STARTUP MUSTER

ANNUAL REPORT

FOREWORD

Australian startups are an important contributor to a strong economy and create opportunities for exports, investment and jobs right across the country.

We recently marked the one year anniversary of an initiative designed to capitalise on Australia's strengths, turning this country into an innovation leader.

The \$1.1 billion National Innovation and Science Agenda, launched by the Turnbull Government last December, is aimed at helping Australians get their ideas to market and to create the jobs and business growth we need.

Our plan revolves around innovation as a key driver of business competitiveness, economic growth and improved living standards.

In 2016 new tax incentives for early stage investors have been introduced, along with the launch of the Incubator Support initiative and the creation of landing pads in San Francisco, Shanghai, Singapore, Tel Aviv and Berlin. All of these initiatives aim to assist Australian founders and the startup ecosystem.

I am pleased to see the 2016 Startup Muster highlight the important role startups play in our economy while also showing the significance and value of innovation activity across all businesses and sectors.

Innovation is central to boosting growth, creating new jobs and industries and improving our quality of life.

SENATOR THE HON. ARTHUR SINODINOS AO

Minister for Industry, Innovation and Science



CEO SUMMARY

2016 has been another record year for the Australian startup community, and for Startup Muster.

Startup Muster has embraced greater opportunities to showcase the progress, challenges and opportunities in the startup community, with the expansion of our 2016 survey so that all members of this ecosystem could take part. This included startup founders, people considering launching a startup, and businesses that support startups including, but not limited to, accelerators, incubators, investors, mentors, educators, service providers and government.

We trust this report will improve the understanding of not just our current ecosystem, but also those that will help build our future ecosystem.

At 24 pages, this report is the most detailed of any report we have released to date. There's still a considerably larger amount of data we haven't yet reported on however, and we welcome enquiries from organisations wishing to better understand a specific (and deidentified) part of our ecosystem.

Startup Muster is made possible by the support of Google and the Australian Government's Department of Industry, Innovation and Science.

A big thank you to the Startup Muster team:

8 Murray Hurps

👃 Rick Geremia

A Tim Paris

A Raena Lea-Shannon

A Ryan Defina

Amit Shah

A Michael Kedzierski

And most importantly, thank you most of all to the Australian startup community for taking the time to make sure they are represented. These are statistics for the ecosystem, by the ecosystem, and which we trust will help inform and build our future ecosystem.

MONICA WULFF CEO and Co-founder Startup Muster



METHODOLOGY

The Startup Muster 2016 survey was available to complete online from July 4th until August 15th of 2016 at www.startupmuster.com.

During this time people engaged in startups, people considering launching startups and businesses that provide support to startups were able to take part in the survey, including but not limited to accelerators, incubators, investors, mentors, educators, service providers and government.

The survey was separated into three survey streams, one for each participant type. The surveys were dynamic meaning the number of questions were dependent on previous responses. For each stream the average answer counts were: Founders: 80 answers, future founders: 30 answers, helpers: 51 answers.

Our CEO, Monica Wulff, undertook a six week roadshow across Australia meeting with local startup communities, private industry and government. Blogs about roadshow were shared via LinkedIn and repurposed as articles by Startup Smart.

In total 118,926 answers were provided by 1478 startup founders, 432 potential founders and 801 startup supporters. These responses then underwent an exhaustive post survey validation and cleaning process, including manual review of each participant to ensure compliance with our definitions. The final statistical sample for this report consists of 685 verified startup founders, 239 potential founders and 474 startup supporters.

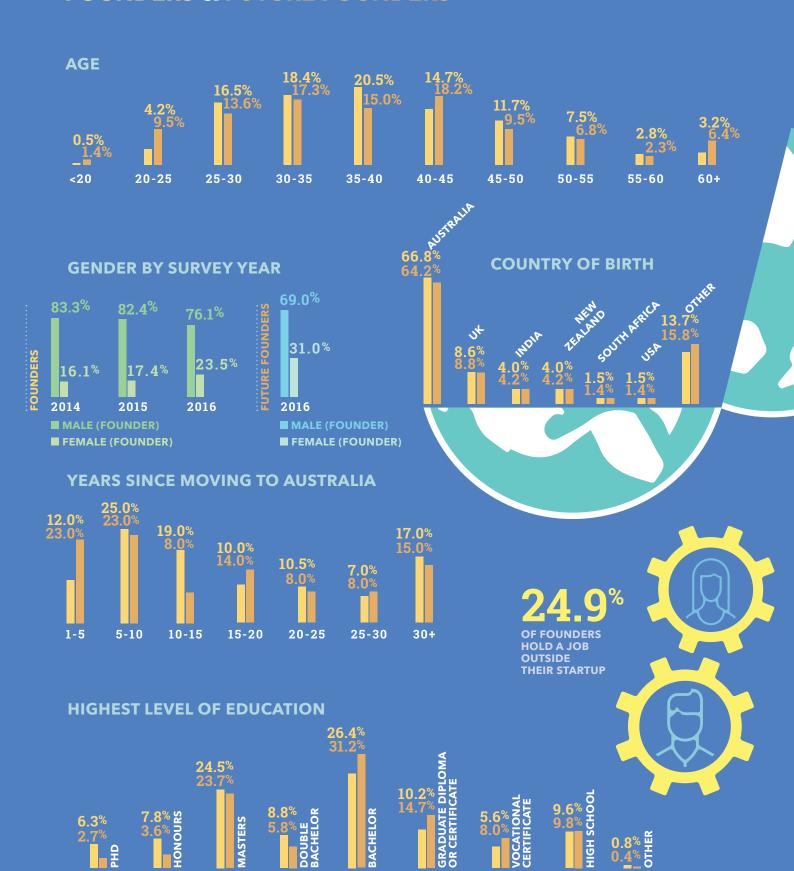
The total response rate for each question varies as all the survey responses were not compulsory, free written text responses were allowed and the relevancy of the questions varied between startups. The report estimates are cross sectional in nature, meaning that all figures for a given year are based on a responding sample representative of the broader startup population in that year.

For the validation of startup companies, evaluation was conducted to establish a large addressable market, or a market that is likely to become large, combined with the use of technology to address that market quickly.

For detailed information on the treatment of data after submission, please contact info@startupmuster.com

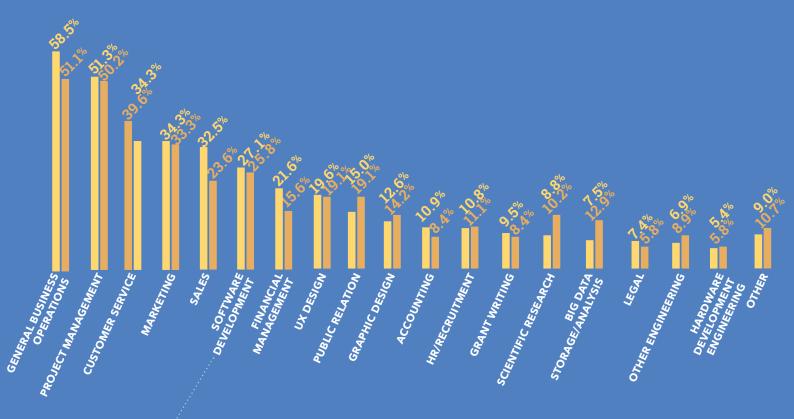
WHO IS STARTING STARTUPS?

FOUNDERS & FUTURE FOUNDERS



WHAT SKILLS **DO THEY HAVE?**

FOUNDERS & FUTURE FOUNDERS



PROGRAMMING LANGUAGES

JAVASCRIPT 57.0%

PHP 31.3%

NODEJS 18.2%

JAVA 17.8%

IDON'T KNOW 15.1%

PYTHON 14.3%

C# 12.7%

RUBY 12.4%

OBJECTIVEC 10.1%

C++ 9.1%

SWIFT 7.8%

c 4.7%

CLOJURE/

HASKELL/ ERLANG 3.4%

GO 3.1%

R 3.1%

PERL 1.6%

SCALA 1.6%

.NET 1.3%

ANGULARJS 1.0%

OTHER 7.2%

NUMBER OF STARTUPS PREVIOUSLY FOUNDED

54.6% 25.4% 8.6%

6.4%

2.1% 2.8% 0.9%

71.6%

16.9%

7.6%

2.2%

NUMBER OF STARTUPS PREVIOUSLY WORKED FOR

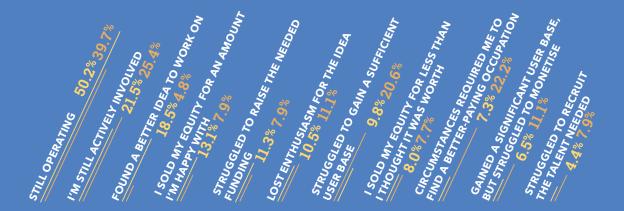
73.8% 75.7% 18.0%

16.5%

6.1% 3.6% 3.6%

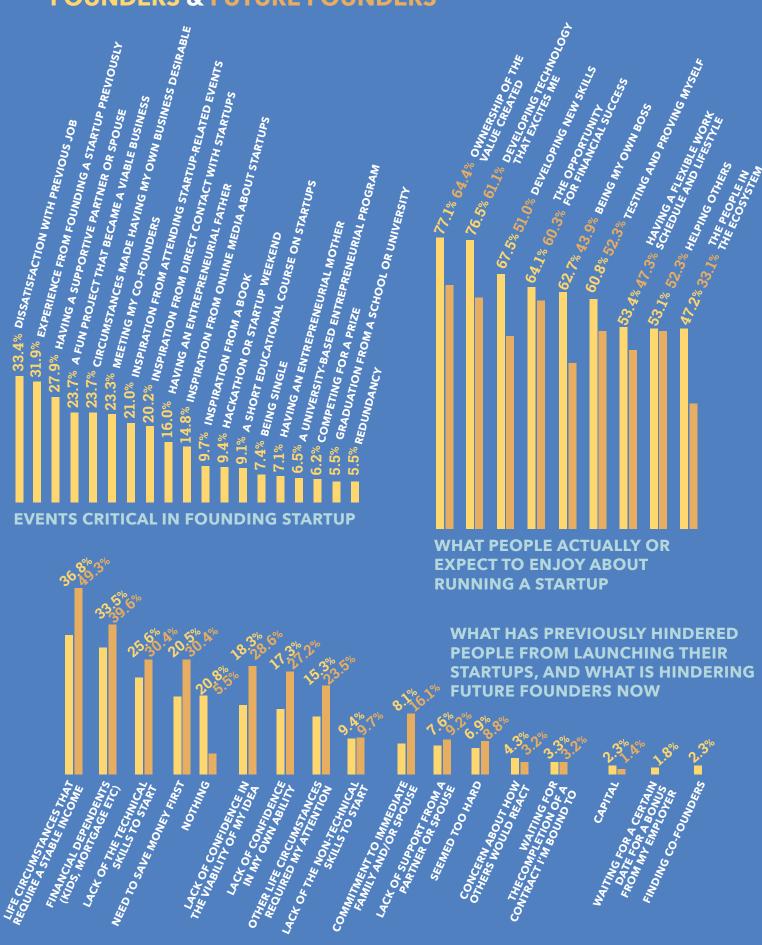
2.8%

STATUS OF LAST STARTUP FOUNDED



WHY ARE THEY STARTING?

FOUNDERS & FUTURE FOUNDERS



HOW DID THEY START?

FOUNDERS







FOUNDING TEAM SKILL SET



61.2% GENERAL BUSINESS OPERATIONS

52.5% PROJECT MANAGEMENT

37.2% MARKETING

29.7% SALES

29.7% UX DESIGN

26.9% GRAPHIC DESIGN

26.7% FINANCIAL MANAGEMENT

26.3% CUSTOMER SERVICE

20.5% ACCOUNTING

13.7% OTHER ENGINEERING

13.2% BIG DATA STORAGE/ANALYSIS

12.6% SCIENTIFIC RESEARCH

11.9% HARDWARE DEVELOPMENT/ ENGINEERING

11.4% PUBLIC RELATIONS

11.0% LEGAL

9.8% GRANT WRITING

8.7% HR/RECRUITMENT

6.6% OTHER

SKILLS FOUNDERS WISH THEY HAD IN THEIR FOUNDING TEAM



SOFTWARE DEVELOPMENT 33.3%

UX DESIGN 30.1%

SALES 24.4%

GRAPHIC DESIGN 23.1%

LEGAL 17.1%

PUBLIC RELATIONS 15.4%

FINANCIAL MANAGEMENT 14.9%

GRANT WRITING 14.9%

ACCOUNTING 13.5%

ĠENERAL BUSINESS OPERATIONS f 10.1%

BIG DATA STORAGE/ANALYSIS 9.5%

NONE 7.6%

PROJECT MANAGEMENT 7.6%

HARDWARE DEVELOPMENT/ENGINEERING 6.0%

CUSTOMER SERVICE 4.3%

HR/RECRUITMENT 4.1%

OTHER ENGINEERING 4.1%

SCIENTIFIC RESEARCH 2.9%

OTHER 2.2%

HELP BENEFITED FROM SINCE FOUNDING

62.5% MENTORSHIP + 44.7% COWORKING 39.7% INVESTMENT 35.3% CONNECTIONS TO STARTUPS 33.2% ACCOUNTING ASSISTANCE 32.3% LEGAL ASSISTANCE 31.7% MEDIA EXPOSURE 30.5% GRANTS & SCHOLARSHIPS 26.3% AWARDS & COMPETITIONS **HIGH SPEED INTERNET** 24.0% CONNECTIVITY

CORPORATE CUSTOMERS 22.7%

HOSTING 21.2%

FOUNDING TEAM

OUTSOURCING ASSISTANCE 19.0%

ACCELERATION OR INCUBATION 18.7%

TAX COMPLIANCE ASSISTANCE 18.0%

PROFESSIONAL DEVELOPMENT

(TRAINING THROUGH ANY MEDIUM) 16.5%

INTERNSHIPS15.8%

BANKING SERVICES15.7%

→ PAYMENT PROCESSING FACILITIES14.5% EVENT SPACE13.7%

TIME INVESTED BY FOUNDING TEAM

47.5% **NONE FULL TIME**

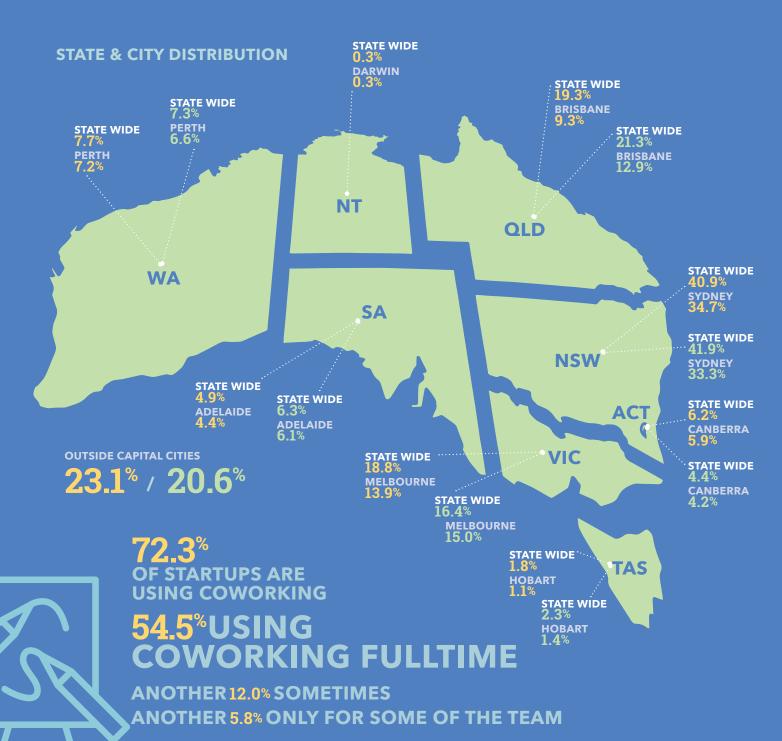
30.6% **ALL FULL TIME**

21.9% **SOME FULL TIME**



WHERE ARE THEY?

FOUNDERS & SUPPORTERS



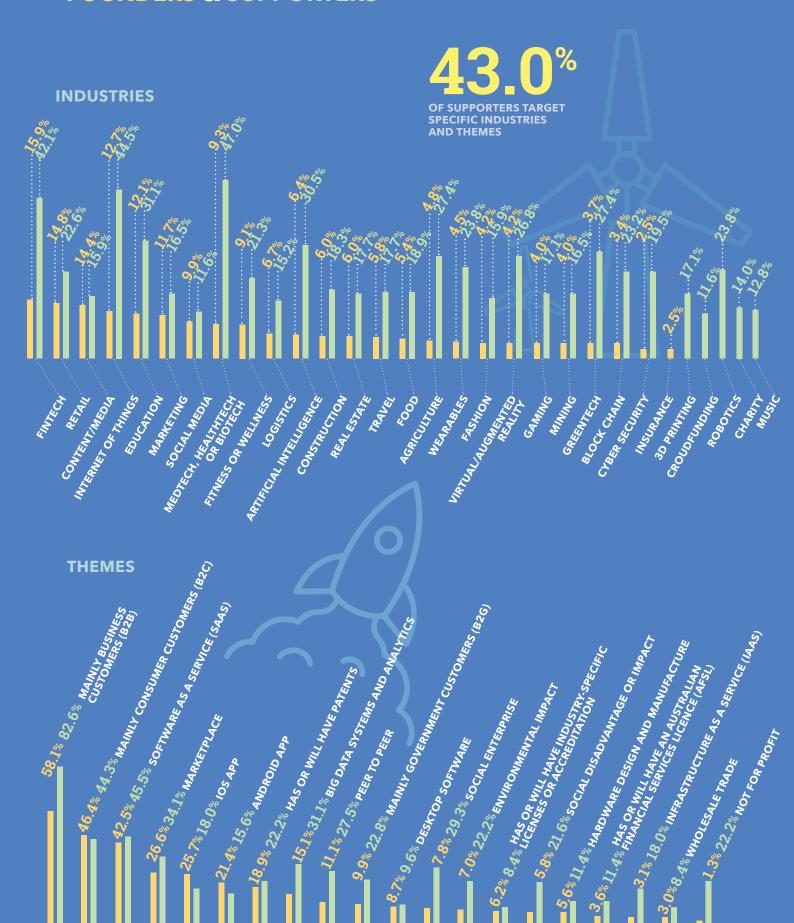
80.6% of male founders use coworking



69.6% OF FEMALE FOUNDERS USE COWORKING

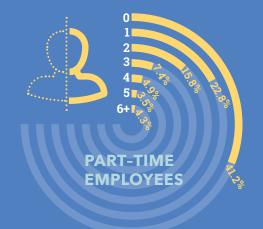
WHAT ARE THEY WORKING ON?

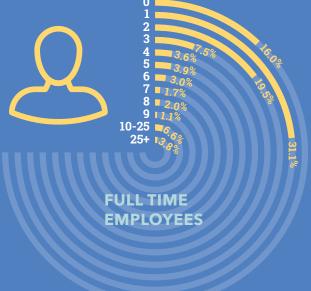
FOUNDERS & SUPPORTERS

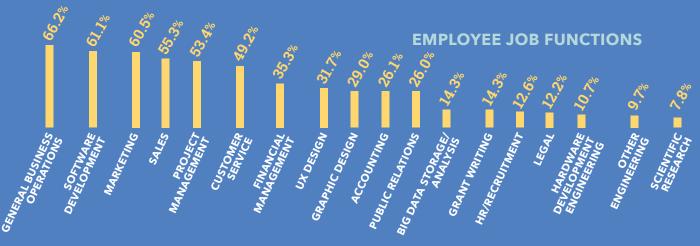


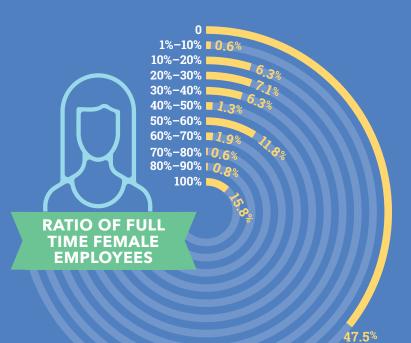
WHO ARE THEY EMPLOYING?

FOUNDERS

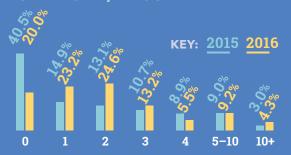








NUMBER OF EMPLOYEES
WITH EQUITY OR OPTIONS
FOR EQUITY, BY SURVEY YEAR



TYPES OF EMPLOYEE VISAS

NO VISAS 84.0%

TEMPORARY WORK (SKILLED) VISA (457) 8.7%

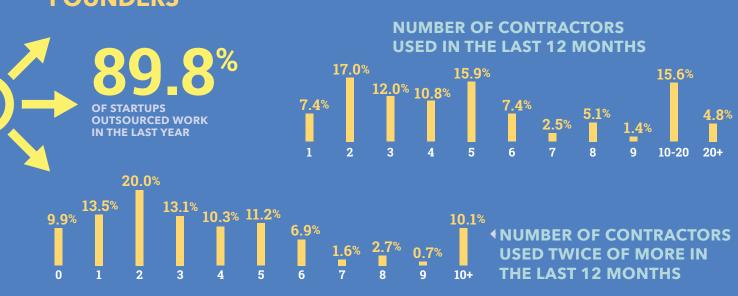
OTHER (SPECIFY) 5.4%

WORKING HOLIDAY VISA (417) 3.3%

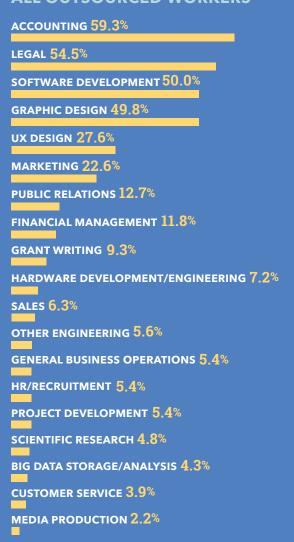
PERMANENT RESIDENT 1.6% STUDENT VISA (500) 1.3%

WHO ARE THEY CONTRACTING?

FOUNDERS



KEY FUNCTIONS PERFORMED BY ALL OUTSOURCED WORKERS





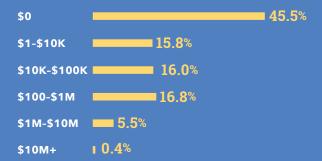
REVENUE & SALES

FOUNDERS

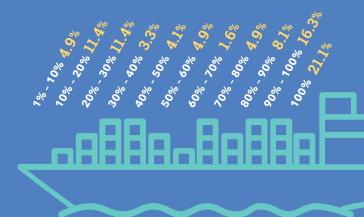
92.0%

OF AUSTRALIAN STARTUPS
GENERATED EXPORT REVENUE

REVENUE IN THE LAST 12 MONTHS

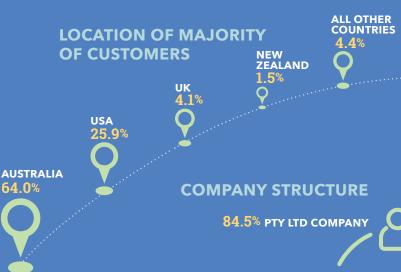


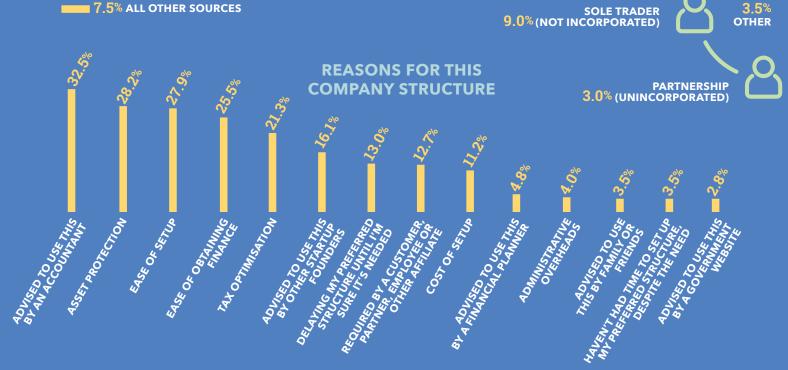
PERCENTAGE OF REVENUE FROM OVERSEAS CUSTOMERS



LARGEST SOURCES OF REVENUE

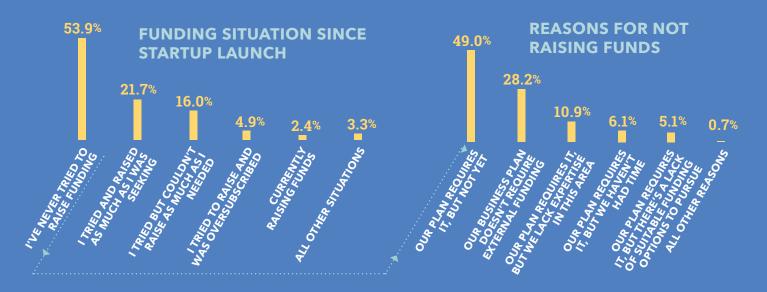






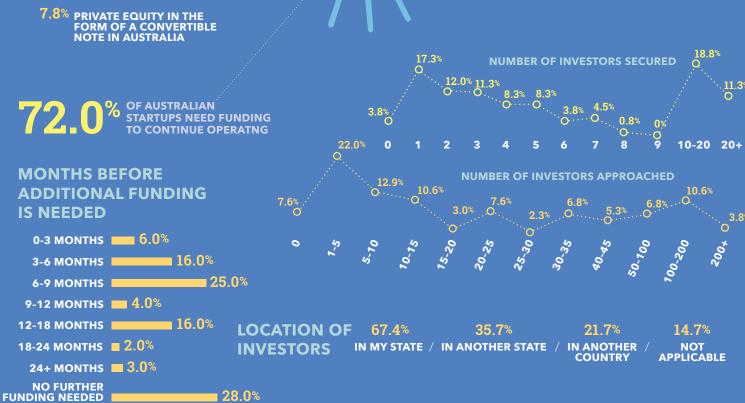
FUNDING

FOUNDERS



TYPES OF FUNDING RECEIVED





28.0%

AVERAGE NUMBER OF FULL-TIME EMPLOYEES PER STARTUP

4.12



AVERAGE AMOUNT RAISED

\$448,300

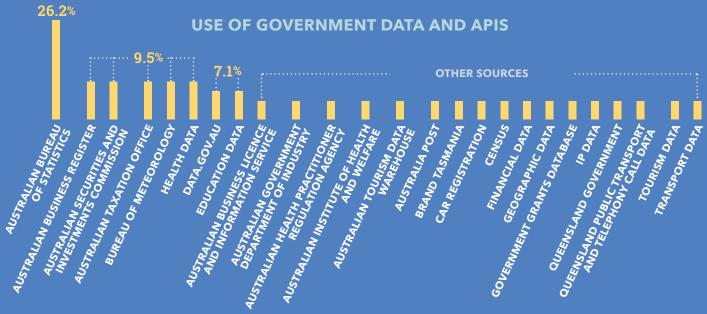
AVERAGE REVENUE IN PAST 12 MONTHS

\$345,200

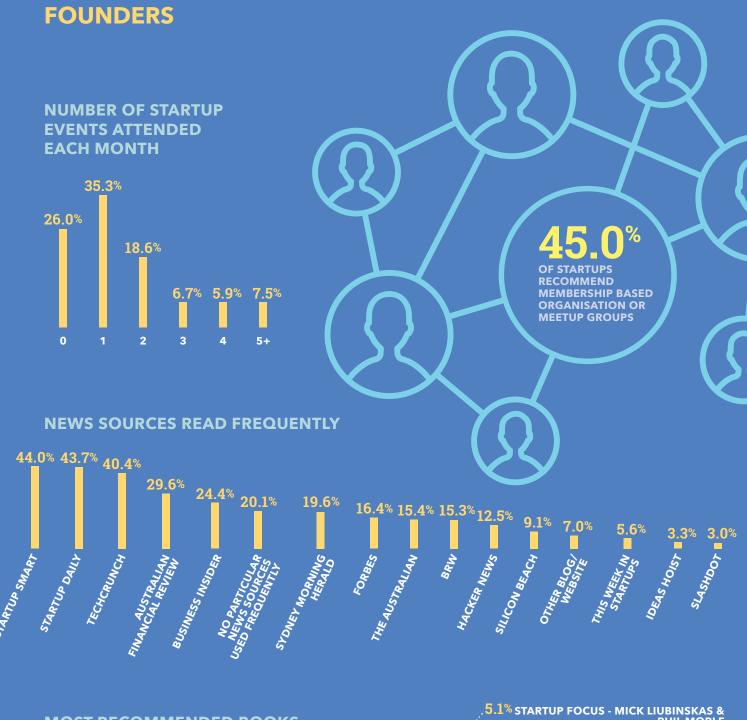
GOVERNMENT

FOUNDERS





COMMUNITY & RESOURCES



MOST RECOMMENDED BOOKS

THE LEAN STARTUP - ERIC RIES 47.4%

ZERO TO ONE - PETER THIEL 22.6%

THE HARD THING ABOUT HARD
THINGS - BEN HOROWITZ 15.0%

PURPLE COW - SETH GODIN 12.2%

THE INNOVATORS DILEMMA CLAYTON CHRISTENSEN 12.1%

RUNNING LEAN - ASH MAURYA 9.9%

HOOKED - NIR EYAL 7.0%

PHIL MORLE
4.4% CREATIVITY INC - ED CATMULL
THE STARTUP OF YOU - REID
2.4% HOFFMAN & BEN CASNOCHA

2.4% HOFFMAN & BEN CASNOCHA
WHAT DO YOU CARE WHAT OTHER
1.7% PEOPLE THINK - RICHARD FEYNMAN

1.4% PLATFORM REVOLUTION - GEOFFREY G. PARKER

1.0% THE 4-HOUR WORKWEEK - TIM FERRISS

......14.6% OTHER

...... 31.5% NO BOOKS

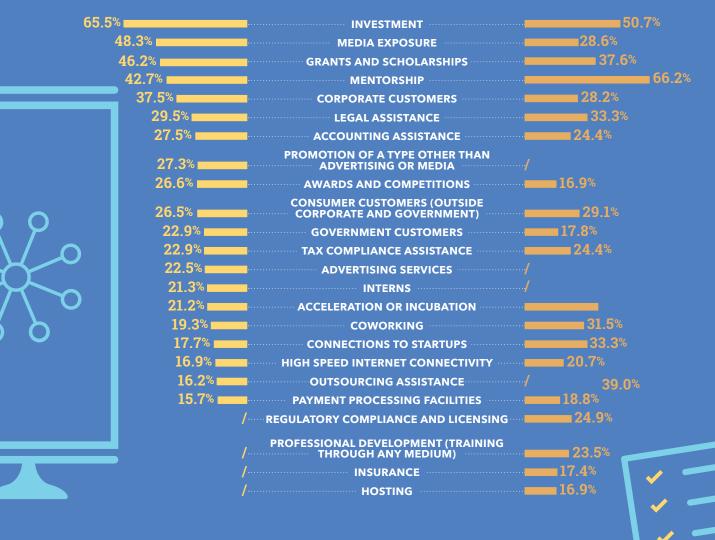
LEAN IN - NELL SCOVELL & SHERYL SANDBERG 6.6%

IMMEDIATE PLANS

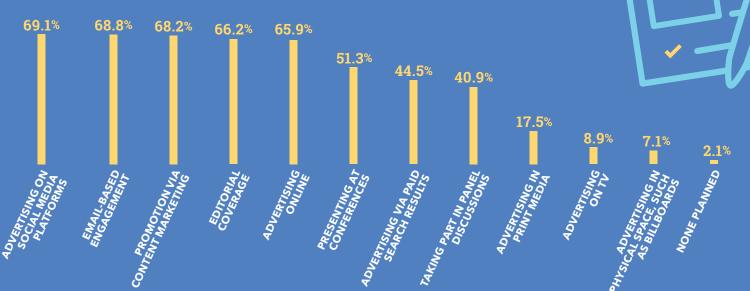
FOUNDERS & FUTURE FOUNDERS



NEEDS IN THE NEXT SIX MONTHS

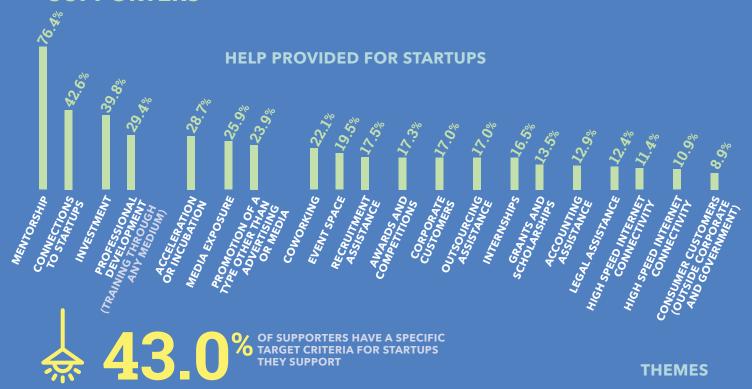


PROMOTIONAL EFFORTS PLANNED BY THE 27.3% OF STARTUPS PLANNING PROMOTION



WHO IS HELPING STARTUPS

SUPPORTERS



INDUSTRIES

47.9% MEDTECH, HEALTHTECH OR BIOTECH

45.5% INTERNET OF THINGS

43.1% FINTECH

35.9% SOFTWARE DEVELOPMENT

31.7% EDUCATION

30.5% ARTIFICIAL INTELLIGENCE

28.7% GREENTECH

27.5% AGRICULTURE

27.5% VIRTUAL/AUGMENTED REALITY

24.6% WEARABLES

24.0% ROBOTICS

23.4% BLOCK CHAIN

23.4% RETAIL

21.6% FITNESS OR WELLNESS

20.4% CYBER SECURITY

19.2% FOOD

18.6% CONSTRUCTION

18.0% TRAVEL

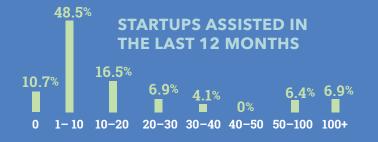
17.4% 3D PRINTING

17.4% MARKETING



17.4% **GAMING**

17.4% REAL ESTATE



MAINLY CONSUMER CUSTOMERS (B2C) 44.4% MARKETPLACE 34.3% BIG DATA SYSTEMS AND ANALYTICS 32.0% **SOCIAL ENTERPRISE 29.0% PEER TO PEER 27.2%**

MAINLY BUSINESS CUSTOMERS (B2B) 82.8% SOFTWARE AS A SERVICE (SAAS) 46.2%

MAINLY GOVERNMENT CUSTOMERS (B2G) 23.1%

ENVIRONMENTAL IMPACT 21.9%

HAS OR WILL HAVE PATENTS 21.9%

NOT FOR PROFIT 21.9%

SOCIAL DISADVANTAGE OR IMPACT 21.9%

INFRASTRUCTURE AS A SERVICE (IAAS) 17.8%

IOS APP 17.8%

ANDROID APP 15.4%

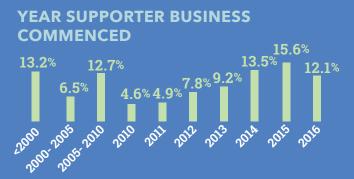
HARDWARE DESIGN AND MANUFACTURE 11.2%

HAS OR WILL HAVE AN AUSTRALIAN FINANCIAL SERVICES LICENCE (AFSL) 11.2%

DESKTOP SOFTWARE 9.5%

WHOLESALE TRADE 8.9%

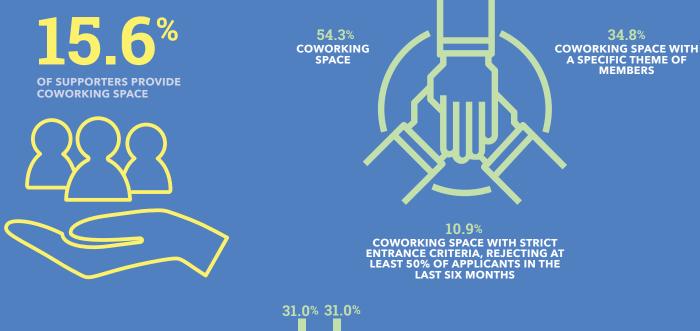
HAS OR WILL HAVE INDUSTRY-SPECIFIC LICENSES OR ACCREDITATION 8.3%

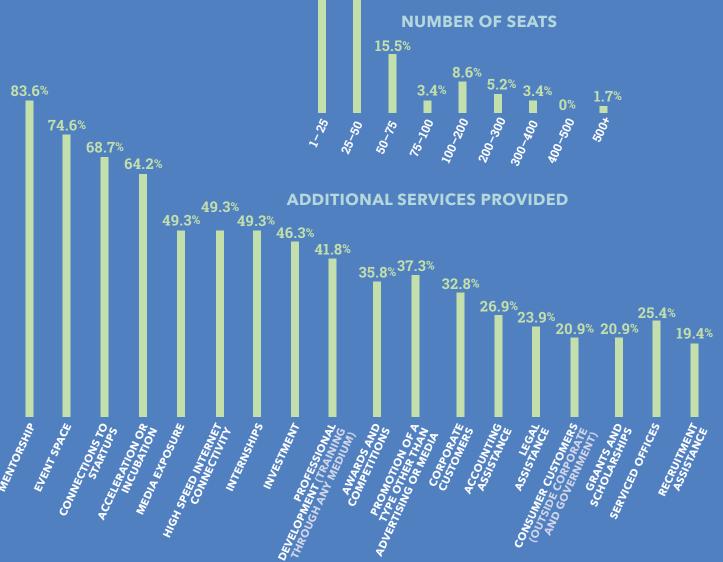


COWORKING SPACES

SUPPORTERS

TYPE OF COWORKING SPACE

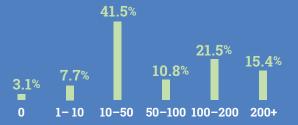




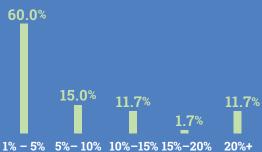
INCUBATORS/ ACCELERATORS

SUPPORTERS

APPLICATIONS RECEIVED IN THE LAST 12 MONTHS



PERCENTAGE OF
APPLICATIONS ACCEPTED
IN THE LAST 12 MONTHS



19.0%

OF SUPPORTERS
OPERATE AS AN
INCUBATOR OR
ACCELERATOR



IARGETED INDUSTRIE

- 45.9% INTERNET OF THINGS
- 43.2% MEDTECH, HEALTHTECH OR BIOTECH
- 43.2% ARTIFICIAL INTELLIGENCE
- 40.5% FINTECH
- 37.8% AGRICULTURE
- 37.8% EDUCATION
- **37.8%** ROBOTICS
- 32.4% GREENTECH
- 32.4% 3D PRINTING
- **32.4% SOFTWARE DEVELOPMENT**
- 32.4% VIRTUAL/AUGMENTED REALITY
- 29.7% BLOCK CHAIN
- 29.7% FOOD
- **29.7% TRAVEL**
- 29.7% WEARABLES
- **27.0% MINING**
- 24.3% FITNESS OR WELLNESS
- 24.3% RETAIL
- 21.6% CYBER SECURITY
- **21.6% FASHION**

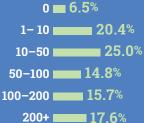
TARGETED THEMES

- MAINLY BUSINESS CUSTOMERS (B2B) 77.5%
- MAINLY CONSUMER CUSTOMERS (B2C) 42.5%
 - BIG DATA SYSTEMS AND ANALYTICS 37.5%
 - MARKETPLACE 32.5%
 - SOCIAL DISADVANTAGE OR IMPACT 32.5%
 - ENVIRONMENTAL IMPACT 30.0%
 - SOCIAL ENTERPRISE 30.0%
 - SOFTWARE AS A SERVICE (SAAS) 30.0%
- MAINLY GOVERNMENT CUSTOMERS (B2G) 27.5%
 - PEER TO PEER 27.5%
 - INFRASTRUCTURE AS A SERVICE (IAAS) 25.0%
 - HAS OR WILL HAVE PATENTS 20.0%
 - IOS APP 17.5%
 - ANDROID APP 15.0%
- HARDWARE DESIGN AND MANUFACTURE 15.0%
- HAS OR WILL HAVE AN AUSTRALIAN FINANCIAL SERVICES LICENCE (AFSL) 15.0%
 - HAS OR WILL HAVE INDUSTRY-SPECIFIC LICENSES OR ACCREDITATION 15.0%
 - WHOLESALE TRADE 7.5%

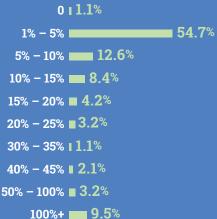
INVESTORS

SUPPORTERS

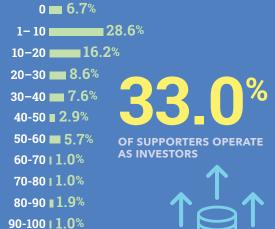
APPLICATIONS RECEIVED IN THE LAST 12 MONTHS

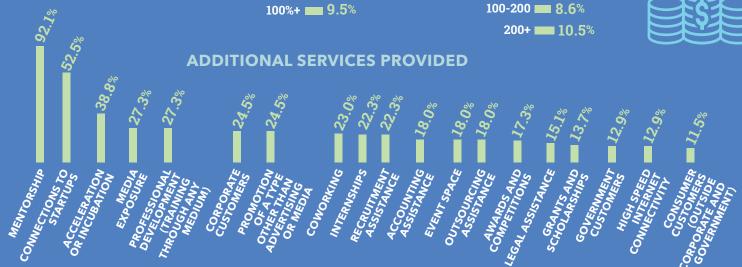


PERCENTAGE OF APPLICATIONS ACCEPTED IN THE LAST 12 MONTHS



STARTUPS HELPED SINCE ORGANISATION WAS FOUNDED





TARGETED INDUSTRIES

- **56.2% FINTECH**
- **52.1%** MEDTECH, HEALTHTECH OR BIOTECH
- 49.3% INTERNET OF THINGS
- 41.1% ARTIFICIAL INTELLIGENCE
- 34.2% SOFTWARE DEVELOPMENT
- 32.9% VIRTUAL/AUGMENTED REALITY
- 30.1% BLOCKCHAIN
- 30.1% EDUCATION
- 28.8% AGRICULTURE
- **28.8%** ROBOTICS
- 27.4% GREENTECH
- 24.7% CYBER SECURITY
- 23.3% FITNESS OR WELLNESS
- 21.9% WEARABLES
- 20.5% REAL ESTATE
- 19.2% LOGISTICS
- 19.2% RETAIL
- **17.8% 3D PRINTING**
- **17.8% GAMING**
- **15.1% CHARITY**
- 15.1% CONTENT/MEDIA
- **15.1% FASHION**
- 15.1% TRAVEL

56.0% OF INVESTORS HAVE A SPECIFIC TARGET CRITERIA FOR STARTUPS THEY SUPPORT

TARGETED THEMES

- MAINLY BUSINESS CUSTOMERS (B2B) 85.3%
 - SOFTWARE AS A SERVICE (SAAS) 57.3%
- BIG DATA SYSTEMS AND ANALYTICS 44.0%
- MAINLY CONSUMER CUSTOMERS (B2C) 42.7%
 - MARKETPLACE 41.3%
 - SOCIAL DISADVANTAGE OR IMPACT 28.0%
 - SOCIAL ENTERPRISE 28.0%
 - **PEER TO PEER 25.3%**
 - HAS OR WILL HAVE PATENTS 22.7%
 - **ENVIRONMENTAL IMPACT 21.3%**
 - NOT FOR PROFIT 20.0%
- INFRASTRUCTURE AS A SERVICE (IAAS) 18.7%
- MAINLY GOVERNMENT CUSTOMERS (B2G) 17.3%
 - IOS APP 16.0%
- HAS OR WILL HAVE AN AUSTRALIAN FINANCIAL SERVICES LICENCE (AFSL) 13.3%
 - ANDROID APP 10.7%
 - HARDWARE DESIGN AND MANUFACTURE 10.7%
 - DESKTOP SOFTWARE 5.3%
 - HAS OR WILL HAVE INDUSTRY-SPECIFIC LICENSES OR ACCREDITATION 4.0%
 - WHOLESALE TRADE 4.0%

FUTURE PLANS

FOUNDERS

PLANS FOR THE NEXT 12 MONTHS

PLANS AFTER 12 MONTHS

64.9%	EXPANI	D SALES SIGNIFIC	ANTLY INSIDE AUSTRA	LIA ·····	46.0%
59.1%	UND	ERTAKE CAPITAL	RAISING IN AUSTRALIA	Δ	26.0%
43.1%	EXPAND	SALES SIGNIFICA	NTLY OUTSIDE AUSTR	ALIA	52.3%
24.7%	UN	DERTAKE CAPITA	L RAISING OVERSEAS		29.5%
15.8%	М	OVE TO A NEW O	FFICE IN AUSTRALIA	9.4%	
15.8%			AKE PART IN A PROGRA LUE TO THE STARTUP		<u>.</u> %
13.4%	МО	VE TO A LARGER	OFFICE IN AUSTRALIA	12.9)%
12.5%	%	OPEN ANOTHER	OFFICE OVERSEAS ·····	17	.1%
4.	.9%	NO SPECI	FIC PLANS	12.9)%
4.	.3% RE	NEW MY OFFICE	LEASE IN AUSTRALIA	1.7%	
4.	.2% - Mo	OVE OUR PRIMAR	Y OFFICE OVERSEAS	■ 3.3%	
3	.8% SELL	THE STARTUP TO	A FOREIGN PURCHASE	R 12.9) %
3	.8% SELL TH	E STARTUP TO AN	AUSTRALIAN PURCHA	ASER 11.7	%
0).7% 	LIST ON	THE ASX	5.9 %	
		LIST ON A FORE	EIGN EXCHANGE	2.3%	

ADVICE FOUNDERS

ADVICE FROM FOUNDERS TO FUTURE FOUNDERS

10.0% VALIDATE 7.4% GO FOR IT 5.1% PREPARE YOURSELF FINANCIALLY 4.9% GET A CO-FOUNDER 4.6% SPEND TIME PREPARING 3.9% BUILD AN MVP 3.3% BUILD A TEAM 3.3% RESEARCH THE MARKET 3.3% RESEARCH THE PROBLEM YOU'RE SOLVING 2.8% BE PASSIONATE 2.8% PREPARE TO WORK HARD 2.1% APPLY FOR AN INCUBATOR, ACCELERATOR OR COWORKING SPACE 2.3% RESEARCH YOUR CUSTOMERS

2.0% BE PERSISITENT
2.0% BE COMMITTED
1.8% GET A MENTOR

