

HUNTER REGION ECONOMIC INDICATORS SPECIAL FOCUS: INNOVATION

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HUNTER RESEARCH
FOUNDATION CENTRE



THE UNIVERSITY OF
NEWCASTLE
AUSTRALIA

ECONOMY & INNOVATION

A blue pen is pointing at a line graph on a screen. The graph shows a fluctuating line with a dashed horizontal line. The background is dark with some blurred lights.

1. Economic state of play
2. Why play the innovation game?
3. Hunter's innovation performance
4. Innovation ecosystems
5. Hunter iF Project

SUMMARY – 2018 Q3



- Full-time jobs growth & unemployment falling
- Confidence in regional economy
- Renewed activity in the mining sector sustained

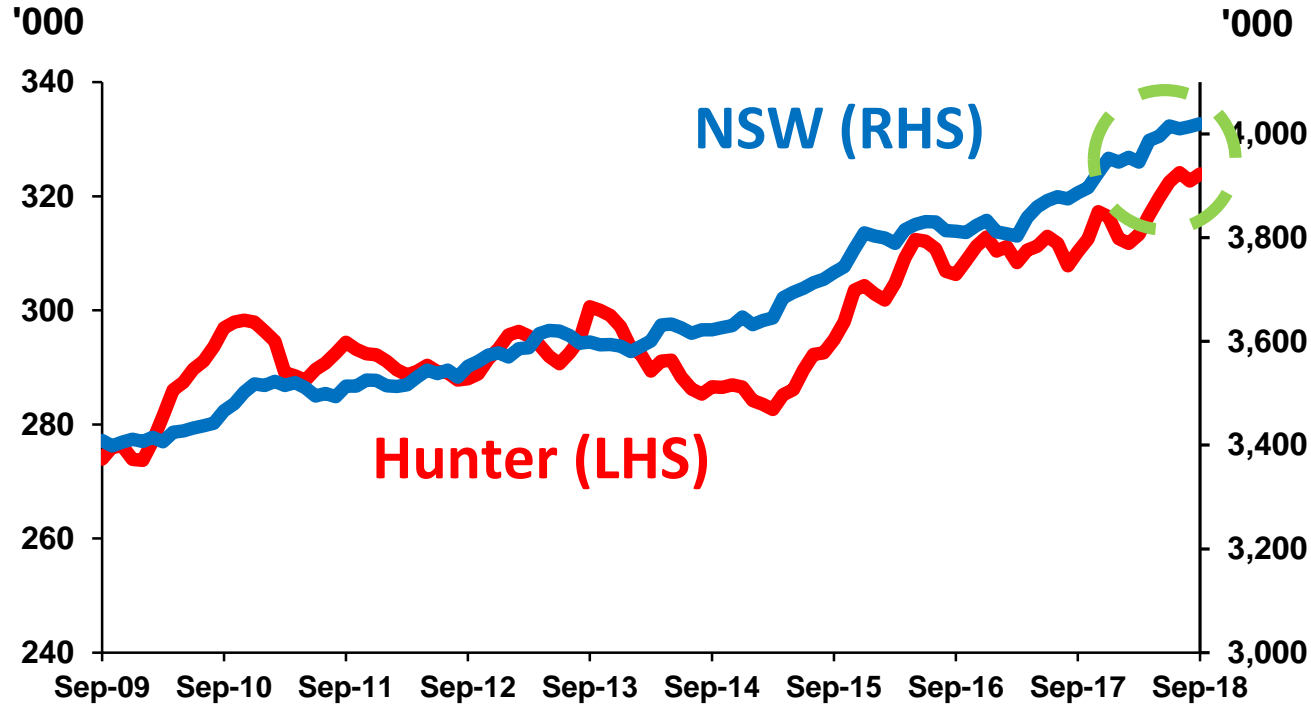
- Business confidence and performance



- House prices & investor activity
- Consumer spending slowing second half 2018
- New housing approvals trending downward

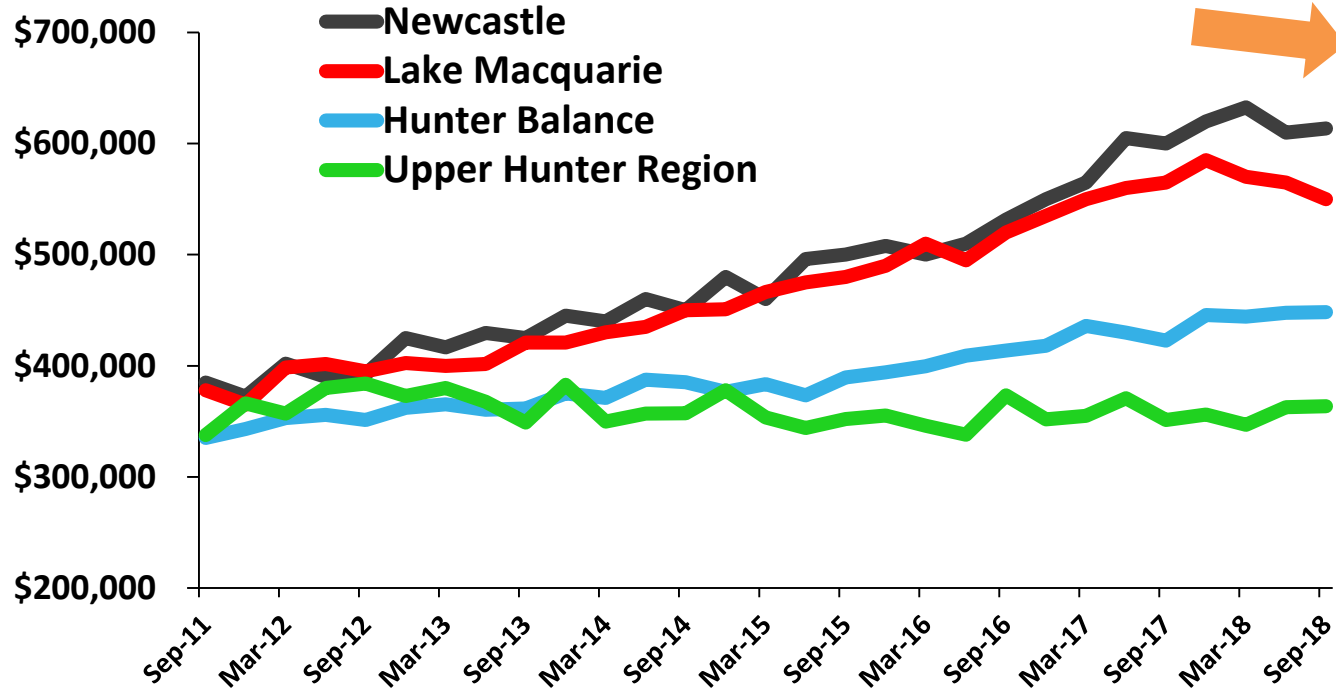
LABOUR MARKET

EMPLOYMENT



HOUSING MARKET

HOUSE PRICES



The image features a dark blue background with a complex network of glowing, interconnected lines and nodes. The lines are bright blue and create a sense of depth and connectivity. Several large, dark blue spheres are positioned at various points within the network, acting as nodes or hubs. The overall aesthetic is futuristic and technological. In the center, the word "INNOVATION" is written in a clean, white, sans-serif font, enclosed within a dark blue rectangular box that blends with the background's color scheme.

INNOVATION

WHY PLAY THE INNOVATION GAME?

Clark *et al.*, (2018) summarise long and short term trends driving the rise of the innovation economy over the last decade:

1. ***Competitive pressures***
2. ***Technology***: a new cycle of technologies with exponential effects
3. ***Speed of change***: accelerated business cycle and pace of technology change
4. ***Economic diversification and resilience***
5. ***Sustainability***: recognition of technology as a means to achieve sustainability and improve wellbeing
6. ***Capital appetite***: improved access to venture capital and global financial markets
7. ***Stronger global IP frameworks***
8. ***Changing enterprise systems***

BENEFITS FOR FIRM

INNOVATORS VERSES NON-INNOVATORS

Degree higher	Areas
1.4 x	<ul style="list-style-type: none">• Income from sales of goods and services• Profitability
2 x	<ul style="list-style-type: none">• Productivity
3 x	<ul style="list-style-type: none">• Total number of jobs or positions• Contracting or outsourcing• Structured / formal training for employees• Expenditure on information technology
4 x	<ul style="list-style-type: none">• Range of goods and services offered
5 x	<ul style="list-style-type: none">• Social conditions• Export markets targeted

BENEFITS FOR REGION

In addition to directly increasing the number of start-ups, scale-ups and employment associated with innovation and entrepreneurship, ecosystems have been found to: (Clark *et al.*, 2018):

UNLOCK BUSINESS POTENTIAL & GROW HIGH VALUE JOBS

well-paid and able to withstand global cost pressures

MULTIPLIERS AND SPILLOVERS

jobs created in the innovation economy have been shown to lead to many additional professional and non-professional jobs in other parts of the economy (Moretti, 2012)

EXPORTS

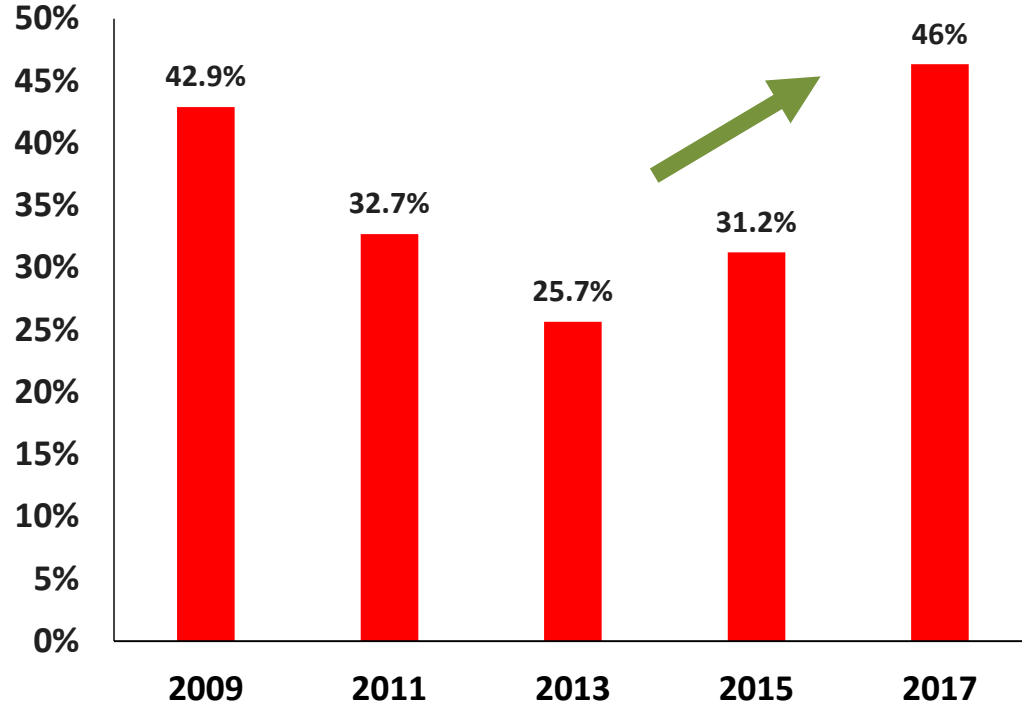
innovation economy activities drive exports of high value goods and services

PRODUCTIVITY

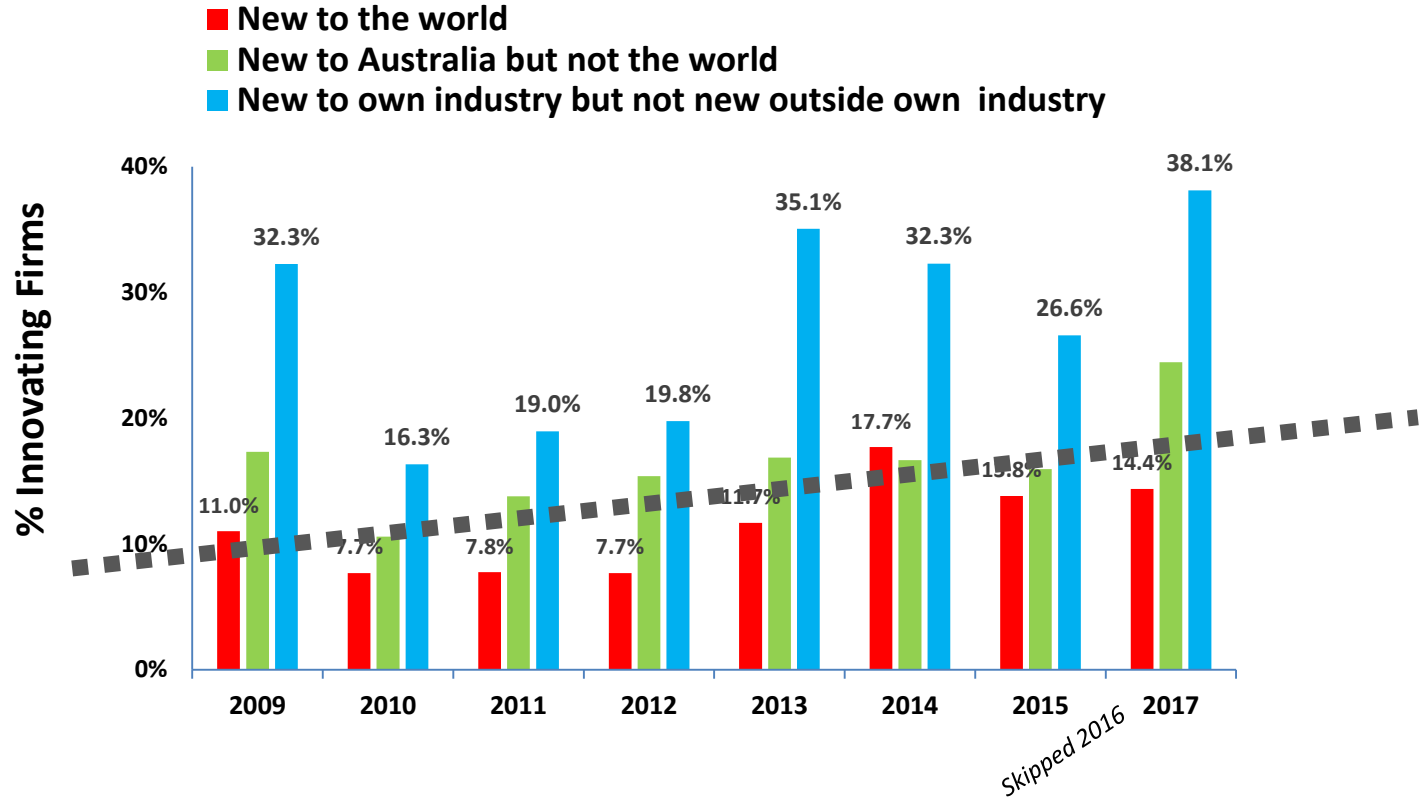
innovation promotes development of skills, enterprise and investment

HUNTER REGION: STATE OF PLAY

% New or significantly improved goods or services

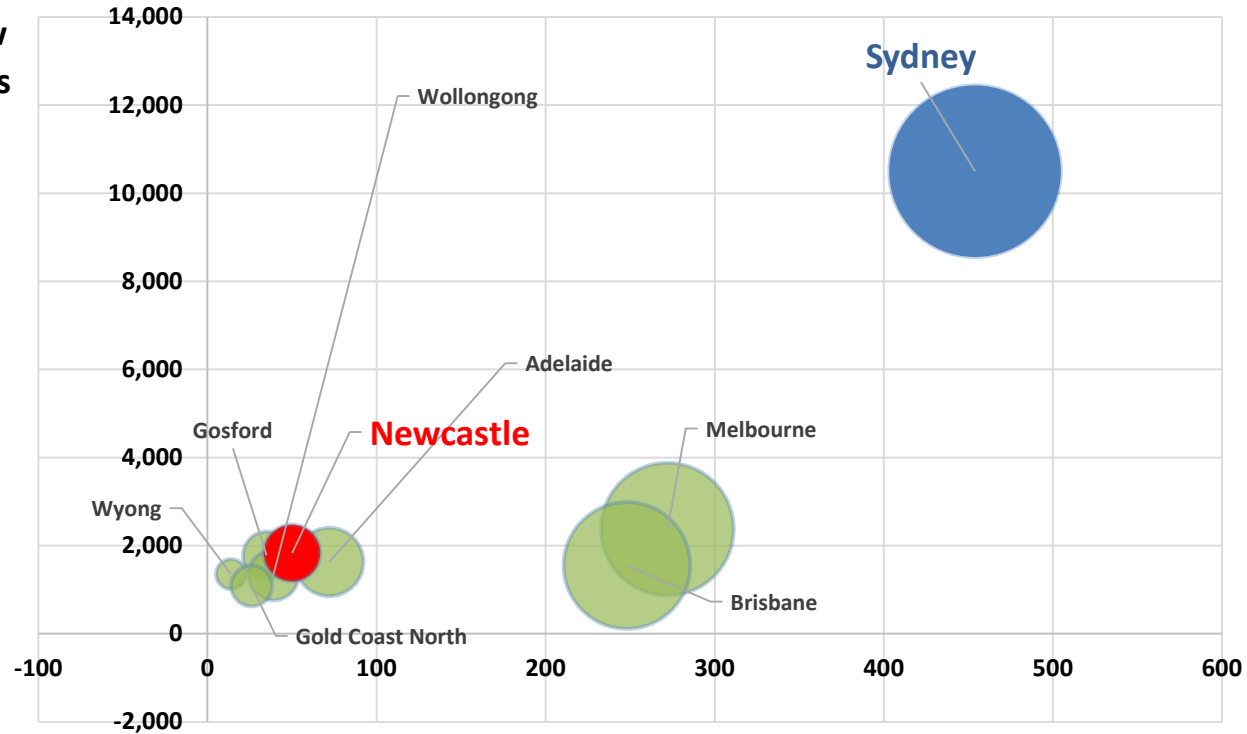


HUNTER REGION: STATE OF PLAY



HUNTER REGION: STATE OF PLAY

Number of New Business Entries



Patent Applications

WAYS FORWARD – INNOVATION ECOSYSTEMS

DEFINITION OF AN INNOVATION ECOSYSTEM:

“networks of firms, institutions, customer communities, infrastructures, supply chains, labour markets and investment systems that coalesce across a city or region” Clark et al., (2018:15).

“a synergistic relationship between people, firms and place (the physical geography of a district) that facilitates idea generation and accelerates commercialisation.” Brookings Institution (2014) ‘The Rise of Innovation Districts’.

“International evidence suggests that cities which lack these dynamics or do not possess a critical mass and breadth of skills are unlikely to succeed in establishing themselves as hotspots for innovation.”

Clark *et al.*, (2018:13).

BARRIERS TO INNOVATION – REGIONAL AUSTRALIA

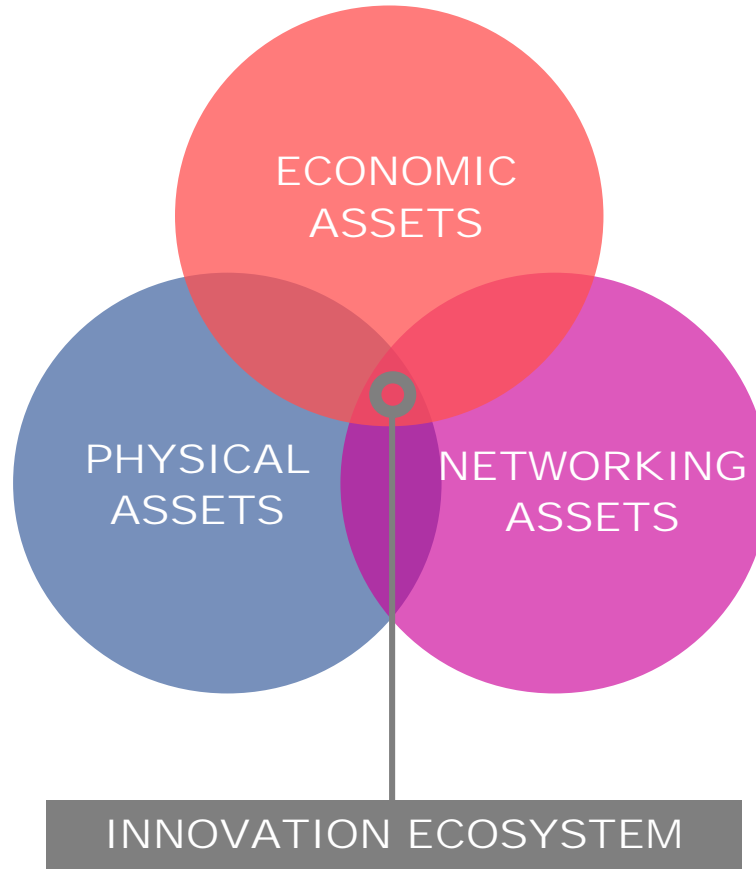
- Fewer **economies from agglomeration**
<-> **lower density of businesses/population**
- Fewer **internationally syndicated firms**
- Real or perceived **deficits in infrastructure**
- **Smaller and less specialised labour markets**

MARKET FAILURE –

Need for hard and soft infrastructure to develop a regional innovation ecosystem



INNOVATION DISTRICTS



Source: *The Brookings Institution*, 2014; Urban Growth NSW (2016), 'Cultivating a Successful Innovation District'.

INTERNATIONAL EXAMPLES

REGION	IMPACT
Berlin, Germany	2012 - 2015, startups 127% growth
Pittsburgh, USA	Within the past ten years over 450 companies have attracted \$3.5 billion in investment , 198% growth. In 2017, more than \$687 million . Over the past decade, more than 80 firms have 'exited' into the market, generating over \$8.2 billion .
Bristol, United Kingdom	Bristol is now a £32 billion economy. The region is home to the largest 12 aerospace companies in the UK (Darmody, 2018). The innovation district currently comprises of approximately 35,924 digital jobs and 225 startups . 3,500 startups, raised more than £1.5 billion of investment and injected £8.6 billion into the UK economy.
Stockholm, Sweden	Stockholm now rests as the second largest nurturing innovation ecosystem in Europe – only behind London. Outcomes from initial investment have seen the creation of 600-900 Startups with a growth index of 5.3 and the attraction of 186 foreign entrepreneurs into the city.
Ontario, Canada	Regional outcomes have seen 741 new research and development commercialisation projects . Over 1,800 new startups with incremental sales of over \$151,000,000 in revenue.

HUNTER iF PROJECT



Hunter iF

iF PROJECT - OBJECTIVES

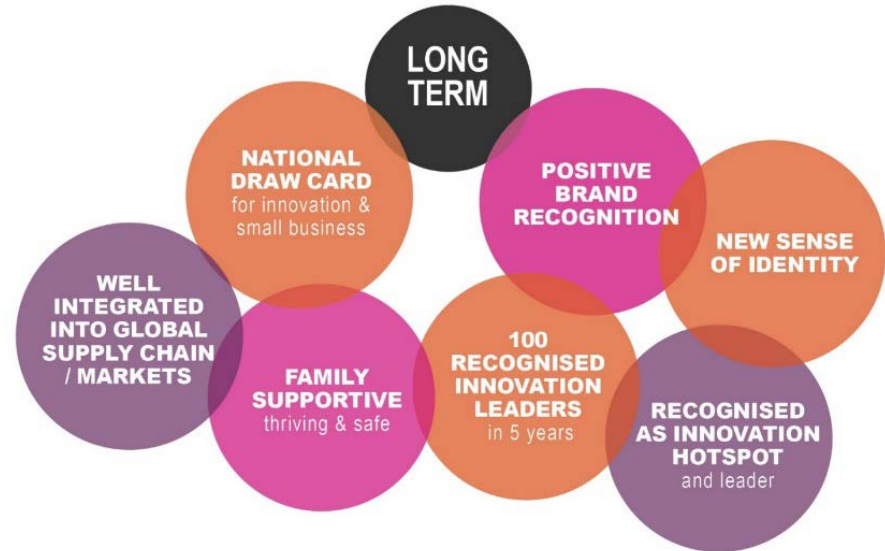
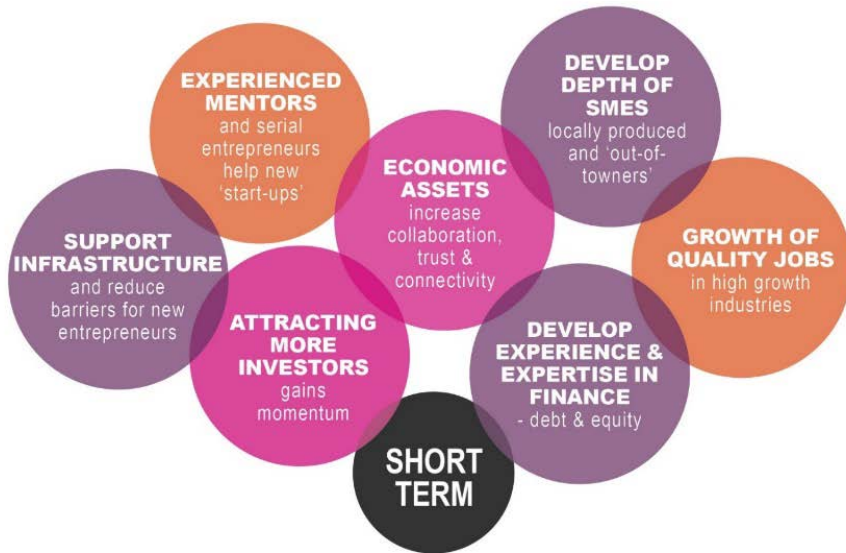


- To draw the innovation community together
- Establish a coordinating entity
- Champion innovation in the region and grow scale to impact
- Provide connectivity to support mentors, funding, opportunities
- Provide connections of activity, programs, events and organisations across the Hunter

“A vibrant entrepreneurial ecosystem is not simply a collection of isolated elements – the connections between the elements matter just as much as the elements themselves.”

Strangler and Bell-Masterson (2015:4)

REGION-WIDE OBJECTIVES



THANK YOU



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