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THE DISRUPTION ISSUE

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University of
South Australia

**THE SHARING ECONOMY:
OPPORTUNITY OR THREAT
FOR MODERN BUSINESS?**

**FUTURE TRANSPORT:
WILL AUTONOMOUS
CARS LEAD THE WAY?**

**EQUITY CROWDFUNDING:
CAN IT SUPERCHARGE
YOUR BUSINESS GROWTH?**



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Alexandrea Canon (pictured), UniSA MBA Graduate, Chair of the Leaders Institute SA and SATAC, Director of of Hood Sweeney, Credit Union SA, Winston Churchill Memorial Trust and Bizbuild.



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EXECUTIVE EDITOR

Annabel Mansfield

CREATIVE DIRECTOR

Jarrad van Dijk

WRITERS

Eva Balan-Vnuk
Kartick Gupta
Chandra Krishnamurti
Dan Lander
Will Leitch
Carole Lydon
Michelle Perugini
Con Tragakis
Akshay Vij

CONTRIBUTORS

Sarah Cutbush
Lana Davidson
Alison Hookway
Adam Joyce
Braam Lowies
Michèle Nardelli
Jade O'Donohue
Katrina Quinn
Marianna Sigala
Will Venn
Jasmine Vreugdenburg
Marie Wilson
Angie Young

PHOTOGRAPHERS

Shane Reid
David Solm
Juan van Staden

ILLUSTRATORS

Tang Yau Hoong

WEB

Shaun Mills

unisabusiness is published by the University of South Australia Business School.

READER FEEDBACK:

unisabusiness@unisa.edu.au

UPDATE YOUR DETAILS:

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 **Professor Marie Wilson**, Pro Vice Chancellor: Business and Law, UniSA Business School, pictured at MOD—UniSA's futuristic museum of discovery, featuring the *WorldWide* telescope and Australia's first *Science on the Sphere*.

ON THE EDGE OF

Writer Marie Wilson Photographer David Solm

DISRUPTION DISRUPTION

Space: the final frontier—When Captain James T. Kirk first spoke these words in the 1960s television series, *Star Trek*, few people could have predicted that within three years, we'd first step foot on the moon. Yet on 20 July, 1969, we did just that. The culmination of decades of pioneering technology, this historic moment represented a massive shift in what people believed was possible.

It required the development of new technologies that had impact far beyond NASA and the moon, and it disrupted the way we thought about our world, and the technologies behind flight and communication. Now, near-Earth space has become a communication superhighway, with an increasing number of sensors and communication relays that are a burgeoning focus for technological innovation on Earth.

Disruption, like innovation, has become a business buzzword. Disruption is typically used to describe innovations that displace—or dramatically interrupt—how we think, behave, live and do business. At once, it is both destructive and creative. We are in an era when space travel and rocketry are transitioning from government to the private sector, from enormous technical enterprises to micro-businesses and smart start-ups. This will disrupt a wide range of traditional supply chains and infrastructure, and change the assumptions in our businesses.

At the UniSA Business School, we are dealing with the disruption of business education globally. As a premier Australian business school—ranked in the top one per cent worldwide for our excellence in business, research and education—we support businesses to excel in a context of disruption. And with disruption at the forefront of today's start-up landscape, it's timely that this is the focus of our new issue of *unisabusiness* magazine.

From understanding the impact of new technologies, to exploring the exponential possibilities of innovations in space, this issue takes you through a journey of disruptive innovations poised to transform the world.

In *The Sharing Economy*, we consider the rise of peer-to-peer platforms, evaluating the impact of big-player start-ups, like Airbnb and Uber, as well as the new micro-entrepreneurs borne from their spin-outs. Without doubt, traditional businesses are feeling the pinch of collaborative consumption, and it's apparent that greater regulatory input is needed in order to achieve synergy between the old and new.

We take both a step forward and a step back in time in *The Future of Transport*, where we assess the impact of autonomous transport and the likelihood of driverless cars, pilotless planes and other unmanned vehicles. With breakthrough technologies, economic and sustainable practices leading the way, it seems just a matter of time before autonomous travel takes pride of place on our roads.

New legislation from the Australian Securities and Investments Commission has also changed the state of play for start-ups, and in *Decoding Equity Crowdfunding*, we investigate the eligibility of publicly unlisted companies to raise funds from the 'crowd'. With small companies now able to raise capital from groups of online investors, we're likely to see significant and much welcomed growth in this sector.

This issue of *unisabusiness* magazine seeks to challenge and inspire you to think differently about the ever-changing business environment. Exploring transformative technologies and breakthrough innovations, it's easy to see how disruption is now cemented in our everyday reality.

Our world is certainly changing; through this collection of articles we hope to help you keep up. ●

THE SHARING ECONOMY:

EQUAL ACCESS FOR ALL?



IN A WORLD WHERE ACCESS IS KING AND PEER-TO-PEER PLATFORMS ARE THE KINGDOM, WHERE DOES BUSINESS SIT?

Writer Carole Lydon Photographer David Solm

If you were to ask any First Peoples for their thoughts on the new sharing economy, they would tell you there is nothing new about it. People and communities have been sharing resources for as long as they've inhabited the earth. True, but today people demand more. Driven by constant interconnectivity and technological advances, the way we trade in the 21st century is unlike ever before.

Professor Marianna Sigala, Director of UniSA Business School's Centre for Tourism and Leisure Management (CTLM), says that it's time to take off the rose-coloured glasses and look at the impact the sharing economy is having on the tourism and leisure industry. Only then can we manage the monumental shift that is taking place in this industry.

"It's important to understand that we've been sharing assets for a long time—renting cars and holiday houses is nothing new. Rather, it's the way we access these services that's vastly different," Professor Sigala says.

"With social media and peer-to-peer platforms internationalising and escalating the size of the market, it's created an environment that's not only about sharing assets, but more accurately, about sharing access to assets."

Widely viewed as a network of connected individuals, communities and organisations, the sharing economy creates value through interaction and integration of idle resources, revolutionising the customer's role as a service provider for firms and other customers.


THE SHARING ECONOMY SITS MOST COMFORTABLY WITH MILLENNIALS AND GEN Zs— THEY'VE GROWN UP WITH THE INTERNET AND ARE AT EASE WITH THE PACE OF DIGITAL CHANGE.

With the younger generation in the driver's seat, diversity, flexibility, mobility and access are more important than ever—more so than commitment and ownership—and it's this shift in values that's transforming the sector.

Take Airbnb for example. What started as a way for individuals to offer a different home-style type of accommodation is fast becoming commercialised. People are now specifically buying homes and apartments in sought-after locations with the intention of renting them out as Airbnb accommodation.

"The sharing economy is challenging the fundamental institutions of employment, work and entrepreneurship to the point where it is generating a whole new breed of micro-entrepreneurs," Professor Sigala says.

"In the accommodation sector, we're seeing a new diversity of offerings, at times in locations that would never have been able to offer a commercial hotel. We're also seeing a corresponding sub-economy that is flourishing on the support needs of not-quite-commercial

 **Marianna Sigala** is Professor in Tourism and Director of the Centre for Tourism and Leisure Management at UniSA. She is an authority in service operations management and ICT applications in tourism and hospitality.

THE IDEA

THE SCENARIO
The sharing economy is challenging the fundamental institutions of employment, work and entrepreneurship, to the point where it is creating a new breed of micro-entrepreneurs and a range of new business opportunities.

THE IMPACT
Changes do not come without costs: new players and business models are disrupting value chains, and impacting the principles of value creation in the modern economy.

THE WAY FORWARD
The long-term success of the sharing economy requires regulatory input from the government in order to fairly distribute social and economic value across all stakeholders.

accommodation operators—micro-hoteliere—who require services such as cleaning, laundry, accounting and social media platform management, to name just a few.

“In this vein, the sharing economy is fuelling numerous entrepreneurial opportunities, at times in locations that would never have been able to offer a commercial hotel.”

The sharing economy shows a fundamental shift in the way business is done, with effects that permeate throughout the economy and social structures. But while it presents a wealth of new opportunities for customers and providers alike, it does not achieve this without repercussions.

A recent study by Professor Sigala identified four types of micro-entrepreneurs that are prevalent in the sharing economy: peer-to-peer start-ups aspiring to become the next Airbnbs; micro-entrepreneurs who are using sharing platforms to rent their resources; entrepreneurs working in the sub-economies of peer-to-peer platforms; and labour that has been transformed from paid employees to freelancing professional services.

“THE SHARING ECONOMY NOT ONLY DISRUPTS VALUE CHAINS BY INTRODUCING NEW PLAYERS AND BUSINESS MODELS BUT CHANGES THE FUNDAMENTAL PRINCIPLES OF VALUE CREATION IN THE MODERN ECONOMY.”

“We’re also seeing unfair competition, where commercial hoteliers are operating under strict safety, quality and



THE SHARING ECONOMY IN PRACTICE



Airbnb: Owns no real estate, but matches rooms to 425,000 guests per night.

Founded: 2008, US
Worth: US\$2.6 billion



Uber: Owns no cars but offers ride-sharing and food delivery to 633 cities worldwide.

Founded: 2009, US
Worth: US\$7.5 billion



Airtasker: An online job marketplace outsourcing 11.3 million tasks per month to verified workers.

Founded: 2012, Australia
Worth: AUD\$3.5 million



OFO: A station-free, rent-by-the hour bike service, averaging 25 million bike rides/day.

Founded: 2014, China
Worth: USD\$2 billion

labour regulations, whereas their sharing economy competitors are not. In this way, you can see some of the downfalls of the sharing economy: it's good for the economy but can't be given free rein. It must be measured and managed."

Whether we like it or not, we rely on regulation as a fundamental part of conducting business—from keeping people safe, to making sure taxes are paid.

"While freedom and entrepreneurship sound attractive, the long-term success of our sharing economy requires regulatory input from the government in order to even the playing field," Professor Sigala says.

"Plus, of course, we need a long-term vision for how we can make the most of the sharing economy, in terms of generating and fairly distributing both social and economic value across all stakeholders."

As organiser of South Australia's Open State session, *Entrepreneurship and sharing economy in tourism: unravelling economic, socio-cultural and environmental impacts*, held in October last year, Professor Sigala brought together a diverse range of internationally recognised academics, government representatives and entrepreneurs to explore the impact of the sharing economy.

Access over ownership is the mantra of the sharing economy. Here are four of the key players:

"What we've learnt is that the sharing economy is disrupting industry structures and economic systems, showing just how our social values and consumption behaviours are changing," she says.

"Certainly, the sharing economy affords new entrepreneurial opportunities, simultaneously creating new labour types by restructuring labour markets. And how we respond and monitor this will shape the sustainability of the tourism sector."

While the way we access the assets of others has changed, the way we value those assets has not. It still stands that those with more valuable assets will have the opportunity to make more money from them.

Yet without regulation, the sharing economy has the potential to drive a wedge into the economic and social divide—the rich will become richer and the poor will be called micro-entrepreneurs.

If we can use the sharing economy responsibly so that tourism innovation flourishes, while ensuring transparency and accountability from all players, traditional and new players will make the most of this peer-to-peer frontier. ●

For more information, visit UniSABusinessSchool.edu.au/magazine

TIPS FOR MICRO-ENTREPRENEURS

If you're looking to dip your toes into the tourism sharing economy, these tips will help:

- 1 Be smart:** remember that you're in business and the basic rules of business still apply.
- 2 Connect with your council:** check local building and planning regulations if you're developing your own property.
- 3 Redefine your labour metrics:** check how you are recording new forms of labour across various socio-demographics and locations.
- 4 Seek financial and taxation advice:** advisors who are familiar with the tourism sector are best suited for your operations.
- 5 Protect yourself:** check that your insurances cover your activities.
- 6 Think ahead:** make sure you have social security coverage and a pension scheme for any freelance work you may do.
- 7 Be professional:** you're not only 'selling' your services but also your destination, so its reputation is also in your hands.

THE FUTURE OF TRANSPORT

Writer Akshay Vij



WHEN THE SCI-FI DELOREAN SPORTS CAR FIRST HIT MOVIE SCREENS IN *BACK TO THE FUTURE* IN 1985, AUDIENCES DELIGHTED IN THE TIME TRAVELLING ANTICS OF MARTY McFLY AND DOC BROWN. THIRTY YEARS ON, AND FUTURISTIC TRANSPORTATION-TECH CONTINUES TO FEATURE IN MANY A BLOCKBUSTER, RAISING THE QUESTION: WHAT WILL TRANSPORT LOOK LIKE IN THE FUTURE?

Right now, we're on the brink of a new era in transportation. The invention of autonomous vehicles, the emergence of shared mobility services, the commercialisation of electric vehicle technologies, and the development of unmanned aerial vehicles, promise to revolutionise how humans travel.

Not since Henry Ford invented the Model T in 1908 has the transport sector seen this much disruption. And while many of these technologies are still in their infancy, when they're market ready, the implications are likely to be profound.

Shared electric autonomous vehicles promise to be cheaper, safer and more energy efficient than any existing mode of transport. Fifty years from now, most urban regions across the world will likely not allow humans to drive. In a hundred years, we'll look back at this period and ask ourselves how we ever allowed humans to drive in the first place! Like the horse-drawn carriage that came before, interested enthusiasts may be able to take human-operated cars for rides on protected and supervised roadways away from the city. But for most people, present day cars will be nothing more than quaint objects from a distant past.

1985

DELOREAN DMC-12

Movie: *Back to the Future*

Undoubtedly one of the most iconic futuristic cars, the DeLorean could travel through time after hitting 88 miles per hour to achieve temporal displacement. Initially fuelled by plutonium, the DeLorean famously required a lightning bolt to send Marty McFly back to 1985 after accidentally becoming stranded in 1955.

So what does this mean for the everyday driver? We're likely to see lower car ownership, but more people that depend on cars; fewer fixed route and fixed schedule mass public transport systems, and more flexible 'micro' public transport systems that offer adaptive routes and schedules; and improved safety, but greater protective legislation.

Undoubtedly, these new systems and services are poised to deliver unprecedented economic, social and environmental change, and how we deal with this will be critical for our future.

THE RISE OF THE SHARING ECONOMY

The emergence of autonomous vehicles is unquestionably linked with the rise of the sharing economy. Web-based services—such as e-commerce platforms, video messaging services, digital health services, and online distance learning portals—are all changing the need and desire to travel, with more people valuing the experience over ownership.

Many of the same information and communication technologies underlying these online services are leading to new forms of shared mobility. Short-term carshare services like GoGet, rideshare services like Uber, and public bikesharing services such as OFO are each changing how consumers use transport.

In Australia alone, carshare services have 66,000 members and offer access to 2200 vehicles; ride-share services employ 20,000 active driver-partners, and bike-share services offer access to 7,000 bicycles. In comparison, the taxi industry operates 21,000 taxis nationwide.

 Akshay Vij is a senior research fellow at UniSA's Institute for Choice. His research has made significant contributions to the development of discrete choice methods and their application to transport contexts.

THE IDEA

THE SCENARIO

The invention of autonomous vehicles, the rise of shared mobility, the commercialisation of electric vehicle tech, and the development of unmanned aerial vehicles, mean we are about to see significant changes in how humans travel. So what does this mean for the everyday driver?

THE FUTURE

The future of passenger transport is predicted to be electric, autonomous, and increasingly shared. With transformative and far-reaching economic, social and environmental ramifications both nationally and internationally, adaption will be key if they are to compete in this rapidly changing ecosystem.

1976

MAZE CAR

Movie: *Logan's Run*

Set in the year 2274, these futuristic, automated monorail maze cars operated within a tubular tunnel system within a domed dystopian city.

1982

KITT

TV series: *Knight Rider*

Made famous in the 1980s, KITT was a crime-fighting super car, not only able to drive itself, but also able to make wise-cracks with its sometime driver, played by David Hasselhoff.

1990

JOHNNY CAB

Movie: *Total Recall*

This automated taxi cab featured a robotic humanoid torso, which much to Arnold Schwarzenegger's annoyance, could only drive once given an address.



The rise of collaborative consumption and the growth in business and consumer interest in shared mobility services reflects a broader transition from an ownership-based economy to an access-based economy.

"A SINGLE CARSHARE VEHICLE COULD TAKE UP TO 10 PRIVATE VEHICLES OFF THE ROAD, AND A FLEET OF 9,000 CARSHARE VEHICLES COULD REDUCE SYDNEY'S PRIVATE CAR OWNERSHIP BY 90,000 PRIVATE VEHICLES." AECOM report, 2016

The shift has been aided by concurrent economic and demographic shifts, such as a recessionary global economy, rising oil prices, rising higher education enrolment rates, an increase in the average age of entry into the labour market, and the decision to start a family at a later age.

The last two decades have been witness to stagnant or declining levels of private car use across much of the developed world. For example, between 2001 and 2016 in Australia, per capita vehicle kilometres travelled decreased by six per cent nationally, with licensing rates for people under 25 dropping by more than 10 per cent in Victoria and New South Wales. The sustained fall in private car use is a phenomenon observed around the world, and has been referred to as 'peak car'.

SELF-DRIVING CARS ARE THE FUTURE

Autonomous vehicle technology, in conjunction with shared mobility services, could accelerate 'peak car', helping households downsize from two cars, to one, or potentially none at all.

The technology that drives autonomous vehicles will enable on-demand, door-to-door transport services as a new form of micro public transport, combining the benefits of existing mass public transport services and private modes of motorised transport, but without the same drawbacks.

Compared to mass public transport services that require large catchment areas in order to be feasible (and consequently suffer from first and last mile connectivity problems) micro public transport can offer door-to-door services. And, compared with private modes of motorised transport, where high parking costs and frequent congestion can limit access and use, micro public transport is expected to be cheaper, faster and more convenient.

This technology is already disrupting existing practices within the transport, automotive and insurance industries, and already traditional public transport service providers are being forced to consider new models of provision.

For example, Transport for New South Wales is currently trialling on-demand transport (ODT) services that allow commuters in suburban parts of the state to book transport from or near their home to a local transport hub through a phone call, website or smartphone app.

Metropolitan regions in Northern Europe have tested the related concept of Mobility as a Service (MaaS), where consumers can plan, book and pay for travel using different transport modes and services through a single digital platform. Our research has found that there is unmet consumer demand for both ODT and MaaS in Australia, especially the latter. Additionally, many transport service providers are exploring the provision of these services with a view towards future integration with autonomous vehicle technology.

To bridge the pending gap in car sales, traditional automotive manufacturers are looking to take on the role of transport service providers themselves.

For example, BMW already operates carsharing services in North America and Europe, and General Motors plans to commence its own ridesharing services in 2019 using self-driving cars developed in house.

"SHARED MOBILITY SERVICE PROVIDERS ARE INVESTING IN THE DEVELOPMENT OF AUTONOMOUS VEHICLE TECHNOLOGY, SO AS TO HOLD ON TO THEIR CURRENT MARKET ADVANTAGE."

The insurance industry is also bracing itself, as reduced private ownership and increased safety will likely push down car insurance premiums over time. Consequently, insurance providers are also looking for opportunities to enter the transport market. For example, the Royal Automobile Association (RAA) of South Australia is extensively involved in ongoing self-driving car trials; the Royal Automobile Club of Victoria (RACV) is a private partner in Melbourne Bike Share; and preliminary discussions are underway at the Royal Automobile Club of Queensland (RACQ) to develop a business case for a MaaS service for South East Queensland.



2002

POD CAR

Movie: *Minority Report*

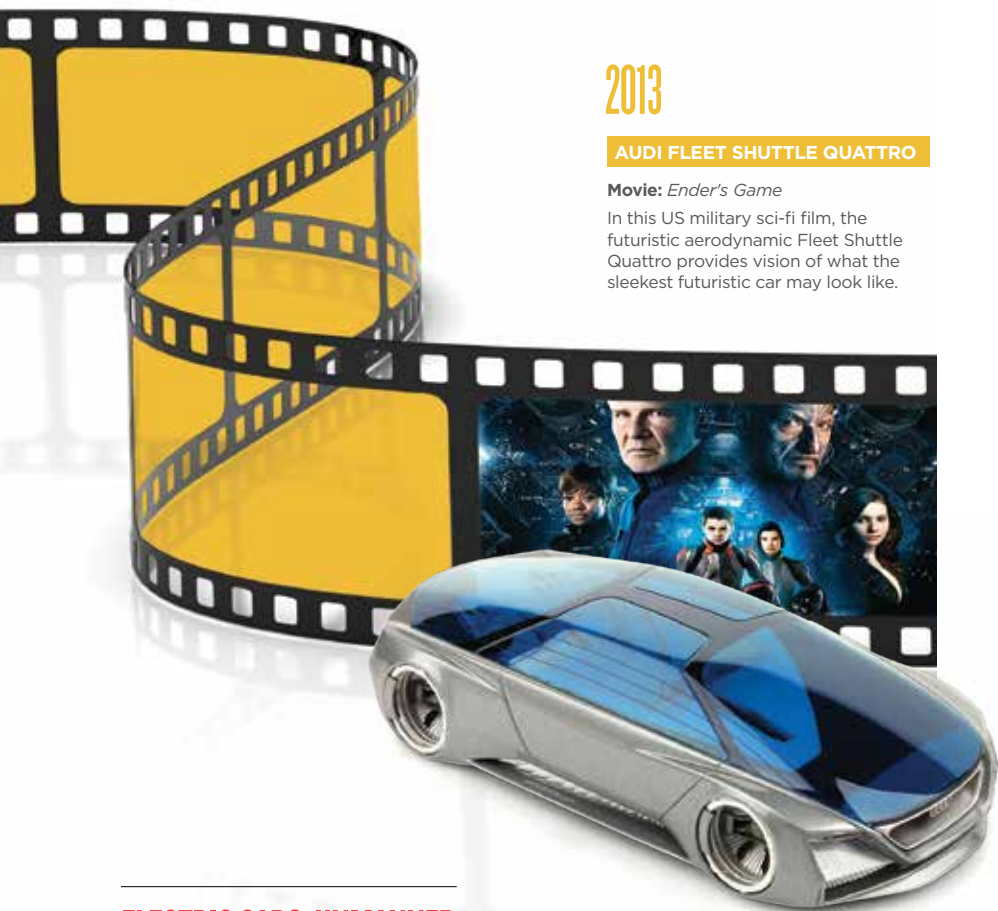
Set in the year 2054, these driverless cars operated on a magnetic levitation system, enabling both vertical and horizontal travel at more than 100 miles per hour.

2004

AUDI CONCEPT CAR

Movie: *I, Robot*

Aesthetically, this car probably comes closest to what future automated vehicles will look like. Driving itself on four spheres instead of wheels, this movie raised concerns about what happens when an autonomous car malfunctions.



2013

AUDI FLEET SHUTTLE QUATTRO

Movie: *Ender's Game*

In this US military sci-fi film, the futuristic aerodynamic Fleet Shuttle Quattro provides vision of what the sleekest futuristic car may look like.

ELECTRIC CARS, UNMANNED AERIAL VEHICLES AND OTHER POTENTIAL DISRUPTIONS

Parallel with these developments, electric cars are becoming increasingly commercially feasible. While high costs, low driving ranges, long charging times and limited public charging infrastructure continue to be major impediments to adoption, most experts agree that the electrification of our transport infrastructure is not a question of if, but when.

"ELECTRIC CARS HAVE THE POTENTIAL TO PROVIDE COST EFFECTIVE EMISSIONS REDUCTIONS, ADDRESS ISSUES OF FUEL SECURITY, AS WELL AS BENEFITS TO AIR QUALITY."

While they pose threats to the oil industry, they will create new business opportunities in the construction and maintenance of public charging infrastructure.

Unmanned aerial vehicles, or drones, are another potential disruptor. Large drones have the ability to displace existing long-distance air, rail and freight shipping industries; smaller drones could similarly displace existing urban delivery services.

Companies like Google and Uber have even been testing pilotless planes as flying taxis. However, most variants of unmanned aerial vehicle technology are still under research and development. And, while the commercial benefits are not clear at this stage, many experts continue to view them as 'technologies in search of solutions'.

THE WAY FORWARD

The future of passenger transport is predicted to be electric, autonomous, and increasingly shared. Each of these changes by themselves are potentially disruptive, but together, will be transformative, with far-reaching economic, social and environmental ramifications both nationally and internationally.

In the past, industry and government have failed to anticipate the rate and scale of change of new technologies and services. For example, the rapid diffusion of rideshare services such as Uber in Australia caught both taxi providers and transport planners by surprise. As a result, state governments have been forced to introduce expensive bailouts to keep local taxi industries afloat and compensate taxi plate owners for their losses.

Legislation has had to be amended to allow rideshare companies like Uber to operate legally, following pressure from consumer advocacy groups. Now, new regulations are under review to address concerns around unfair employment practices, inadequate insurance coverage, and lax security measures with regards to the provision of these services. Some of this disruption could have been avoided had the public and private sectors been appropriately prepared.

The case of ridesharing in Australia serves as an excellent example for why businesses in transport and related sectors need to be aware of transformative technologies and new service provision models.

Adaption is key if they are to compete in this rapidly changing ecosystem. ●

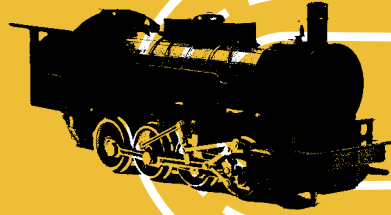
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HISTORY OF TRANSPORTATION

1850

STEAM LOCOMOTIVE

The steam locomotive were some of the first transport modes for suburban commuting.



1820

HORSECAR

The horsecar was probably the first form of urban mass public transport.



1908

FORD MODEL T

Ford's Model T made private car ownership feasible for the first time. Subsequent developments, such as the emergence of General Motors in the US and Volkswagen in Germany, contributed to the growing popularity of private cars.



1880

ELECTRIC TRAM

The electric street car took over from the horsecar.



2000

CAR SHARING

The smartphone revolution sets the stage for app-based sharing of cars including Uber in 2009.



1950

INTERSTATE HIGHWAY

In the US, Eisenhower constructed the interstate highway system that became an engine for national economic growth.



2020

DRIVERLESS CARS

Autonomous vehicle testing intensifies in the 2010s, with all major OEMs announcing plans to develop AVs. The first commercially ready self-driving car is promised as soon as 2020.



2010

ELECTRIC VEHICLES

Advances in batteries, concerns about increasing oil prices, and the desire to reduce greenhouse gas emissions lead to the onset of electric cars in 2010.



THE SKY'S THE LIMIT NO LONGER

THE SKY'S THE LIMIT NO LONGER

THERE'S A NEW SPACE RACE UNDER WAY, AND THIS TIME AROUND, NATIONAL PRESTIGE HAS TAKEN A BACKSEAT TO PRIVATE INNOVATION

Writer Dan Lander Photographer David Solm

Most likely, sometime in the next couple of decades, some breathtakingly fortunate woman or man will be the first to set foot on Mars. While it's not a nailed-on certainty, key stakeholders worldwide share an almost unanimous belief that the pre-eminent dream of sci-fi fantasists now floats tantalisingly close to realisation, and that has recently reawakened the public's lust for space exploration.

As remarkable as a Mars landing may be, however, in many ways the journey to get there could be more exciting than the actual destination. Mars is no El Dorado, no exotic paradise of untold riches—it remains a largely unknown quantity, and an inhospitable one at that. But the final push to transform humankind into a genuinely space-faring race may already be generating the most disruptive, lucrative industry we have ever known—space is now open for business, and business, it appears, could be very good.

A DOWN TO EARTH MARKET

The global space industry is growing at a rate of 9.5 per cent per year, almost four times faster than the world economy. Space-related activity is worth around \$350 billion today, but the Bank of America Merrill Lynch has tipped that the industry will generate at least \$2.7 trillion within 30 years, an eight-fold increase.

Growth, both current and projected, is being fuelled by an explosion of start-ups around the world, and while it may be the inter-planetary ambitions of big players like Elon Musk garnering all the headlines, the wider boom is in monetising new ways to make space work for the folk down on Earth.

So much of what we now take for granted, from GPS to mobile communications to the morning weather report, depends on orbital infrastructure, and with technology improving and costs shrinking, new possibilities are blossoming.

“We are so connected to space, in ways we don't even realise,” says Jasmine Vreugdenburg, Manager of the University of South Australia's Innovation & Collaboration Centre (ICC). “From low orbiting satellites used for telecommunications, to Elon Musk's prototype satellites that are aiming to beam the internet across the world, the engagement we have with space is truly incredible.”

“WE'RE ONLY JUST REALISING THE OPPORTUNITIES THAT THE SPACE INDUSTRY PRESENTS—AND THE SCOPE IS PHENOMENAL.”

“We're talking everything from commercial rocket launch services, obviously, but also new applications using earth observation data, manufacturing in space and even mining asteroids.”

With much of this innovation being driven by young, progressive researchers and entrepreneurs, growth in the space business is riding a profoundly disruptive wave—not just new ideas, but lots of new faces too. And, as Airbus's Space Systems Development Director, James Hinds, told the South Australia Space Forum in April, the impact is substantial.

“New space is evolving away from the classical lines,” Hinds said. “There's still great excitement about exploration, but industry and society are not looking at space like another great Apollo scheme, they're actually looking at it as a service.

“How can space make people's day-to-day lives better?”

“THE UNIVERSITY OF SOUTH AUSTRALIA ALREADY HAS A LONG ASSOCIATION WITH SPACE RESEARCH, AND WE CURRENTLY DELIVER A SPACE INDUSTRY COURSE IN CONJUNCTION WITH THE INTERNATIONAL SPACE UNIVERSITY.”

THE LEARNING CURVE

It's not only the established space industry heavyweights taking note of this industrial evolution—government operations around the world are also paying close attention.

Internationally, NASA and the European Space Agency have flung open the door to collaboration with entrepreneurs from SpaceX to Queensland rocket company Gilmour Space Technologies. And while many details of Australia's own forthcoming space agency are still to be confirmed, key bodies such as the CSIRO and the Defence Science and Technology Group have indicated firmly that their future lies in partnership with the best and brightest new space enterprises.

The South Australian Government has made a long-term commitment to the space industry, opening the South Australian Space Industry Centre (SASIC) and establishing a formal space portfolio, with the new Premier Steven Marshall announcing at the SA Space Forum that he would be serving as Space Industries Minister himself.

“I am taking on the space portfolio, and one of my highest priority issues is regarding the Australian space agency and lobbying as hard as I can for South Australia to play a lead role in that development,” the Premier said.

The SA Government has also provided a \$4 million, four-year fund through SASIC, which will see UniSA collaborate with the International Space University and a global accelerator partner to deliver a space industry development program. The first stage of the program will operate through UniSA's Innovation & Collaboration Centre, and as Vreugdenburg notes, is designed to answer one of the biggest challenges facing most start-ups: how to turn a great idea into a successful business.



COSMIC IDEAS, LOCAL GAINS

“The University of South Australia already has a long association with space research, and we currently deliver a space industry course in conjunction with the International Space University (ISU).”

“But our new Space Incubator Program is about providing young engineers and scientists and other innovators with direct, focused guidance in building a viable business around their ideas.”

A CIRCLE OF KNOWLEDGE

Commencing in September this year, the ICC’s six-month Venture Catalyst Space Incubator Program will deliver topics on leading a growth business, understanding the opportunity and market, and product management, build and release.

While leading academics will feature in the program, there is also a key role for industry mentors, who will provide practical, experience-based guidance and support. South Australia already boasts a burgeoning space start-up culture—including Neumann Space and Fleet Space, that are some of the industry leaders, and Myriota, which developed out of research that came from UniSA’s Institute of Telecommunications—and exposure to this environment will be one of the highlights of the program.

“Existing start-ups will be key in helping new start-ups through the program,” Vreugdenburg says. “Start-ups are aware of what you can and can’t do in this industry—from navigating the regulations to understanding some of the unique technical challenges they can face—and that will be a key understanding to deliver back to our new companies.”

While there has been plenty of excitement about the potential presented by a new Australian space agency, the savviest expectations have been tempered—we will not be creating NASA Down Under, nor leading a mission to Mars. The more realistic hopes are that the agency will better co-ordinate our existing capabilities and help foster niche innovations that can be taken to a world market. In the newly fluid and co-operative global space industry, Australia doesn’t need to be able to do it all, it just needs to be the best at those things it does do.

“For local start-ups, understanding how to take advantage of the new opportunities, such as testing and deployment in space, will be important,” Vreugdenburg says. “If you can harness that, there’s a lot of potential in this industry, now and going forward.”

One of the increasingly apparent features of that potential is that any benefits extend well beyond the space industry. The same technological innovations that are transforming our orbital infrastructure, from extreme data processing to high precision sensors, are having a ripple effect across a whole range of different sectors, providing diverse opportunities for switched-on companies.

“Businesses are not looking to invest in the next rocket necessarily, but all the underlying technologies and services that support the space industry,” Vreugdenburg says.

“New space and the commercialisation of new technologies are creating a massive new industry. And being a part of this, and seeing just how these new technologies extend from one industry to engage with many others, is extremely exciting.”

Given that, in the last year alone, more than \$52 million of investment has been committed to South Australia’s space industry through a combination of venture capital, universities, local industry and government, it’s clear that getting involved with what’s going on off-planet is a great way to boost what’s happening back on Earth.

And, with both public and private sectors demonstrating a rare degree of synergy in the current space industry, perhaps it’s finally reasonable to start looking forward to a future among the stars.



Jasmine Vreugdenburg is the Manager of UniSA’s Innovation & Collaboration Centre. She is leading the development of UniSA’s Venture Catalyst Space Incubator Program that supports start-ups in the space sector.



THE IDEA

THE CHALLENGE

Fuelled by an explosion of start-ups, the global space industry is evolving from exploration to innovation. Driven by young, progressive researchers and entrepreneurs, this new space demands innovation, creative thought, and distinct support structures to enable disruptive ideas.

THE WAY FORWARD

UniSA’s Space Incubator Program is one such support mechanism designed to help space start-ups. Providing seed funding, development, and strategy advice, the program supports founders with the essential business skills to successfully start and lead space ventures.

OUR PLACE IN SPACE

UniSA and its antecedents have been directly involved in research in the space industry since 1988. From supporting space start-ups and transformation satellite communications, to interactive global space hackathons, and intensive live-in space programs, UniSA continues to be at the forefront of space.

1998 -

COOPERATIVE SPACE RESEARCH

In 1998, UniSA partnered in the Cooperative Research Centre for Satellite Systems (CRCSS), to research satellite systems for communication, space science and computer technology, satellite systems and satellite engineering with the objective of generating scientific and commercial benefits to Australia.

2002 -

HIGH RATE SATELLITE DEMODULATOR

The ever-increasing number of satellites demanded much greater performance. In late 2002, the Institute for Telecommunications Research joined with Satellite Services BV SSBV to develop a fully programmable demodulator capable of multi-satellite missions with data rates to approximately 320 Mbit/s.

FEDSAT

In 2002, the CRCSS launched FedSat, a 58kg microsatellite from Japan, on board a 53-metre rocket, delivering a landmark moment in Australia's satellite and space communication research program. A four-year mission, FedSat allowed the testing and refinement of new technologies in satellite computing and communications, leaving an enduring legacy of expertise and infrastructure that continues today.

2003 -

COHDA WIRELESS PTY LTD

Founded from the UniSA Institute for Telecommunication Research, Cohda Wireless developed signal processing techniques as the basis for a successful start-up in 2003. Using satellite and wireless technology Cohda is transforming the way systems communicate to deliver smart city infrastructure.

SATELLITE GROUND STATION

UniSA's satellite ground station is one of only a few available in the southern hemisphere, featuring a three metre steerable antenna that operates on L- and S-Band frequencies, and a 6.8 metre steerable antenna on the X-Band frequency. With our ground station equipment we have provided tracking services for the second Autonomous Vehicle launch to the International Space Station, as well as commercial data for low earth orbit satellites.

2004 -

SOUTHERN HEMISPHERE SPACE STUDIES PROGRAM

A unique, intensive, five week, live-in experience for those seeking knowledge of and contacts in the international space sector. Presented in partnership with the International Space University, it covers everything from space exploration and human spaceflight, to space policy and laws.

2008 -

INTERNATIONAL SPACE STATION LIFELINE

As one of only six stations worldwide, UniSA monitored an Ariane 5 rocket on behalf of the French Space Agency, Centre National d'Etudes Spatiales (CNES), and Arianespace, as it travelled from French Guiana to the International Space Station (ISS). The mission delivered vital supplies such as food, water and air to the astronauts aboard the ISS. In 2012 we repeated the mission for the ISS.

2010 -

LOW ORBIT SATELLITE

UniSA was awarded \$5 million under the federal government's Australian Space Research Program to develop a satellite-based wireless sensor network to provide Australia with greater capacity to collect information vital for industry, defence, the environment and national security.

2015 -

MYRIOTA PTY LTD

With roots in UniSA's Institute for Telecommunications Research, the massively successful start-up, Myriota Pty Ltd, will use *exactEarth's* Low Earth Orbit (LEO) satellites for its ground-breaking, cost effective connectivity solutions. Industry analysts have estimated that global M2M revenue will grow to \$1.2 trillion by 2022.

2016 -

NASA SPACE APPS CHALLENGE

One of the world's largest hackathons, this 48-72-hour hackathon sees coding and space enthusiasts from around the world attempt to solve some of the Earth's problems using NASA open source data. An initiative of UniSA and Defence SA, it encourages local ingenuity and entrepreneurship.

2018 -

ACTSPACE AUSTRALIA

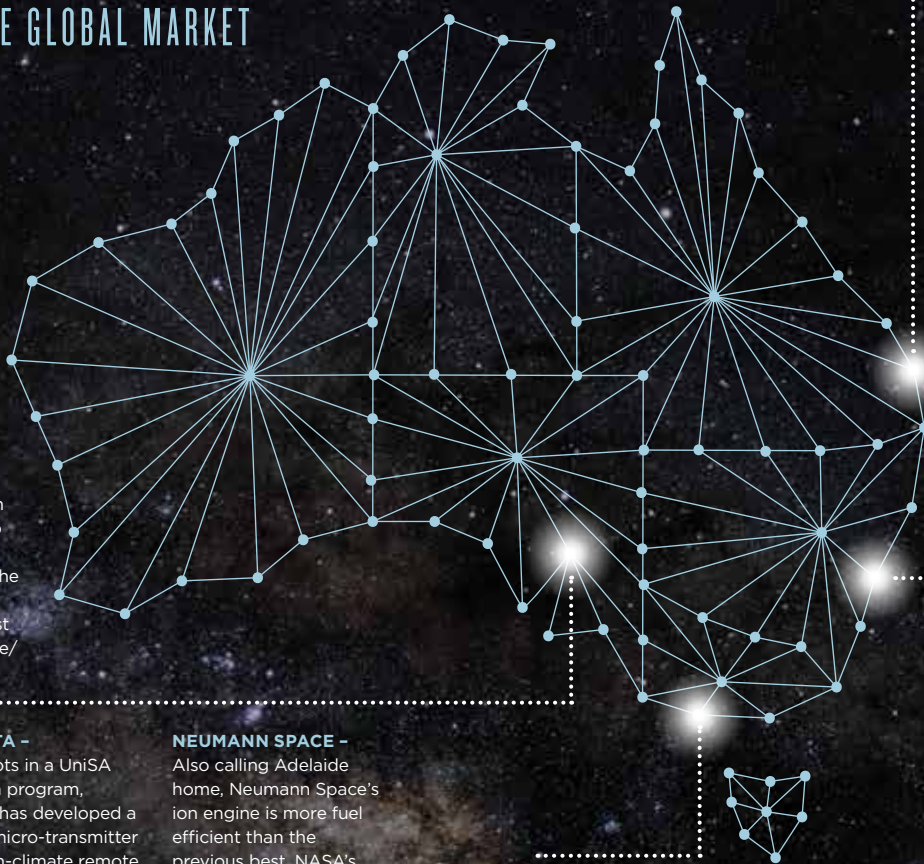
A global 24-hour hackathon encouraging participants to solve challenges using space technologies and data. Run with CNES, the European Space Agency, the South Australian government and UniSA's ICC, it could conceive the next space start-up.

SMART SAT CRC

UniSA is currently leading a bid for a multi-million dollar SmartSat Cooperative Research Centre to be established in South Australia. The Centre will catapult Australia as a leader in niche areas of intelligent satellite systems, advanced communications and earth observation.

START ME UP

AUSTRALIA'S INNOVATIVE SPACE SECTOR IS FINDING EXCITING NICHES IN THE GLOBAL MARKET



FLEET SPACE -

Founded in Adelaide in 2015, Fleet is aiming to create an affordable, universal network for the Internet of Things, utilising the world's first fully integrated Satellite/LoRaWAN™ gateway.

MYRIOTA -

With roots in a UniSA research program, Myriota has developed a 50mm micro-transmitter for harsh-climate remote applications, with inbuilt antenna, GPS, motion sensor, microprocessor and 12-month battery.

NEUMANN SPACE -

Also calling Adelaide home, Neumann Space's ion engine is more fuel efficient than the previous best, NASA's HIPEP thruster. Neumann estimates its thruster could send a probe to Mars and back on a single fuel rod.

NEXTAERO -

Founded by a group of Monash University engineers, NextAero has developed a 3D-printed aerospike rocket, which is more efficient at altitude than traditional bell-shaped rockets, and went from concept to testing in just 4 months.

GILMOUR SPACE TECHNOLOGIES -

With bases in Queensland and Singapore, the Gilmour brothers, Adam and James, successfully launched Australia's first hybrid sounding rocket in 2016 and now have a research agreement with NASA.

EARTH-AI -

Also based in Sydney, Earth-AI is another mineral company using AI to deliver a platform with 47 layers of remote sensing to highlight ore bodies, alteration haloes, hard rocks and regolith.

FLUROSAT -

Sydney's FluroSat uses remote sensing imagery taken by precise hyperspectral cameras on board drones or satellites to provide analytical agricultural data about nutrient deficiency, water and heat stress, and weeds and diseases.

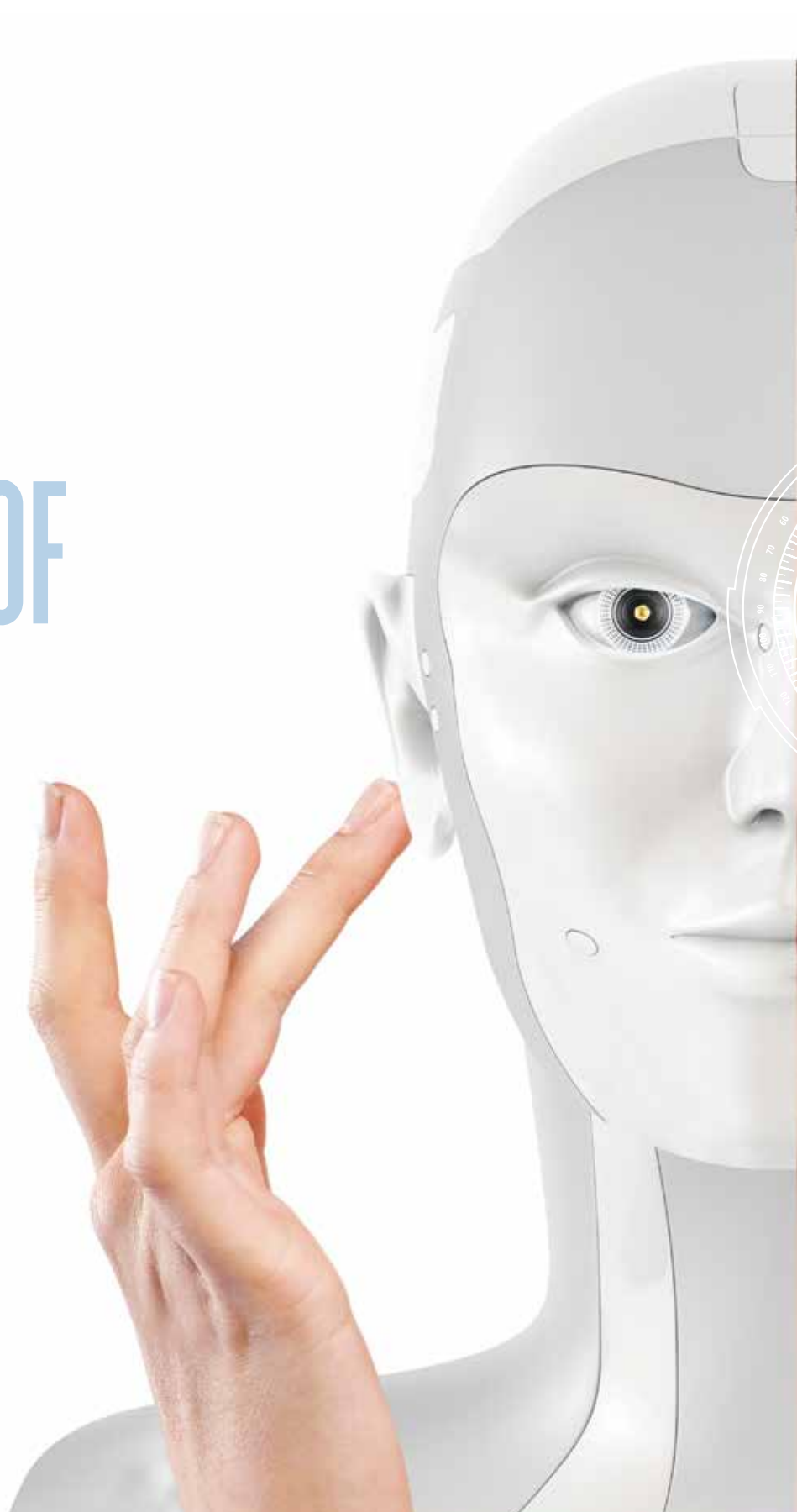
OTUS INTEL -

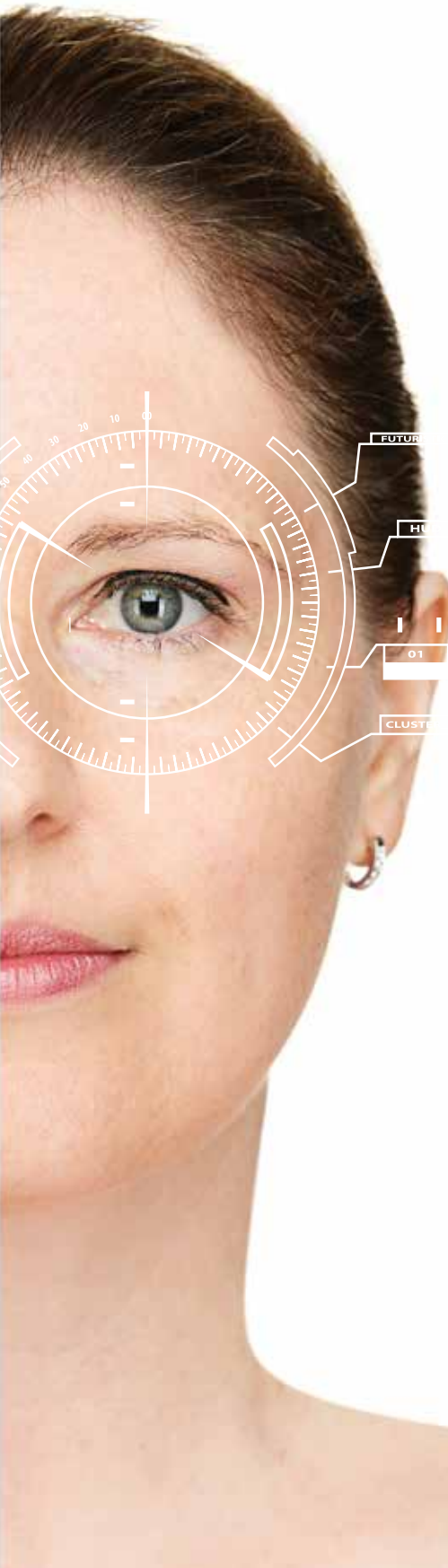
This Sydney-based spatial intelligence outfit acquires imagery from multiple commercial satellites and employs proprietary data processing techniques to guide on-ground resource sector operations.

WORKFORCE EVOLUTION: DISRUPTION OF THE LABOUR MARKET.

I know my job is changing,
but how much, how quickly,
and how do I keep up?

Writer Dr Eva Balan-Vnuk **Photographer** David Solm





My grandmother, 93 years young, worked on the assembly line in a Philips factory in Adelaide in the 1950s and 60s. It was a golden age of manufacturing, when such jobs seemed secure. But when automation arrived in the late 1970s, her job, along with hundreds of others, disappeared.

Throughout history, humanity has always experienced (and caused) changes that impact the way we live and work, yet it's the pace of change that we see in today's workforce that's causing disruption. The emergence of artificial intelligence (AI), machine learning and the internet-of-things are driving this change, and while each has the power to improve our lives, they're also transforming the workforce at an unprecedented rate.

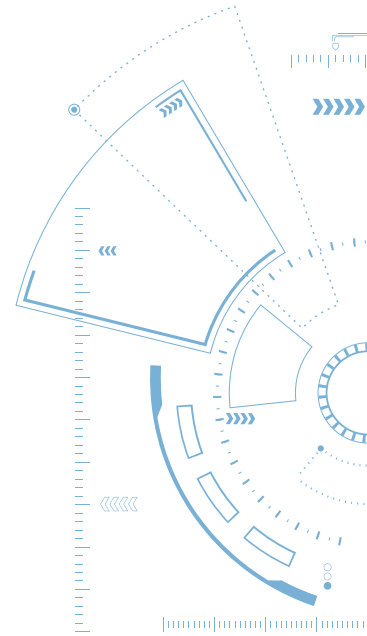
With suggestions of robots taking over, and predictions that upwards of 40 per cent of jobs will be automated in the next 15 years, it can be difficult to think constructively about the possible transition of our own careers.

More helpful, is to consider an analysis of US Census Bureau data that shows the trends in available and required jobs in the market. Roles are identified as cognitive or manual in nature, with tasks being routine or non-routine. Considering where we fit in these categories can help us consider what new skills we need to remain relevant and valuable. As manual-routine and cognitive-routine jobs are most suited to being automated, it makes sense to see how we can transition our skills to suit manual-non-routine, or cognitive non-routine roles.

Evolution is inevitable, but we can prepare for change. In my grandmother's case, she transitioned from a manual-routine job in assembly line manufacturing, to a manual non-routine role as a carer for children with disabilities, a job she had until she retired. And, while it makes sense that a manual-routine assembly line job is replaced by an automated process, many traditional white-collar jobs are also likely to be on the line. It all comes down to the human element—just think of National Australia Bank's announcement in February this year that 6000 employees would be let go because of task automation.

JOBS THAT REQUIRE INNATELY HUMAN SKILLS ARE THE WAY OF THE FUTURE.

Even highly paid roles, such as radiologists, may need to now transition, as we know that AI can more accurately interpret scanned results. Careers in law, where AI can do in seconds what can take paralegals hours or days are also in for a shakeup. Of course, this doesn't mean we don't need lawyers; it just means lawyers will need to rely more strongly on their human qualities.



AND THEREIN LIES THE KEY: HUMAN QUALITIES. DEVELOPING SOCIAL OR 'SOFT' SKILLS WILL BE CRITICAL FOR FUTURE EMPLOYMENT.

AI is acknowledged as being inferior to human intelligence in at least three ways—the ability to persuade and influence others; the ability to empathise; and the ability to teach others through role modelling, coaching and mentoring. Being able to hone attributes that are innately human—including creativity, empathy, problem-solving, collaboration and curiosity—will help us stay employable.

When you consider a key trait employers are looking for, the notion of 'learnability', a curiosity and thirst for new knowledge and skills, arises. Enter the rise of micro-credentials where you can 'pick and mix' courses to match job requirements, enabling accelerated skills, in digestible

amounts, to deliver value quickly. Even just-in-time learning can help you gain new skills and quickly deliver value for a new role.

Increased digital fluency will be even more important as technological solutions permeate roles in all sectors of our economy; this presents specific challenges for those in our community who are not confident using technology. Addressing this situation requires investment from multiple sources to ensure these people aren't excluded from the workforce in the future. However, in addition to domain or technical skills, developing skills that hold us in good stead in the non-routine category will become increasingly important.

Just as employees need to identify new learning opportunities for themselves, an employer also needs to take its workforce on a learning and development journey. Investing in an existing workforce, that understands the culture, history and purpose of the organisation, is more cost effective than attempting to find specialists with new niche skills and engaging in a talent war with other organisations. Businesses that invest in their people generally also offer more flexible working conditions, a more diverse workforce and are better prepared for an unknown future. ●

For more information, visit
UnisaBusinessSchool.edu.au/magazine

IS YOUR JOB AT RISK?

According to the US Census Bureau, increasing automation is leading to a decline in *routine* jobs, simply because computers are able to complete these tasks more efficiently and accurately.

The types of jobs that are at risk are shown in the grid (**right**)—if your role sits in either the routine-cognitive or the routine-manual quadrants, it would

be wise for you to start thinking about upskilling.

For those in either of the non-routine quadrants, the personal, human skills needed for these jobs are holding you in good stead for the future.

Either way, remember: proactive upskilling will always help you to stay ahead of the curve.



HOW TO NAVIGATE YOUR CAREER THROUGH AUTOMATION:

1

ASSESS YOUR SKILLS:

Start by looking at your job and assessing whether it is predominantly *manual* or *cognitive*. Identify where you fit on the grid below. If in either of the routine quadrants, it's time to upskill.

2

CRITIQUE YOUR CAREER PATH:

Consider your career path and identify what new skills you need to learn to pivot your career into a new role or sector. If you have more *routine* skills, look to develop your problem-solving, collaboration, and creativity. If you're already doing *non-routine* tasks, keep ahead of the curve by upskilling where you can.

3


STAY AHEAD OF THE CURVE:

Think about how you can develop your 'learnability' so that you can keep pace and thrive in today's era of disruption.

	ROUTINE	NON-ROUTINE
COGNITIVE	<ul style="list-style-type: none"> ▶ X-ray technicians ▶ Paralegals ▶ Office assistants 	<ul style="list-style-type: none"> ▶ Managers ▶ Creatives ▶ Teachers ▶ Engineers
MANUAL	<ul style="list-style-type: none"> ▶ Assembly line workers ▶ Check-out operators 	<ul style="list-style-type: none"> ▶ Carers ▶ Security officers ▶ Hospitality staff

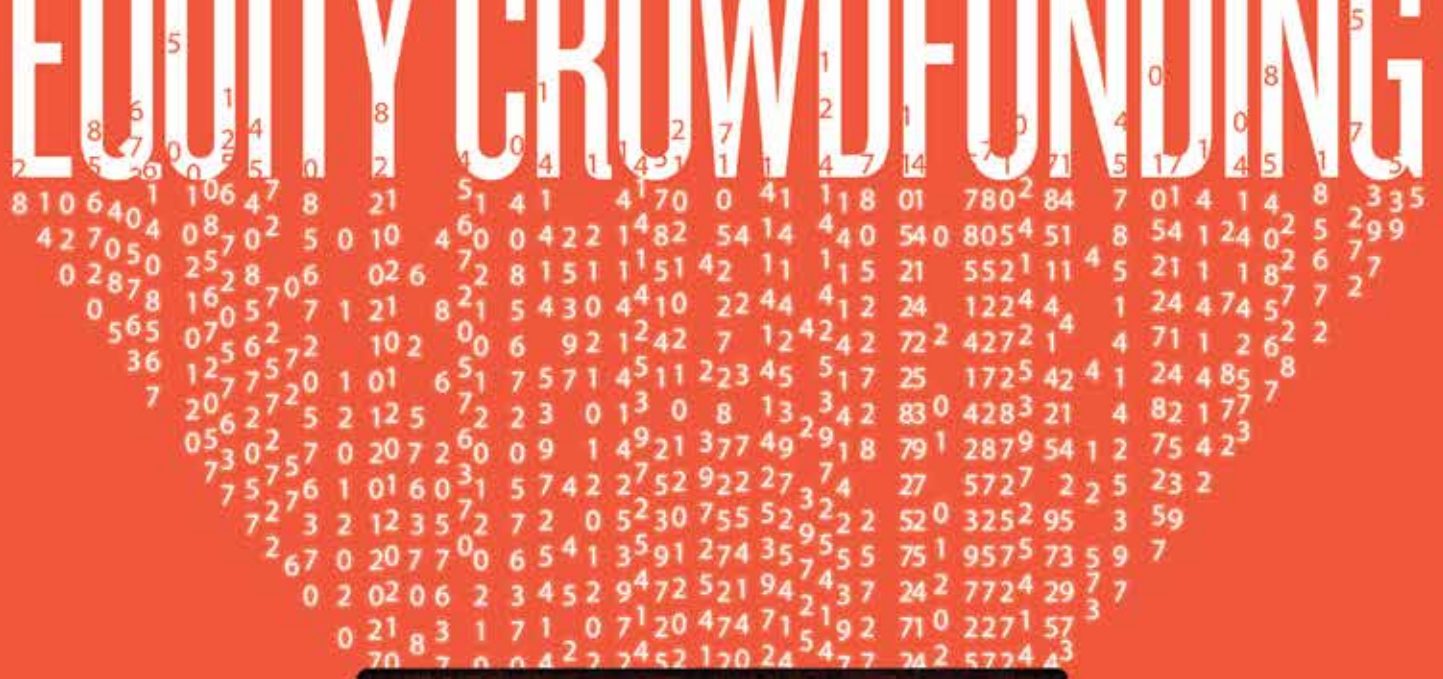
Grid adapted from the US Census Bureau



 **Dr Eva Balan-Vnuk** is Executive Director, ICT and Digital Government at the Department of the Premier and Cabinet, Government of South Australia. Prior to this she spent nine years working with Microsoft across Europe, the Middle East, Africa and Asia. She is a graduate of the UniSA Business School.

– DECODING –

EQUITY CROWDFUNDING



If you're a new business looking to supercharge your growth, equity crowdfunding might just be your golden ticket.

Writers Kartick Gupta and Chandra Krishnamurti **Illustrator** Tang Yau Hoong

On 29 September 2017, Australian Securities and Investments Commission (ASIC) legislation opened a whole new world of funding for Australian business. Legalising equity crowdfunding, the legislation allows unlisted public companies to raise funds from the 'crowd' in order to support their business ideas.

With eligible companies able to raise up to \$5 million a year, this could be a real game-changer for the Australian business sector. So how does equity crowdfunding really work, and what are the rules?

Crowdfunding basics

Equity crowdfunding is essentially a method of financing that enables an entrepreneur to sell shares of their business (equity) to a group of investors through an open call on an internet-based platform.

Similar to other forms of crowdfunding, equity crowdfunding collectively raises funds, but unlike traditional crowdfunding initiatives, investors are rewarded with a slice of the business's equity, in lieu of products and services. Importantly, if the venture succeeds,

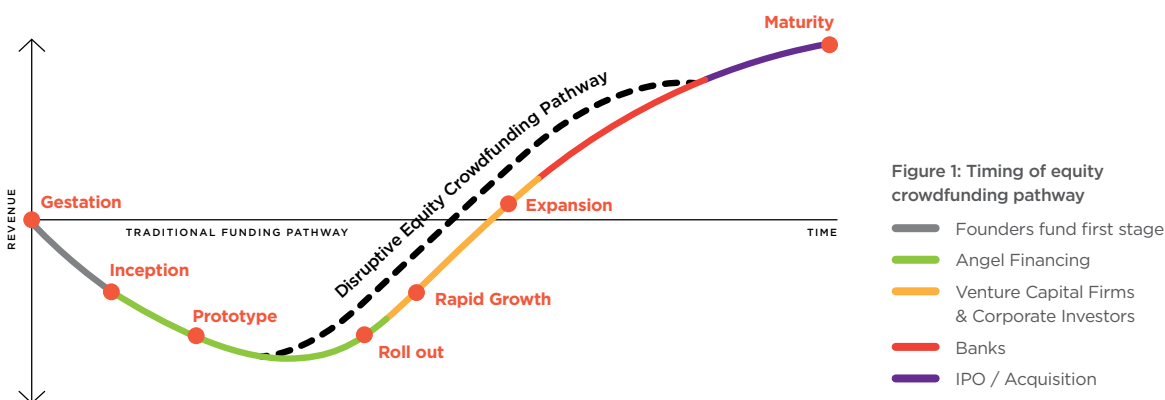
investors will also take their share of the profits.

With the ability to invest as little as \$50 (or anywhere up to \$10,000), investors can choose to back ideas and initiatives that really appeal to them.

Anything from fashion and movies to technology and space is on offer, with the pitches clearly listed and presented on crowdfunding platforms.

What makes crowdfunding so valuable?

Equity crowdfunding addresses two main issues. Firstly, it reduces the capital-raising obstacles for small companies in the early stages of development. In Australia, there is a lack of funding for early stage emerging companies because of a lack of interest from banks, angel investors and venture capitalists, so this really opens up new opportunities. Secondly, it provides new opportunities for retail investors to take a stake in unlisted companies, something previously unavailable to them.



Dr Kartick Gupta is a member of the UniSA's Centre for Applied Finance and Economics. His research focuses on energy finance, innovation, corporate finance and corporate social responsibility

Chandra Krishnamurti is a Professor of Finance. His research expertise includes asset pricing, corporate governance, market microstructure and corporate finance.

THE IDEA

THE SCENARIO

New ASIC legislation allows publicly unlisted companies to raise funds from 'the crowd' in order to support their business ideas. With eligible companies able to raise up to \$5 million per year, this could be a real game-changer for Australian business.

THE OUTLOOK

Industry observers believe that Australia will follow international trends and experience massive growth in equity crowdfunding. Investors must be wary of increased risks, as start-ups are not liquid companies. While investment periods will be much longer, this new method of financing will open new doors to those looking to reach the alpha section of their portfolios.

THERE ARE FOUR DISTINCT TYPES OF CROWDFUNDING:



REWARD-BASED CROWDFUNDING is the most popular type of crowdfunding, where entrepreneurs solicit financial donations in exchange for a product or service. For example, a music entrepreneur may reward contributors with a copy of their new album.

DEBT CROWDFUNDING is where lenders request support and resources from other investors in exchange for interest in addition to the repayment of the principal. Also known as crowd lending, this is a good alternative for start-ups as it can offer greater flexibility and lower interest rates than banks.

DONATION-BASED CROWDFUNDING is where donors donate small amounts of money to raise funds that support a cause or a non-profit venture. UniSA is currently crowdfunding to support these projects: survival of native animals; technology to help stroke survivors; and programs to prevent asylum seeker suicide.

Who can invest?

Historically, the capital raising space has been dominated by wealthy individuals, but since the new legislation has come into operation, equity based crowdfunding has become increasingly popular for all kinds of investors, from the everyday mum-and-dad investor, to the sophisticated financier.

In Australia, everyday investors are termed retail investors and are defined as anyone over the age of 18 who can invest up to \$10,000 per company per year through on-line crowdfunding portals.

Those more in the know, are known as sophisticated investors and have recorded a gross annual income of \$250,000 during the last two years or have net assets of at least \$2.5 million and are not subject to investment limitations faced by retail investors.

So there are different types of investors, and with the passing of the new legislation, retail investors now have more options to invest in, and gain part-ownership of, companies that they feel passionate about.

Who are the key players?

Since the new legislation, a number of Australian crowdsourcing platforms have arisen, with Equitise, Birchal and Enable Funding being the most popular.

Such platforms have the ability to host multiple start-ups who pitch their business ideas to investors.

To get started, entrepreneurs typically make an open call for funding on a crowdfunding platform by providing relevant information. Then, the crowdfunding platform provides facilities

such as a standard investment contract, settlement mechanisms and due diligence.

Transaction costs, funding amounts and so on, vary across the different platforms, but in general, the process of investing is quick and easy.

Potential investors then can search the options and invest as they choose. The process is quick and simple: register online via an equity crowdfunding platform, discover the available opportunities, decide to invest and pay seamlessly online—and just like that, you're an equity investor in a new start-up.

What are the rules?

As this is the first time that retail investors have been allowed to invest in early stage equity, several safeguards have been put in place. The first is that retail investors are only allowed to invest up to \$10,000 per company per year. Further, when they invest in crowdsourced equity, a cooling-off period of five working days is allowed for each investment. This seems sensible, given the high risk of early-stage start-ups.

From the start-up perspective, the ease of access to funds means some limits must be enforced. Consequently, eligible companies are only allowed to seek investments of up to \$5 million through crowdsourced equity platforms, which is generous when comparing to overseas markets that have capped this at \$2 million.

Those unlisted public companies with gross assets and revenue of less than \$25 million are allowed access to this source of

funding. It therefore excludes proprietary companies and larger public companies. Crowdsourcing platforms must also have a financial services license.

What's the outlook for equity crowdfunding?

Industry observers believe that Australia will follow global trends in crowdsourcing. In the United States and United Kingdom, crowdfunding markets have experienced massive growth in capital raising after enabling regulations were passed.

From the perspective of one of Australia's key crowdfunding platforms, Enable Funding, capital raised from Australian crowdsourcing is expected to soar tenfold, from \$119 million in 2016 to \$1.5 billion in 2021.

What are the risks?

While retail investors now have a chance to invest in early stage companies, these investments are certainly not without risks. Start-ups are by nature much riskier investments than established entities, yet they also offer the possibility of getting in on an idea before it becomes too successful or out of reach.



LINKING MINDS AS WELL AS MONEY

Crowdfunding platforms provide a perfect early stage and expansion capital solution. Will Leitch, CEO Enable Funding, and UniSA Business alumnus shares his insights.

EQUITY CROWDFUNDING lets investors contribute larger amounts of money in return for ownership of a company. It's different to debt crowdfunding, as investors gain a slice of the business, only making their money once the company is sold.

Initial studies of equity crowdfunding campaigns in Australia suggest that human capital is positively associated with the number of investors and funding amount. What this means is that companies with more board members are more successful at attracting investors and can therefore raise larger amounts.

Further, studies show that the inherent risk in investing in an early stage company may be mitigated by entrepreneurs retaining more equity and providing more detailed information about risks to the potential investors. So, when entrepreneurs take a larger stake, they convince new investors that they have more skin in the game. Likewise, by providing detailed information about the risk involved in the venture, potential investors are able to take calculated risks while investing in such ventures.

Finally, investors should not look at equity crowdfunding campaigns as get rich quick schemes; they are much more likely to be long-term, high risk investments and as such, investors should take care when committing any significant portion of wealth or income. And, as always, diversification is the key to long-term investment success. ●

For more information, visit UniSABusinessSchool.edu.au/magazine

Early stage businesses offer unique opportunities and challenges for investors and operators alike, and the recent changes to Australia's equity crowd-funding laws are tailored specifically for that scenario. With heavy regulation making it difficult for traditional investment vehicles to access startup culture, equity crowdfunding fills an important niche.

Will Leitch, CEO of Sydney and Adelaide-based Enable Funding, and graduate of the UniSA Business School, knows the benefits of connecting savvy, forward-thinking investors with opportunities that fit not only their portfolios, but their broader philosophies as well.

"This is a great opportunity to drive a sector of the Australian economy that's been substantially lacking ever since the Global Financial Crisis," Leitch says.

"We're working with early stage companies, the people who have put their blood sweat and tears into the business, and aligning them with investors who really understand that business and, in most instances, have a real passion about what they're investing into."

Enable Funding evolved out of the Australian Small Scale Offerings Board (ASSOB), which was the world's first equity-based crowd funder, and between its two incarnations, has been trading for almost 10 years, raising close to \$150 million in capital.

The company has come to recognise the crowdfunding model provides a unique synergy between investor and business which, handled correctly, has the potential to be far more dynamic than a traditional investment scenario.

"One example would be that crowd funding can be used in a number of ways to build a customer database," Leitch says.

"Firstly, the targeted digital marketing of the capital raising campaign creates awareness for potential customers, and whilst they might not purchase equity in the company, they may sign up to try the products or services. Also, investors who do purchase equity rapidly expand the raising entity's potential customer market.

"For example, if an online company sells equity at a minimum parcel size of \$500, then these investors are likely to become members of this site. The investors then become brand ambassadors—they tell their friends about the service, and get them on as customers, helping the company to further build sales momentum, which is critical in an early stage company. That means the break-even term on the business becomes a lot shorter and the risk decreases for investors as well."

While Leitch acknowledges there are unique risks with investing in startup scenarios, Enable and similar platforms provide rigorous screening of business applicants, and he believes that the new legislation strikes the right balance between opportunity and investor protection.

"New business models are dominating the global market, and we're seeing much faster evolution from startup to unicorn," he says.

"Now, through some very good legislation from the Australian Government, everyday investors can participate in this as well. They need to understand the risks—these are not liquid companies and you have to invest for a longer time period—hence the legislation leaves wholesale and sophisticated investors unrestricted, but caps retail investment at \$10,000. This provides people a new way to get the alpha section of their portfolio that they actually need." ●

For more information, visit enablefunding.com



Dr Michelle Perugini has a PhD in Medicine, and is an internationally renowned expert in health, medical research, advanced analytics, and AI. She is an alumna of UniSA and a member of the UniSA Business School Advisory Board.

WISDOM FROM THE START-UP WHISPERER

Writer Charlotte Chalklen Photographer David Solm

Providing Artificial Intelligence-driven cloud-based image analysis that can improve outcomes and cut costs of IVF, Life Whisperer is an example of how disruptive technologies and dynamic teamwork can bring about positive change, sooner.

Ten years ago, Michelle Perugini was a stem cell biologist with an entrepreneurial itch to scratch. While excited by her work, she wanted to help actualise applications faster. A decade on, and she's steered several high-tech start-ups to success. Her latest, Life Whisperer, is poised for success after being named 'best idea' in Richard Branson and Apple co-founder Steve Wozniak's Talent Unleashed awards.

Life Whisperer is an artificial intelligence (AI) company that uses non-invasive image analysis to improve the selection of healthy embryos for IVF implantation. When stakes are high, and success rates are low, Life Whisperer offers a welcome alternative for couples wanting to have children.

Conceived in late 2016, Life Whisperer's fast-track is no fluke, but borne from the experience of Perugini's previous start-up, ISD Analytics, which she developed over eight years with her husband, former defence scientist Don Perugini. An AI-driven behavioural modeling system to predict consumer behavior, ISD Analytics, was sold in 2015; Perugini says lessons learned from that start-up experience have been invaluable.

"The reason we've been able to get Life Whisperer up so quickly is because we've done it before," she says. "To do that first time without any commercialisation experience is really difficult."

Building a team with the know-how to take a disruptive idea forward is a crucial first-step for any start-up.

Perugini advises tapping in to incubation and mentoring programs—it was while working as a mentor on one such scheme that she came into contact with Life Whisperer co-founder, Jonathon Hall, a physicist and nanotechnology researcher with a concept around using non-invasive technology to better select healthy embryos during IVF.

"I fell in love with the idea," Perugini says. "Jonathon was very passionate about commercialising and together we had the perfect skill set to make it happen—my work in stem cell biology, Don's AI background, and Jonathon's computer vision and physics know-how."

TAKE-HOME TIPS FOR START-UP HITS

- 1 Synergise your team:**
A clever concept is important, but a team with the right skill set is crucial. You can't smash four independent people together and just hope for magic—genuinely assess whether you've got the right team or not.
- 2 Leverage support early:**
Surround yourself with mentors and people who understand how to bring technology to market. There are lots of programs and support available to develop ideas, so leverage them.
- 3 Take a long-term view:**
Don't have short-term expectations, because invariably it will take longer than you might think. Break goals down into achievable milestones and have realistic expectations.
- 4 Gain exposure on a shoestring:**
No marketing budget? No problem. Leverage social media, embed yourself in start-up communities and enter innovation awards. Enter competitions as an investment: winning one will give your start-up the kind of exposure that money can't buy.

Current IVF techniques have clinicians looking down microscopes to assess what is a viable embryo; Life Whisperer looks at tens of thousands of previous images and detects complex patterns that the human brain can't compute to identify healthy embryos, so achieves this much faster.

With cloud technology, the platform can be delivered instantly to clinics around the globe. It's the ultimate disruptive technology that is set to expand an untapped market: Perugini says that while official reports estimate around two million couples undergo IVF each year, the number of infertile couples is closer to 140 million.

"The reasons those numbers are so small is because of the low success rates, the high cost, and availability," Perugini says. "We're hoping to change that and make IVF more affordable and available, preventing couples from having to go through what's often a very drawn out and traumatic process."

With change occurring at such a fast pace, the risk of being usurped by other disruptive developments is very real.

"The one way that you can keep ahead of the curve is by constantly having iterations of products over time so that you're always evolving and improving the technology and broadening its capability," Perugini says.

"So, if this is version one, what will version two or three look like? And how can we evolve to deliver improved accuracy or outcomes for the patient, or deliver something of greater value to clinics?"

Ethical considerations are also critical. Despite their potential (or indeed because of it), AI technologies raise concerns around human labour becoming obsolete. Perugini sees much of this as misplaced.

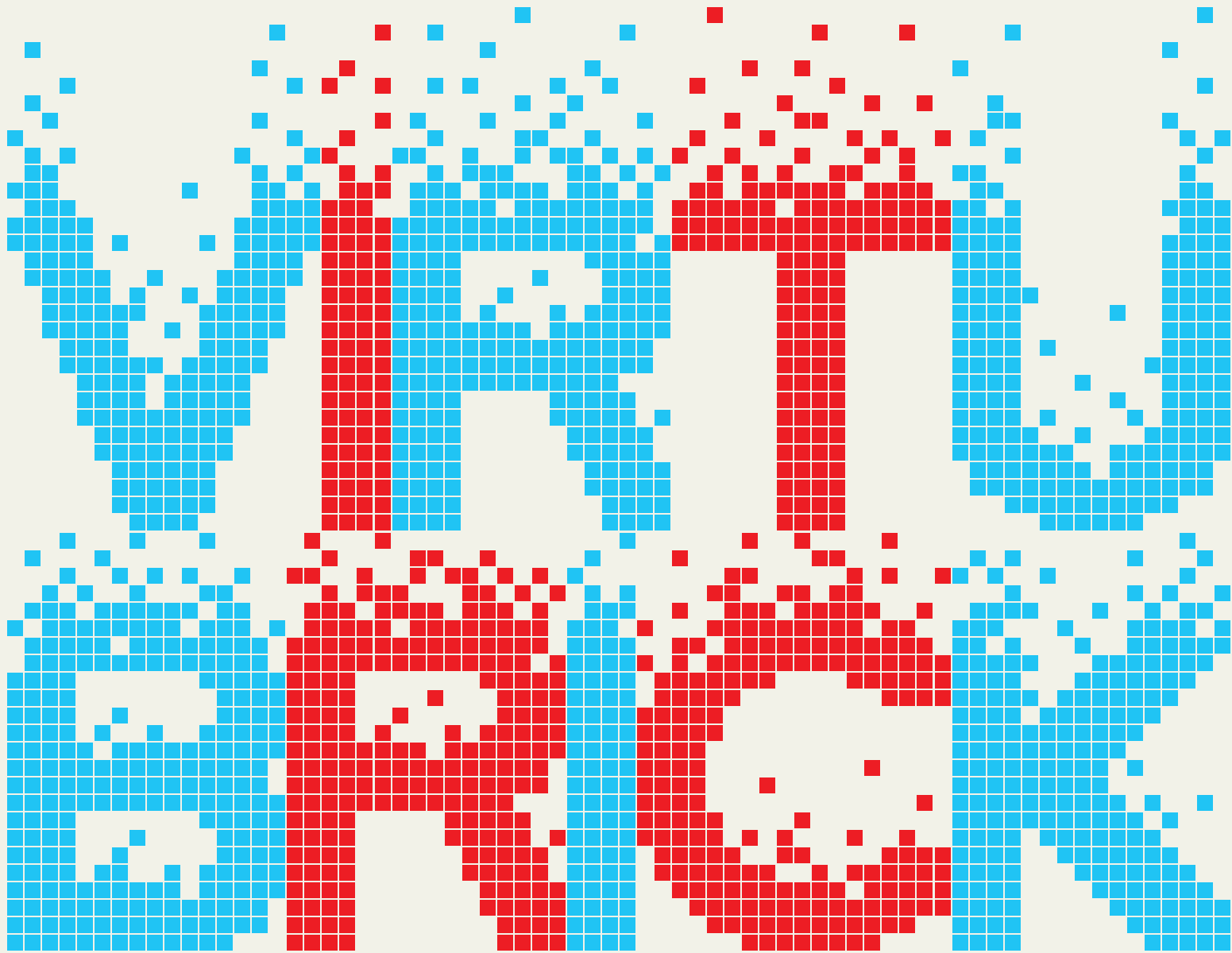
"There's still a need for that interactive component and that's what people are good at. The things that we shouldn't be doing are those very mundane and repetitive jobs—why not get computers to do that so we can focus on more creative and intelligent tasks?"

"Society grows because of disruption and it's exciting that technology's enabling us to do things quicker, affording a whole range of opportunities from which we can leverage and create."

Perugini's advice for would-be entrepreneurs? Embrace failure and stop glorifying success.

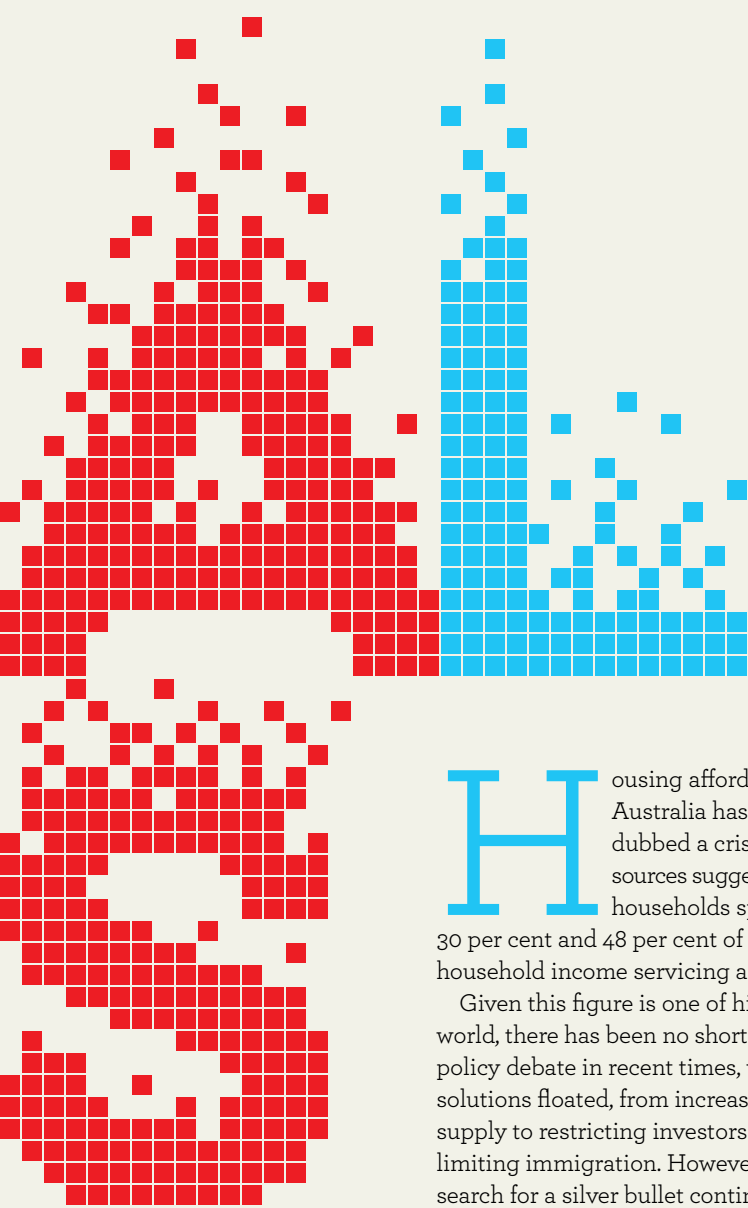
"Seeing failure as this big dark looming cloud really doesn't help anyone," she says. "Failure is the way you learn, but you need to fail small and often, pick up on those failures, learn and evolve, and eventually you'll get to a success point." ●

For more information visit UnisaBusinessSchool.edu.au/magazine



**AS THE AUSTRALIAN DREAM CONTINUES TO SLIP
FURTHER FROM REACH, SAVVY INVESTORS ARE LOOKING
FOR NEW AVENUES INTO THE PROPERTY MARKET.**

Writer Dan Lander



GENERATION NEXT

Dr Lowies suggests that there are a number of characteristics of both the emerging market and the next-generation investor that could significantly influence the shape of Australia's real estate industry. First and foremost, he expects that the plugged-in, instantaneous nature of our ever-expanding virtual world will have major implications, both demographically and operationally.

"We're going to start seeing a new type of investor who is tech savvy and wants everything through a screen, and that will increase this rate of disruptiveness", Dr Lowies says. "It's currently quite slow because of a Baby Boomer-Generation X market that is slow to adapt to change, but as Millennials and, even more so, the new Generation Z come through, the speed of change and disruption will definitely increase."

THERE IS AN EMERGING TREND TOWARDS ONLINE PLATFORMS THAT FACILITATE PARTIAL OWNERSHIP IN A PROPERTY, AS OPPOSED TO AN INDIVIDUAL HAVING TO RAISE THE ENTIRE PURCHASE CAPITAL THEMSELVES.

Largely as a response to high property prices, this new model presents opportunities to people who have been shut out of the traditional property market, and currently operates in two similar but distinct formats—crowd funding and fractional investment.

Housing affordability in Australia has been widely dubbed a crisis, with various sources suggesting that many households spend between 30 per cent and 48 per cent of their annual household income servicing a mortgage.

Given this figure is one of highest in the world, there has been no shortage of related policy debate in recent times, with a range of solutions floated, from increasing housing supply to restricting investors and even limiting immigration. However, while the search for a silver bullet continues at the official level, exorbitant real estate prices are prompting a different response, encouraging a number of investment innovations.

"A market becomes disruptive when there is a problem that needs to be solved," Dr Braam Lowies, Senior Lecturer in Property at the University of South Australia says.

"In the property market, the problem is housing affordability; it's always been the problem and it continues to be the problem. On the back of that, disruptive vehicles are starting to emerge, and although they have been slow to adapt, the current property market is changing rapidly, so the pace may be about to pick up."

CROWDFUNDING: THE NEW CROWD PLEASER

In general terms, crowdfunding is increasingly common in many contemporary industries, where an individual or a company (the promoter) receives online contributions from a large number of individuals to finance a project, such as a book, movie or video game.

According to Christa Viljoen, a PhD student at UniSA's School of Commerce, this model is currently making quiet inroads into the property investment market.

"The property crowdfunding model is equity based and similar to buying shares in a company. In this case, it acts as a special purpose vehicle enabling buyers to

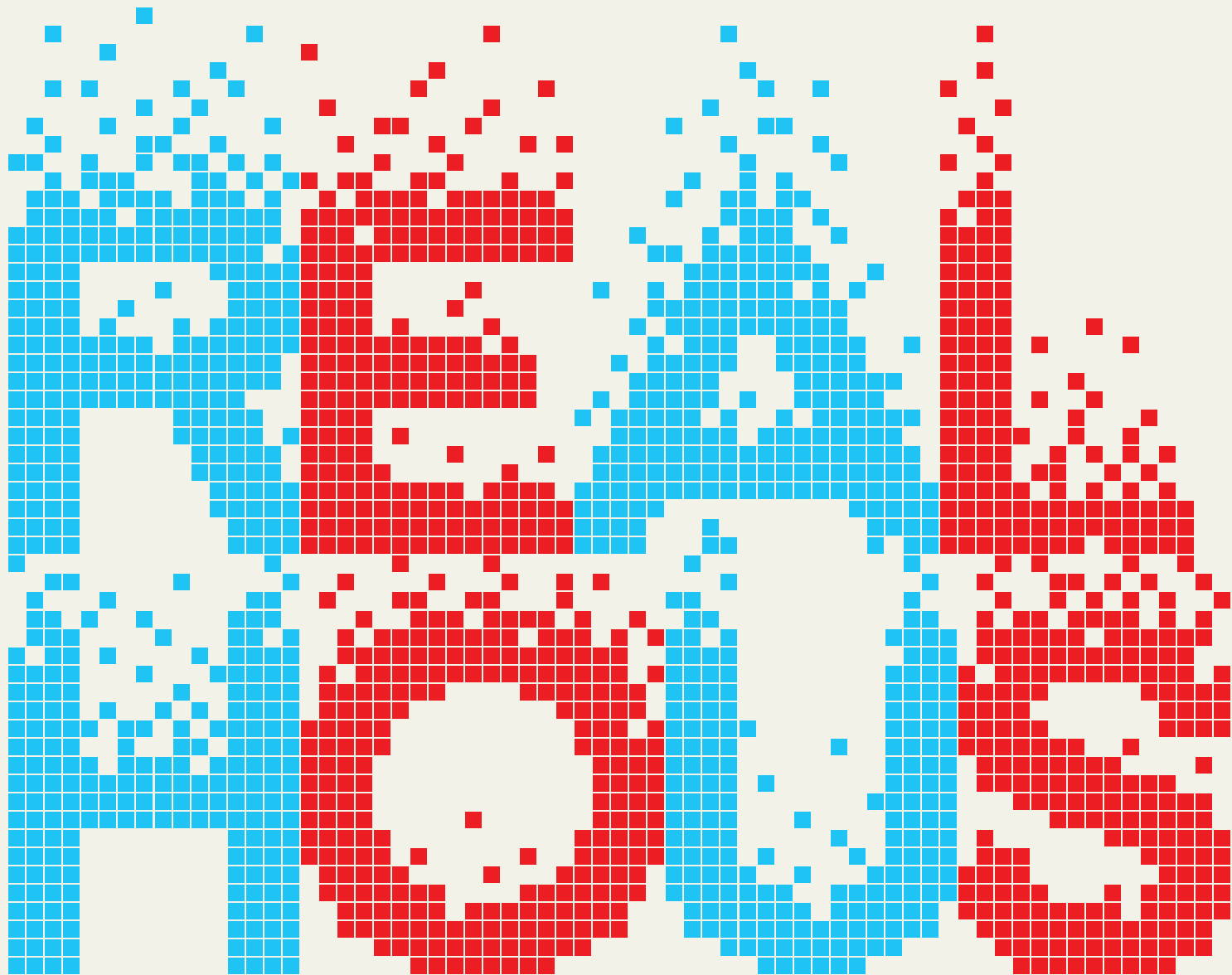
invest in a property or development when they don't have enough capital to do so by themselves," Viljoen says.

"It's a disruptive model for two reasons: firstly, because of the investment opportunity it provides sans solo capital, and secondly because it allows you to diversify. So, rather than just putting everything into one property, you can now invest in a number of different properties without needing to fully finance any of them."

Most crowdfunded property opportunities are attached to large scale commercial developments such as

shopping malls or day-care centres, allowing investors to engage with high-profile projects for as little as \$1000, while also enjoying control over the ventures they back.

"Of course, you've always been able to invest in property through investing in, for instance, Real Estate Investment Trusts," Viljoen says. "But if you invest that way, you might not be sure exactly which property you have invested in and what risks are involved, whereas crowdfunding gives an investor the opportunity to only invest in the projects they choose."



FRACTIONAL INVESTMENT: A FOOT IN THE DOOR

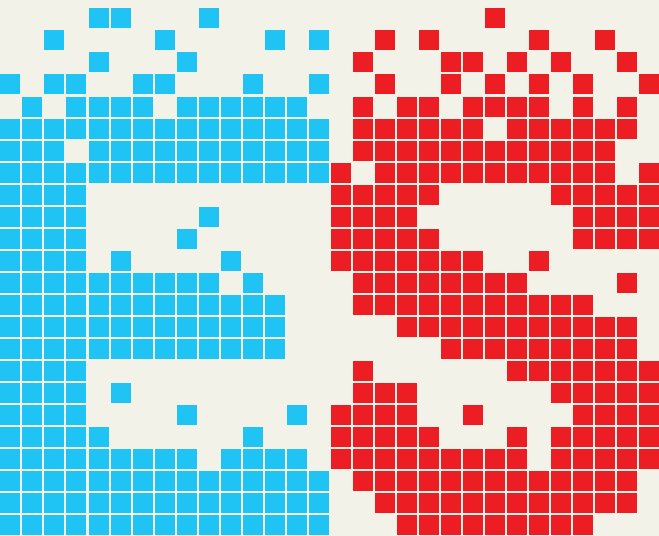
Like crowdfunding, disruptive online fractional investment allows an individual to buy a share in a property, but with a distinctly different orientation.

“Some online fractional investment platforms focus on residential real estate,” says Dr Rob Whait, Lecturer in Taxation Law in the UniSA’s School of Commerce. “Premium residences in high-yield areas are held within a trust and managed by the platform administrator, and the investor can buy a unit in the trust to gain a fractional investment in the residential property.”

In the fractional model, these units—generally referred to as ‘bricks’—can sell initially for less than \$100 each, and unlike the crowdfunding scenario, which represents somewhat of a gamble on a development, a fractional ‘brick’ is a real holding in an established, revenue-generating property. The investor receives a proportion of the rental income, and the value of their bricks increases in line with capital growth.

THE OTHER APPEALING FEATURE OF FRACTIONAL PLATFORMS IS THAT THEY OFFER A BUILT-IN OPTION, ALLOWING INVESTORS THE FLEXIBILITY TO SELL THEIR ‘BRICKS’ WITH A SWIPE OF THEIR SMARTPHONE.


“When you want to get out, you simply list your ‘bricks’ for sale on the platform site, and wait for someone to purchase them,” Dr Whait says. “That’s where the disruption comes in, because it’s very easy to transfer some money into your digital wallet and place orders in the order book to buy bricks and sell them later by placing them for sale in the order book—it’s almost like a little stock exchange but is held within that platform.”



NEW KIDS ON THE BLOCK

Fractional investment and crowdfunding platforms are emerging as a disruptive new presence in Australian real estate. Here are five of the key players:

- 1 **BRICKX // brickx.com**
This fractional investment platform allows consumers to buy and sell very small stakes in a pre-selected pool of residential properties, with “bricks” available for less than \$100 each.
- 2 **DomaCom // domacom.com.au**
A facilitated syndicate investment platform where individuals select properties, DomaCom then attracts other investors, then buys and manages the property on the syndicate’s behalf.
- 3 **CoVESTA // covesta.com.au**
In addition to supporting syndicated investment, this platform also provides the option of an investor living in and renting the property, with a five-year tenancy agreement.
- 4 **CrowdfundUP // crowdfundup.com**
This platform provides crowdfunding access to investment properties, such as shopping centres and retirement villages, with a buy-in as low as \$100 on some properties.
- 5 **Estate Baron // estatebaron.com**
With minimum investments starting at \$1000, Estate Baron offers crowdfunding opportunities in new residential developments, as well as commercial property.

 **Dr Braam Lowies** is a Senior Lecturer in Property at the UniSA Business School. His research expertise includes behavioural issues in property and finance, housing affordability and property crowdfunding.

Dr Rob Whit teaches taxation and taxation Law. His research interests include tax related research, tax compliance and tax avoidance.

 **THE IDEA**

THE ISSUE

Housing affordability in Australia has been widely dubbed a crisis. As the Australian dream continues to slip further from reach, savvy investors are looking for alternative ways into the property market.

THE OUTCOME

As a response to high property prices, platforms such as crowdfunding and fractional investment are increasing, enabling partial ownership as opposed to individuals needing to solely raise purchase capital.

DIFFERENT STROKES, DIFFERENT FOLKS

Despite the ease of access offered by these new investment platforms, Dr Lowies emphasises that real estate remains a slow business.

“INVESTORS ARE COGNISANT OF THE FACT THAT PROPERTY IS NO QUICK FIX NOR A QUICK WAY TO MAKE MONEY,” HE SAYS. “YOU CAN SPECULATE ON THE PROPERTY MARKET, BUT IT TAKES TIME.”

Taking this into account, crowdfunding and online fractional investment platforms currently reflect quite different demographics and motivations. The crowdfunding model appeals largely to older people, with many seeing it as consistent with traditional investment avenues, whereas fractional investing attracts a younger demographic.

“People using the crowdfunding platform are generally over 55, and they perceive it as very low risk, and their return expectations are similar to bank savings. On the other hand, your fractional investor may be looking for something different—in our recent research sample, 85 per cent of fractional investors were under 54 years of age, and 40 per cent were between 18 and 34 years.”

While Dr Lowies suggests more research is warranted into the reasons behind this distinction—including whether the actual presentation and interface of the particular platforms is a factor—there is a sense that fractional investment may offer a better route to future outright property ownership or simply be used as a more attractive saving instrument.

“The fractional model is attractive to younger people partly because it’s online, but also because they don’t have to pay stamp duties and fees, except for a small administration fee, which is one of the major stumbling blocks to young people investing in the property market. Also, these are high-end properties that are expected to show really good capital growth, so if they invest in these properties and they keep their money in for the long haul, they actually have an investment that stays in line with the market and can later be leveraged to buy their own property.”

WHAT IF THE BUBBLE BURSTS?

Those who are in the market to purchase their own property may notice the mortgage landscape is also undergoing something of a metamorphosis. Not only have mortgage brokers and non-bank lenders created an ultra-competitive market, new digital financiers like Tic:Toc are streamlining the application process so owner-occupiers can receive same-day approval, all directly online.

However, with that in mind, there remains concern that one of the biggest changes on the property horizon may be a little more old-fashioned than bleeding-edge FinTech platforms—a long overdue price correction. Already this year Australia has seen real estate markets cooling, particularly in Sydney and Melbourne, and Dr Lowies says we shouldn’t rule out further price adjustments.

“In my personal opinion, the over exposure to interest-only loans for investors is a really big concern,” Dr Lowies says.

“The problem is that in three to four years from now, when a large number of these loans mature and need to be renegotiated, some investors are going to have cash flow issues to pay back that fully amortised loan. If that prompts widespread selling, it can cause further disruption.”

Recent toughening of lending criteria for investor loans may go some way to softening the impact of any adjustment—hopefully shrinking rather than bursting the bubble—but the future of Australia’s property market is more uncertain than it has been for quite some time.

“What a leveraged investor sometimes misunderstands is the fact that, if property values decrease, their loan amount doesn’t decrease with that—the investor remains exposed to the same amount of debt,” Dr Lowies says.

“So that’s the disruptiveness of that side of the market, and that can be quite negative.”

As always, caveat emptor. ●

For more information, visit UniSABusinessSchool.edu.au/magazine



A DISRUPTIVE MORTGAGE

Con Tragakis, Chairman of TicToc Home Loans and UniSA Business School alumnus, relates his own experience in the changing property sector.

Property and financial services have been my passion most of my career—they work together, hand in glove. There is a sense that comes with building something physical and tangible that many people enjoy, whether it be in a commercial or manufacturing setting, or a beautiful piece of community infrastructure.

While the property sector is broad and covers many facets, my own experience with disruption is in the real property sector and the financial services that feed it, and I am reminded of something Bill Gates said: “We always overestimate the change that will occur in the next two years and underestimate the change that will occur in the next ten. Don’t let yourself be lulled into inaction.”

The way that property is built, financed, transacted, utilised, taxed and valued is rapidly changing, meaning all those involved in or servicing the property sector need to be aware of new directions in customer trends and how those trends will impact current business models. Essentially, ‘proptech’ disrupters aim to achieve one (or a combination) of three things: Disrupt an existing cost structure; improve asset utilisation and flexibility of use; and increase revenue through improving customer demand, experience and connection.

Given this disruption is currently occurring across such a wide array of property and financial services, it may be illustrative to look at one example that I am particularly familiar with. In 2017, I helped launch a ‘FinTech’ called TicToc Home Loans, for which I now chair the board. We launched from South Australia as a national business, providing consumers with instant home loans by utilising a fully-digitised approval process.

The traditional home loan financing process is cumbersome, time consuming, costly and lacks transparency. Nonetheless, it is the lifeblood of the Australian housing sector, and with \$1.7-trillion of residential home loans outstanding, it is ready for disruption. TicToc, a KPMG H2 Ventures Global 100 Fintech, is the first company in the world to provide a fully-digitised home loan featuring world-class responsible lending outcomes, with loan approvals and documentation ready in minutes, not days or months.

Why was I captivated by this idea? Because the banking sector is heavily regulated, loaded with costs and old systems and I could see that customers wanted change.

How will TicToc go? It’s early days, but with great backers like Bendigo Bank and Adelaide Bank, a quality management team and the market opportunity to change the way people transact home loans, the venture is exciting. The software platforms created by companies like TicToc will change markets and improve the customer experience—remember signing credit card dockets not so long ago.

Amidst all this change, I would also emphasise to those servicing the property sector that long-term holding of property needs to be future proofed, because customer trends and demands will change in the short term. Building infrastructure that can be reconfigured into smaller or larger layouts, for instance, allows for technology to be easily retrofitted, and understanding such future trends will be critical to protecting asset values. ●

For more information, visit tictochomeloans.com

HIGHLIGHTS



PRIDHAM HALL

THE HEART OF OUR CITY WEST CAMPUS

Hot on the heels of two weeks of graduations ceremonies, Pridham Hall was officially launched on 7 May, 2018.

Benefactor, UniSA alumnus, and namesake of the Hall, Andrew Pridham unveiled the plaque together with UniSA Chancellor Jim McDowell, Vice Chancellor Professor David Lloyd and leaders of UniSA's sporting clubs.

Commencing construction in 2015, the \$50 million project was completed in April 2018 with generous donations from more than 500 alumni and friends of the University, including \$5 million from the Pridham family.

Pridham Hall was designed to deliver a sporting hub to UniSA's City West campus and at the same time provide an on-campus venue for graduations. It features an array of sporting facilities from

basketball courts and a rock climbing wall, to the underground swimming pool, exercise and dance studio, and full gymnasium.

"This was always about breathing more life into the campus and creating memories that endure—playing sports with friends, going to the gym, shooting hoops and then taking to the stage on graduation day—it is about living your university days on campus," Professor Lloyd said.

"We are so grateful for the generous support of the Pridham family and for the hundreds of graduates and friends who have committed their donations to be a part of making the vision for Pridham Hall a very tangible and impressive reality."

● unisa.edu.au/campusgreathall



UNISA BUSINESS SCHOOL SHINES WITH NEW 5 STAR RANKING

The UniSA Business School has been awarded a 5-star ranking by Quacquarelli Symonds. We also received five stars for our teaching and student quality; internationalisation and diversity; facilities; engagement; and for the strength of our MBA. The news follows the MBA receiving a 5-star rating by the Graduate Management Association of Australia for the 10th consecutive year.

● unisabusinessschool.edu.au

INNOVATION & COLLABORATION

FIRST ACTINSPACE AUSTRALIA EVENT

Fantastic ideas full of innovation and creativity were developed and pitched at the first ActInSpace Australia hosted by the Innovation & Collaboration Centre (ICC) at UniSA on 25-26 May.

A total of 25 countries and 70 cities across five continents participated in the event, with 2200 people taking part in more than 550 teams worldwide. Almost 50 people from around Australia participated with some logging in from around the world to be part of a team.

The task was to choose a challenge from the ActInSpace website and to utilise existing space technology to design, improve or develop innovative applications.

Ten teams vied for the Australian title over an intense 24-hour period.

Manager of UniSA's Innovation & Collaboration Centre, Jasmine Vreugdenburg said the competition was fierce.

"After a massive 24 hours working on these challenges, we were very impressed with the level of professionalism and well-planned ideas.

"We are encouraging some of these teams to consider applying for the ICC's Venture Catalyst Space incubator program that launches soon, so we can work with them and support their ideas into viable and potentially new global businesses."

The Wright Team Inc., took out first prize and will now compete in the international finals in France.

● icc.unisa.edu.au/newsroom

IGNITE SA GIGABIT CHALLENGE

\$20K PITCH BRINGS AUSTRALIAN ABORIGINAL ARTEFACTS TO THE WORLD

Ignite SA and the South Australian Museum have launched South Australia's first Gigabit Challenge to make the State's extraordinary collection of Aboriginal cultural items accessible to the world.

Supported by the Department for State Development, and UniSA's Innovation & Collaboration Centre, the SA Gigabit Challenge—*Preserve*—has asked local developers, entrepreneurs, students, hackers, makers and other creative minds to pitch an idea that will give the museum's Australian Aboriginal Culture Collection high visibility.

One of the largest and most comprehensive collections of Australian Aboriginal culture in the world, the 30,000 artefacts are of great significance to Aboriginal cultural heritage but due to the size of the collection, the museum can only display five per cent at any one time.

In early May, a 'Reverse Pitch' event was held where a panel of industry experts provided information on the collection and how participants might bring it into the digital age. Participants are now developing their ideas, with finalists shortlisted at Hybrid World, the digital entertainment and technology event in late July.

The winner will be awarded \$20,000 to develop their idea into a functional platform using Adelaide's Gigabit capabilities, as well as a further \$5000 to attend a global conference to possibly pitch the idea on a global stage.

Ignite SA's Technology Leader and UniSA's Deputy Director of ICT Infrastructure, Karl Sellmann, said *Preserve* will allow more information to be shared globally.

"This is very timely as South Australia was recently announced as the first international city to join the US Ignite Smart Gigabit Communities program," Sellmann said.

"This challenge is the first of many that will employ Adelaide's high speed internet capabilities to enhance the economic, social and community development in South Australia.

"We look forward to seeing some innovative ideas and hope to see something that could be to be used by other industries across the world."

Preserve is generously sponsored by US Ignite, UniSA, the South Australian Museum, SABRENet, Optus and Cisco.

● ignitesa.org/app-challenge

GLOBAL #1 RANKING FOR UNISA'S BRAND MANAGEMENT RESEARCH

A global study of the impact of business research has ranked UniSA number one in the world for brand management, with the findings published in the *Australian Financial Review BOSS Magazine*.

Determined by the League of Scholars, the analysis reviewed the academic impact, output and influence of more than 100,000 business researchers worldwide, finding UniSA to be the top for its brand management research.

The study reinforces what many of the world's marketers already know. Brands like PepsiCo, ESPN, Kellogg's, Westpac, Mars, and Carlsberg sponsor the research at UniSA's Ehrenberg-Bass Institute for Marketing Science.

Professor Byron Sharp, Director of the Ehrenberg-Bass Institute (pictured third from right, above, with fellow Directors) said the number one ranking shows that the world can look to Australia for world-class research.

"UniSA students are fortunate. They learn that marketing is a creative discipline, but that this creativity works best when you also have sound knowledge about how buyers actually buy and how to manage brands for the future," Professor Sharp said.

"Science has transformed every discipline it has touched. It's hardly surprising that it's doing the same in marketing."

● <https://bit.ly/2Jag0iq>

GRADCONNECTION TOP100 AWARDS

GRADUATE WINS NESTLÉ MARKETING FUTURE LEADERS AWARD



An innate sense of curiosity and a passion for learning has placed UniSA student, Yolanda Nguyen, at the forefront of Australia's top marketing graduates, taking out the coveted 2018 Nestlé Marketing Future Leaders Award, at the recent GradConnection Top100 Awards.

Run in partnership with Fairfax's *Australian Financial Review*, the awards challenge Australia's top-performing students in a full graduate recruitment process modelled on those of leading companies, with the goal of identifying Australia's future leaders.

Both Yolanda Nguyen, a Master of Business (Research) student with UniSA's Ehrenberg-Bass Institute for Marketing Science and fellow student, Michael Pivato, a UniSA Information Technology (Honours) student, entered the competition, and from a pool of nearly 4000 applicants, were selected as finalists in the top 100.

Yolanda (pictured above) was named the category winner in marketing.

She said the competition provided invaluable insights into the graduate recruitment process.

"Understanding contemporary recruitment processes is critical as a new graduate, especially as an increasing number of companies are adopting similar graduate selection protocols," Yolanda said.

"The Top100 Competition challenged me to demonstrate perseverance and determination across a range of recruitment and leaderships scenarios—from simulated online interviews, to in-depth group discussions.

"Experiencing these first-hand, and under competitive conditions, was the ultimate way for me to become truly 'career ready'."

As part of her preparation, Yolanda received valuable guidance from UniSA Career Services team.

"UniSA's Careers Services team provided some top tips on how to succeed at Assessment Centres—what to expect, and the specific behaviours that are typically favoured by panels," Yolanda said.

"They were extremely helpful and supportive, particularly with understanding the importance of finding a good balance between participating, talking, and listening in the Assessment Centre.

"When you reflect on today's competitive job market, it's really easy to become doubtful within yourself and your own abilities.

"For me, this award is a tangible symbol that reminds me of my capabilities, and that anything is possible if I set my mind to it."

The GradConnection Top100 Awards were announced in Sydney in February. ●

TOURISM ACCOLADE

SOUTH AUSTRALIAN TOURISM STUDENT OF THE YEAR



The UniSA Business School is proud to announce Kelsey Reilly as the winner of the South Australian tourism student of the year category as part of the 2017 South Australian Tourism Awards.

Kelsey (pictured centre, above) is currently studying a Bachelor of Business specialising in tourism and event management.

Growing up on a date plantation and vineyard in regional South Australia, Kelsey acquired an appreciation for agriculture, food and wine, and an interest in rural tourism. This was later enhanced by her love of travel, which has seen her visit 18 countries, and participate in international study tours to France and South Korea where as a recipient of the New Colombo Plan Student Mobility Scholarship. ●

INNOVATIONS THAT INSPIRE



The UniSA Business School was recently recognised for its business growth programs as part of the AACSB International 2018 *Innovations That Inspire* initiative.

The AACSB received 119 submissions from business schools around the world.

The Australian Centre for Business Growth was recognised in the *Enhancing Approaches to*

Leadership Education Development category and for being a "champion of change in the business education landscape".

Professor Jana Matthews, ANZ Chair in Business Growth & Director: Australian Centre for Business Growth (pictured above), attended the conference which provided an opportunity to showcase its world-class business growth programs and to demonstrate how it is enabling CEOs, MDs and executives of small and medium companies to lead, manage and accelerate the growth of their companies.

● <https://bit.ly/2JtkL60>

PARTNERSHIP SCHOLARSHIPS

WOMEN IN MBA PARTNERSHIP SCHOLARSHIPS



The UniSA Business School is proud to support aspirational and high achieving women through the Women in MBA (WiMBA) scholarships.

These dedicated scholarships actively address leadership inequality and champion women with leadership potential to advance their careers into senior management and executive roles, via the MBA, which is a known pathway to leadership and career progression.

The Business School is proud to announce that it has accepted a total of 17 scholarship recipients to date, each mid-career professionals and leaders who come from a range of sectors including mining and resources, logistics, communications and IT, film and creative technologies, community development, local government, sport and recreation, health, and defence.

The WiMBA scholarship recipients are also supported by their organisation, partnering with the Business School to show their commitment to addressing gender diversity in leadership, support for the growth of the female talent pipeline, and to foster positive economic growth for the nation.

● unisabusinessschool.edu.au/mba/scholarships

TOP TIER RECOGNITION FOR UNISA'S MBA

UniSA's Master of Business Administration (MBA) has achieved top-tier rankings in three categories of the newly released CEO Magazine's 2018 Global MBA Rankings.

The accolades recognise UniSA's MBA as a Tier 1 MBA worldwide program, the highest ranking given by the magazine. It also identifies UniSA's MBA as the highest ranked online MBA in Australia, and ninth in the world in the online MBA category.

UniSA Executive Director for MBA and Executive Education, Peter Stevens, said the ranking is wonderful recognition for UniSA's world-class program.

"Our MBA is consistently ranked among the world's best and this accolade is further testament to the outstanding quality of our program.

"We're particularly proud of the MBA's online results. Our MBA has been available online for many years, however this is the first time we have entered an online ranking category.

"This top ten global result demonstrates our success in not only the online category but also the flexibility of our program to study face-to-face, online and in a flexible blended mode. ●

SEMINAR SERIES

2018 PROGRAM:
VIEW FROM THE TOP

View From The Top is an exclusive seminar and networking series that connects executives and thought-leaders with the Business School's MBA and postgraduate students, alumni and high achieving second and final year undergraduate students.

Presenters will share leadership and industry insights to advance debate on issues that affect the current business world and our society.

The 2018 program includes keynote speakers: Greg Pattinson, CEO, Foodbank; Tim Harcourt, The Airport Economist; and Andrea Martens, Global Chief Marketing Officer, Jurlique.



Greg Pattinson, CEO, Foodbank
Fighting Hunger Through Innovation and Creativity

Time: 6.00pm - 8.00pm

Date: Thursday, 9 August 2018

**Location: Yungondi Building,
UniSA City West campus**

Greg Pattinson is the Chief Executive Officer of Foodbank SA and brings

extensive experience gained over 30 years in the food, automotive, and mining sectors. In this masterclass, Greg Pattinson will share with students and alumni how innovative and creative entrepreneurship can be incorporated into the running of a social enterprise such as Foodbank SA.



Tim Harcourt, The Airport Economist

Time: 6.00pm - 8.00pm

Date: Thursday, 6 September 2018

**Location: Yungondi Building,
UniSA City West campus**

An active commentator in the media on economic and trade issues, Tim Harcourt is the author of six books on international economy. His best known book *The*

Airport Economist is a business bestseller and has been translated into several languages in Asia, and is now televised.



Andrea Martens, Global CMO, Jurlique

Time: 6.00pm - 8.00pm

Date: Wednesday, 17 October 2018

**Location: Bradley Forum, Hawke Building,
UniSA City West campus**

Andrea has led a strategic plan that spans positioning, pricing, packaging and innovation to realise the business's performance potential. With overview of

110 retail units in 23 markets complementing Jurlique's e-Commerce business, she has defined a data-driven strategy to deliver tangible impacts across business, brand and marketing performance. ●

unisa.edu.au/view-from-the-top

CONNECT

The University of South Australia Business School is renowned for its concentration of global thought-leaders. We work in partnership with some of the world's largest organisations to uncover new knowledge, deliver responsive, clever and enterprising outcomes, and address local and global issues. UnisaBusinessSchool.edu.au/research



HOW BRANDS GROW
Ehrenberg-Bass Institute for Marketing Science. Our team of marketing scientists are advancing knowledge into how marketing really works and how brands grow. We help global brands to understand and develop an evidence-based approach to marketing, making them more efficient and effective.
 ● marketingscience.info



GROW YOUR BUSINESS
Australian Centre for Business Growth. Unlock your company's growth potential with our world-class business growth programs. We teach CEOs/MDs and executives the knowledge and skills they need to develop as leaders, identify growth inhibitors and opportunities, and compete in a global marketplace.
 ● unisa.edu.au/cbg



HOW WE MAKE CHOICES
Institute for Choice. As a leader in discrete choice techniques, our evidence-based research informs organisational decision-making for public impact, strategic growth, customer satisfaction, consumer and public opinion, brand equity, and public preferences for health and other public services.
 ● unisa.edu.au/I4C



LEADERSHIP AND PEOPLE
Centre for Workplace Excellence. We enable organisations to achieve success as the global marketplace, workforce and technology continue to change. Our researchers find solutions to challenges in the areas of people management, diversity, employee well-being, organisational culture and change, and leadership.
 ● unisa.edu.au/cwex



ENGAGE WITH ASIA
Australian Centre for Asian Business. We deliver research insights on current cross-cultural business issues and long-term regional engagement strategies in the Asia-Pacific region. Our team helps governments and companies navigate the financial, legal and cultural complexities that arise when doing business with Asia.
 ● unisa.edu.au/asianbusiness



TOURISM AND LEISURE
Centre for Tourism and Leisure Management. Aspiring to become one of the nation's leading research groups in tourism, hospitality, events, sport and leisure, our multi-disciplinary team can help guide your strategic and operational planning, to ensure you respond to the very latest trends in industry.
 ● unisa.edu.au/tourismleisure



DYNAMIC ECONOMIES
Centre for Applied Finance and Economics and Centre for Sustainability Governance. Two distinct but collaborative research centres that address themes such as transforming industries, allocating scarce resources, and catering for an ageing population at both a practical and policy level.
 ● unisa.edu.au/dynamineconomies



BUILD YOUR CAPABILITIES
Strategic Partnerships and Executive Education. We offer high impact short courses for individuals, through to tailored on-site degrees for organisations. Our 20+ years of experience ensures the right content and delivery format to meet your strategic learning needs.
 ● unisa.edu.au/strategic

SUPPORT OUR FUTURE LEADERS

HOST A STUDENT INTERN AT YOUR WORKPLACE

The UniSA Business School Internship Program matches organisations with students from a wide range of business degrees including accounting, marketing, events, and logistics and supply chain management.

The program can help you:

- > Benefit from motivated students who bring fresh perspectives and knowledge of current trends to business thinking
- > Identify potential new employees
- > Develop mentoring and supervision capabilities within your organisation
- > Form valuable links with the UniSA Business School for future education and research collaboration.

Internships are 15, 30 or 45 days in length, with the flexibility to run as a block of time or spread out across a longer duration.

To find out more or express interest in hosting a student, contact Partner Engagement Manager: Internships, Daryl McMahon at daryl.mcmahon@unisa.edu.au

unisabusinessschool.edu.au/study/internships

Pictured: UniSA Bachelor of Business (Management) student, Corey Boutwell, who interned at Environment Protection Authority and now works there.



University of
South Australia

Business
School



Debuting at the April graduations, this \$50 million space was supported by a \$5 million benefaction from UniSA Property Management graduate, Andrew Pridham. Featuring a sports centre, pool, exercise and dance studio, gym, and flexible seminar and function rooms to seat 1800, Pridham Hall has transformed our campus footprint at City West.

For more information:

- +61 8 8302 7480
- business.enquiries@unisa.edu.au
- UniSABusinessSchool.edu.au

- UniSABusinessSchool.edu.au/magazine
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