Economic Challenges

"IRA" CHIPS and Science" "Digital disruption", "WFH" and "employment agreements"

Inflation Reduction Act and CHIPS & Science Act

Inflation Reduction Act: \$370 billion in grants, subsidies and tax breaks to boost clean energy transition and advanced manufacturing.

CHIPS and Science Act: \$280 billion to boost semiconductor capacity, R&D, create regional hi-tech hubs and a stronger STEM workforce.

"They are basically renationalising their economy. They are doing it for economic and security reasons."

"America is now taking a different view about the role of trade. It's an economic leverage to drive investment, but it's also got social leverage around the labour market."

Jennifer Westacott: BCA CEO

"This is a tougher world for Australia, with its special deals, fiscal bribery, erosion of the liberal trade system, fierce competition and government winner picking. We need to be internationally competitive."

Paul Kelly: Australian

"The world's biggest economies are offering huge subsidies in a cut throat race to win the industries of the future."

The Wall Street Journal.

The European Union is offering its own green-energy package. Japan has announced plans for \$150 billion to finance investment in green technology.

We can't compete directly but we can leverage the knowledge generated from our mining industry and apply those learnings in a targeted manner – into Defence, Agritech, Robotics, Space, Manufacturing, STE(A)M, Cybersecurity, Climate Action and Mining Services where we have niche competitive advantages.

America is remaking the world..

And we have a Problem

Australia is slipping behind the rest of the world on productivity (14 out of 32), education (39 out of 41), innovation (23 out of 25), investment in Al (12 out of 12), R&D with commercialisation (40 out of 42) compared with OECD nations, and on economic complexity 93 of 133 countries.

We rely too heavily on "dirt, meat and wheat", when the rest of world is heavily investing in 21st century technologies. And they are moving fast.

"The challenge we face, is that the drivers that gave us 27 years of economic growth are not the drivers that we need going forwards. In the past, natural resources, cost of labour and capital were enough. In the future it will be how effective we are at translating R&D into new breakthroughs."

"Do we have the workforce skills? Do we have the digital literacy? Do we have the digital capital and digital industries and digital exports?

Only 2% of our companies develop new innovation and export it."

Adrian Turner: ex Data61 CEO

Which is a problem.

CSIRO, our universities and innovative businesses are the generators of new ideas and innovation.

But to leverage the innovation and transfer ideas, knowledge, example, inspiration and opportunity needs a national "change management" system...

...so that ALL our productive industries, students, boards, CEOs and regions benefit from new opportunities faster and more effectively.

That is what the RED Toolbox is for - <u>https://www.redtoolbox.org</u> / myREGION.au

An economic "farm management system" for the nation's organisations, sectors and regions to support innovation, investment, export, climate action and manage the future of work and jobs.

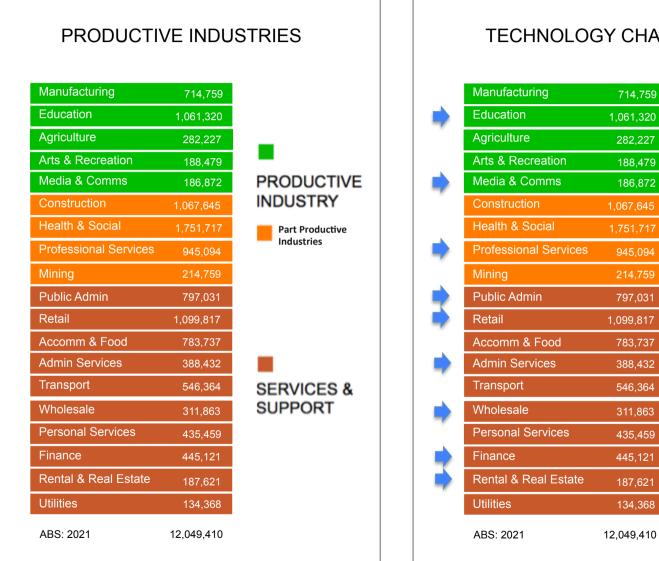
Australia is slipping behind the world

NUMBER OF ORGANISATIONS

Health & Social	174,126
Retail	156,765
Construction	445,253
Education	40,212
Professional Services	331,918
Public Admin	7,530
Accommodation	110,909
Manufacturing	91,154
Transport	212,333
Finance	120,284
Personal Services	129,049
Admin Services	122,344
Wholesale	84,088
Agriculture	175,333
Mining	8,409
Arts & Recreation	37,078
Rental & Real Estate	286,317
Media & Comms	24,979
Utilities	8,497
ABS: 2022	2,569,900

NUMBER OF EMPLOYEES

Health & Social	1,751,717
Retail	1,099,617
Construction	1,067,645
Education	1,061,320
Professional Services	945,094
Public Admin	797,031
Accomm & Food	783,737
Manufacturing	714,759
Transport	546,364
Finance	445,121
Personal Services	435,459
Admin Services	388,432
Wholesale	311,863
Agriculture	282,227
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Rental & Real Estate	187,621
Media & Comms	186,872
Utilities	134,368
ABS: 2021	12,049,410



TECHNOLOGY CHALLENGE

PRODUCTIVE

Part Productive

INDUSTRY

Industries

SERVICES &

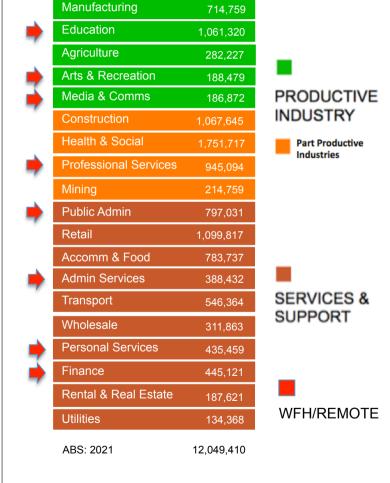
DISRUPTIVE

THREAT

SUPPORT



WORK FROM HOME/REMOTE



LEVEL OF CHALLENGE		LENGE	
	Rental & Real Estate	286,317	
	Finance	120,284	
	Transport	212,333	
HIGH	Manufacturing	91,154	
	Wholesale	84,088	
	Media & Comms	24,979	
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1

Sectors all challenged by robots, AI, systems integration, and disintermediation by a range of brokerage tools

Sector challenge protected short term by the "personal relationship".

Where the relationship is enhanced by technology = success.

Where relationship can be replaced = problem

Sectors less threatened, because of the interpersonal nature of the sector, the unique nature of each task within the sector or the fact that automation has already occurred

	TECHNOLOGY C	PPORTUNITY
Manufacturing	Medical & Surgical Equipment Medical & Pharmaceutical Product	Medical Consumables, Rehabilitation & Mobility Aids, Wearable Technology Medicines & Pharmaceuticals
	Aircraft	Drones & UAVs, Aviation Parts & Accessories
	Ship Building	Boats & Ships
	Computer & Business Machine	Industrial Computers & Accessories, Social Robots
	Professional & Scientific Equip	Sensors, Hardware & Devices, Monitoring & Control Systems
	Electronic Equipment	Electronic Accessories & Supplies, RFID Readers, LiDar
	Electrical Equipment	Electric Generators, Wind Turbines, Ocean Energy
	Telecommunication Equip	Communication Equipment
	Plastic Product/Rigid Fibre	Moulded Composites, Ceramic Linings, Aquaculture
	Other Specialised Machinery	Agricultural Equipment, Pollution Control Machinery, Ultrasonic Cleaning
	Other Machinery	Industrial Automatic Equipment, Robot 3D Printers, Field Robotics
Professional, Scientific & Technical	Computer System Design	ICT, Business Management Software, Games
a reclinical	Scientific Research	Research & Testing Services
	Architectural Services	Design, Business and Industrial Services
	Engineering Consulting	Consulting, Business and Industrial Services
Electricity, Gas, Water & Waste	Electricity Supply	Renewable Energy, Solar Storage,
& Waste	Waste Treatment & Recovery	Environmental Protection, Recycling, Biomass Fuels for Renewable Energy
Information Media & Telecomms	Film & Video Production	Design, Animation, Animatronics
Telecommis	Internet Publishing	Online Auctions, Transaction Platform, Meteorological Services
Construction	Residential Building Construction	3D Printed Homes, Factory Built Housing.
Public Admin & Safety	Other Public Order & Safety	Emergency Alerts, Access Control, Alarm & Detector
	Defence	Protection against Drones, Passive Radar, Robotics, UAVs, Rockets
Arts & Recreation	Creative Arts	Indigenous Arts & Crafts

DESIGN, BRANDING OPPORTUNITY

Manufacturing

Cerear, Pasia, Cake & Pasiry
Fruit & Vegetable Processing
Sugar & Confectionery
Dairy Product
Other Food
Wine, Beer & Spirits
Clothing
Cosmetic & Toiletry
Jewellery & Silverware
Toy & Sporting Good
Furniture
Electric Light & Sign
Fabricated Metal Product
Motor Vehicle & Parts
Environmental Consultancy
Design
Air Transport
Telecommunications
Post Production Services
Creative Arts

Cereal Pasta Cake & Pastry

Fresh Noodles & Pasta, Ice Cream Cake, Prepared Meals Oils, Vinegar, Pickle, Marmalade, Asian Foods, Sauces Chocolate, Nuts & Kernels Glace Ginger, Sugar Cheese, Cream, Yoghurt, Milk, Feta Spices, Sauces, Supplements, Seasonings, Spices Wine, Ale, Lager, Stout, Cider, Beer, Whiskey, Ligueur, Vodka etc Womenswear, Menswear, Uniforms, Socks, Shoes, Boots Skin Care, Lipstick, Cosmetic, Hair Care, Soap, Sun Screen Sunglasses, Eyeglasses, Watches, Jewellery, Necklaces Toys, Bicycles, Carbon Fibre Frames, Skateboards, Trampolines Custom Design, Kitchens, Chairs, Office, Wardrobes, Tables etc. LED Lighting, Neon, Sports Lighting, Bollards, Signboards etc Water Tanks, Laser Cutting, Precision Components, 3D Prototyping Disability Vehicles, Sports Cars, All Terrain Vehicles, Truck Bodies etc Dust Suppression, Revegetation, Crop health, Acoustic Services, Monitoring Industrial Design, Branding, Product Design, Electronic Product Design Rockets for Small Satellites, Aircraft Status, Charter Satellite Communications, Wireless Solutions, IP Telephony Video Tools, Video Conversion, Animation Production Ceramic Art, Bowls, Paintings, Textiles etc

Professional, Scientific & Technical

Transport, Postal & Warehousing

Information Media & Telecomms

Arts & Recreation

Australian Businesses



2.4 MILLION BUSINESSES Each business category has **INTERNAL** and 4 **EXTERNAL** business relationships

INSIDE AN ORGANISATION

JOB TYPES Profession, Technician & Trades **CEO & General Management** Admin & Office Support **Operators**, **Drivers & Labourers Community & Personal Service Communication & Sales**

CAPABILITY BUILDING

Innovation Investment Sustainability Export Future of work & jobs Courseware & Microcredentials

50% Laggards **30%** Slow Followers

15% Fast Followers

5% Leaders

400 BUSINESS CATEGORIES

52 Regions

19 industry sectors

400 business categories

Multiple hubs & Clusters

EXTERNAL

CUSTOMER

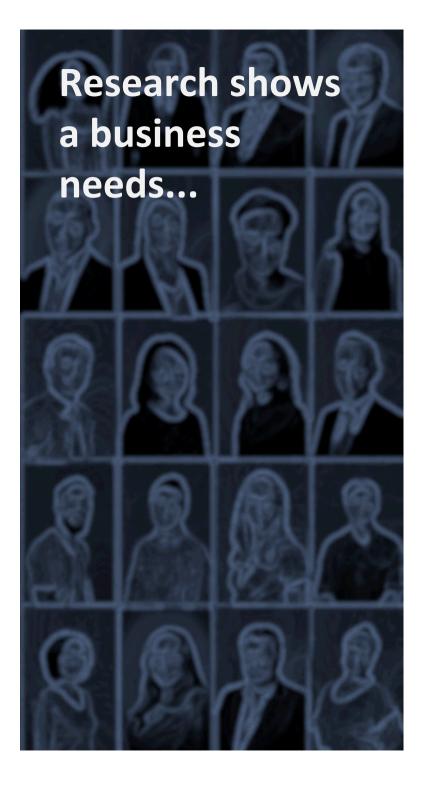
"We are a big country with a small population and we are ratshit at collaboration." Ian Macfarlane





Idea

Just Started Establishing Improving Expanding Mature Exit & Selling





Targeted information, case studies, events, training

Sales – 100% Sector information – 68% Innovation news – 67% Future of work & jobs – 62% Investment – 52% Sustainability information – 33% International market news – 30%

Registration profiles a business for help & support

NAME
SECTOR/CATEGORY
IZE
GE
OCATION

diness for:

- nologies
- ty and
- igital threats
- to work/jobs
- provement

Profiling allows benchmarking, match-making, targeted promotion and help

Business name, industry sector, category, employee numbers, year established, location - (Business profile) - allows a business to be matched to customers (domestic and export), targeted training, services, news, events, innovation and capability building in a holistic manner.

Productive Industries...

...and key networks

PRODUCTIVE INDUSTRIES

Manufacturing Education Agriculture Arts & Recreation Media & Telecommunication







THE CATALYST FOR BUILDING ECONOMIC COMPLEXITY IN AUSTRALIA







Connecting the value.

Regions connected to investors, to each other, to industry, to export markets... and jobs.

Regions

Each business, state or region manages its own listing, can post business details, news, showcase startups to investors, promote exporters to markets overseas.

Regions can collaborate, share information & projects, connect sectors, access news, insights and innovations.

NAME
SECTOR/CATEGORY
SIZE
AGE
LOCATION





Benchmark readiness for:

- Digital technologies
- Investment
- Export
- Sustainability and
- Managing digital impacts
- Challenges to work/jobs

Connect to:

- Training, short courses etc
- Export agencies/markets
- Other similar organisations
- High Schools
- Innovation
- Ongoing email updates/news
- Short surveys 5 questions

Aggregate platform data:

- Regions, sectors, economies
- Analytics
- Change management events
- Innovation investment
- Sector development
- Export markets