](#) [Comment](#) [Share](#)



Dr. Ian Martinus (ACEcD)

Director AustCyber WA Node at Edith Cowan University
1w • Edited

Promoting cybersecurity in Karratha @ ABC studios with Jordan to critical infrastructure companies this week. Studio chat with Prof Craig Valli who leads ECU Security Research Institute & sits on the AustCyber Industry Advisory Group. Thanks also to Mourad @ AISA & Jeff @ Horizon Power for their great support.

[#wacyberhub](#) [#AustCyber](#) [#gameon](#) [#ozcyber](#) [#ECUSRI](#) [#WANewIndustriesFund](#) [#AISA](#) [#HorizonPower](#) [#KDCCI](#) [#ABCKarratha](#)



163 • 10 Comments

The West Australian

<https://thewest.com.au/>

HOME LATEST VIDEO CRICKET NEWS SPORT BUSINESS POLITICS OPINION

The Game | Sign up for free for your chance to win a Mazda BT-50

BUSINESS > ENERGY

Woodside invests in ECU-born Sapien Cyber

Peter Milne The West Australian
Monday, 18 March 2019 3:32PM



📷 Woodside chief technology officer Shaun Gregory Picture: Steve Ferrier

Red Piranha signs US\$5 Million Cyber Security capability partnership at Indonesia-Australia Free Trade Agreement Signing ceremony



Latest Threats, News and Developments



Threat Intelligence Report - August 5-11, 2019



Threat Intelligence Report - July 29 - August 4, 2019



Threat Intelligence Report - July 22-28, 2019



Threat Intelligence Report - July 15-21, 2019



Threat Intelligence Report - July 8-14, 2019

News Categories



**CYBER
CHECK.ME**



Dr Ian Martinus
WA AustCyber Innovation Hub
Director
Joondalup Innovation Hub
Edith Cowan University
i.martinus@ecu.edu.au

INTRODUCTION TO PEEL

Paddi Creevey OAM



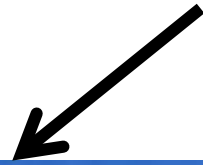
ENTREPRENEURSHIP & INVESTMENT

Katie Bawden - DPIRD



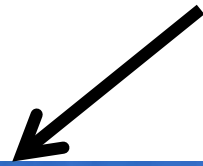
Disclaimer

NOT ME

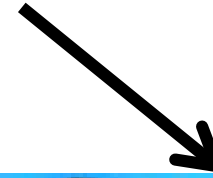


Disclaimer

NOT ME



ME



Overview

- Part 1 – Role of entrepreneurs in innovation and economic development
- Part 2 – Financing entrepreneurs and innovation

Importance of innovation

“The general consensus...is that the driving force behind long-term economic growth is science, technology and innovation in its different forms and facets” (OECD, 2011).

Importance of innovation

“The general consensus...is that the driving force behind long-term economic growth is science, technology and innovation in its different forms and facets” (OECD, 2011).

85%

Start-ups

Start-ups create over half
of new innovations

Startups

Startups create over half
of new innovations

But, they also fail ...
a lot!



Gazelles



Gazelles



AKA: Scale ups/ high growth firms

**6% of business
community**

50% of all new jobs

**Create over 80% of
regional jobs**

([OECD](#), 2014)

Gazelles are not...



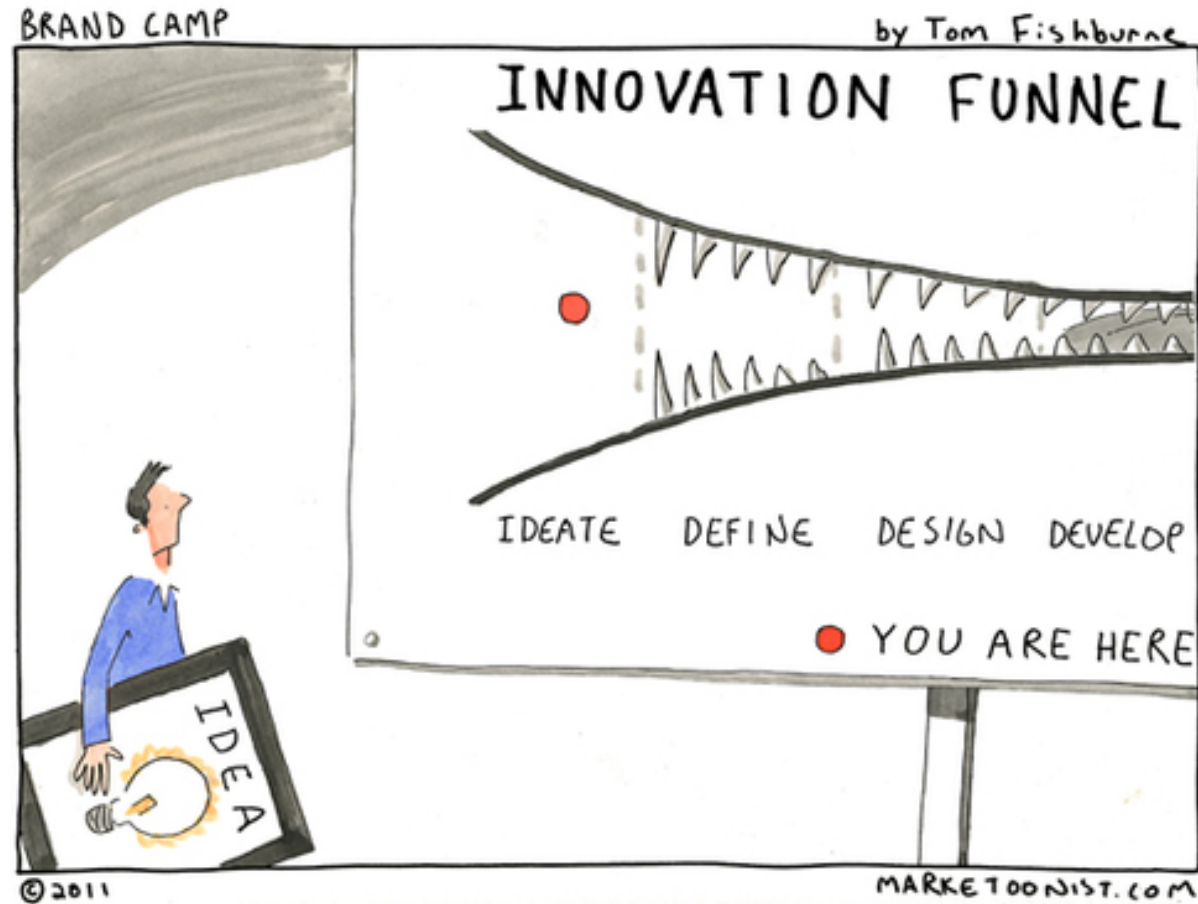
What we do know

- Innovation drives economic growth
- Start ups are the most innovative
- Around 80-90% of Start ups fail
- Only 6% of firms become gazelles
- Gazelles are typically young businesses

What else do we know?

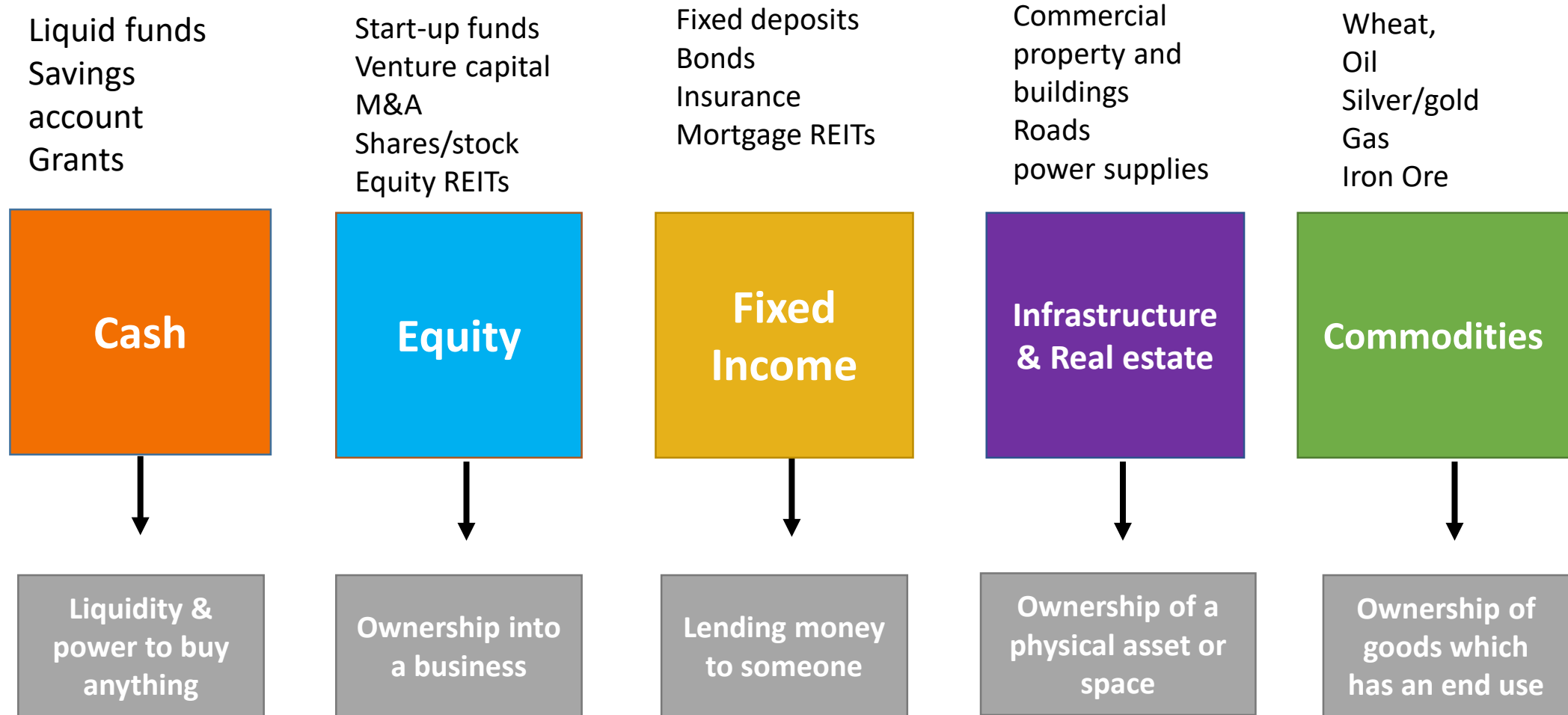
- By 2025, 75% workforce will be millennials
- Only 2% jobs come from “hunting” outside region
- 40% of US GDP is by firms that didn’t exist 15 yrs ago and 50% will be replaced in 10 years
- Average age of firms in S&P is shrinking
 - 1965 - 33 yrs; 1990 - 20 yrs; 2026 - 14 yrs est.

The Pipeline – How do we create it?

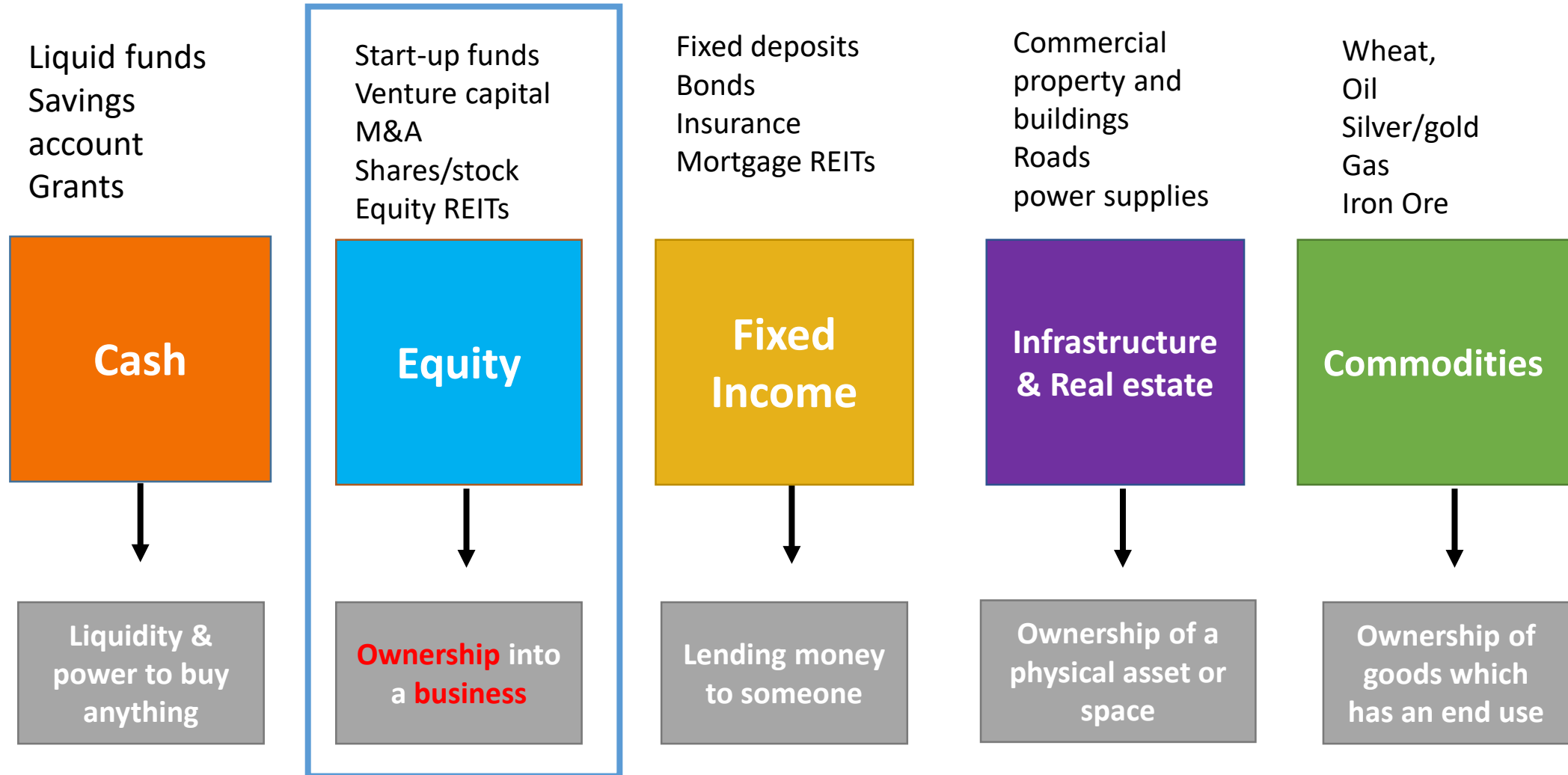


Part 2 - Financing Entrepreneurs & Innovation

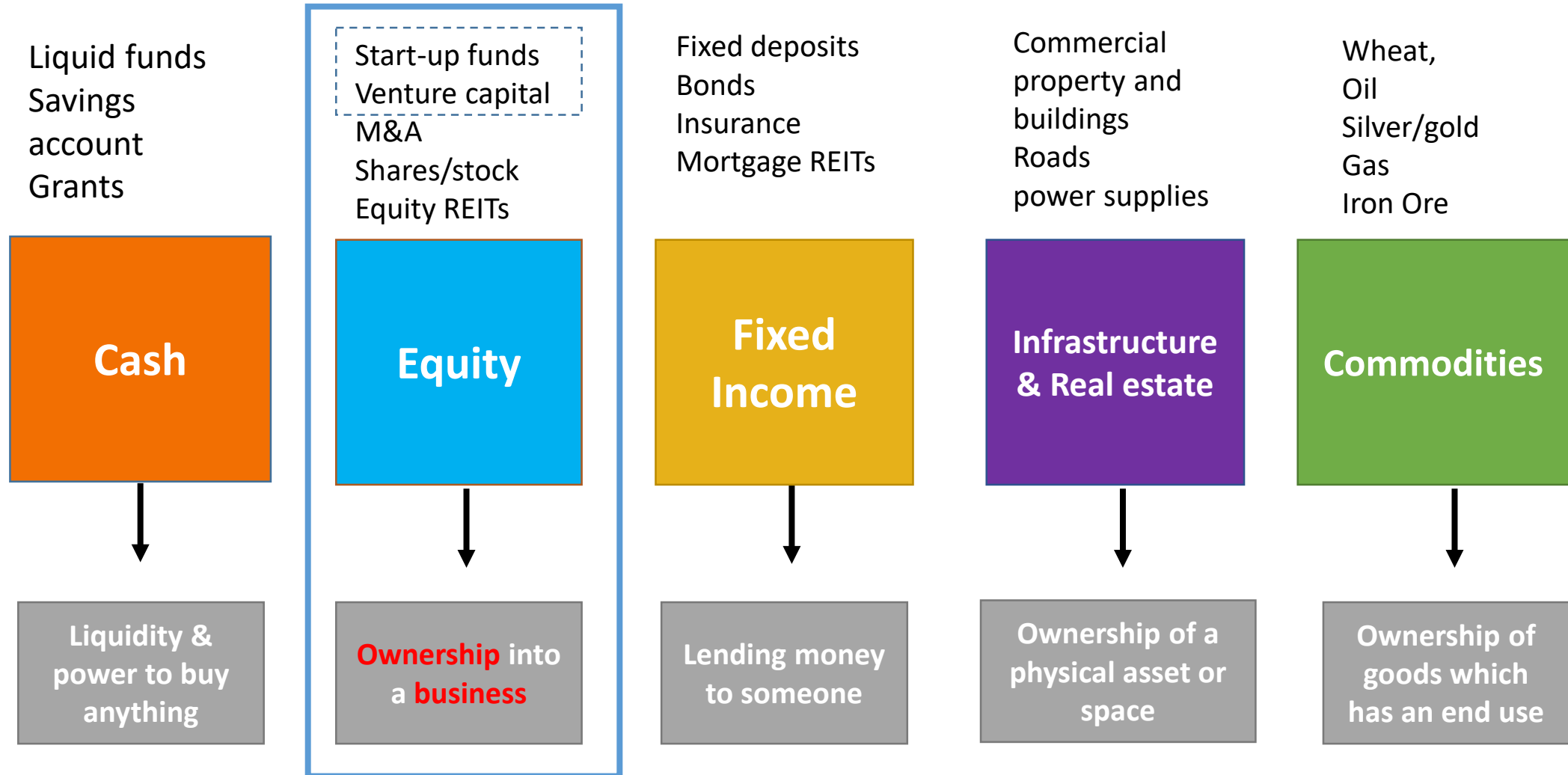
Investment Asset Classes



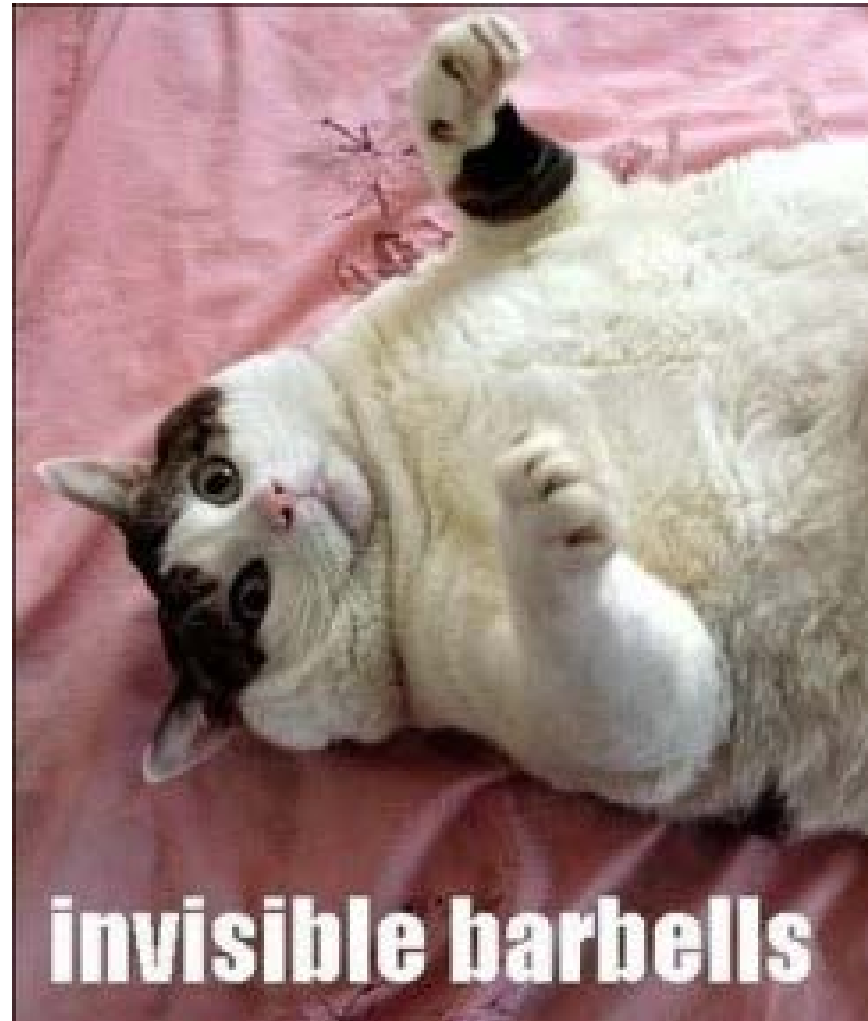
Investment Asset Classes



Investment Asset Classes



Tangible vs Intangible Asset



Tangible vs Intangible Assets

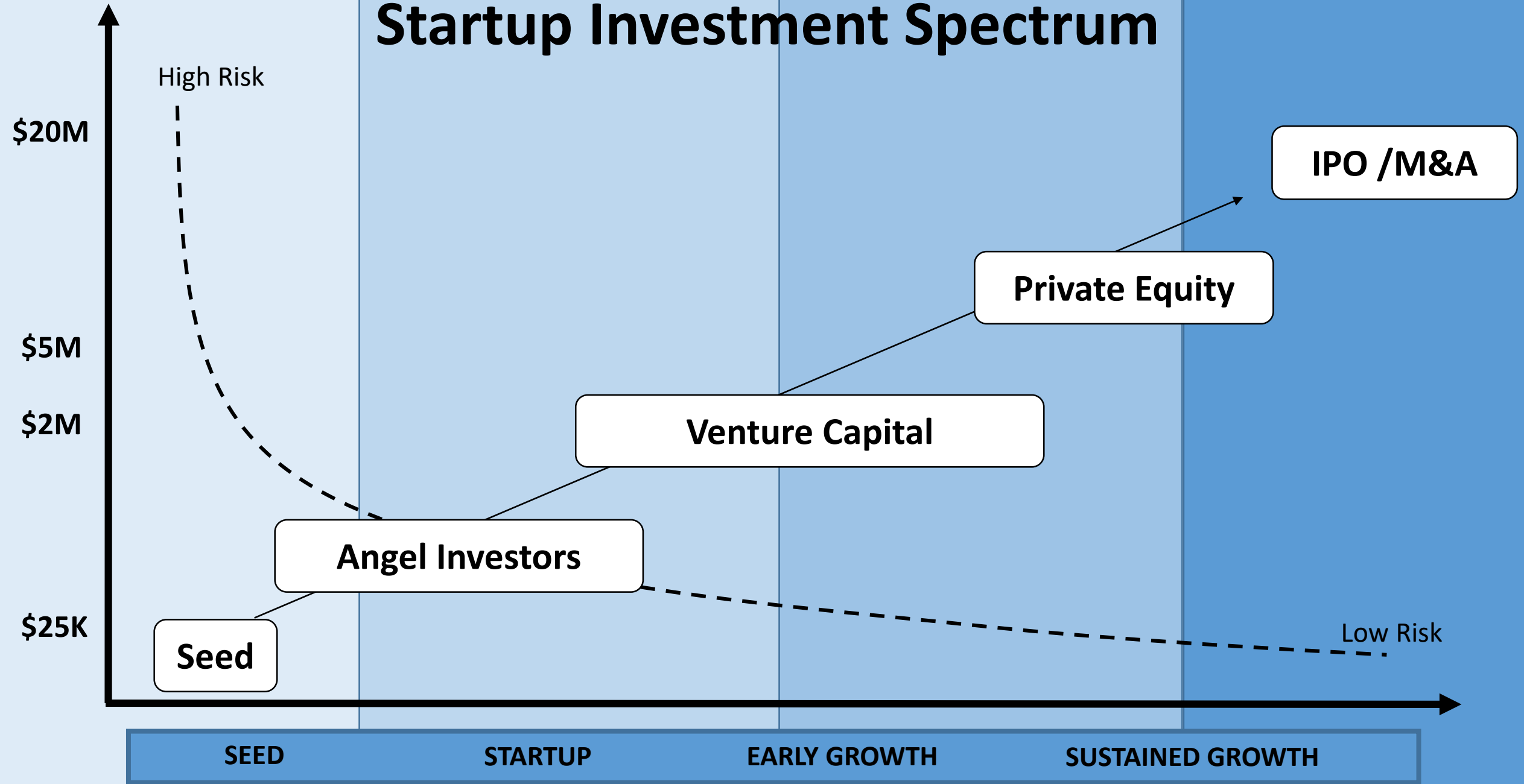
| Tangible Assets | Intangible Assets |
|--------------------|--------------------------------|
| Cash | Patents & copyright |
| Plants & Machinery | R&D & skills |
| Vehicles | Brand value |
| Buildings | Software |
| Stock | Business processes & knowledge |
| Equipment | Customer data |
| Computers | Goodwill |

Four Ss

Properties of intangibles- the four “S”s

1. **Sunk costs** - investment cannot be recovered
2. **Scalable** – fixed investment e.g. in Uber software, can be scaled
3. **Spillovers** – knowledge investment can be used by others
4. **Synergies** – investment synergies ie. most valuable when linked with other capital

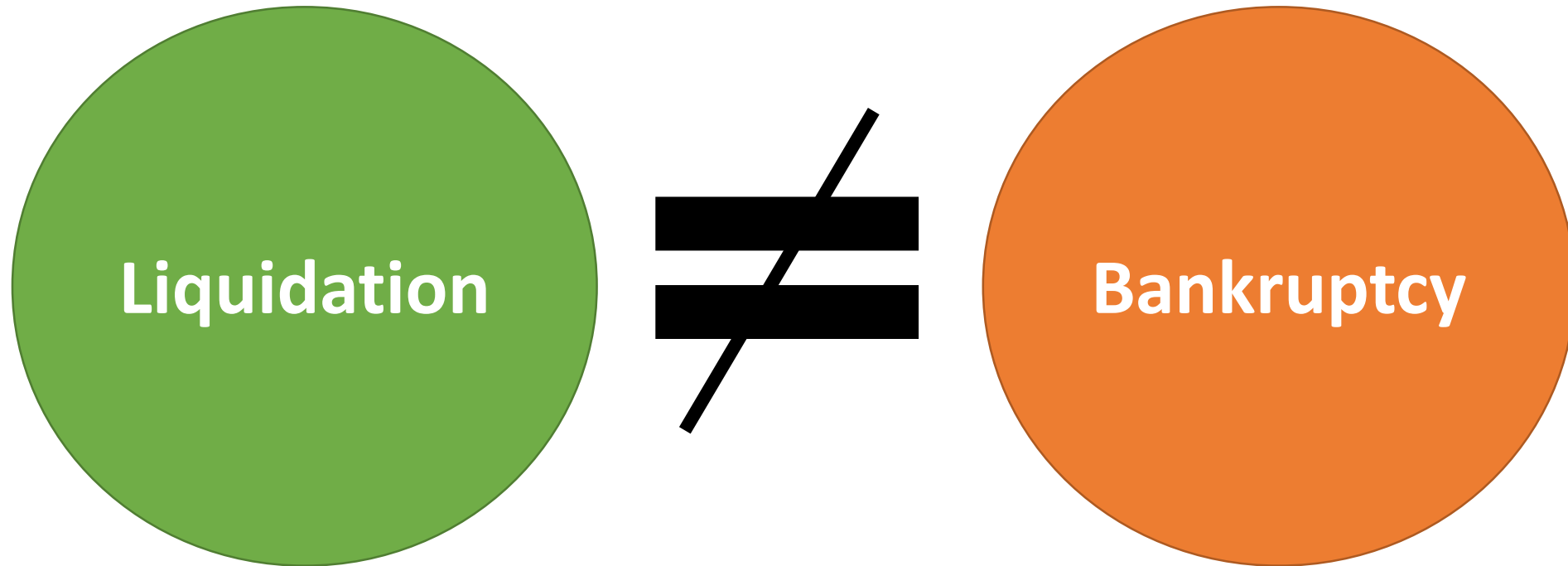
Startup Investment Spectrum



Angel Investment vs Venture Capital

- An individual
 - Under \$1M investment
 - No control or subsequent funding rounds
 - Relatively simple terms for investment
 - Pre revenue - very high risk investment
- A company
 - \$1M+ investment
 - Lengthy due diligence process
 - Requires board seat & company control
 - Revenue stream proven but profitability not assured – comparatively less risky

Exit strategies



Why this type of capital is important

The Pitch Slap

Keeping startups
funded since
entrepreneurs
started asking



Status Quo



“The reality is that Australia’s venture capital sector is still far too small for a country with bold ambitions to be an innovation-leader.”

Yasser El-ansary CEO, AVCAL

"I'm telling you boss, this multimillion dollar investment will pay off huge once someone starts using it."



som^{ee}cards
user card

Thank you!

CASE STUDY 1

Asher Vukelic - South West Angels





South West Angels

CASE STUDY 2

Kylie Hansen - Impact Seed





Western Australia's peak capacity builder for impact investment and social enterprise development

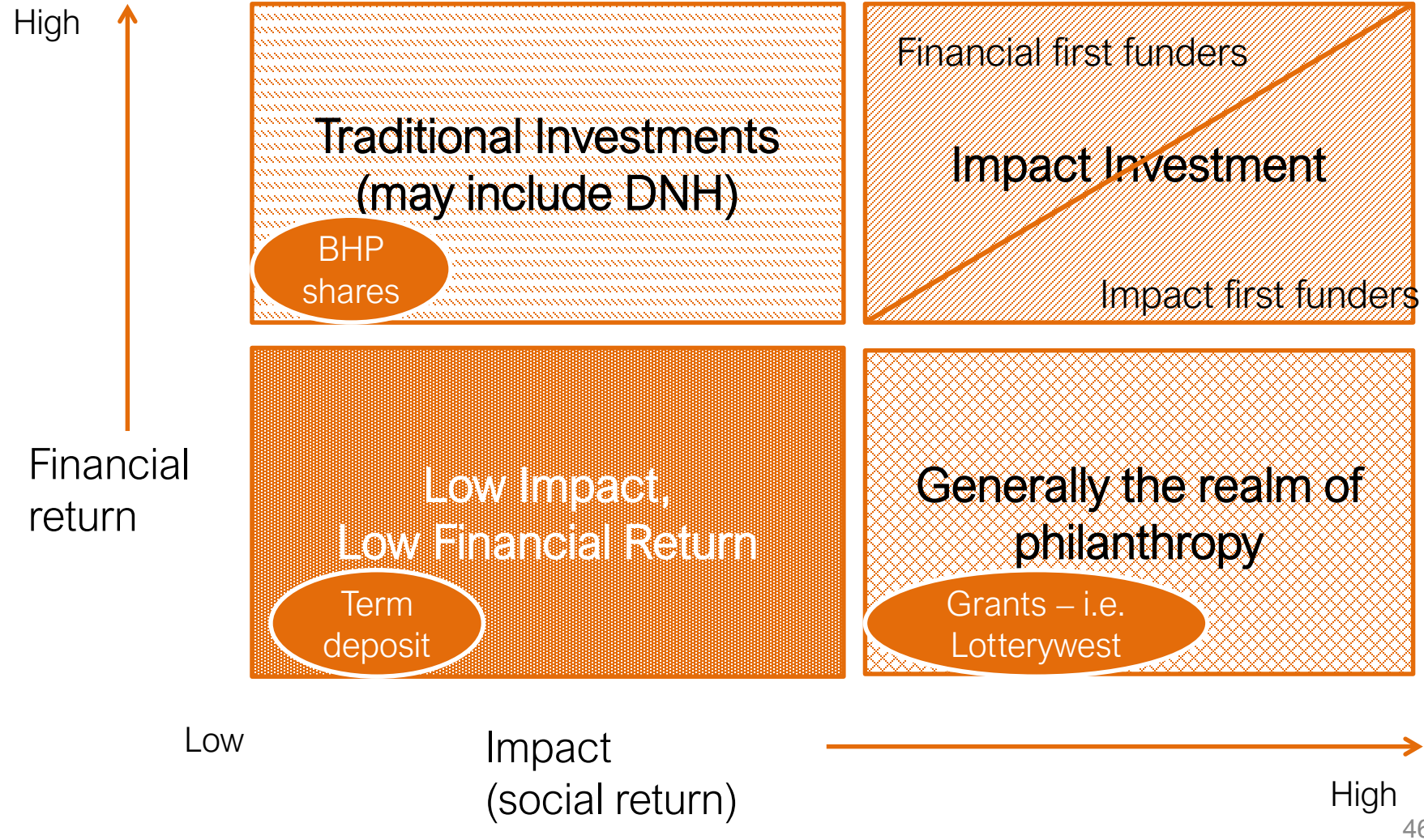




Impact Investment:

An introduction

Impact Investment



The convergence of NFP and FP



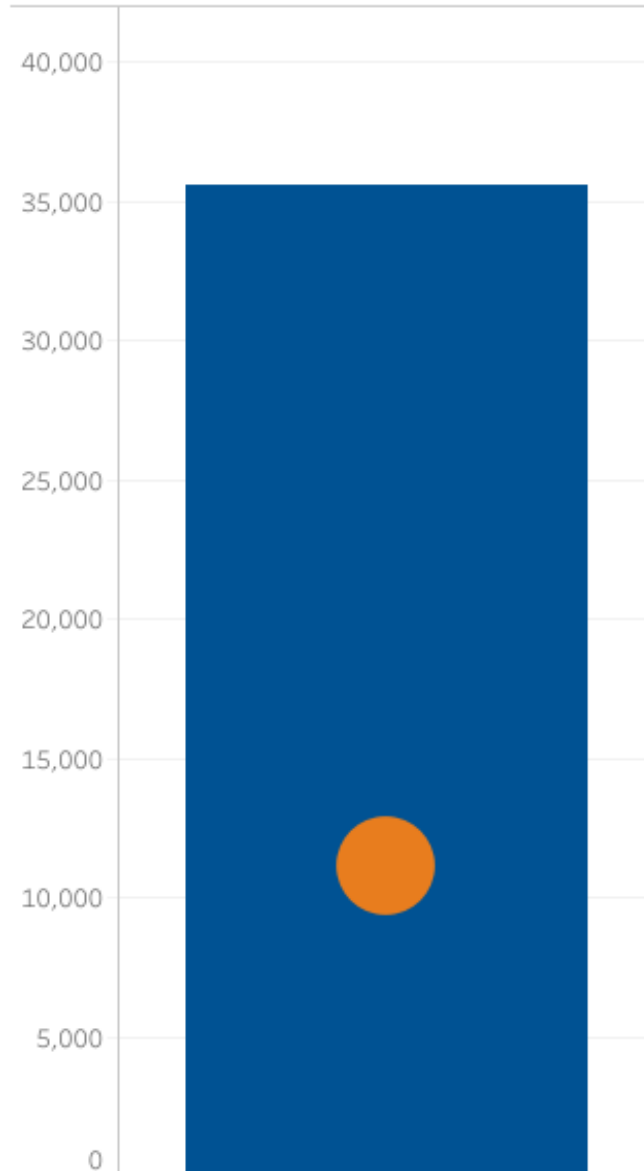


Impact Investment:

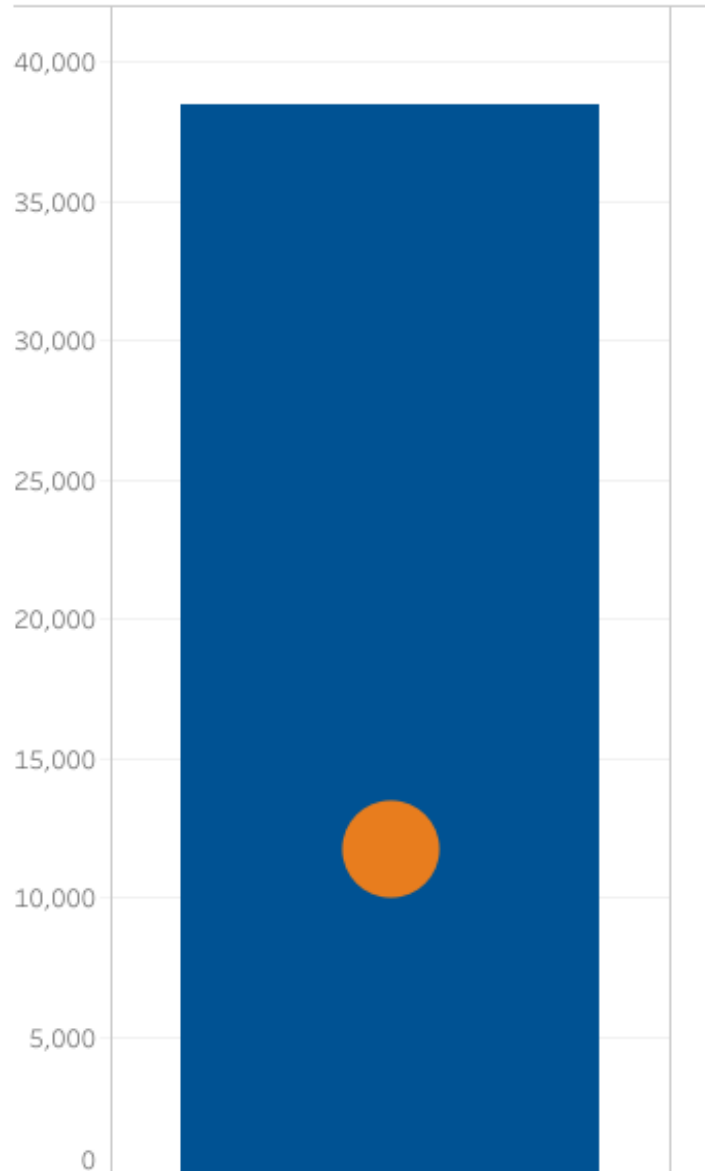
State of the market – internationally,
nationally, locally

2017 Investment Activity

n = 225



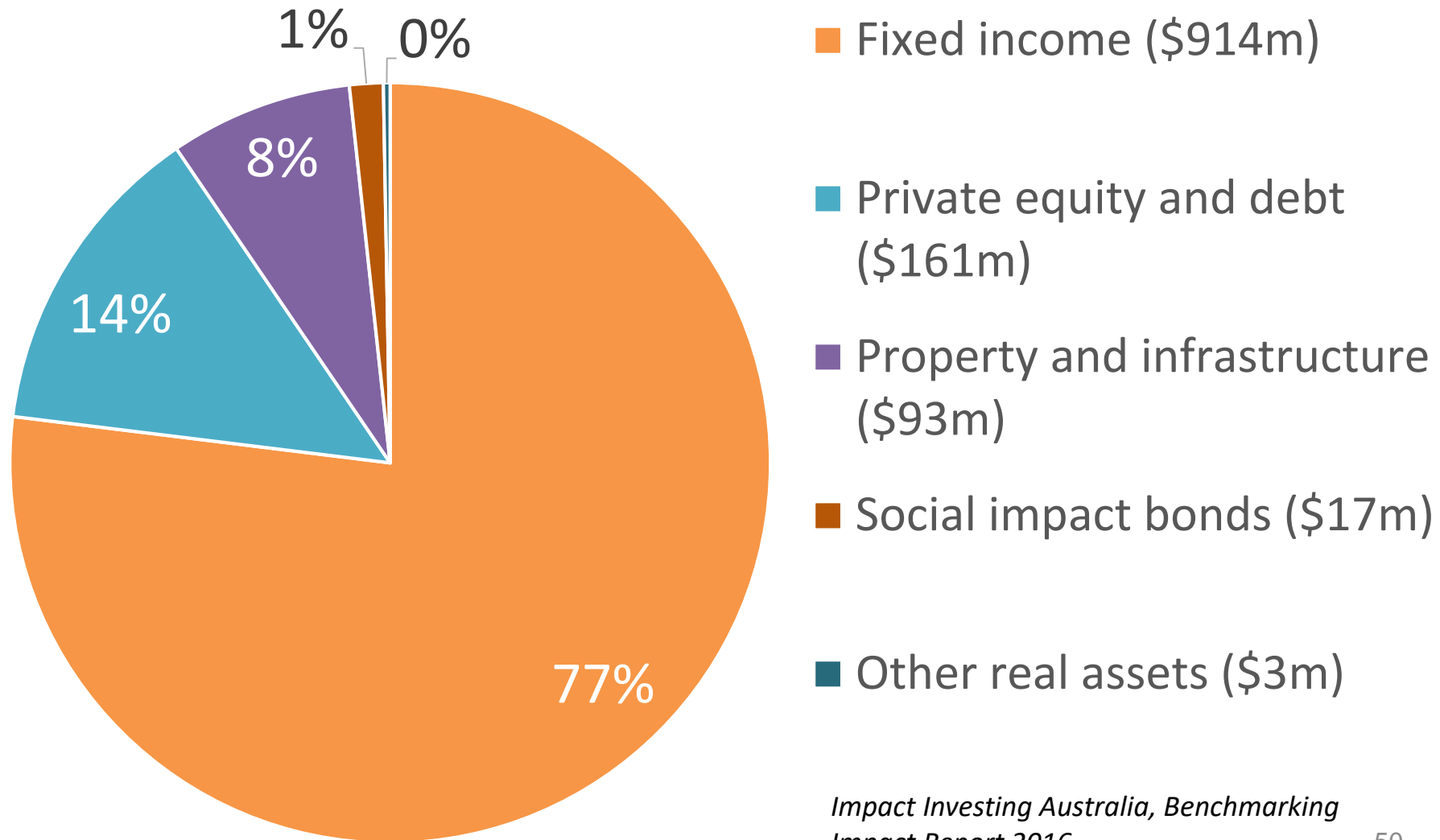
2018 Planned Investment Activity



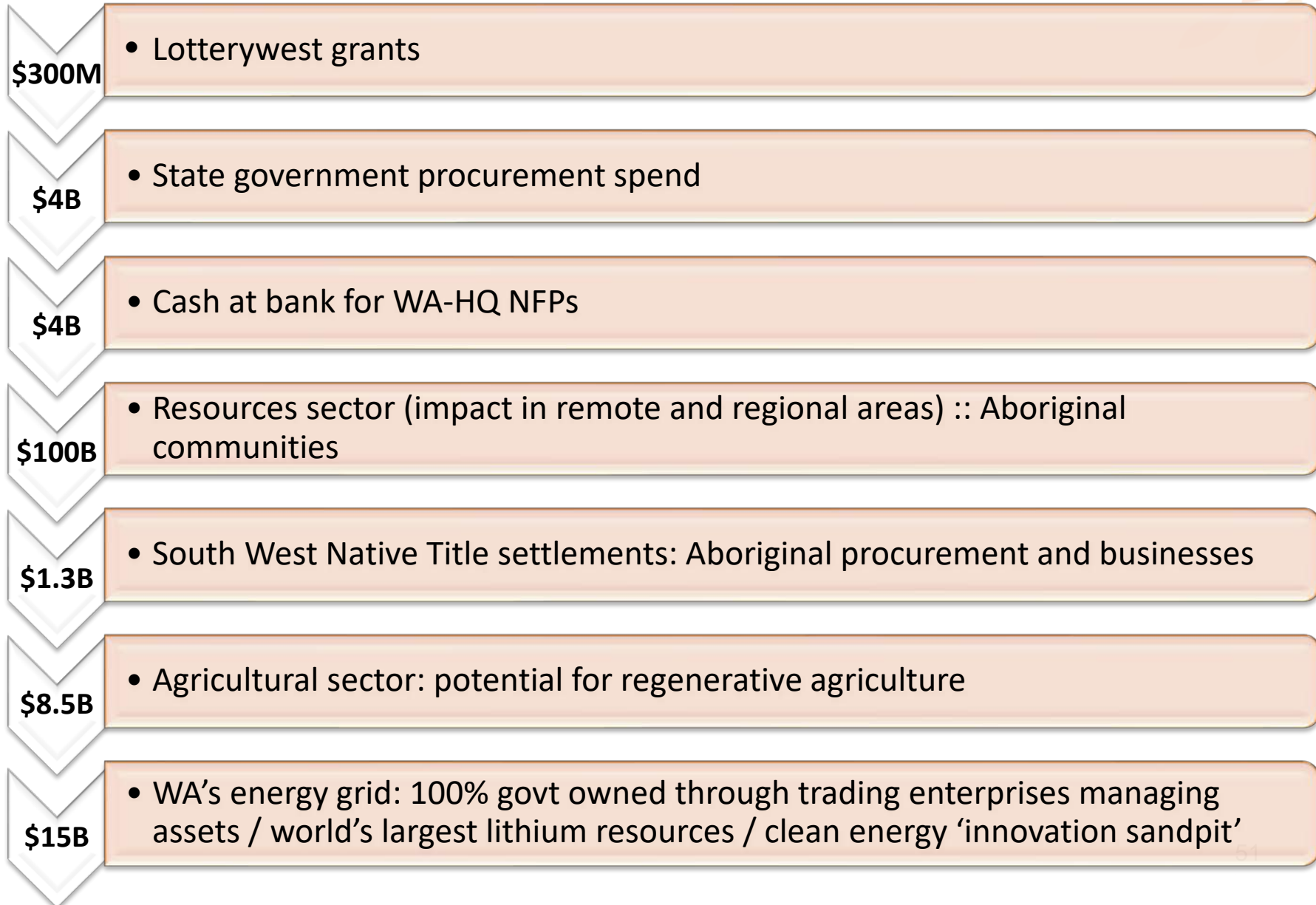
Note: Excludes two large outliers and two respondents that did not report 2017 investment activity.

Source: Annual Impact Investor Survey 2018. The GIIN.

State of the market nationally



State of the market in WA

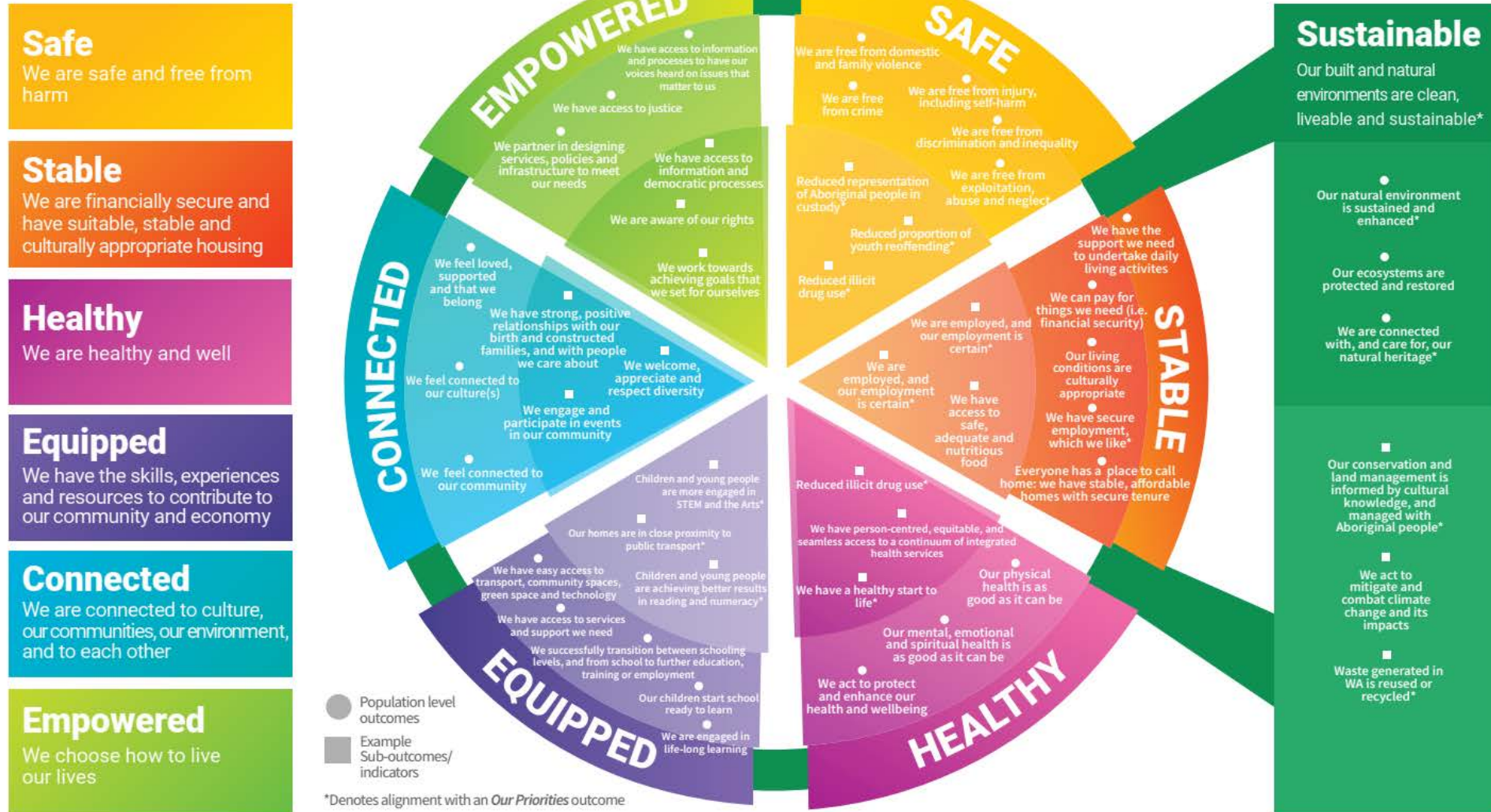


Outcomes Measurement Framework WA Prototype 5:

June 2019

The Framework is a hierarchy of outcomes and associated indicators, providing the architecture for a whole-of-government and a whole-of-sector approach to service delivery across agencies and organisations. The intent of the Framework is to orient our focus to the **outcome**, rather than the output; and to the **person**, rather than to the program.

Domains and outcome statements:





Impact Investment:

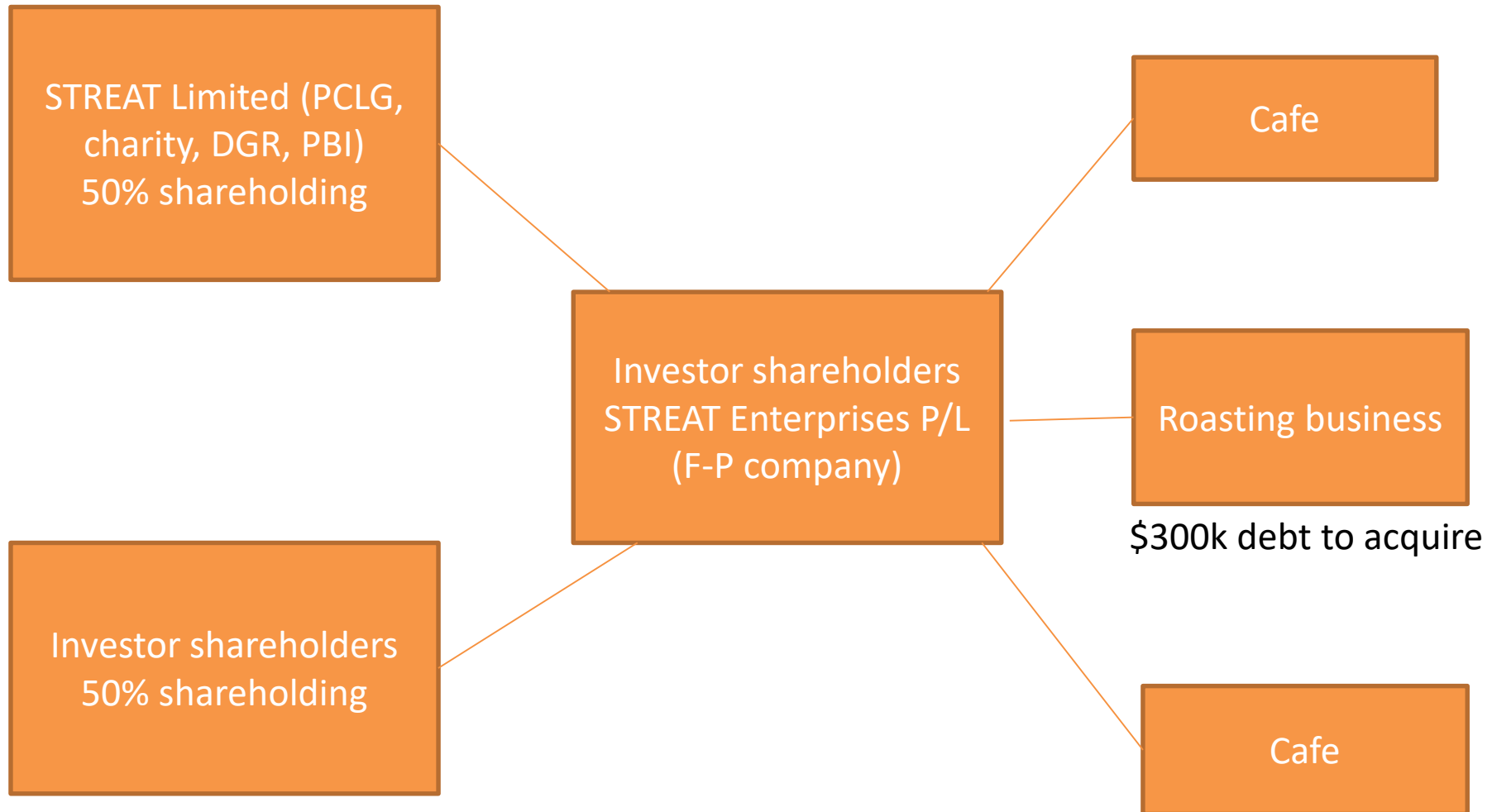
Types of Impact Investment

Goodstart

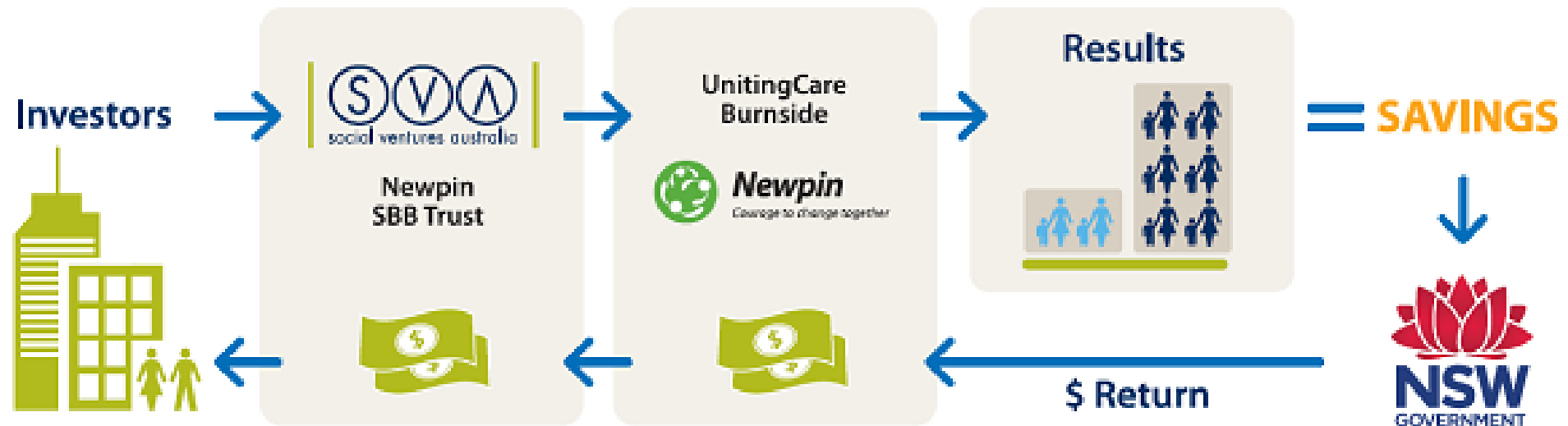


- Collapse of ABC Learning
- Arguably Aus's largest Social Enterprise
 - 73,000 Children
 - 60,000 Families
 - 13,000 Staff
 - 633 ELCs: 130 in disadvantaged areas
- NFP (so, debt only)
- \$95M raised in 2008

**By 2014 Goodstart ran an operating surplus of \$40M
and \$43M of debt was repaid**



Social Impact Bond - Newpin



INVESTMENT: \$7M

SOCIAL RETURN:

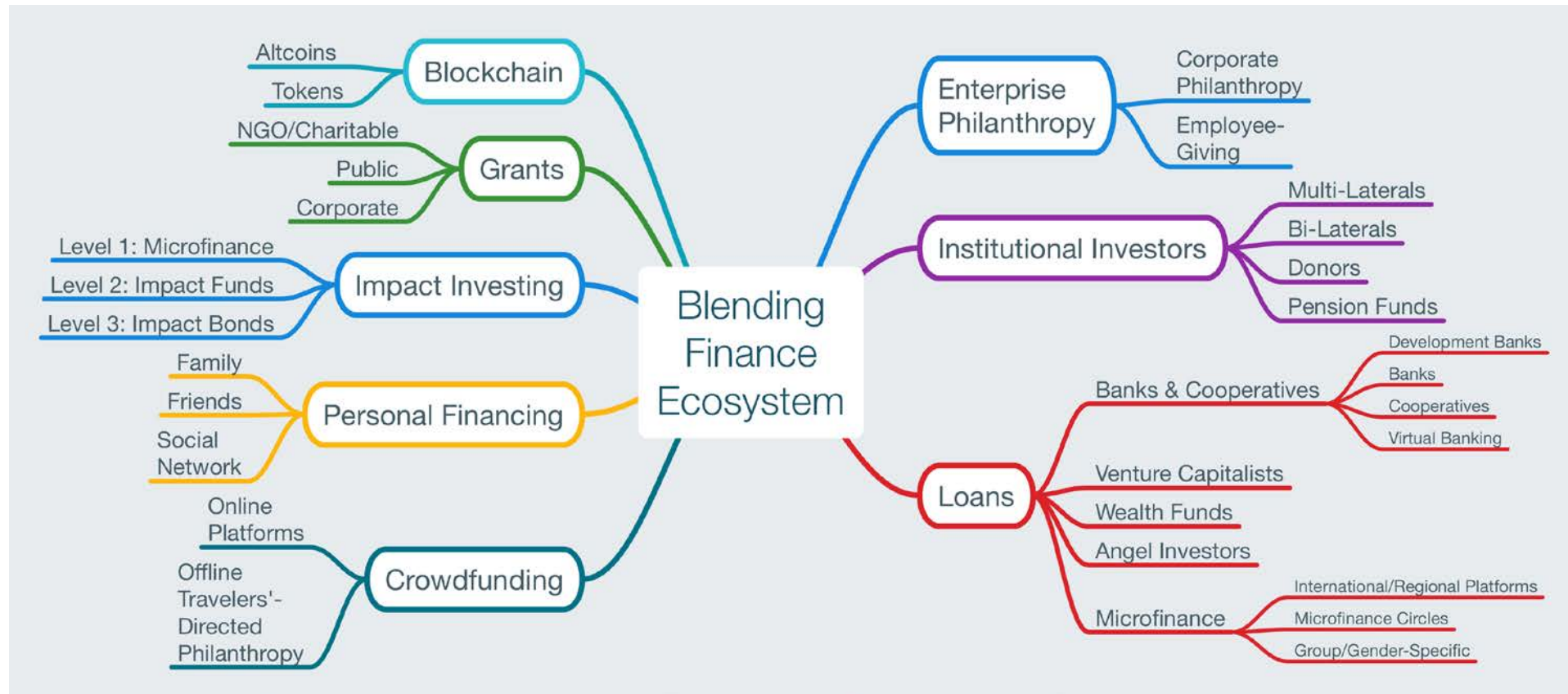
Restorations that last >12mths

FINANCIAL RETURN: Based on restoration – 3-15% PA

Role of:

- Deloitte
- NSW Children's Court

Blended Finance



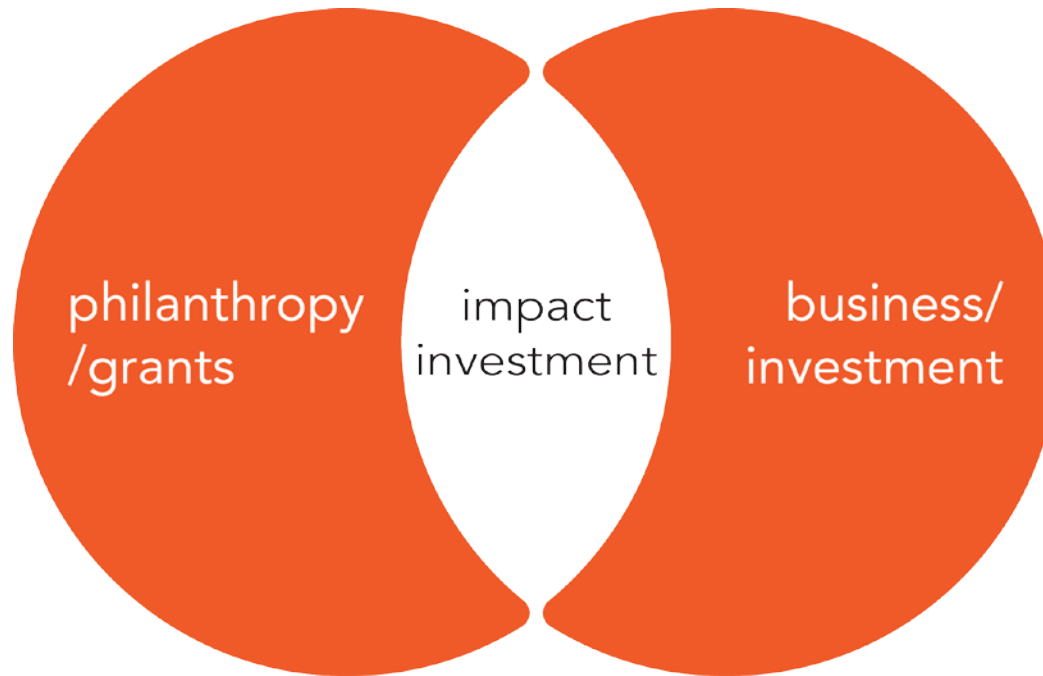
Source: thebclab.com (note – American)



About Impact Seed: What we're interested in

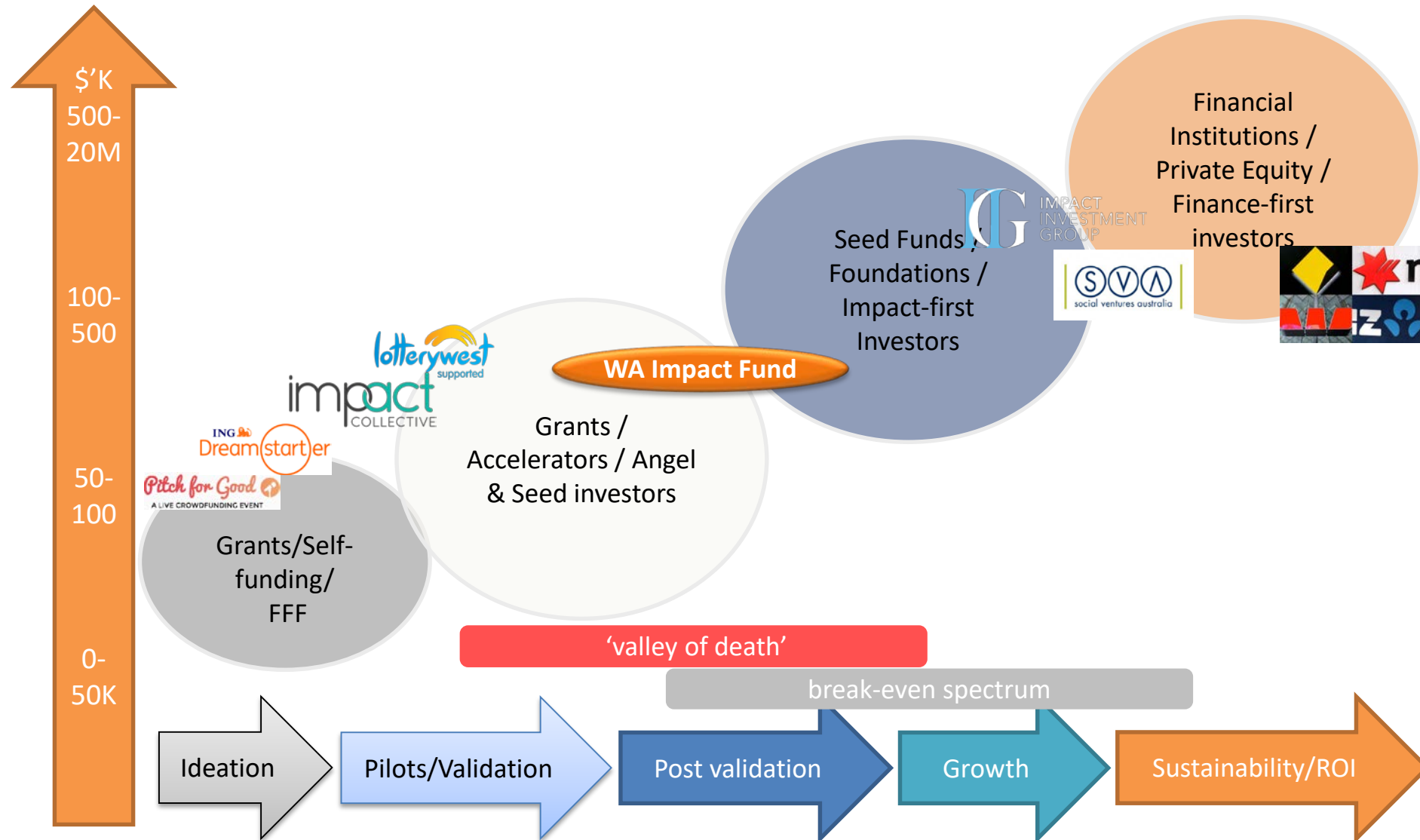
About Impact Seed

WA's only dedicated capacity builder for impact investment and social enterprise development.



Building market supply and demand for impact investment with not-for-profits, social entrepreneurs, government, corporates, foundations and family offices.

Venture funding landscape and gaps in WA



Traditionally...

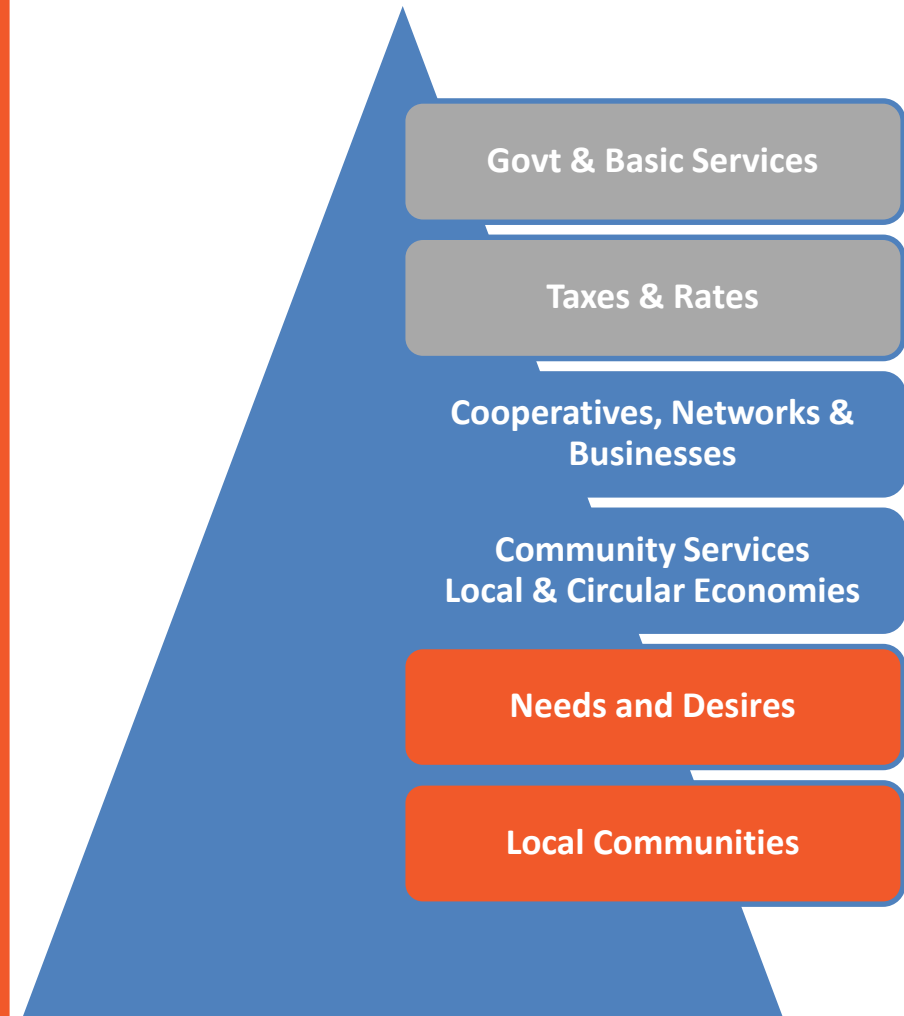


Drivers: Jobs & Growth

to deliver: company profits and tax revenue;

to fund: community services

Could we...



Drivers: Belonging & Purpose

to inspire: community-centred thinking

to recreate: local economies, integrating social inclusion
and connection



thank*you*

CASE STUDY 3

Tash Ayers – AgriStart Pty Ltd





**GROWING THE FOOD INDUSTRY
THROUGH SKILLS DEVELOPMENT,
ENGAGEMENT AND INNOVATION**

Agtech investment hype...

“\$100 billion industry by 2030”
“connectivity”
“traceability”
“value-add”

What’s new about innovation in
agriculture???

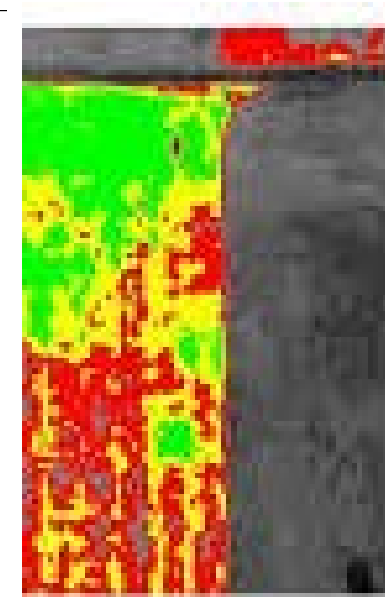
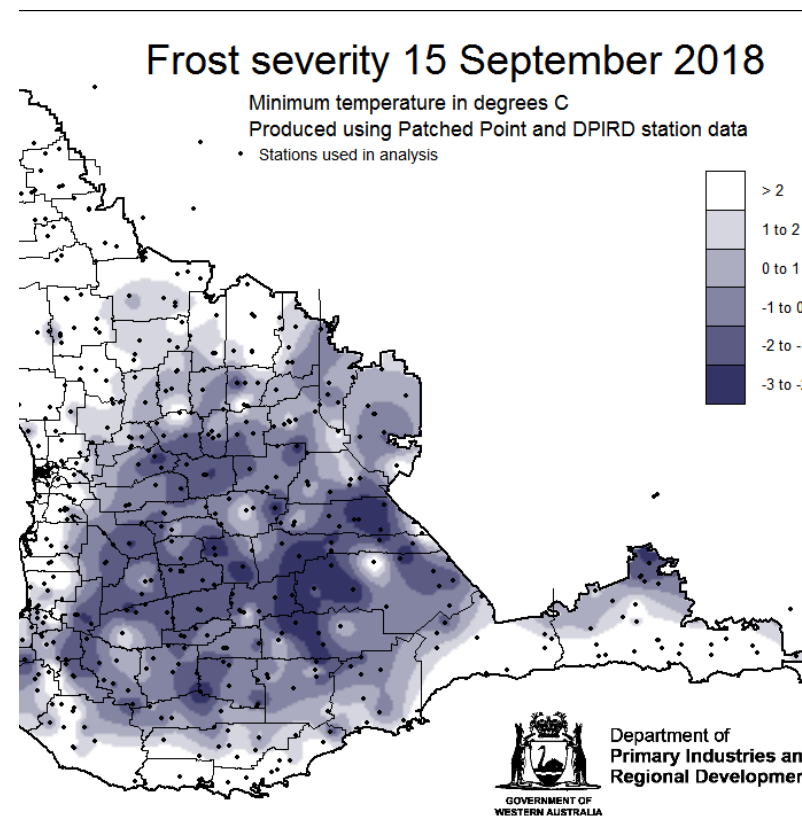
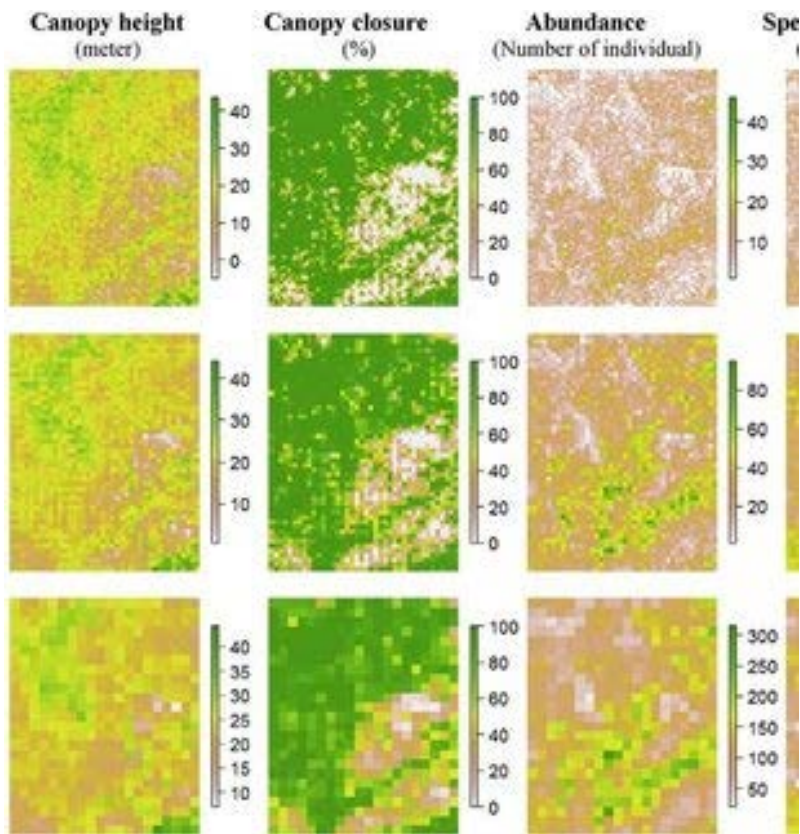


So why don't we have a \$100 billion industry yet???

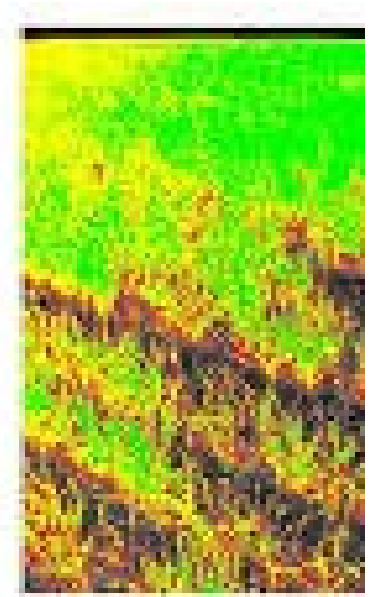


Mic Fels @ipaddockapps Apr 21

To every agency that wants to ask why adoption of Precision Ag is so slow. Its because the nerds who develop it think this is acceptable. When will they realise farms don't have an IT department



negatively recognized that the
the road was not indicative
mean will likely produce less



We walked to this location
images and found much of
shown in the image at left

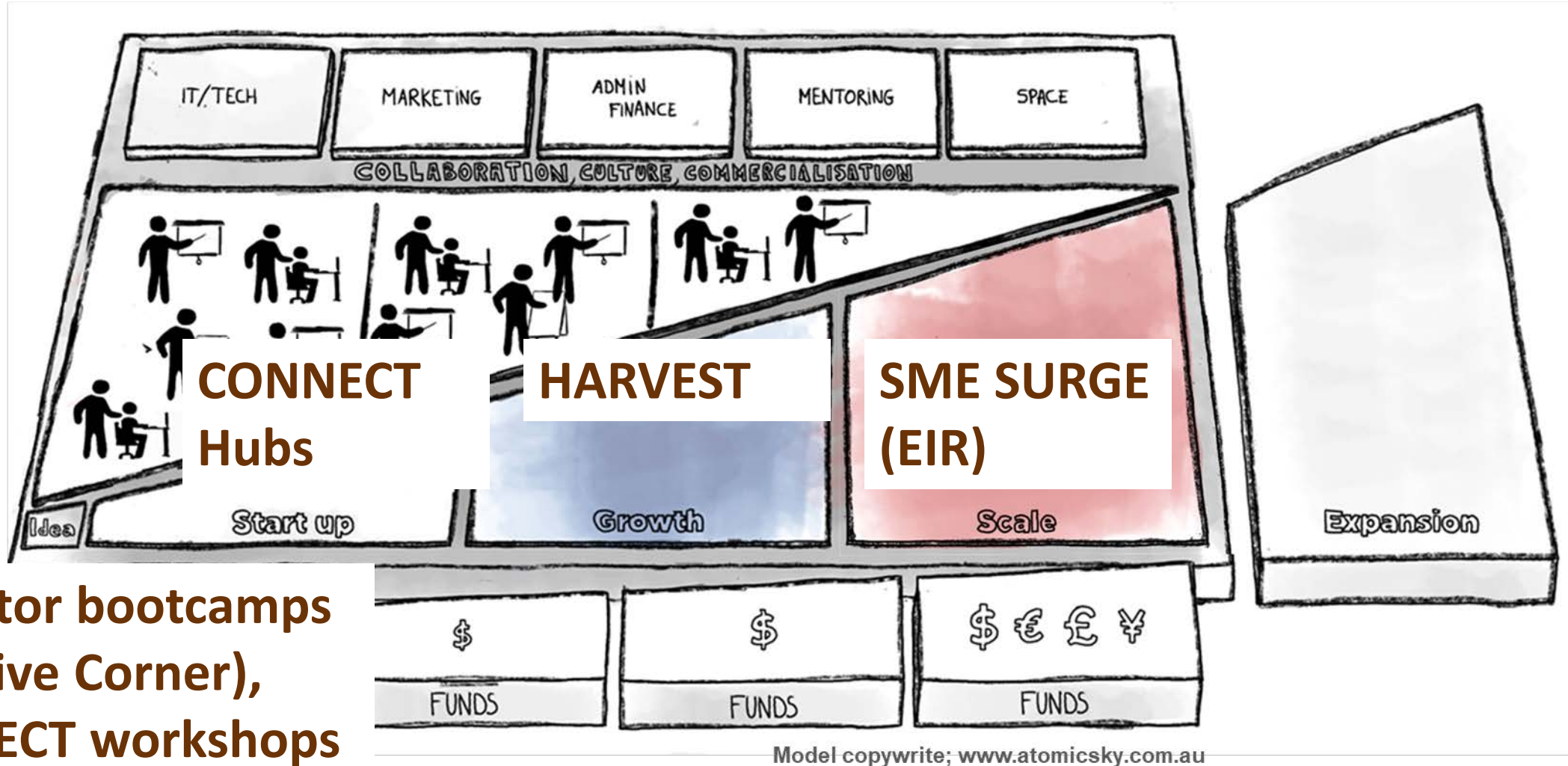
From pretty maps to “decision agriculture”

**Start-ups, SMEs
Researchers**



**Farmers, Agri-Corporates,
Industry bodies**

Innovation Ecosystem



Validator bootcamps
(Creative Corner),
CONNECT workshops

HARVEST Accelerator Programs



30 Innovative WA businesses completed
>50 expert guest speakers and mentors
>500 attendees across the sector at HARVEST networking events

Short-term, 'accelerate' the growth of an existing company

HARVEST Business Model: Partnerships

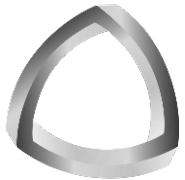
Free for cohort and no equity



Department of
Primary Industries and
Regional Development



PARTNERING WITH
MURESK
INSTITUTE
CULTIVATING MODERN AGRICULTURE



TRIANGLE EQUITY PARTNERS

WRAYS

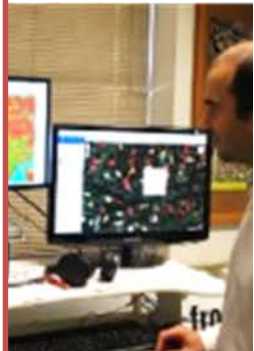


Deloitte.



Program Outcomes: Alumni

- New customers and major supply agreements
- New partners, mergers
- Capital investment
- Grant funding
- Media exposure
- Awards e.g. Agriculture and Aquaculture Entrepreneurship, Export Market, 40/40, evokeAg,
- Guest speaker invites at events
- Accepted into national programs e.g. SproutX and Rocketseeder
- International exposure e.g. Austrade landing pads





Australian Government

Department of Industry,
Innovation and Science

Business

CONNECT:

REGIONAL INNOVATION HUBS

CONNECT
REGIONAL INNOVATION


INNOVATION
HUB
WHEATBELT

CONNECT
REGIONAL INNOVATION

INNOVATION
HUB
SOUTH WEST

CONNECT
REGIONAL INNOVATION

INNOVATION
HUB
GREAT SOUTHERN

Longer-term, 'incubating' innovative ideas, building business 



Incubator Overview

- ✓ 2 day business bootcamp
- ✓ 6 months access to co-working space
- ✓ Monthly business masterclasses
- ✓ Mentoring with business experts
- ✓ Regional showcase event and local pitch night



Connections
Contacts
Culture
Confidence



FIND BY POSTCODE

REGIONAL INNOVATION SHOWCASE

PERTH TOWN HALL

2 DECEMBER 2019

3PM - 6PM

AS PART OF WEST TECH FEST



SUPPORTED BY THE DEPARTMENT OF INDUSTRY,
INNOVATION AND SCIENCE THROUGH INCUBATOR
SUPPORT INITIATIVE FUNDING AS PART OF THE
ENTREPRENEURS' PROGRAMME.



Agriculture Investment Opportunities



Opportunities for Australian Agtech

\$240 bn addressable market

- **Precision fertilizer application:** \$65 bn addressable market, 18% yield improvement
- **Precision planting:** \$45 bn addressable market, 13% yield improvement
- **Compaction reduction via a fleet of smaller tractors:** \$45 bn addressable market, 13% yield improvement
- **Precision spraying:** \$15 bn addressable market, 4% yield improvement
- **Precision irrigation:** \$35 bn addressable market, 10% yield improvement
- **Field monitoring, Data management, and other:** \$35 bn addressable market



1. UVP: Solve problems that need solving...
2. Economies of scale
3. Market Potential



What makes AGRICULTURE different to other sectors?

WA convoy delivers much-needed hay to drought-stricken NSW farmers

ABC Central West By Kate Cowling, Tim Fookes and Joanna Woodburn

Updated 17 Aug 2018, 3:14pm



People.





WHERE TECH

AGRICULTURE

www.agristart.com.au

info@agristart.com.au

CASE STUDY 4

Roban-Lynne Clarke - AusIndustry



AusIndustry – Support for Business

Department of Industry, Innovation and Science



Regional Manager Southern WA

- Roban-Lynne Clarke
- 0429 689 665
- roban-lynne.clarke@industry.gov.au



PANEL Q&A

Facilitated by Ian Martinus



CLOSING

Paddi Creevey OAM



NETWORKING!

Please enjoy drinks & canapes

