

# Enterprising women

An economic study of the way Australian women work, live and connect.





## Introduction

It is exciting to see the real proof that connectivity over the **nbn™** broadband access network is contributing to a boom in female entrepreneurship and flexible working in Australia.

Across the country, the **nbn™** access network is helping people remain in the towns and communities that they love, rather than moving solely for employment reasons.

I'm proud to be part of a change to the digital landscape that is benefiting Australians, and none more so than working women.

From the latest research by AlphaBeta, commissioned by NBN Co, we can see that access to fast broadband is helping to give women the opportunity to work from home, to work part-time and to be self-employed more often in **nbn™** connected areas, than in areas yet to be connected.

With 92 per cent of self-employed women being mothers, and 80 per cent of self-employed women

having dependent children, connectivity over the **nbn™** access network can help provide women and men the chance to find a balance between an engaging career and family life.

Helping to provide digital connectivity to regional and rural Australia is an integral part of the **nbn™** access network so it's heartening to see the network helping enable job opportunities that allow people to remain in their communities.

This has the added consequence that the **nbn™** access network is underpinning the sustainability of our regions.

Whether it's cutting out the long commute, getting connected to the workforce sooner after having a child, or finding new opportunities to work from regional Australia, technology including the **nbn™** access network is helping to reshape the way women are engaging with the workforce.

**Stephen Rue**  
Chief Executive Officer  
NBN Co

# A nation in transition

When the Australian Bureau of Statistics undertook the 2016 Census, it captured a snapshot of the social and economic impact of one of the largest nation-building projects in Australia's history: the **nbn™** access network.

With this comprehensive data, we could now measure how Australia's economy and society had changed in regions connected to the **nbn™** access network and those that were not yet connected.

Economics and data-analytics advisory firm AlphaBeta was able to measure the "**nbn™** effect" by analysing the behaviour of 24 million people and 10 million households.

This research establishes an important statistical baseline to measure the impending impact of Australia's digital transformation over the years and decades ahead.

Over the course of 2018, we have reported detailed results on the estimated impact of the **nbn™** access network on:



**Jobs and growth**



**Female entrepreneurship**



**Social connection**



**Industry**



**Education**



**The economy**



# Conducting the research

## Methodology

The fact that some households now have access to services over the **nbn**<sup>TM</sup> access network while others are still waiting to be connected provides a timely opportunity to measure the impact of the **nbn**<sup>TM</sup> access network on people's lives.

AlphaBeta used multiple sources to gather evidence. The analysis drew on data from both the 2016 Census and a bespoke national Ipsos survey.

The 2016 Census data represents the whole Australian population. AlphaBeta and Ipsos ensured that the survey sample comprised a mix of people representative of the true Australian population by placing specific quotas on age, income, gender and geography, as per best practice.

Differences in the demographics of non-**nbn**<sup>TM</sup> access network-connected and **nbn**<sup>TM</sup> access network-connected regions were controlled for, such as income, education levels and regionality.

### Census data collected from:



**24 million**  
Australians



**10 million**  
households



**2000**  
regions

**nbn**<sup>TM</sup> access network rollout data was used to crossmatch and compare ABS data for regions with a strong **nbn**<sup>TM</sup> access network presence against areas of low **nbn**<sup>TM</sup> presence.

AlphaBeta compared areas where the **nbn**<sup>TM</sup> access network rollout was more than 90 per cent complete with areas where the rollout was less than 10 per cent. Using actual **nbn**<sup>TM</sup> rollout data for this study significantly improves the robustness of the results and distinguishes it from other studies.

### **nbn**<sup>TM</sup> access network rollout completion data



Economic impact was then estimated using a computable general equilibrium model, allowing AlphaBeta to detect the impact of the **nbn**<sup>TM</sup> access network on how people connect, work and live.

### Areas of economic impact as a result of the **nbn**<sup>TM</sup> access network



Industry productivity



Teleworking



Online education



Economy growth



Jobs growth

# New opportunities for entrepreneurship

## Growth in female entrepreneurs

Australian women are seizing opportunities with the help of connectivity over the **nbn™** access network to become their own bosses. The number of self-employed women in **nbn™** connected regions grew 2.3 per cent a year on average, or 20 times the pace of growth in the number of self-employed women in non-**nbn™** connected regions.

The **nbn™** effect is projected to help contribute up to an additional 52,200 women being self-employed by 2021.

## Annual growth in the number of self-employed people by 2017.



# Female entrepreneurship in Australia

Around 12 per cent of all employed women in Australia are self-employed. Over the past ten years, female self-employment has been steadily climbing and in 2016, at last census count, almost 590,000 women in Australia reported they were self-employed.

Female entrepreneurship encourages further employment with one in three self-employed women going on to employ other people.



**12%**

Employed women who were self-employed in Australia in 2016



**39%**

Self-employed women with employees



**61%**

Self-employed women without employees

Source: Census 2016, Census Longitudinal (2016)



Industries where self-employed women outweigh women employed by others:



Agriculture and primary



Construction



Admin and support



Professional and technical



Arts and recreational services



Real estate

Source: Census 2016, Census Longitudinal (2016)



“Access to good internet has been an incredible, big boost for my business, and I wouldn’t have got it off the ground without it.”

**Jo Palmer,**  
Pointer Remote Roles

“The Sky Muster™ satellites means that we can reliably operate a business from regional Australia without having to be in an urban area with an office. It’s given us more opportunities, particularly as we have young children.”

**Elisha Parker,**  
cattlesales.com.au

“It’s a great service, we certainly wouldn’t have been able to run this business before Sky Muster™. It’s definitely allowing us to keep our finger on the pulse and there’s a lot more to come from us.”

**Annabelle Woods**  
cattlesales.com.au



## Remote control

Entrepreneur Jo Palmer runs two successful businesses from the Riverina in regional NSW, splitting her time between a traditional office in Wagga Wagga and her home at The Rock, some 31 kilometres to the south.

One of her businesses is Pointer Remote Roles, a job-matching platform that allows small to medium sized businesses to advertise roles where the candidate can live and work remotely.

“The need that I saw for Pointer is the fact that there are so many talented professionals that live all over Australia, be it regionally or in the city. For whatever reason, family or physical location, they either

can’t or don’t want to go into a physical office to work.”

She found there wasn’t a simple place to go to find jobs advertised to be worked remotely. So, Jo created it herself.

The flow-on effects in regional areas are particularly exciting, according to Jo. She says communities benefit not only because businesses can grow, but also because regional households can ‘drought proof’ or ‘flood proof’ their finances by earning income from another part of Australia. “Being able to add a second income to families living all over the country is a real buzz because they’re putting money back into their local communities as well,” she said.

## Moving cattle online

Annabelle Woods and Elisha Parker are former school friends who, according to Annabelle, identified a need to “revolutionise the way the Australian cattle industry connects”.

Together, they co-founded the country’s first national advertising website solely for cattle, providing a central site for cattle buyers and sellers to connect.

Annabelle and Elisha are able to run cattlesales.com.au from their homes in remote Queensland - Annabelle on a 660,000 acre property in North West Queensland, and Elisha on a 120,000 acre property west of the Central Queensland town of Clermont.

From their properties 1000 kilometres away from each other, Elisha and Annabelle have daily teleconferences, and manage all aspects of cattlesales.com.au.

They also run their homes, raise their children, and have other work commitments including managing their own cattle stations.



## Supporting a part-time workforce

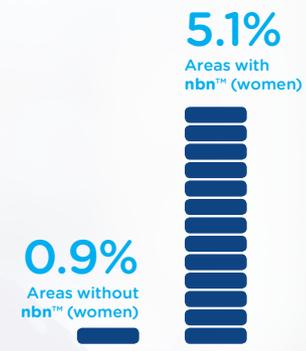
Self-employment helps create more opportunities for women to choose how, when and where they work.

### Self-employed women part-time growth.

**5X** in nbn™ connected regions compared to non-nbn™ connected regions

**up to 3,400** self-employed women working part-time with the help of the nbn™ effect by 2017

### Annual growth in the number of self-employed women working part-time by 2017.



# Why flexible work is important to Australian women

Almost half of Australian women in senior positions want the opportunity to have flexible work arrangements so they can stay engaged in the workforce while caring for their children or elderly relatives.

Mothers make up 92 per cent of self-employed women, and 80 per cent have dependent children.

## Balancing an engaging career and family life.



**92%**

self-employed women are mothers



**80%**

self-employed women have dependent children



**67%**

women employed by others are mothers



**43%**

self-employed women are in their key child-rearing years (aged 25-44)

Source: Census 2016, Census Longitudinal (2016)

## Reasons women in senior positions choose to work flexibly:

48% of women surveyed state care giving as a reason to work flexibly.



**32%**

Seeking work life balance



**40%**

Caring for children



**8%**

Caring for elders or relatives



**6%**

Leisure for sporting interests



**5%**

Outside study or education



**5%**

Others



**4%**

Volunteering

Source: Bain & Company and Chief Executive Women (CEW)



# Bringing work to the people

## Connecting regional women to employment markets

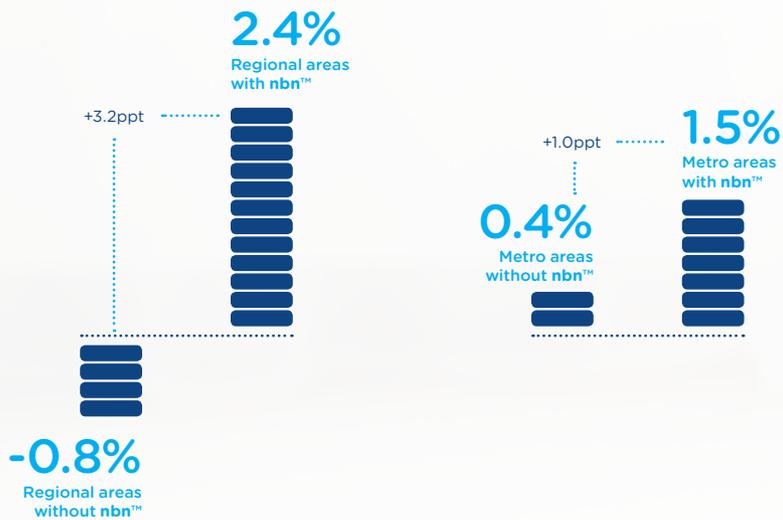
The **nbn**<sup>TM</sup> access network is helping to open up opportunities for women in regional areas to engage in the workforce without leaving their communities.

In **nbn**<sup>TM</sup> connected regional areas female self-employment grew by an average of 2.4 per cent a year compared to

-0.8 per cent a year in non-**nbn**<sup>TM</sup> connected regional areas.

Growth in female self-employment was also stronger in **nbn**<sup>TM</sup> connected metropolitan areas, increasing at almost four times the pace of non-**nbn**<sup>TM</sup> connected metropolitan areas.

### Annual growth in the number of self-employed women by 2017.



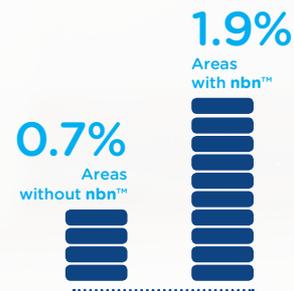
## Creating flexible workplaces

Access to fast broadband is helping more working mothers balance work and family commitments.

The number of self-employed women working from home grew on average at more than twice the pace in **nbn**<sup>TM</sup> connected regions compared to non-**nbn**<sup>TM</sup> connected regions.

The **nbn**<sup>TM</sup> access network has helped to drive up to an additional 830 self-employed women working primarily from home by 2017 alone.

### Annual growth in the number of self-employed women working primarily from home by 2017.



## Breaking down barriers

Connectivity over the **nbn**<sup>™</sup> access network is helping provide opportunities for women who did not finish high school to run their own businesses.

In non-**nbn**<sup>™</sup> connected areas, self-employment by women who did not complete Year 12 studies contracted by an average of 3.9 per cent a year. However, in **nbn**<sup>™</sup> connected regions, the number of self-employed women who left school early remained steady.

Up to an estimated 2,100 women who did not finish school were self-employed by 2017 with the help of the **nbn**<sup>™</sup> access network.

---

### Annual growth in the number of self-employed women who did not finish year 12 by 2017.





## About the research

This report was published by NBN Co, the company building Australia's broadband access network.

The research was performed by economics and data-analytics advisory firm AlphaBeta, which serves clients across Australia and Asia.

AlphaBeta worked with strategic communications firm 89 Degrees East and a number of data providers, including global market research company Ipsos, to support the analysis.



## November 2018

This report was published by NBN Co, the company building Australia's broadband access network. The research was performed by economics and data-analytics advisory firm AlphaBeta, which serves clients across Australia and Asia. AlphaBeta worked with strategic communications firm 89 Degrees East and a number of data providers, including global market research company Ipsos, to support the analysis.

Please visit [www.alphabeta.com](http://www.alphabeta.com), for detailed methodology.

This document is provided for information purposes only and is a summary only of research from AlphaBeta.

nbn is very happy with Jo's, Annabelle's and Elisha's experiences with the nbn™ broadband access network. Of course, an end user's experience, including the speeds actually achieved over the nbn™ access network, depends on the nbn™ access network technology and configuration over which services are delivered to their premises, whether they are using the internet during the busy period, and some factors outside of nbn's control (like their equipment quality, software, chosen broadband plan, signal reception, or how their provider designs its network). Speeds may also be impacted by network congestion on the nbn™ Fixed Wireless network, including during busy periods. Sky Muster™ satellite end users may also experience latency.

© 2018 nbn co ltd. 'nbn', 'bring it on', 'Sky Muster', 'gen nbn' and the Aurora device are trademarks of nbn co ltd  
ABN 86 136 533 741.

Copyright: This document is subject to copyright and must not be used except as permitted below or under the Copyright Act 1968 (CTH). You must not reproduce or publish this document in whole or in part for commercial gain without prior written consent of NBN Co Limited. You may reproduce or publish this document in whole or in part for educational or non-commercial purposes

1804-01-KM