GOOGLE ECONOMIC IMPACT

Australia 2019



αlphaβeta strategy x economics

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Google helps grow Australian businesses



in benefits generated by businesses from using Google's advertising tools in 2019



1.1m+

Businesses connected with consumers via Google in 2019



in income generated by Australians monetising content on YouTube in 2019



\$23b

of the business benefits from using Google's platforms were delivered to SMEs in 2019

Google helps to create Australian jobs



117,700 jobs

supported by businesses helped by Google's platforms



70 jobs

in the economy supported by each Googler



Two in three

jobs supported by Google's platforms were with SMEs

Google helps businesses save time and money



of benefits in time saved for transport businesses by Google Maps in 2019



\$1.6b

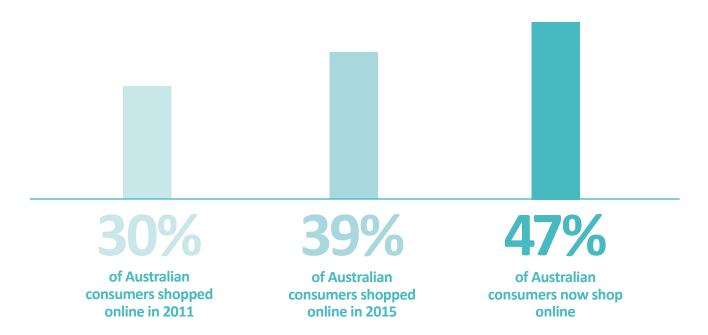
of benefits in time saved for businesses by Google Search in 2019

Note: All estimates are for 2019

EXECUTIVE SUMMARY

Digital technologies have become central to how Australians do business by unlocking global opportunities and helping people work together more productively. As a fast-growing majority of businesses and consumers buy, sell and interact with each other online, tools like Google's search, advertising and productivity platforms are generating significant value for businesses of all sizes across the nation.

Google helps hundreds of thousands of businesses in Australia each year, generating an estimated \$35 billion in business benefits through its search and advertising, maps and video hosting platforms. This is more than twice Google's estimated contribution to Australian businesses in 2015, reflecting the increasing importance of the digital economy in Australia.¹ Approximately 47% of Australian consumers now shop online, up from 39% in 2015 and 30% in 2011.² For businesses — particularly smaller firms with limited marketing budgets and expertise — the digital economy offers an unprecedented opportunity to reach new customers, connect and grow.



¹ Alpha Beta (2017), 'Google Economic Impact Australia 2015'. Available at: https://www.alphabeta.com/wp-content/uploads/2016/08/Google-ecomonic-impact-2015.pdf

² Roy Morgan (2018), 'Who's Shopping Online? Nearly 9.5 million Australians'. Available at: http://www.roymorgan.com/findings/7612-whos-shopping-online-nearly-9point5-million-australians-201806080733; Roy Morgan (2015), 'Online shopping on the rise for most retail categories'. Available at: http://www.roymorgan.com/findings/6095-online-shopping-on-rise-201503182332

EXHIBIT 1

Google helped Australian businesses to generate \$35 billion in business benefits in 2019

\$AU millions, 2019

	BUSINESS BENEFITS	VALUE OF BENEFITS
Google Search and Google Ads	Businesses use Search and Google Ads to advertise their goods and services. More 1.1 million businesses connect with consumers through Google	
AdSense	AdSense is a program that website publishers can use to run ads on their sites and earn income from the monetisation of their content	\$32,200 million
Ad Grants	The Ad Grants programs offers in-kind advertising to certified nonprofit organisations. Ad Grant recipients are entitled to spend up to US\$10,000 per month	
YouTube	Content creators use YouTube to generate income through the monetisation of their content	\$95 million
Google Maps	Google Maps has generated benefits for Australian businesses in the transport industry, such as ridesharing companies or delivery services, through improved journey routing and reduced travel time	\$1,340 million
Google Search	Google search also helps businesses improve their productivity through time saved by their employees through improved access to information	\$1,570 million
Total business benefits	\$35,200 million	

Source: AlphaBeta analysis 2019

GOOGLE IS HELPING AUSTRALIAN BUSINESSES CONNECT AND REACH NEW MARKETS

In 2019, Google's search, grants and advertising tools helped connect more than 1.1 million businesses, website publishers, and nonprofits to consumers nationwide. Business activity from Google's advertising services was worth \$32 billion in 2019. Although different concepts, this activity is roughly equivalent to the annual output of Australia's building construction sector.³

Google has also enabled new business models through advertising placement service AdSense and video hosting platform YouTube. These pay bloggers, writers, website publishers, video producers and other content creators for hosting advertisements on their webpages or channels. Australian content creators earned a total of \$95 million through YouTube and \$160 million through AdSense in 2019.

GOOGLE IS HELPING TO CREATE AUSTRALIAN JOBS

Google is helping Australian businesses to create Australian jobs by providing digital tools and resources to attract customers, reduce costs and improve innovation. In 2019, Google supported almost 117,700 jobs in Australia, including 1,500 high-quality jobs within Google itself. These jobs help boost Australia's digital capabilities and talent pool, and are particularly important to the Australian economy as STEM skills become more valuable worldwide.

By enabling businesses to grow, Google also supports a further 116,200 jobs in businesses across the wider economy. More than two-thirds of these jobs are jobs in SMEs that are able to leverage online advertising and productivity tools to grow.

GOOGLE IS HELPING AUSTRALIAN BUSINESSES SAVE TIME AND MONEY

In addition to the extensive benefits that Google Maps and Search deliver to consumers, Australian businesses **save over \$2.9 billion in time and money** through improved journey routing and improved access to information. As a whole, Australian businesses are estimated to save 44 million hours in travel time a year through Google Maps, and 52 million hours in search time through Google Search — an average time saving of 250 hours in reduced travel time for transport-related businesses and 40 hours per business in reduced search costs.

II Business activity from Google's advertising services was worth \$32 billion in 2019.

³ ABS (2019), '5206.0 – Australian National Accounts: National Income, Expenditure and Product, Mar 2019'. Available at: https://www.abs.gov.au/AUSSTATS/abs@.nsf/Latestproducts/5206.0Media%20Release1Mar%202019





Google helps grow Australian businesses



in benefits generated by Australian businesses from using Google's advertising tools in 2019



Australian businesses connected with consumers via Google in 2019



in income generated by Australians monetising their content on YouTube in 2019



of the business benefits from using Google's platforms were delivered to SMEs in 2019

GOOGLE HELPS GROW AUSTRALIAN BUSINESSES: SEARCH AND ADVERTISING GENERATE \$32 BILLION IN ANNUAL BUSINESS BENEFITS

EXHIBIT 2

Estimated business benefits to Australia from Google's search and advertising products- in 2019:



Google's search and advertising tools helped business generate \$32 billion in benefits



More than **1.1 million business** were able to connect with consumers via Google search



Google supported more than 1,600 NFPs in Australia with in-kind advertising and G Suite access through the Ad Grants program



Australian website publishers generated approximately \$160 million in income from advertising on their website



Australian YouTube content creators earned \$95 million in income from advertising on their content



\$23 billion of business benefits were delivered to small and medium-sized Australian businesses

Source: AlphaBeta analysis 2019

Google helps grow Australian businesses by connecting them with new customers and generating new revenue streams for content creators. In 2019, Google generated a total of \$35 billion in business benefits for Australia, including \$32 billion through its search and advertising platforms that connected advertisers, content producers and consumers nationwide.⁴ A breakdown of the benefits experienced by each state and territory in Australia can be seen in **Exhibit 3**. In Australia, businesses get an average of 30 calls and 65 requests for directions through their completed Google listings.

Google's search and advertising services are particularly important to Australia as they help firms overcome the tyranny of distance and connect to global markets. More than 1.1 million Australian businesses and 1,600 nonprofits were able to connect with customers via Google search listings and advertisements in 2019.

These services are of greatest benefit to start-ups and small to medium-sized enterprises (SMEs), which may otherwise lack the scale and resources to run traditional marketing campaigns on television, radio or newspapers.

Google has also enabled new business models through AdSense and YouTube, which pay bloggers, writers, website publishers, and video producers for hosting advertisements alongside their content. Australian content creators earned \$95 million through YouTube and an additional \$160 million through AdSense in 2019.

Exhibit 4 below shows the value of Google's products to Australian businesses and how the economic impact of these benefits have been calculated in this report. Please see **Appendix A** for a more detailed methodology.

Benefits of Google's advertising products to Australian businesses in 2019 Benefits generated Total benefits: \$35.2bn \$0.4bn \$50.8bn \$50.6bn Source: AlphaBeta analysis 2019

⁴ See Appendix A for details on methodology; See Appendix B for details on business benefits derived in each state and territory in Australia

EXHIBIT 4

Google is critical to supporting businesses and generates benefits across all states and territories in Australia

\$AU billions, 2019

Google Search & Advertising tools	Google Ads	 Businesses use Search and Google Ads to advertise their goods and services to consumers More than 1.1 million businesses connect with consumers through Google 	 Additional revenue that businesses generate using Search and Google Ads in 2019
	AdSense	 AdSense is a program that website publishers can use to run ads on their sites and earn income from the monetisation of their content 	 Income generated by Australian website publishers through AdSense in 2019
	Ad Grants	 The Google Ad Grants program offers in-kind advertising to certified not-for-profit organisations Ad Grant recipients can spend up to \$10,000 (USD) a month 	 Amount spent on advertising by Ad Grant recipients in 2019
	Income for content creators	 YouTube enables people to start new types of businesses by becoming content creators Content creators are earning an income with YouTube, growing into a new generation of media businesses reaching new markets all over the globe 	 Income generated by content creators in Australia by monetising their content on YouTube in 2019
YouTube	Return for businesses from advertising	 Businesses can advertise through YouTube by having their ads displayed on videos on YouTube By advertising on YouTube, businesses are able to reach new markets and potential customers 	 Excluded from estimations to avoid potential double counting with Search and Advertising tools

The economic impact estimates presented in this report are conservative and based on Google's core products. In search and advertising, a consistent methodology based on global benchmarks has been used to determine the impact of Google's tools on businesses, income to website publishers, and advertising value to nonprofits. In addition, the income derived by YouTube content creators and productivity impacts from Google Maps and Google Search on Australian businesses are included. We leave out estimates of the return on investment to advertisers through YouTube and AdSense, as well as some of Google's other products like the impact of Android, Google My Business and usage of G Suite.

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1.1 GOOGLE SEARCH AND GOOGLE ADS: DRIVING TRAFFIC THROUGH PAID AND UNPAID CLICKS

As internet connectivity improves and digital natives account for more of the population, a growing share of Australia's economic activity is taking place online. Approximately 47% of Australians consumers aged 14 or above now engage in e-commerce, an increase of nearly 20% from 2011.⁵ Nearly 90% of Australian adults who access the internet did so via their mobile phone, while 85% use a computer.⁶ Every month, in Australia, Google drives millions of meaningful connections between businesses and their customers including calls, online reservations and direction requests.

In 2019, Google's search and advertising tools helped Australian businesses generate approximately \$32 billion in benefits. Businesses generated revenue as a result of people finding their products and services through free search and paid online advertising. Google maximises the value of advertising by efficiently matching customers with relevant businesses. This helps to direct customers to goods and services that they value. These efficiencies allow businesses to realise productivity, invest savings in business expansion or reaching new markets that were previously inaccessible.

The business benefits for each Google product has been derived using multiple approaches with a range of third-party sources. The total benefits have been derived as the sum of the business benefits generated from Google Search, Google Ads, AdSense, Ad Grants, YouTube, Google Maps and the use of Google Search by Australian employees as shown in **Exhibit 5**. Our approach to estimating the economic impact of Google Search, Google Ads, AdSense and Ad Grants is aligned with the Google's 2018 Economic Impact Report for the US market, but also incorporates additional impacts on businesses from YouTube, Google Maps and the use of Google Search by business employees.

The business benefits attributed to Google Search and Google Ads was derived by first estimating advertising spend on Google Ads by businesses. This was estimated using two methods. The first method took a top-down approach, which estimated the total size of the search advertising market in Australia and Google's share of this market. This approach was also reconciled with public reports on Australia's online advertising market and company reports produced by third parties.* The second method took a bottom-up approach which estimated the number of Google page views in Australia, the proportion of these pages that were display advertisements, the number of advertisements on each page and the average click-through rate. To estimate the direct business benefits, a return on investment (ROI) ratio was applied to the advertising spend on Google Ads. This estimate is based on an established methodology developed by Google's chief economist Hal Varian, whose analysis of cost-per-click activity across a large sample of advertisers was published in the American Economic review, as well as research by Bernard Jansen and Amanda Spink, which was based on sample search log data and published in the International Journal of Internet Marketing and Advertising.9

⁵ Roy Morgan (2018), 'Who's Shopping Online? Nearly 9.5 million Australians'. Available at: http://www.roymorgan.com/findings/7612-whos-shopping-online-nearly-9point5-million-australians-201806080733

⁶ Nielsen (2019), 'Nielsen Digital Panel June 2019'.

^{7 2019} refers to financial year 2019, spanning from 1 July 2018 to 30 June 2019.

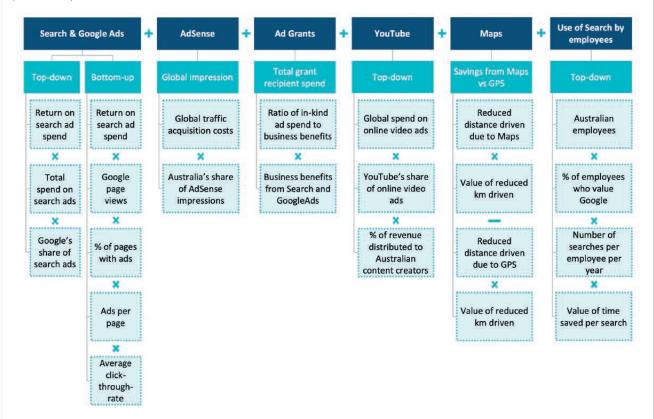
⁸ IAB (2019), 'Online advertising expenditure report'. Available at: https://www.iabaustralia.com.au/research-and-resources/advertising-expenditure/item/11-advertising-expenditure/2760-online-advertising-expenditure-report-quarter-ended-march-2019; IBISWorld (2019), 'Online Advertising in Australia'. Available at: http://clients1.ibisworld.com.au/reports/au/industry/default.aspx?entid=5505; IBISWorld (2017), 'Google Australia Pty Ltd'.

⁹ See Google (2018), 'Economic Impact Report United States 2018'. Available at: https://static.googleusercontent.com/media/economicimpact.google.com/en//static/reports/2018/ei-report-2018.pdf; See Appendix A for details

EXHIBIT 5

The methodology for measuring business benefits has relied on publicly available data by using an 'outside in' approach

\$AU billions, 2019



Note: This report's methodology for measuring Google's economic impact is consistent with the methodology used in the Google Economic Impact United States 2018 report, and also measures the business benefits of YouTube, Google Maps and Google Search

Source: AlphaBeta analysis 2019

More than 1.1 million businesses to connected with consumers through Google in 2019 through Google. The vast majority of these were small businesses, underscoring the importance of online advertising to Australia, where SMEs account for 9 in 10 businesses and 40 percent of jobs. ¹⁰

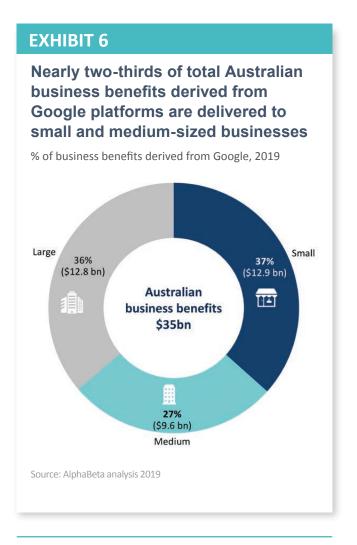
Small businesses traditionally haven't had the scale to develop 'brand advertising' through channels like television, print or radio. However, digital advertising has drastically shifted the marketplace, with platforms like Google now enabling small businesses to access customers for free via search, in addition to paid advertising delivered through performance-based pricing models. These benefits were realised by businesses through increased sales that were originating from their Google Ads as well as search results for their business.

¹⁰ Australian Small Business and Family Enterprise Ombusdman (2016), 'Small Business Counts'. Available at: https://www.asbfeo.gov.au/sites/default/files/Small_Business_Statistical_Report-Final.pdf

advertising works so well for small businesses is that it's a great leveller. You don't need to tip thousands or millions of dollars in building a brand or creating assets that might get used for a few weeks on TV or radio. The way the system is designed is that anyone can compete II

Mike Rhodes, Founder and CEO, WebSavvy¹¹

In 2019, approximately \$23 billion of business benefits were delivered to Australian small and medium sized businesses, accounting for almost two-thirds of all Australian business benefits as shown below in **Exhibit 6.**¹²



 $^{11\,}Megan\,Brownlow\,(2019),\,'Mythbusting!\,How\,and\,why\,small\,businesses\,are\,getting\,into\,digital\,marketing'.$

¹² Classification of business size is in accordance with ABS definitions: small businesses have 1-19 employees, medium businesses have 20-199 employees and large businesses have 200+ employees.

LITTLE SPROUT



LOCATION: CANBERRA, ACT | EMPLOYEES: 5

One morning, former airforce officer, trained school teacher and mum of two Brooke Kearns walked into Canberra's Little Sprout toy store to buy presents for her kids. By that evening, she'd decided to buy the business, too.

With the help of her husband Gerard and her staff of five local mums, Brooke has made Little Sprout her own, while retaining everything that the locals have always loved about the quirky destination. "I carefully select products based on quality, value, and fun. The difference of the business is our product knowledge; we're all genuinely passionate about children and love to pair our customers with the perfect toy," Brooke says.

As many owners of local, independent businesses will know, one of the greatest challenges when it comes to growth is how to reach a broader audience while maintaining the deeply personal shopping experience that only face-to-face customer service can deliver. With the help of Google, Brooke has kept Aussie kids, parents and grandparents smiling, whether they're down the road or across the country.

Brooke hired an SEO specialist, who has helped her website achieve 40% growth in organic Google search. She also capitalised on the lucrative Christmas period by driving sales during the holiday season through Google Ads, which ultimately lead to a 115% increase in online sales in her first year. "I've begun selling our toys to stayat-home mums in every state in Australia," Brooke says.

And while the demographic of her audience has shifted, Brooke's commitment to unique customer service with a home-grown personal feel has stayed the same. "We like to encourage our customers to leave reviews on Google. When a purchase has been made, we send an email introducing ourselves, explaining that we're a small business and that their feedback means a lot to us, and we respond to all reviews positively."

VETS ON CALL



LOCATION: VICTORIA | EMPLOYEES: 5

Milky hates vet visits; they make him anxious and restless. His owner, Morgan, hates them almost as much. It upsets him to see his dog so stressed, every appointment costs a fortune, and their opening hours make it almost impossible for him to fit Milky's appointments around work.

If it's true that all clouds have silver linings, then the glow that surrounds poor Milky's trauma is the launch of Morgan's app-based business, Vets on Call. The proud Torres Strait Islander and Melbourne local developed an app that connects home-visiting vets with pet owners across Victoria in an easy, three-step booking process with upfront quotes. That is, of course, so long as people can find it.

Enter, Google. As a digital business, digital marketing was always going to be Morgan's best bet for getting Vets on Call off the ground. He taught himself how to navigate Google Ads, and has seen impressive growth in his twelve months of business. "When I first started the business, it was costing \$23 to convert a customer. Today, we're

down to \$2.80 per customer. That's unheard of." Morgan's business has grown exponentially over the last year, and he now has 60 vets on their register, over 3000 clients, and is starting to see repeat business. As well as marketing his business on Google, Morgan also regularly shows at pet expos, offering free vet checks for the pets of everyone who downloads the app, which allows Vets on Call to control conversions and build trust with their client base.

It took a lot for Morgan to get his dream up and running. "It's been hard to explain the sacrifice and my burning ambition," Morgan says. "If I'm up at five a.m working on the business, I can see the impact. It's been an incredibly empowering experience." And, perhaps most importantly, Milky's much happier now, too.



LOCATION: QUEENSLAND | EMPLOYEES: 8

Before discovering Google Ads, Chris and Toni Nightingale tried every advertising trick in the pre-digital book, including handing out flyers outside Central Station, dressed as teddy bears.

The husband and wife team had been trying to get their customisable plush toy business off the ground since they were inspired following the birth of their baby boy. "We tried everything from market stalls, expos, radio ads, print advertising," Chris says, "but we were struggling to drive customers to our online site using traditional means." When Chris found Google Ads, he taught himself as much as he could, and sought expert advice on how to optimise his spend.

My Teddy's Click Through Rate (CTR) doubled instantly, and their sales saw similar growth. Now, after eleven years of perfecting their approach to advertising with Google,

Chris and Toni are thrilled with the results. "We're so happy with our return on investment. You know exactly what you get back and where it came from for every cent spent. In February 2018, for every dollar spent we returned 492% (average across all forms) through Google paid ads," Chris says.

Still, even with so much experience and the confidence of more than a decade of success, the Nightingales are excited for what the future of online advertising holds for them. "In the eleven years that we've been using Google Ads, so much has changed. There are so many strategies one can use to improve its effectiveness. Now, we can do online marketing so much quicker and more effectively with proven results, and get on with what we do best: making awesome gifts, posting quickly, and keeping our customers coming back!"

1.2. ADSENSE: SUPPORTING LOCAL CONTENT CREATORS

Google's AdSense program also generates benefits for Australian businesses, specifically website publishers. Content creators, like online journalists, media sites, bloggers, vloggers and writers, ear income by hosting advertisements on their sites. In 2019, Google's product AdSense generated \$160 million in benefits for Australian businesses.

AdSense allows website publishers to monetise space on their websites by allowing Google to display advertisements related to the content on the website. Advertising revenue underpins

the continued variety, quality and availability of content on the internet. Previously un-commercial content on traditional forms of media is now able to be supported providing Australian content creators unprecedented opportunities to deliver new and engaging forms of writing, media or journalism. Approximately one in four pages searched via Google were supported by AdSense. ¹³ In Australia, this means that more than 18,000 Australian content creators were supported, in part, by AdSense.

1.3. AD GRANTS: GOOGLE HELPS NONPROFITS RAISE FUNDS FOR FREE

Australia is the fourth largest market for 'Google For Nonprofits' (G4NP) after the USA, UK and Canada, with 8,109 nonprofits in Australia enrolled in the program. The G4NP program allows nonprofits to communicate their mission, engage new supporters and increase their fundraising channels. More than 2,800 of the nonprofits enrolled in the program are also actively using G Suite for free.

As part of G4NP, Google's 'Ad Grant' program was launched in 2003 and was designed to support nonprofit organisations through in-kind advertising solutions. Ad Grant recipients are entitled to US\$10,000 worth of advertising spend per year with Google, as well as being provided access to Google's

G Suite products free of charge. ¹⁴ Google's Ad Grant recipients are selected based on a range of criteria, including holding a charity status in Australia and have a high-quality website that meets Ad Grant requirements.

In 2019, Google supported more than 1,600 nonprofits through the its Ad Grants program, more than triple the number of nonprofit beneficiaries in 2015. This program provides Ad Grant recipients with up to AU\$250 million of free advertising each year in Australia. Ad Grants have made it easier for Australian nonprofits to receive donations by connecting them with people who are searching on Google for similar nonprofits.

1.4. YOUTUBE: MAKING CONTENT CREATION EASIER FOR ALL BUSINESSES

YouTube has grown significantly since its first video, "Me at the Zoo" was uploaded by co-founder Jawed Karim in April 2005. Globally, more than 500 hours of video content is uploaded to YouTube every minute, an increase of 40% since 2014. 15 YouTube is also a significantly popular platform in Australia for online video streaming. In May 2019 alone, approximately 16.3 million Australian adults consumed an average of almost 25 hours of videos on YouTube. 16

YouTube is emerging as a prominent platform to enable businesses to access customers. Through a simple process, businesses can launch a free YouTube channel and communicate their message through videos, allowing their products and services to be positioned through increasingly sophisticated and engaging ways.

The popularity of YouTube in Australia is also benefiting Australian video content creators who are uploading entertaining, educational and informative content to the platform. YouTube has lowered the barriers to entry for creation of media content, with various Australian YouTubers creating content quality content with minimal upfront investment, relative to the production of new television show. Australian content on YouTube earns significant interest among international audiences, with more than 90% of views coming from outside Australia. This provides Australian YouTube content creators with access to a global audience, and an ability to build businesses around their YouTube channels. In 2019, Australian content creators generated approximately \$95 million in income by monetising their content from advertisements.

¹³ Hal Varian (2011), 'Economic value of Google Presentation'. Available at: http://assets.en.oreilly.com/1/event/57/The%20Economic%20Impact%20of%20 Google%20Presentation.pdf.

¹⁴ Google (2019), 'Google Ad Grants'. Available at: https://www.google.com.au/grants/.

¹⁵ Statista (2019), 'Hours of video uploaded to YouTube every minute'. Available at: https://www.statista.com/statistics/259477/hours-of-video-uploaded-to-youtube-every-minute/.

¹⁶ Google (2019), '3 key takeaways from new Digital Content Ratings report'. Available at: https://www.thinkwithgoogle.com/intl/en-aunz/advertising-channels/video/3-key-takeaways-new-digital-content-ratings-report/.

¹⁷ Google Australia Blog (2017), 'YouTube – The Australian Story'. Available at: https://australia.googleblog.com/2017/11/youtube-australian-story.html



Google helps to create Australian jobs



117,700 jobs

in Australia are supported by businesses helped by Google's platforms



70 jobs

in the Australian economy are supported by each Googler



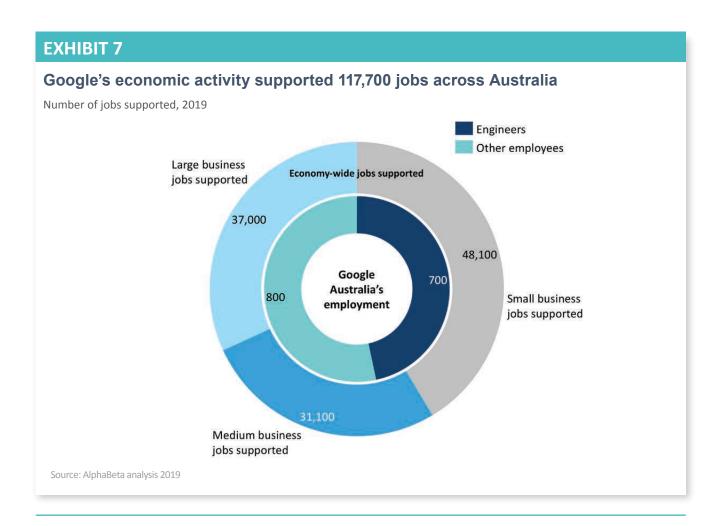
Two in three

jobs supported by Google's platforms were with SMEs

GOOGLE HELPS CREATE AUSTRALIAN JOBS: SUPPORTING 117,700 WORKERS

Google is helping businesses to create Australian jobs by providing digital tools and resources to attract customers, reduce costs and improve innovation. In 2019, Google helped Australian businesses to support up to 116,200 jobs.¹⁸

More than two-thirds of these jobs were with SMEs.¹⁹ In addition, Google's presence in Australia provides high-quality jobs for 1,500 workers and supports the development of a high-tech workforce.



¹⁸ Jobs supported refer to new jobs that may have been created through a business' use of Google's platforms, as well as ongoing employment of jobs that previously existed

¹⁹ See Appendix B for details on jobs supported in each state and territory in Australia

2.1. GOOGLE EMPLOYS 1,500 AUSTRALIANS IN HIGH-QUALITY JOBS

Technology and software-based skills and jobs are critical to participating in the digital economy. A key driver of talent development in this area is the prominence of internationally-renowned firms like Google, which bring with them an experienced workforce that can mentor, develop and share knowledge with local workers.²⁰

This experience allows employees to develop important skills required in the technology and digital sector that can lead to innovation and entrepreneurship. For example, many former Google employees, referred to as 'Xooglers' have started a number of successful start-ups.²¹

employer of Australian university graduates and is not only one of the major employers of graduates but also one of the employers of choice among graduates. They run one of the largest internship programs for university students in Australia, preparing students for work in the technology sector.

Maurice Pagnucco, Deputy Dean for the Faculty of Engineering, University of New South Wales.

II Working at Google is seen as a top graduate employment outcome for our students, with competition to apply for internships and to participate in on-campus events with Google incredibly high.

Professor Katrina Falkner, Deputy Dean for the Faculty of Engineering, Computer and Mathematical Sciences, University of Adelaide.

²⁰ Beata Javorcik (2013), 'Does FDI Bring Good Jobs to Host Countries?'. Available at: https://pdfs.semanticscholar.org/1c6f/da5af6eee2d67d34705eb8a6b64f95a3b6bf.pdf

²¹ Business Insider (2019), '20 of the hottest enterprise startups of 2019 founded by former Google employees'. Available at: https://www.businessinsider.com/20-enterprise-startups-former-google-employees-2019-6/?r=AU&IR=T

Google has a strong presence in Australia, directly employing 1,500 people. This drives the employment quality in Australia in numerous areas relevant to Google's products, with a majority of these being high-skilled occupations. For example, Google creates many opportunities for workers, students and academics in STEM-related fields in Australia, currently employing 700 engineers, over 100 graduates from Australian universities, and supporting 26 PhDs.²²

Google Australia is currently ranked as the most desirable employer by Australian university students and seek to recruit graduates from a range of backgrounds, including STEM and business related fields.²³

Google... has a significant research program in Australia (Google Maps originated in Australia and is still being actively developed at the Sydney office) that is enhancing the nation's capacity for innovation. Google has also invested heavily in raising the awareness of ICT in the community, especially among school students. They have actively been involved in funding programs to equip school teachers to teach computer science and have funded campaigns to raise awareness of computer science careers. I have not seen this level of foresight and commitment from the Australian technology sector.

Maurice Pagnucco, Deputy Dean for the Faculty of Engineering, University of New South Wales.

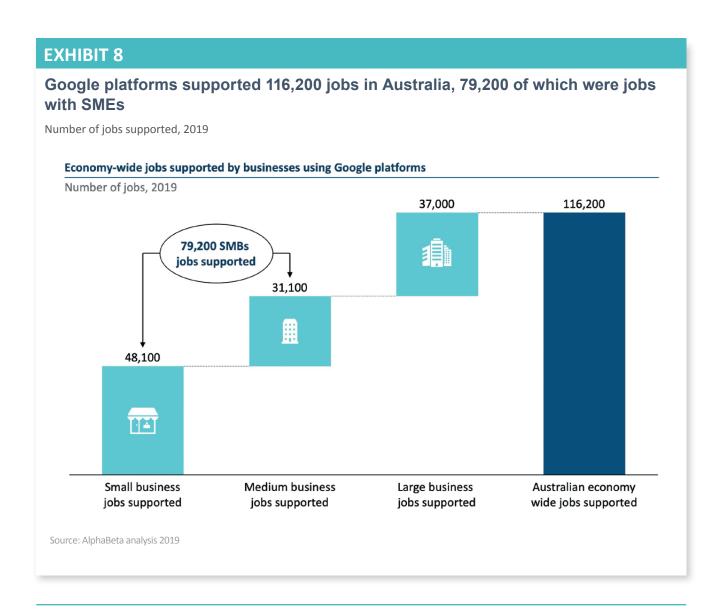
²² Sydney Morning Herald (2019), 'Expanded Chromebook range hits Australia as Google pushes homegrown software'. Available at: https://www.smh.com.au/technology/expanded-chromebook-range-hits-australia-as-google-pushes-homegrown-software-20190604-p51udw.html; Australian Financial Review (2018), 'Google Photos creator Anil Sabharwal heads home to Australia'. Available at: https://www.afr.com/technology/google-photos-creator-anil-sabarwhal-heads-home-to-australia-20180223-h0wjow

²³ Grad Australia (2019), 'The Australian Top 100 Graduate Employers'. Available at: https://gradaustralia.com.au/top-100-employers; Grad Australia (2019), 'Google Australia'. Available at: https://gradaustralia.com.au/graduate-employers/google-australia.

2.2 GOOGLE ENABLES 116,200 JOBS IN THE WIDER ECONOMY, OF WHICH TWO-THIRDS ARE IN SMES

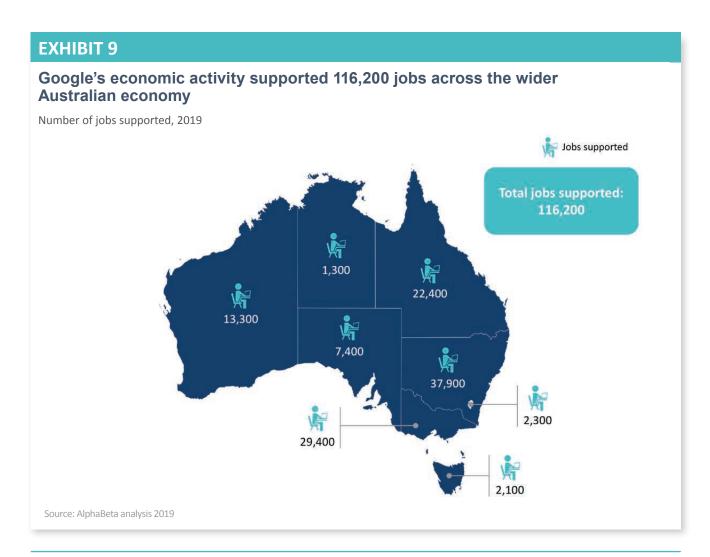
Overall, the effect of Google's products for employment in Australia has been through the growth, increased productivity and opening of new opportunities for other businesses, which in turn supports jobs in those businesses. In 2019, the benefits realised by businesses from using Google's platforms enabled them to support up to 116,200 jobs in Australia. Two-thirds of these jobs were realised by small and medium businesses.

Businesses that expanded their revenue and reach to new markets through the use of Google Ads and Search would require increased hiring to meet this additional demand. Furthermore, additional productivity for workers can result in businesses being more willing to hire.



More directly, there are increasing opportunities for businesses to utilise tools provided by Google. This includes those that leverage existing products, such as using Google Maps APIs, or rewarding those who are creating content through monetising online page and video views through AdSense and YouTube.

Google Search is also a common tool for people to search for new jobs and provide upskilling for future opportunities. The benefits of Google's platforms have been realised nationally by helping Australian businesses to support jobs across all states and territories in Australia in 2019 as shown in **Exhibit 9** below.

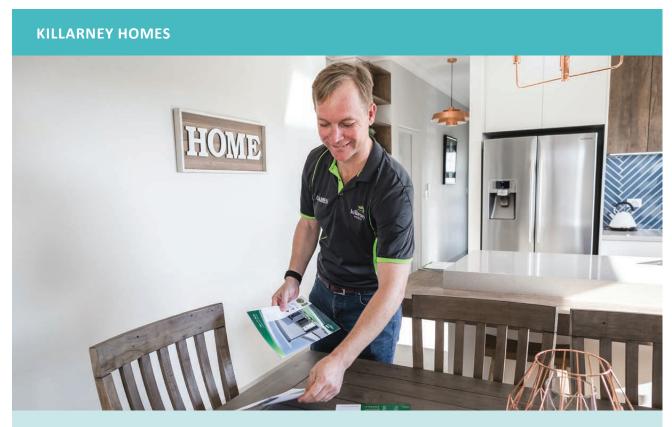


Google products can be especially useful in helping businesses overcome more traditional barriers that smaller businesses face. In addition, Google platforms have also supported small businesses and self-employed entrepreneurs in creating more jobs, by enabling new growth opportunities such as developing tools using Google Maps, or producing content that can be distributed and monetised through AdSense and YouTube.

All of these provide business opportunities and productivity improvements for growing businesses, which in turn leads to greater employment in Australia's SMBs.

If For a business that wants to grow, global reach is everything. It extends your potential market beyond your imagination.

James Ravens, Bridestowe Lavender, Tasmania



LOCATION: NORTHERN TERRITORY | EMPLOYEES: 20 PLUS 80 CONTRACTORS

When Cyclone Tracy hit Darwin, she caused a level of destruction unprecedented in Australia's history. But, where many people saw nothing but devastation, brothers Damien and Michael Moriarty saw a chance to help. Darwin needed rebuilding, and there had been a shift away from tropical home designs in the area, which meant people were using tonnes of unnecessary energy to cool their homes against the Territory's often oppressive heat. Together, the brothers pooled their savings and hatched a plan. "Our commitment is to build cool, comfortable homes appropriate to the tropics with a high quality finish, on budget and on time," Damien says.

At first, their instincts to lean into online advertising were met with derision. Damien says, "Plenty of people told me clients aren't looking for houses online." But the brothers persevered. "We know it's the largest purchase people make, and we'd say they're doing the opposite. They're screening potential real estate agents and builders online, in the comfort of their own homes." Damien and Michael turned to Google to drive awareness of their business.

"We saw a 55% increase in traffic to our website," Damien says. They've used Google Ads to help customers discover what's best for them, making their interactions with potential customers as efficient as possible.

Since 2005, Killarney Homes has grown rapidly and from strength to strength. They've captured 9% of the residential market in Darwin, Palmerston and Litchfield, and been recognised with a haul of industry awards for their commitment to eco-efficient housing. Today, they remain steadfast in their commitment to digital advertising, with Google by their side. Damien puts it best when he says, "Broadcast and mass media are like trawling the ocean floor. You literally rip everything up off the seabed. We think about good internet campaigns as fishing in the right spot, with the right bait."

BRIDESTOWE LAVENDER



LOCATION: TASMANIA | EMPLOYEES: 60

When father and son team Robert and James Ravens bought 96 year old business Bridestowe Lavender in 2010, they were already on the back foot. The business had been struggling, and the family needed to attract a whole new market of visitors to the farm if they were going to restore it to the thriving tourist attraction it had once been.

Robert and James explored their advertising options. "Very early in the piece, when we started to look at how to grow this business, we realised we didn't have money to invest in traditional advertising. So, we started to look at what online communication tools were available," James says. The family was looking to the Asian tourism market as potential new visitors to the farm, and Google Ads gave them the reach, affordability and quick turnaround they needed to attract that new market in time. "We saw the ability to do paid campaigns online. It was cheaper and gave us instant feedback," James says. "For a business that wants to grow, global reach is everything. It extends your potential market beyond your imagination."

For the next two years, the Ravens focused their attention on this overseas market. They optimised their Google Ads campaigns with Google Analytics, and used YouTube to showcase the breathtaking vistas the acreage offers.

The results were remarkable. "On December 26th 2018, we had 2,500 people come through our gates. We've boosted tourism numbers into this area. Originally, a few thousand a year, now more than 85,000 visitors come to see Bridestowe Estate every year."

That impact has extended beyond the bounds of Bridestowe Estate and into the Nabowla community. Since 2010, they've employed almost 60 new local staff, and the entire community is benefitting from the reinvigoration of this 96 year old business.

CHEEKY FOOD EVENTS



LOCATION: NSW | EMPLOYEES: 2-5

After falling in love with a sailor, Leona Watson jumped aboard a yacht as the crew's newest cook and sailed off into the sunset. Here she found her second love – bringing people together over good food, good wine and good times. In 2002, Leona decided to turn this passion into a career and Cheeky Food Events was born.

Cheeky's unique team building offering took off with ease. "In the beginning, there were no competitors. The product didn't exist, so early growth was very good," Leona says. Then, the market started to flood, the Global Financial Crisis hit and Cheeky's phones stopped ringing. After exhausting the traditional advertising methods, including numerous cold calls, Leona turned to Google. "Google Ads has steadily delivered 70-80% of our new business leads since the GFC, and it's getting closer to 90% more recently," Leona says. "Between 2008 and 2009 we doubled our revenue from \$1 million to \$2 million – Google can be attributed to \$1.5 million of that."

Over 17 years Leona continued Cheeky's evolution with the help of Google Analytics and an SEO specialist. She has since sold the company but is looking forward to seeing the next phase of growth as they expand to other Google products, like Display ads and Video campaigns. Leona now spends her time mentoring other small business owners and working on her next adventure with Google at the helm. "Google Analytics is great to have, there's so much gold in it; from breaking down traffic sources, identifying tyre-kickers and even helping know how the business should speak."

SNOWYS



LOCATION: ADELAIDE, SOUTH AUSTRALIA | EMPLOYEES: 100

In 1995, camping enthusiast Richard Wescombe started selling outdoor gear to locals in Adelaide's western suburbs. Having already launched his own lawn-mowing business, Richard's entrepreneurial spirit helped Snowys quickly grow from a small shop front to a store 15 times the size.

Snowys had dipped a toe in the digital pool, but Richard knew they needed to dive in head first to grow the business further. So, in 2011, they created an online store and turned to Google to help it thrive. Ben Collaton, Snowys' SEO and SEM specialist, says "Our website is also part content creation and inspiration. Content helps to tell stories around the products." After investing heavily in YouTube to tell these stories, along with in-house SEO and Google Ads, Snowys saw a 500% growth in users to their site. "The majority of the business is online and we have customers Australia-wide," Ben says. "So much so that 50% of our employees solely handle our online orders."

Three locations and 100 employees later, Snowys hasn't lost sight of its humble local origins. "It's a family business and employs the local market. We often have multiple members of other families working for us," Ben says. After Snowys' success with Google Ads, Ben is excited to see the role it will play for other regional businesses. "Google could become even more of a trusted partner in smaller towns. We would recommend all businesses use Google to grow their business Australia-wide".





Google helps businesses save time and money



\$1.3 billion

of benefits in time saved for Australian transport businesses by Google Maps in 2019



\$1.6 billion

of benefits in time saved for Australian businesses by Google Search in 2019

GOOGLE HELPS BUSINESSES SAVE TIME AND MONEY: PRODUCTIVITY TOOLS DELIVER \$2.9 BILLION IN BUSINESS BENEFITS

Google reduces the friction of conducting business by saving time, reducing costs and improving the ability to access information and knowledge. Google Maps underpins many aspects of the transport sector allowing seamless navigation for taxi, ridesharing and other forms of road transport. Google Search makes it easier and cheaper for businesses to find relevant data and information by arranging and simplifying the

vast array of content on the internet. This reduces the search costs involved with acquiring knowledge and information that previously incurred high time cost. In 2019, Google helped Australian businesses save over \$2.9 billion in time and costs through improved journey routing and access to information from Google Maps and Search.

EXHIBIT 10

Google reduces the friction of conducting business by saving time and reducing search costs



Source: AlphaBeta analysis 2019

3.1 GOOGLE MAPS AND SEARCH HELP BUSINESSES FIND WHAT THEY NEED MORE QUICKLY

Google Maps and Search remove the friction of undertaking business through convenient journey routing and organising the vast array of information available on the internet.

Google Maps provides free access to route planning allowing businesses to plan their journeys through driving, biking, walking or public transport. Taxi drivers and peer-to-peer ridesharing drivers can easily navigate their journeys with Google's Map application which allows the user to navigate the most efficient journey path.

We estimate that approximately 44 million hours were saved each year through these businesses using Google Maps, equating to \$1.3 billion in value, or \$7,600 per business using Google Maps.

Google Search gives businesses unprecedented access to information, while also increasing the ease and speed at which it can be accessed. Businesses using Google Search are saving time by finding an answer efficiently without, for example, a lengthy trip to the library. This ability to rapidly and inexpensively access information provides tremendous productivity and time saving benefits to businesses.

It is estimated that each business in Australia saves on average almost 40 hours in search time, amounting to \$1.6 billion of value in 2019.

EXHIBIT 11

Google Maps and Search are saving businesses time and increasing productivity

SAU and hours of saved time

	Time saved per business	Benefit per business	Total benefit
		©	\$
Google Maps	250 hours per transport business	\$7,600 per transport business	\$1.3 billion
Google Search	40 hours per business	\$1,200 per business	\$1.6 billion

Source: AlphaBeta analysis 2019

APPENDIX A

METHODOLOGY

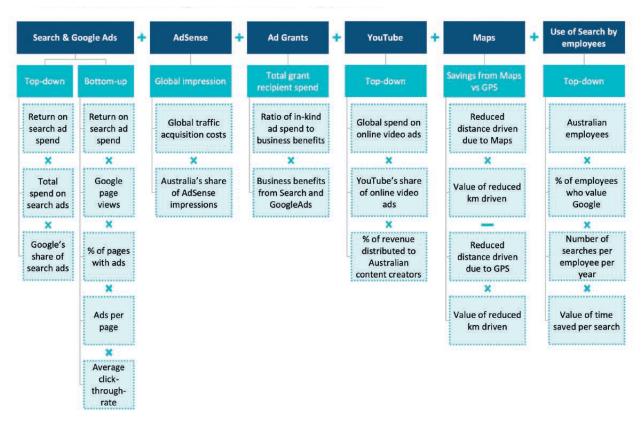
This report describes the business economic impact of Google in Australia in 2019.

The business benefits for each Google product has been derived using multiple approaches with a range of third-party sources as shown in **Exhibit 12**.

The total benefits have been derived as the sum of the business benefits generated from Google Search, Google Ads, AdSense, Ad Grants, YouTube, Maps and the use of Google Search by Australian employees as shown in **Exhibit 12**.

EXHIBIT 12

The methodology for measuring business benefits has relied on publicly available data by using an 'outside in' approach



Note: This report's methodology for measuring Google's economic impact is consistent with the methodology used in the Google Economic Impact United States 2018 report, and also measures the business benefits of YouTube, Google Maps and Search Source: AlphaBeta analysis 2019

GOOGLE SEARCH AND GOOGLE ADS

We estimated the benefits for businesses operating in Australia that were attributable to Google Search and Google Ads using two methods: (1) a top-down approach; and (2) a bottom-up approach. The top-down approach estimated of the total size of the search advertising market in Australia and Google's share of this market. The bottom-up approach estimated the number of Google page views in Australia, the proportion of these pages that were displaying advertisements, the number of advertisements on each page and the average click-through rate.²⁴

To estimate the benefits generated by businesses from using Search and Google Ads, a return on investment (ROI) was applied to the total advertising spend of businesses on Google Ads.

This ROI was developed from three key assumptions

- Hal Varian, Google's chief economist estimated that business generate \$2 of value for every \$1 spent on advertising with Google Ads. This estimation was based on a sample of proprietary data, and has been published in the American Economic Review²⁵
- Businesses generate an additional five clicks from organic search results on Google.com.au for every click on a paid advertisement on Google. This assumption is based off research published by Bernard Jansen and Amanda Spink in 2009²⁶
- Google assumes that unpaid clicks are not as commercially valuable, and therefore are only 70% as valuable as paid clicks. This assumption has been used in the US Economic Impact Study for 2014 and 2018.²⁷

The formula to derive a business' return on investment for advertising on Google Ads can be seen below in **Exhibit 13**.

EXHIBIT 13 Businesses generate additional revenue from advertising through Google Ads **Total return** ROI on Organic Value of ROI on Google organic to on investment Ad Spend to paid Ad Spend Ad Spend GoogleAd (ROI) Ads click ratio paid click Total ROI = $2 \times (ad \text{ spend}) + 5 \times 70\% \times 2 \times (ad \text{ spend}) - (ad \text{ spend}) = 8 \times (ad \text{ spend})$

Therefore, to estimate the benefits generated by businesses, we multiplied the total advertising spend on Google Ads for 2019 by 8.

²⁴ The average click-through-rate refers to the average proportion of visitors to a web page who follow a link to a particular site.

²⁵ Hal Varian (2009), 'Online ad auctions'. Available at: https://www.aeaweb.org/articles?id=10.1257/aer.99.2.430

²⁶ Bernard Jensen and Amanda Spink (2009), 'Investigating customer click through behaviour with integrated sponsored and nonsponsored results'. Available at: https://faculty.ist.psu.edu/jjansen/academic/jansen_click_through_sponsored_links.pdf

²⁷ Google (2018), Economic Impact Report United States 2018. Available at: https://static.googleusercontent.com/media/economicimpact.google.com/en//static/reports/2018/ei-report-2018.pdf

EXHIBIT 14

Inputs and sources for calculating the business benefits of Search and Google Ads using a top-down and bottom-up approach

Estimation	Metric	Source
	Online search advertising market size	IAB Australia (2019), 'Online Advertising Expenditure Report'
		IBISWorld (2019), 'Online Advertising in Australia'
	Google's market share in online search	Statista (2017), 'Share of Google in the revenue of general search advertising in Australia' $$
		IBISWorld (2019), 'Online Advertising in Australia'
Top down	Return on investment of	Hal Varian (2011), 'Economic value of Google Presentation'
	advertising on Google Search and Google Ads	Hal Varian (2009), 'Online Ad Auctions'
		Bernard Jansen and Amanda Spink (2011), 'Investigating customer click through behaviour with integrated sponsored and nonsponsored results'
		Google (2018), 'Economic Impact Report United States 2018'
Bottom up	Google Search page views	Nielsen (2017), 'Nielsen Digital Landscape Surfing Report'
	Percentage of pages that display advertisements	Hal Varian (2011), 'Economic value of Google Presentation'
	Number of advertisements per page	
	Average CTR (click-through- rate by users) of Google advertisements	AdStage (2019), 'Paid Media Q2 2019 Benchmark Report'
	Average CPC (cost-per-click to advertisers)	
ource: AlphaBeta analysis 2019		

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ADSENSE

The benefits of Australian businesses from using AdSense has been estimated as the total income that Australian website publishers earn from placing advertisements sourced through Google Ads next to content on their website.

The total income earned by Australian website publishers was estimated from Google's global payments to website publishers, also known as their traffic acquisition, costs, and applying Australia's share of AdSense impressions to estimate the payments specific to Australia.

EXHIBIT 15

Inputs and sources for calculating the income of website publishers from AdSense using Australia's share of global impressions

Estimation	Metric	Source
Global impression share	Global traffic acquisition costs related to Adsense, converted to AUD	Alphabet Inc (2018), 'United States Securities and Exchange Commission: Form 10-K for financial ended 31 December 2018'
	Australia's share of global impressions on Adsense	Google DoubleClick (2014), 'What's trending in display for publishers?'
Source: AlphaBeta analysis 2019		

AD GRANTS

We have measured the economic impact of Google's Ad Grants program as the total amount spent by grant recipients on advertising in 2019.

The total spend by Ad Grant recipients in Australia has been estimated using US ratios of in-kind advertising expenditure to total benefits derived from Google's platforms in 2018.²⁸

EXHIBIT 16

Inputs and sources for calculating the total ad spend by Google's Ad Grant recipients

Estimation	Metric	Source
Total grant recipient ad spend	Ratio of in-kind advertising to business benefits derived from Google Search and Google Ads in US for 2018	Google (2018), 'Economic Impact Report United States 2018'
	Total business benefits derived from Google Search and Google Ads in Australia for 2019	Australian business benefits for Search and Google Ads 2019 (AlphaBeta analysis)
Source: AlphaBeta analysis 2019)	

²⁸ Google (2018), 'Economic Impact Report United States 2018'. Available at: https://static.googleusercontent.com/media/economicimpact.google.com/en//static/reports/2018/ei-report-2018.pdf.

YOUTUBE

The benefits generated from YouTube was measured as the income of Australian content creators uploading content on YouTube. These benefits were measured using a top-down approach. Firstly, we estimated the total online video advertising market globally and took YouTube's share of this market to derive YouTube's advertising revenue.

From YouTube's advertising revenue, we took the proportion of revenue that is distributed to YouTube content creators and the proportion of YouTube channels that are Australian to estimate the income generated by Australian content creators.

EXHIBIT 17 Inputs and sources for calculating the income generated by YouTube content creators Global online video advertising spend IAB (2019), 'Online Advertising Expenditure Report' eMarketer (2019), 'Digital Ad Spending' IAB (2019), 'IAB internet advertising revenue report YouTube's share of online video ads Statista (2019), 'Video advertising revenue market share of YouTube in the United States from 2015 to 2018' Income generated by YouTube App Nexus (2018), 'The digital content creators advertising stats you need for 2018' Proportion of YouTube revenue Google product forums "YouTube distributed to content creators Monetization" Influencer Marketing Hub (2019), 'YouTube Money Calculator: Calculate how much you can make' DrSoft (2019), 'How to achieve success and make money on YouTube' Proportion of YouTube channels that are Google (2017), 'YouTube - The Australian Australian Story' Omnicore (2019), 'YouTube by the Numbers' Source: AlphaBeta analysis 2019

GOOGLE MAPS AND SEARCH

The benefits that Australian businesses derived from Google Maps have been estimated by calculating the difference in kilometres driven by businesses using Google Maps relative to a counterfactual where businesses are assumed to have access to GPS technology. To calculate the net savings from a business using Google Maps, we first estimated the time saved by calculating the number of vehicles with drivers using Maps, the reduction in trip time using Maps, total kilometres travelled each year by businesses using Maps, the average trip speed, and the average national wage rate.

We then estimated the time saved using a GPS following a very similar method, considering the number of vehicles with drivers using a GPS and the reduction in trip time using a GPS.

We have not quantified the avoided vehicle operating costs and externalities associated with travel time and distance savings of Google Maps.

EXHIBIT 18

Inputs and sources for calculating the productivity benefits associated with Google Maps

Estimation	Metric	Source
Value of time saved	Number of cars with GPS	TNO (2007), 'Independent research by Dutch research institute'
	devices	AlphaBeta Advisors (2017), 'Google Economic Impact Australia 2015'
	Proportion of trips that involve the use of GPS	TNO (2007), 'Independent research by Dutch research institute'
		AlphaBeta Advisors (2017), 'Google Economic Impact Australia 2015'
under counterfactual	Proportion of kilometres	TNO (2007), 'Independent research by Dutch research institute'
	reduced through the use of GPS	AlphaBeta Advisors (2017), 'Google Economic Impact Australia 2015'
	Total business kilometres travelled by all vehicles in a year	Australian Bureau of Statistics (2019), '9208.0 – Survey of Motor Vehicle Use, Australia, 12 month ended 30 June 2018'
	Proportion of people with smartphones	Deloitte (2018), 'Behaviour unlimited – Mobile Consumer Survey 2018: The Australian cut'
	Proportion of smartphone owners that use Google Maps	Deloitte (2018), 'Behaviour unlimited – Mobile Consumer Survey 2018: The Australian cut'
		Statista (2018), 'Most popular mapping apps in the United States as of April 2018'
		ASYMCO (2015), 'Where are Maps going?'
	Proportion of trips that	TNO (2007), 'Independent research by Dutch research institute'
Value of time saved	involve the use of Maps	AlphaBeta Advisors (2017), 'Google Economic Impact Australia 201
using Google Maps	Proportion of kilometres reduced through the use of Maps	TNO (2007), 'Independent research by Dutch research institute'
whilst driving		AlphaBeta Advisors (2017), 'Google Economic Impact Australia 2015'
	Total business kilometres travelled by all vehicles in a year	Australian Bureau of Statistics (2019), '9208.0 – Survey of Motor Vehicle Use, Australia, 12 month ended 30 June 2018'
	Trip speed	Bureau of Transport Statistics, Transport for NSW (2014) Annual Report
		AlphaBeta Advisors (2017), 'Google Economic Impact Australia 2015'
	Value of time saved per hour	Australian Bureau of Statistics (2019), '6302.0 – Average Weekly Earnings, Australia, May 2019'

Australian businesses also generate benefits from employees saving time through the use of Google Search for work related tasks. To calculate the savings businesses experience, we estimated proportion of Australian employees that value and

regularly use Google Search in their employment, the value of time saved per search conducted and the number of searches per employee.

EXHIBIT 19

Inputs and sources for calculating the productivity benefits from employees using Google Search

Estimation	Metric	Source
Value of time saved using Google Search	Number of employees in Australia	Australian Bureau of Statistics (2019), '6202.0 – Labour Force, Australia, Jul 2019'
	Estimated searches per employee	Public First (2018), 'Google's Impact in the UK: At home, At School, At Work'
	Proportion of employees that use Google Search at least once a day	Public First (2018), 'Google's Impact in the UK: At home, At School, At Work'
	Proportion that value Google Search	Public First (2018), 'Google's Impact in the UK: At home, At School, At Work'
	Google's market share of search engines	StatsCounter GlobalStates (2019), 'Search Engine Market Share Australia'
		Statista (2017), 'Share of Google in the revenue of general search advertising in Australia'
	Estimated time saved per search	Hal Varian (2011), 'Economic value of Google Presentation'
	Value of time saved per hour	Australian of Statistics (2019), '6302.0 – Average Weekly Earnings, AustrBureau alia, May 2019'
Source: AlphaBeta analysis 2019		

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EMPLOYMENT

Given the many ways and differing occupations that Google products can be used, it can be difficult to assess the specific effect Google has on employment. However, an overall estimation of the number of jobs that are supported by these products can be made using two approaches. The first method estimated the average revenue generated per worker by business size (small, medium and large businesses).

The second method estimated the average output generated per work. To generate a more accurate figure, we took the average of the two approaches to estimate Google's impact on the number of jobs supported in Australian businesses.

EXHIBIT 20

Inputs and sources for calculating the number of jobs supported from Google's activity in Australia

Estimation	Metric	Source
Revenue per worker by business size	Number of employees in Australia by business size	Australian Bureau of Statistics (2019), '8155.0 – Australian Industry, 2017-18'
	Revenue per business by business size	Australian Bureau of Statistics (2019), '8155.0 – Australian Industry, 2017-18'
Output per worker	Number of employees in Australia	Australian Bureau of Statistics (2019), '6202.0 – Labour Force, Australia Jul 2019'
	Total industry output	Australian Bureau of Statistics (2017), '5209.0.55.001 – Australian National Accounts: Input-Output Tables, 2016-17'
Source: AlphaBeta analysis 2019		

APPENDIX B

STATE AND TERRITORY IMPACTS OF GOOGLE

We have estimated the state by state impact of Australian businesses from using Google's platforms through various metrics. These metrics provide very similar approximations for each state's share of benefits, however some carry more weight for states that have a larger share of output or number of businesses. To minimise the weighting of such metrics, we have taken an average of the metrics listed in **Exhibit 21**.

The benefits derived by Australian businesses and the jobs supported in each state can be seen below in **Exhibit 22** and **Exhibit 23** respectively. We have also estimated the number of beneficiaries from Google Ads, AdSense and NFP Ad Grant recipients in each state and territory, which can be seen below in **Exhibit 24**.

EXHIBIT 21

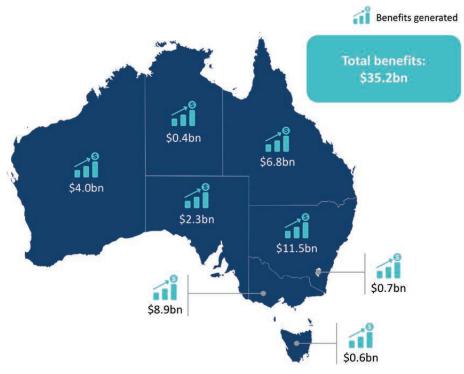
Inputs and sources for calculating the state by state impacts

Estimation	Metric	Source
Average of metrics	Share of Gross Domestic Product (GDP) for each state	Australian Bureau of Statistics (2018), '5220.0 – Australian National Accounts: State Accounts, 2017-18'
	Share of state final demand for each state	Australian Bureau of Statistics (2019), '5206.0 – Australian National Accounts: National Income, Expenditure and Product, Mar 2019'
	Share of businesses in each state	Australian Bureau of Statistics (2019), '8165.0 – Count of Australian Businesses, including Entries and Exits, June 2014 to June 2018'
	Share of population for each state	Australian Bureau of Statistics (2018), '3101.0 – Australian Demographic Statistics, Dec 2018'
Source: AlphaBeta analysis 2019		

EXHIBIT 22

Google is critical to supporting businesses generate benefits across all states and territories in Australia

\$AU billions, 2019



Source: AlphaBeta analysis 2019



EXHIBIT 24

Nearly 120,000 Australian businesses, website publishers & NFPs benefited from Search & Google Ads, AdSense and Ad Grants in 2019

	Businesses paying for Google Ads	Website Publishers earning income	NFP Ad Grant recipients	Total beneficiaries
NSW	33,900	6,100	560	40,560
VIC	26,700	4,800	440	31,940
QLD	19,400	3,500	320	23,220
SA	6,500	1,200	110	7,810
WA	10,000	1,800	160	11,960
TAS	1,700	300	30	2,030
NT	600	100	10	710
ACT	1,200	200	20	1,420
Australia 🗭	100,000	18,000	1,650	119,650

Source: AlphaBeta analysis 2019

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