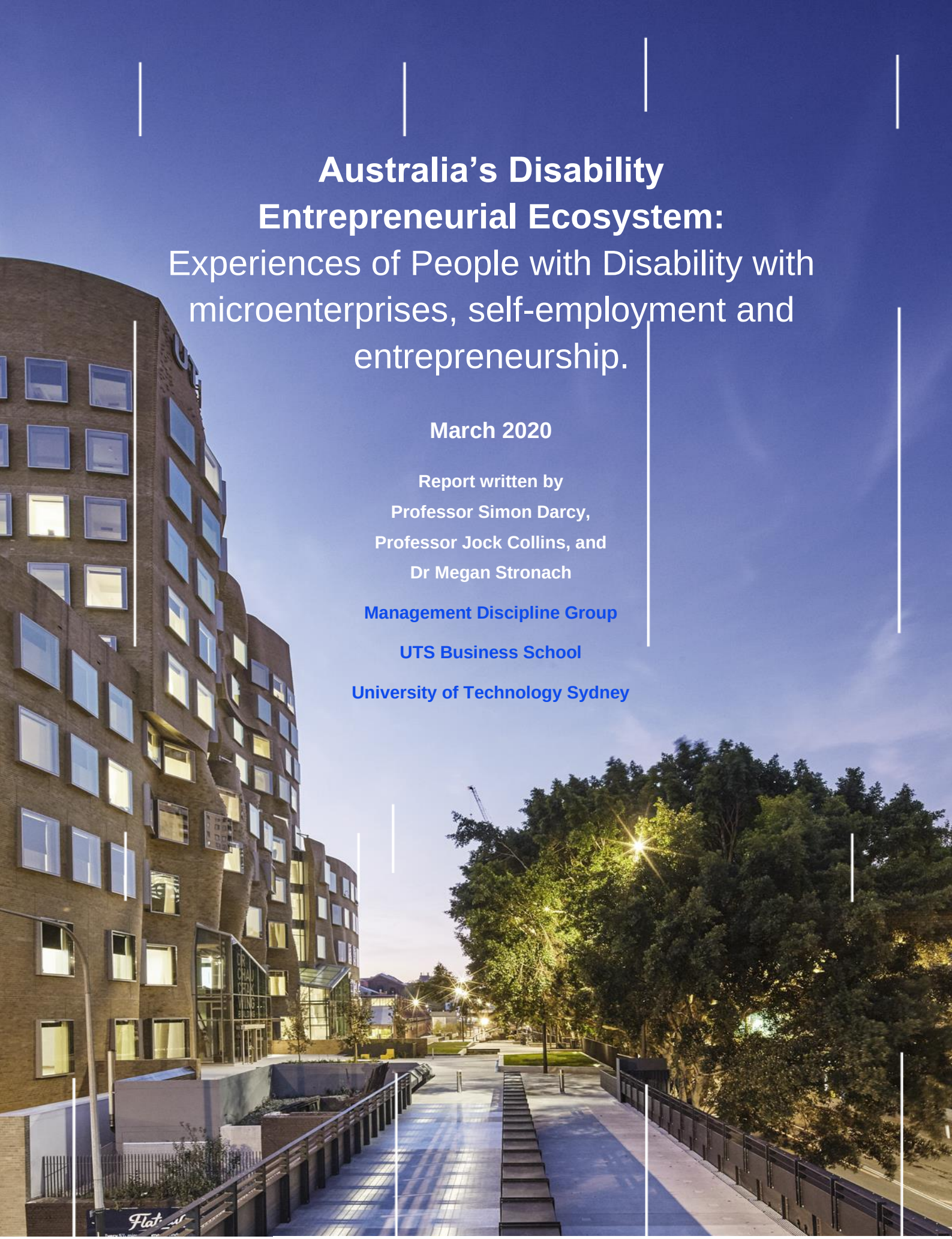

Australia's Disability Entrepreneurial Ecosystem:

Experiences of People with Disability with microenterprises, self-employment and entrepreneurship.

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UTS UNIVERSITY OF TECHNOLOGY SYDNEY

SSI Settlement Services International

NDS National Disability Services

breakthru your choice

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The methodology adopted and sources of information used by the authors are outlined in this report. While all care and diligence has been exercised in the preparation of this report, the authors assume no responsibility for any inaccuracies or omissions. No indications were found during our investigations that information contained in this report as provided is false.

This report was prepared in August 2019 based on the conditions encountered and information reviewed at the time of preparation. This report should be read in full. No responsibility is accepted for use of any part of this report in any other context or for any other purpose or by third parties.

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Executive Summary

Glossary of Terms

Entrepreneurship

Entrepreneurship is the process of discovering, evaluating, and exploiting opportunities to create future goods and services [1]. It means bringing something which is new and innovative to the market [2, 3]. In our view all business (self-employment and employer) arrangements are entrepreneurship experiences. For PwD, entrepreneurship means enhanced empowerment, a reduction of 'entitlement-based' services, and more financial independence [4].

Self-employment

We see self-employment work as an alternative to salaried employment [2], that is, performed for personal profit instead of for wages [5]. Self-employment focuses on work, be it productive or unproductive. Self-employment is generally intended to employ one individual only and so the aim of self-employment is for individual self-support. In this report we consider the terms entrepreneur and self-employed as interchangeable.

Social entrepreneurship

Social entrepreneurship comes about as a response to addressing a social problem interacting with the market [2, 6]. An effective social enterprise may produce profit - both monetary and social [2]. PwD have enormous potential for social entrepreneurship due to their intimate knowledge of social problems [7].

Microenterprise

A micro enterprise is a very small business that is simple to start, with minimal capital needed. They can have a vital purpose in improving people's quality of life and may give PwD a role in their local community providing a service or goods. They are highly individual - able to happen at a scale, stamina and schedule that suits an individual [8].

Incubators and accelerators

An incubator is a business support organisation that fosters start-ups through the provision of services such as seed funding, colocation, mentoring, professional services and access to networks. It can include accelerators and germinators [9]. Startup accelerators, also known as seed accelerators, are 'fixed-term, cohort-based programs that include seed investment, connections, sales, mentorship, educational components, and culminate in a public pitch event or demo day to accelerate growth. Accelerators 'accelerate' growth of an existing company, while incubators 'incubate' disruptive ideas with the hope of building out a business model and company. So, accelerators focus on scaling a business while incubators are often more focused on innovation' [9].

Blocked mobility

'Blocked mobility' describes a situation wherein people may experience discrimination or lack of recognition of their qualifications resulting in a mismatch between their skills and labour market opportunities made available to them [10].

Occupational skidding

'Occupational skidding' describes a situation where people cannot obtain jobs in line with their skills and qualifications [10].

Key Messages

People with disability (PwD) face great difficulty in getting access to the Australian economy. PwD have high unemployment rates while those who do get jobs often find them unsatisfactory. Establishing a business is one strategy to overcome these economic barriers. This report presents the findings of the first detailed research project on PwD self-employed entrepreneurs in Australia. The important findings from this research include:

1. **Education**: entrepreneurs with disability lamented a lack of entrepreneurial education that may have alleviated common startup mistakes, costing them money, time and emotional energy. When schemes including incubator and accelerator programs are available and accessible, entrepreneurs with disability are likely to benefit. However, mainstream entrepreneurial training programs are not inclusive of disability type nor the level of support needs of EWD.

2. **Networking**: respondents commented on the difficulty of networking generally, and specifically with other entrepreneurs with disability (EwD). Networking, developing mentoring connections and delivering entrepreneurial skillsets needed by this cohort. PwD's educational experiences from primary, high school and tertiary levels have been constrained by the lack of inclusive curricula, without the necessary flexibility and supports required that non-disabled entrepreneurs have access to. Networking at social or business levels fosters the exchange of information and ideas and is critical to personal growth and business development. Social networks are the social capital of individuals.

3. **Government social services and bureaucracy**: government policies may stifle entrepreneurial activity among those with disability. Compliance with regulation agencies such as CentreLink, NEIS schemes and the National Disability Insurance Scheme (NDIS) are cumbersome, confronting and laborious, and at this stage, the on-going benefits of the NDIS to entrepreneurs with disability in Australia are unclear.

4. **Culture and attitudes**: discrimination in mainstream employment or blocked mobility may push PwD toward self-employment and entrepreneurship. Yet, other barriers may constrain EwD from fostering relationships with consumers, contractors, funders, and other key individuals. Challenging social attitudes about the ability of self-employed and entrepreneurial PwD is required to provide a more level playing field in business for EwD.

5. **Importance of family and friendship units**: key individuals in the lives of PwD provide support at many levels and are integral in their entrepreneurial journeys, especially so for people pursuing micro-enterprise activities. Many of the cultural, structural and attitudinal barriers experienced by PwD are overcome with support from immediate family, friends and carers.

6. **Financial support**: making sure that PwD do not fall into further hardship is crucial in order to foster entrepreneurship in this cohort. Startup progress is contingent on the combination of the human, social and financial capital available for their enterprise. Human and social capital affect access to financial capital. Knowledge and access to mainstream funding opportunities such as in-kind business development, seed funding, grants, angel investors, venture capital, crowd funding or loans should be further developed to support aspiring entrepreneurs with disability.

Executive Summary

People with disability (PwD) in Australia face a multitude of issues in employment including direct and indirect discrimination [11]. Not surprisingly they have much lower levels of employment (52.8%) than the general population (82.5%) [12]. Yet they have higher levels of self-employment (13.1%) than the non-disabled population (9.2%) [13]. Comparatively, we know relatively little about PwD who are self-employed or entrepreneurs (EwD) in Australia or elsewhere [14, 15].

In 2015, there were 4.3 million people or 18% of the Australian population with some level of disability. Of these, 1.37 million or 5.8% people had a profound or severe disability. The number of PwD who are of working age is increasing while the disability rate for Australians of 'prime working age' is currently around 15% (2.2. million people) [12]. Nearly half (46.6%) of these people were not in the labour force in 2015 [12], and more than half (59%) were permanently unable to work [13].

Research in Australia on PwD seeking to pursue self-employment or entrepreneurship is scant. Nevertheless, there is rising awareness that the employment aspirations and needs of PwD are incompatible with existing outcomes. These factors, along with the roll-out of the National Disability Insurance Scheme (NDIS) [16], are of concern to vocational rehabilitation organisations, disability support groups, business groups, and government policy makers.

In 2016, UTS Business School researchers launched a study to investigate the self-employment, entrepreneurship and social enterprise of PwD. The research involved a partnership with the disability services sector—*National Disability Services*, *Settlement Services International* (SSI) and *Break-Thru People Solutions*—and was funded by a Linkage Grant from the *Australian Research Council* (ARC).[1] The broad aim of the research was to conduct the first national survey of EwD in order to gain an understanding of the disability entrepreneurship ecosystem and through action research follow the entrepreneurial journeys of PwD participating in the *IgniteAbility® Small Business Start-ups* program which was established by SSI November 2016. *IgniteAbility®* is the sister program of *Ignite® Small Business Start-ups* that SSI established in 2013 to assist entrepreneurs of refugee backgrounds to achieve their business dreams.

The objectives of this research are to understand the nature of disability self-employment and entrepreneurship and the entrepreneurial journeys of PwD. In exploring these entrepreneurial journeys, the research sought to understand the nature of the businesses, what motivated the desire to start up, barriers encountered, enabling practices, together with the outcomes and benefits for PwD from pursuing a business enterprise. Such an understanding will support Australia's capacity for developing evidence-based policy initiatives that increase the number and success of entrepreneurs with disability. Our theoretical point of departure put the entrepreneurial ecosystem of PwD, and for the group of EwD as a whole, at the centre of our analysis which focuses on the social inclusion of the group and other forms of social participation as a key aspect of their economic inclusion and economic participation.

[1] ARC Linkage Grant (2016-18) LP160100697 "Disability Entrepreneurship in Australia" Professor Jock H Collins and Professor Simon Darcy (UTS)

Major Findings

Motivations for PwD

The shift to entrepreneurship and self-employment for PwD may be perceived as a combination of pull/anti-pull and push/anti-push factors [17]. The attraction of self-employment stems from a desire by PwD for economic and personal independence in a way that can accommodate an individual's intra-personal lifestyle needs. Pull factors related to the possibility of higher income, flexibility in the workplace in terms of hours and location, and reasonable recognition of support needs, as well as the ability to bring about social change, and the likelihood of increased work satisfaction. Anti-pull factors were aversion to the risks involved in starting up a business, if that meant they needed to relinquish their Disability Support Pension.

From a push perspective, lack of satisfactory opportunities to engage with the economy as employees was identified by many participants. Largely associated with employer discrimination, these people faced great difficulty in getting meaningful work. PwD often experienced a lack of recognition of their qualifications resulting in a mismatch between their skills and labour market opportunities made available to them. Moreover, recognition of their qualifications did not guarantee a job in their field of expertise. As a result, EwD participants felt they had no choice but to start their own business. This course of action can be seen as *necessity entrepreneurship* [18, 19] after long-standing discrimination had resulted in blocked mobility or occupational skidding in the workplace. Hearteningly, it appeared that experiences of discrimination indirectly prepared participants for tackling challenges, and even dealing with risk. An over-focus on the barriers that EwD face can lead to tension to their *agency*, their abilities to make a success of business. Anti-push factors related to the preference for security that having permanent employment can provide.

Barriers and challenges to self-employment and entrepreneurship

Simply being a person with disability presented intra-personal barriers to self-employment or entrepreneurship, and participants described being constrained to work to a certain level because of having to accommodate the disability. The EwD described frequent and on-going episodes of ill-health, or other medical conditions requiring management within their life and within the business environment. For people with speech, vision or hearing impairments, business communication issues were challenging.

Many EwD experienced challenges in obtaining start-up funding or loans, which is substantially different to non-disabled entrepreneurs engaging through the mainstream entrepreneurial ecosystem. Individuals were sometimes unable to locate suitable schemes through which to find adequate information and/or support regarding their start-ups. Reports of negative societal attitudes towards disability were commonplace, and some entrepreneurs mentioned small-scale personality conflicts, which sometimes appeared to border on bullying. However, by far the major issues for people with mobility disability were a series of interlocking structural barriers to the accessibility to facilities, transport and the business environment generally, including lack of access to business networking, and networking with other entrepreneurs with disability. For a proportion of EwD respondents, their current business enterprise had come after failure of a previous enterprise, which had affected their appetite to undertake further risk. It should be noted that business failure is a common experience in the entrepreneurial journey of all business owners.

Enablers and ways forward for PwD

The characteristics possessed by PwD - their agency - also positioned them to succeed in entrepreneurship. These characteristics included innovative problem-solving skills, flexibility, tenacity, sense of humour, preparedness to seek assistance, grace under pressure, and creativity. Moreover, their determination to succeed and their willingness to take risk was itself a product of their experiences as a PwD. Many had juggled salaried jobs while developing their startup and pivoted their original business plans while refining their business offering.

Importantly, a range of programs including mainstream and disability specific micro-enterprise, accelerator and incubator programs provided support to nascent entrepreneurs, and many participants had successfully identified organisations that they had enlisted for support or to add value to the enterprise. Some of these included funding opportunities such as grants or loans. While a third of respondents mentioned the importance of mentors, virtually all respondents benefited from high levels of backing from family and friends in shaping and supporting their ventures.

Business types

Living with a disability gives people a world of experience that other people do not have. This is an important example of the agency of PwD and the need to focus on their abilities, not to be preoccupied with the barriers that they face and their disability. Many entrepreneurs reported they had used the insider disability knowledge that they had gained to their advantage to start a successful business designed to assist others in similar situations. These user-lead innovative business ideas accounted for the majority of those interviewed and a third of those surveyed. These included making car hand controls, support delivery and oversight, providing travel or even parking space advice. Technological advances have opened new avenues for entrepreneurs with disability, who described a wide range of assistive technologies, such as messaging apps, wheelchair stair-climbers, electronic conveyancing, and speech recognition software. In this sense it could be argued that EwD have a comparative advantage in the disability goods and services market niche. Yet about half of the respondents had developed enterprises for non-disabled purposes including winemakers, transport operators, landscaping, and IT support. They are not confined to the disability niche market.

Outcomes and benefits

The benefits of establishing a business to EwD involve individual and community benefits. EwD report having enhanced meaning in life, purpose, opportunities to contribute, increased self-esteem, and a wider range of relationships with people in the community. A need shared by these individuals is to be positively regarded for their inherent ability, skills and expertise, and their human potential, rather than being regarded through the lens of their ‘deficits’ and ‘negative disability stereotypes’. Quantitatively and qualitatively, over half the respondents identified a desire to benefit the community around them, whether that be providing opportunities for employment, showing that those with disability can positively contribute economically and socially, and providing role models for other PwD to forge their own journey through life. Moreover, most PwD who established a business enterprise aimed to become financially independent. Some also created employment for others.

The Social Ecological Model of Disability Entrepreneurship

The findings in this study can be better understood when considered in terms of the social ecological model [20]. Our application for disability entrepreneurship is summarised in *Figure 3* at the end of the report. While a social constructivist approach discusses the aggregation of business enterprises, motivations, barriers, enablers and outcomes/benefits, a social ecological approach provides a further level of analysis in terms of intrapersonal, interpersonal, organizational, community and policy level considerations. When considering the findings within the social ecological model, a more nuanced understanding of the disability entrepreneurship ecosystem emerges [45].

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Introduction

Over 4 million people in Australia have some form of disability, and the number of PwD who are of working age is increasing. In fact, the disability rate for Australians of 'prime working age' is currently around 15% (2.2. million people) [6]. Nearly half (46%) of these people were not in the labour force in 2009, and more than half (59%) were permanently unable to work [13].

Governments often focus their efforts on encouraging inclusion and facilitating PwD to find traditional employment within organisations [21] yet it is interesting to note that in some western countries, PwD are 'more likely to be self-employed than the general population'. For example, in the United States 'PwD are almost twice as likely to be self-employed' [22], while in Europe PwD also have high rates of self-employment [14]. In Australia, PwD have a higher rate of entrepreneurship (13.1%) than employed people without disability (9.2%) [13]. Despite these encouraging statistics, PwD continue to face considerable economic and social exclusion - both in Australia and elsewhere. Indeed, it could be argued that the relatively higher rate of PwD entrepreneurship is itself a function of - and response to - the very economic and social exclusion or 'blocked mobility' that PwD face.

International research has traditionally focused on entrepreneurship in a generic sense, but in recent years a burgeoning interest in entrepreneurs with disability (EwD) has emerged. However, research in Australia on PwD seeking to pursue self-employment is scant. Nevertheless, there is rising awareness that PwD are likely to have their own set of aspirations, needs, and adjustment patterns in employment. These factors, along with the roll-out of the National Disability Insurance Scheme (NDIS), should be of vital interest to vocational rehabilitation organisations, disability support groups, business groups, and government policy makers.

In 2016, UTS Business School researchers launched a study to investigate the self-employment, entrepreneurship and social enterprise of PwD. The research involved a partnership with the disability services sector - *National Disability Services*, *Settlement Services International (SSI)* and *Break-Thru People Solutions* - and was funded by a Linkage Grant from the *Australian Research Council* (ARC*)*. The project had two components. The first was an extensive research project, which examined the experiences of entrepreneurs with disability in Australia. These were PwD who currently did, or have, run their own business, be they large or small. The information provided was used to better understand needs of PwD in business development, the dynamics of their business enterprises, the economic and social contributions they make and the barriers faced.

It was originally envisaged in the research grant proposal that the second component would be a pilot program, of about 10 participants, to assist new enterprise formation by PwD. However, the research project partner SSI - a not-for-profit which supports disadvantaged groups into entrepreneurship which, in 2013, established the *Ignite*® a program targeted to refugees - established a new program *IgniteAbility® Small Business Start-ups* in 2016 to work with PwD in enterprise facilitation. The number of disability business start-ups from *IgniteAbility® Small Business Start-ups* has far exceeded the 10 EwD start-ups envisaged in our ARC Linkage Grant.

Overall, the ARC research project aimed to better understand the pathways of PwD into entrepreneurship in order to support Australia's capacity for developing evidence-based policy initiatives that increase the number and success of entrepreneurs living with a disability. The research hypothesis was that entrepreneurship increases social inclusion and improves employment opportunities for PwD.

The specific project aims were as follows:

1. Identify and understand the experiences of men and women with disability who own and operate private enterprises
2. Investigate the extent to which disability entrepreneurs are embedded in family and personal social networks and the role of gender in disability entrepreneurship
3. Identify the role of networks of disability service organisations in the establishment of, and nature and success of Australian disability entrepreneurship
4. Follow the entrepreneurial journeys of 10 PwD participating in the *IgniteAbility® Small Business Startups*

This report predominantly addresses objectives 1 and 2, with objectives 3 and 4 to be addressed in a follow-up report.

A personal story:

My story in a nutshell - I used to be a professional performer. I used to work around Australia in nightclubs and then I also worked in Japan as a cabaret dancer. Then when I moved over to Melbourne after my fourth contract in Japan I spent about two years going back and forth to Japan, I came here and I was working in the clubs and I was also doing a dance course and I'd also just gotten into a contract. I was going to be a pop star in China and I was coming home from the first rehearsal to that, going home to pick up my costumes to go to work dancing in the nightclub and I got hit by a car and that was the end of that. That was the end of that life. I broke my leg, but that's all the physical damage that I had. But I bruised my frontal lobe, just extending onto the right side of my brain and I was in a coma for nearly a month. I had to learn to walk again, talk again, everything all over again.

What else do I have? Belief in myself. Pig headedness. I'm not willing to let the bastards get me down. I'm also not willing to accept that this injury is permanent. I don't accept that for one second because I'm the perfect example of what you're capable of doing if you put your mind to it. If you stick with it. You have to be dedicated to it. This is a way of life. I get frustrated. Yes, I get frustrated quite a lot. Angry. Well, I've stepped out of the grief and the anger phase. It took probably about 12 or 13 years.

My business is a series of training for others that have an acquired brain injury and I give them tips and strategies for creating a life anew. I aim to be profitable, yes, and I see myself being successful. I've always seen myself being successful. This has been a huge, huge spanner in the works. But it's also providing me with a platform. It's also providing me with a direction and it's also giving me the status that I am an authority in my field. (Taylor, ABI)

Research Design

The research study involved multiple populations including entrepreneur/self-employed people with disability (EwD), key stakeholders involved in the entrepreneurial ecosystem and an in-depth understanding of the entrepreneurial journeys of those involved in one disability specific accelerator program. Drawing on the expertise of the research team in both entrepreneurial and disability projects, and following consultation with research partners, the following mixed methodology research design was adopted for the study. The project employed developed a literature review which subsequently shaped the quantitative survey methods, qualitative in-depth interviews and action research methods employed in the research.

- The *quantitative* instrument was a survey that sought to electronically or digitally snowball 100 respondents drawn from disability organisations from across Australia [23]. As there was no census or list of entrepreneurs with disability, this method was thought to be the most appropriate approach and had been hit by members of the research team lead in the number of previous studies [e.g.[24]. The survey was conducted online, or by telephone or on a face-to-face basis if required. This data was supplemented by 60 respondents with disabilities to the 2017 and 2018 *Startup Muster*® Surveys who identified as having a disability after the research team negotiated a disability module being incorporated into this nationally recognised survey of the entrepreneurial ecosystem.

- The *qualitative* instruments were in-depth interviews: (i) With key stakeholders in the field of Disability Entrepreneurship (state and local Government, disability employment organisations and the broader disability sector), and (ii) With EwD involved in commercial or social enterprises either currently or in the past.

- The *action research* methodology was to follow the entrepreneurial journeys of ten PwD participating in the *IgniteAbility*® program, which was established by SSI, one of the research Industry Partners. The action research drew on formal meetings with the *IgniteAbility*® including the director, enterprise facilitators and others involved in the program from SSI. We had access to the program documentation and many informal conversations and catch up opportunities. The research team met with entrepreneurs from the *IgniteAbility*® program to discuss their involvement, their business enterprise and understand the program from a participant's perspective.

The literature review informed the theoretical framework and, hence, the design of the research instruments. The qualitative methodology generated 52 interviews with entrepreneurs with disability, and 20 with key stakeholders, together with documents and other artefacts collected during the study. The quantitative methodology generated 110 usable responses from the online survey and further qualitative data from the open-ended questions included with the online survey. In addition, 60 usable responses were obtained from the *Startup Muster*®, and annual survey of startup ecosystems across Australia [25]. The *Startup Muster*® provides an annual snapshot of the Australian startup ecosystem.

Data Analysis

The survey data was collected by the Qualtrics online survey design and analysis package. Initial descriptive analysis was undertaken on Qualtrics including frequencies, percentages, cross tabulations and graphics. For more complex inferential analysis, the data was exported from Qualtrics to the Statistical Package for the Social Sciences (SPSS) v23. The data was interrogated for any between group differences based on disability, support needs and other appropriate sociodemographic data. The analysis included chi square, t-tests, ANOVA, correlation and regression. Further, inclusion of the *Startup Muster*® data provided an opportunity to be able to compare entrepreneurs with disability to nondisabled entrepreneurs through the use of descriptive statistics. *Appendix 1* presents a statistical summary of the responses by entrepreneurs with disability.

NVivo, a comprehensive qualitative data analysis software, was used to organise, analyse and find connections across all the interview transcripts, open-ended survey questions and any other textual data collected (e.g. documents). Coding themes (or nodes) were identified based upon theoretical background research to the project and the previously explained research design. Manual coding was undertaken, and then common themes identified across the data. Comparisons were made between the different interview subjects to determine if there were significant differences in concepts identified based on the experience and priorities of the interview subject groups.

The Entrepreneurial Ecosystem

In recent years the fields of entrepreneurship studies have culminated in an emerging entrepreneurial ecosystem approach that focuses on how the social and economic environment affecting the history and circumstances of the entrepreneur. The entrepreneurial ecosystem approach is defined as: as ‘a set of interdependent actors and factors coordinated in such *a* way that they enable productive entrepreneurship within *a* particular territory’ [26, p. iii]. This could be a single company, a group of companies, including startups, or one or more coordination entities, which share similar goals and decide to form a network or organisation.

This challenges the stereotype of the ‘Steve Job hero’ entrepreneur as an isolated solitary figure who is a maverick. In recognising entrepreneurship as a team activity involving social processes that are embedded in broader contexts [27, 28], we reflect the contemporary reality of accelerator and incubator programs. In particular, the entrepreneurial ecosystem reflects the space and place in which it is embedded though procedures, processes and programs that affect each stage of startup development. Works by Pennings [29], Dubini [30], and Van de Ven [31] developed the ‘concept of an "entrepreneurial environment" or ecosystem that was used to explain the influence of regional economic and social factors on the entrepreneurship process’ [46]. This new contextual turn emphasised the importance of situating the entrepreneurial phenomenon – and the entrepreneur himself or herself - in a broader field that would incorporate ‘temporal, spatial, social, organisational, and market dimensions of context’ [32, 33].

The Social Ecological Model of Disability Entrepreneurship

The findings in this study can be further understood in terms of the social ecological model [20, 45]. This model is presented in *Figure 1* and has five components. As Darcy and Burke identify, while a social constructivist approach is discussed in terms of aggregation of barriers and enablers, a social ecological approach breaks this further down in terms of intrapersonal, interpersonal, organisational, community and public policy level [45]. When considering the findings within the social ecological model, a clearer understanding of levels at which the barriers and enablers of the disability entrepreneurship ecosystem emerge.

Figure 1: Social Ecological Model of Disability Entrepreneurship (Simplican et al., 2015)

The social ecology model situates the lives of the individual PwD themselves at the heart of understanding their entrepreneurial journey: their motivations, the nature of the barriers that they face, their social embeddedness in family and personal relationships (including carers). The social ecology model focusses on the nature and timing of their disability, their education, personal circumstances, social support networks, gender, age, linguistic, cultural and religious background, where they live and their individual circumstances. This is situated within a broader political and institutional structure at the local, state and national level that shapes policies, practices and attitudes towards PwD and the opportunities and constraints that they face on a daily basis.

Disability in Australia

The two primary sources of data on PwD in Australia are:

- the Australian Census, conducted every five years, most recently in 2016 [34].
- the Survey of Disability, Ageing and Carers (SDAC), conducted every three years, and most recently in 2015 by the ABS, through a survey of around 75,000 people [12].

These two sources of population data measure disability in slightly different ways which, when combined, give us a picture of the extent of disability in the Australian population. In 2015 in Australia all PwD totaled 4.3 million people, or 18.3% of the Australian population. People with profound or severe disability of all ages were 1.37 million or 5.8% of the population. There were 655,000 people with profound or severe disability aged over 65, 2.8% of the population, and 715,000 people with profound or severe disability aged 0 to 64, which was 3% of the population [12, 35].

Table 1: PwD in Australia, 2015

Disability definition	Number	Percentage of population
All PwD	4.3 million	18.3%
Profound or severe disability – all ages	1.37 million	5.8%
Profound or severe disability – over 65	655,000	2.8%
Profound or severe disability – 0-64	715,000	3.0%

Source: Australian Bureau of Statistics [12]

Disability and Self-Employment Statistics

Apart from the general disability statistics, the tables below identify the number and proportion of PwD by status in employment and disability group. As stated in the introduction and shown in Table 2, people with disability have a higher rate of self-employment (13.1%) than the nondisabled population (9.2%). The rate of self-employment (entrepreneurship) varies by disability type with those with some form of intellectual/cognitive disability having 2.5% less self-employment than non-disabled Australians and those with psychosocial disability having 76% higher levels of self-employment than non-disabled Australians. Research by Darcy, Collins and Stronach (2019 under preparation) suggests that the reason for self-employment are a complex economic, social and cultural milieu that is affected by disability type, level of support needs, and social/human/digital capitals. Further, the intersectionality of disability with gender, ageing, Indigeneity, sexuality and cultural background are all considerations that affect the choice of people to become self-employed or explore entrepreneurial opportunities.[35] As our research has identified, a proportion of entrepreneurial ventures are social enterprises established by PwD for a variety of purposes to address user-lead solutions to complex social problems. **Our research has identified that, on average, PwD are 43% more likely to be self-employed than non-disabled Australians,** supporting similar overseas findings [14].

Table 2: All Employed persons (15 to 64 years), living in households by Status in Employment by Disability Status and Disability Group

	Employee	Self-Employed	Total Employed
Disability Group	**Estimate '000**		
Sensory and speech	182.2	22.3	203.9
Intellectual	84.7	8.5	94.8
Physical/Mobility	539.7	98.0	639.2
Psychological	128.0	24.6	151.9
Head injury, stroke or brain damage	36.0	6.3	41.9
Other	291.8	50.9	340.2
All with reported disability	897.8	135.9	1034.0
No reported disability	9498.1	961.5	10458.8
Total	**10385.6**	**1095.5**	**11492.2**

Table 3: Employee V Self-employment by Disability Group

	Employee %	Self-Employed %	% +/- No Disability
Disability Group	**Estimate '000**		
Sensory and speech	89.4	10.9	119.0
Intellectual	89.3	9.0	97.5
Physical/Mobility	84.4	15.3	166.8
Psychological	84.3	16.2	176.2
Head injury, stroke or brain damage	85.9	15.0	163.6
Other	85.8	15.0	162.7
All with reported disability	86.8	13.1	143.0
No reported disability	90.8	9.2	

Source: Darcy, Collins and Stronach (UTS Business School) 2016-2018 based on 4430.0 - Disability, Ageing and Carers, Australia: Summary of Findings, 2012 published 2015 & ABS 2012 4430.0 - Disability, Ageing and Carers, Australia: 4433.0.55.006 Disability and Labour Force Participation, 2012 published 2015

A personal story:

I'm pretty much totally blind, it's a genetic condition, retinitis pigmentosa. It's often said that to be successful and blind you need to have a really good memory and a really good recall. And I don't. I don't have that sort of photographic recall to pull it all back. A lot of super successful blind people do, and I think that really puts them in good stead, whereas I have to go 'Oh, I know what it is roughly'. I'm a conceptual thinker rather than specific, I'm very much holistic and eclectic. Working with a disability and having a disability can be really overwhelming. And the fear that I always had, the sort of anxiety that I had was that people would think that I was in that job because I had a disability, not because I was competent, and providing a unique result.

The entrepreneurial thing really began when I decided to create a company called 'that worked with voices'. This was a concept that I conceptualised, that the idea was that voice really isn't being utilised much in business, not very effectively at any rate, and that there was this huge gap in the market where I could be a voice authority and a voice consultant with marketers and advertisers. And they can engage me to do really exceptional voice, applications of voice, to really connect with people's hearts as well as their minds. So there'll be more of an emotional connection, rather than the voice just reading the words.

So yes, my life experience had taught me this, so I knew it intuitively from life experience, but there were no textbooks on that sort of stuff. So without blowing my own trumpet, there really isn't anyone who has the same philosophy around voice and sound that I do. I just had a lot more trouble commercialising it than I had hoped. And it really wasn't that successful. Now I feel like I've worn myself out early. Not physically, I'm in pretty good health, but I get tired, much more than I should. And I just don't have the resilience that I once did.

It was a lot harder going out on my own than I'd hoped – and as well, it's a lot harder just to get out and market and to network. If I'm not networking with someone, I just stand in a corner, because I can't see people, engage them, read name tags. (Jack, V)

Findings

The findings of this study are now presented. Each of the major factors, including motivations, barriers, facilitators, outcomes and benefits, are presented prior to the application of the social ecological model of disability entrepreneurship in Australia

Appendix 1 provides a statistical summary of the socio-demographic characteristics of the respondents to the online questionnaire and.

Appendix 2 provides a summary of the typology of in-depth interviewees. Interview participants were given pseudonyms to provide an ethically rigorous yet intimate and individual presentation of the data. For ease of reading this report, interview participants are allocated a code to indicate their disability as follows:

- Hearing (H)
- Speech (S)
- Intellectual disability (I)
- Physical/Mobility (PM)
- Psychological (P)
- Head injury, stroke or brain damage (ABI)
- Other (O)

Online Survey Respondent Characteristics

The online questionnaire respondents' disability types were predominantly mobility/physical (47%) followed by those who were Deaf or had a hearing impairment (20%), and those with intellectual/cognitive disability (10%). Further disability types were mental health, other, blind or vision disability and speech/API. Most (65%) identified as having no or low levels of support needs, with only 20% having high or very high support needs. There was a relatively even representation of females (50%) to males (47%), with the majority born with their disability (51%) as opposed to having a traumatic injury (38%). The respondents were well educated with 43% having an undergraduate or postgraduate qualification and the majority completing year 12 or above. Most identified as being married (60%), with either no dependents (42%), or 1-2 children (47%). While the majority were born in Australia (79%), 21% were born overseas, with only 3% speaking a language other than English at home. Aboriginal and Torres Strait Islander people were underrepresented as respondents (1.2%). Most identified as being self-employed (48%), entrepreneurs (29%), or would like to be self-employed or an entrepreneur in the future (23%).

Startup Muster®

While there were similarities between the online survey conducted for the study and a sample drawn from *Startup Muster*® who were identified as having a disability, there are also decided contrasts. The major disability type again in *Startup Muster*® was mobility/physical (39%) followed by a much larger proportion of people with mental health issues (29%), those identifying as intellectual/cognitive/learning (22%), Deaf or hearing impaired (14%), blind or vision impaired (12%), or other. Similar numbers identified as being independent and not requiring any assistance (66%), followed by low support needs (20%), or medium levels of

support. No one identified as having a high or very high level of support needs. A much higher proportion were male (58%), with lower numbers of females (40%), or other (2%). Some 95% spoke English at home, with 38% also speaking another language. Again, the respondents had very high levels of formal education with the majority (70%) having bachelor or higher degree, with the remainder attending technical and further education or completing high school. With respect to their entrepreneurial journey, a smaller proportion identified as founders (35%), a higher proportion identifying as future founders (43%), and the remainder identifying as supporters of startups.

Business types

Living with a disability gives people a world of experience that other people do not have. Many entrepreneurs reported they had used the insider disability knowledge that they had gained to their advantage to start a successful business designed to assist others in similar situations. These user-lead innovative business ideas accounted for the majority of those interviewed and a third of those surveyed. Put in the language of economic theory, EwD have a comparative advantage in businesses that relate to their experiences as a person with a disability. They know the market well and can spot market niches that have not been addressed or addressed adequately. These wide-ranging business activities as described by survey respondents are illustrated in *Figure 2.* The clear lesson is that while EwD are concentrated in the Health Care and Social Assistance, Education and Training, Professional, Scientific and Technical Services and Arts and Recreation Services industries in Australia, they are not confined to these industries. If the question is 'What is the typical PwD business?' the answer is that there is not one.

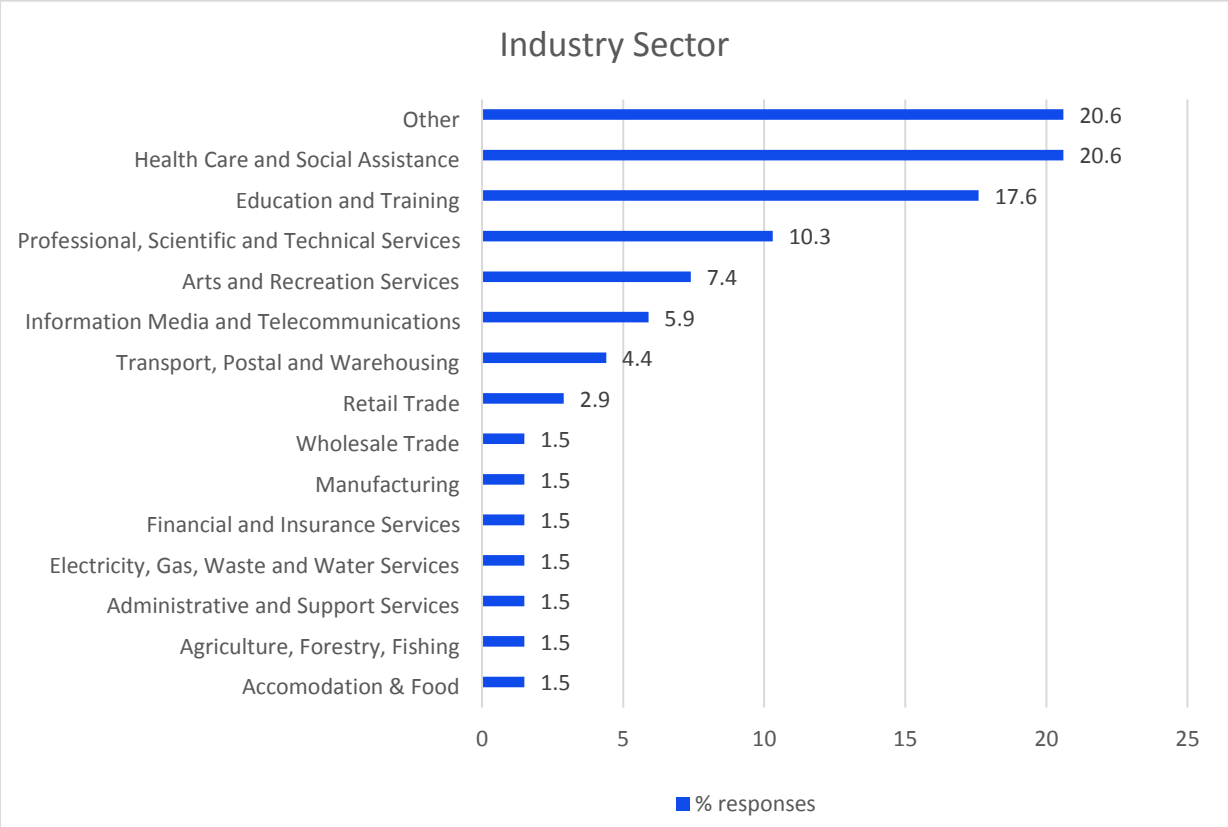

Figure 2: Industry Sector of Business – % response

Interviewees and respondents to the online survey described a similar diversity of business startups, encompassing service, merchandising and manufacturing enterprises. Some of the startups mentioned included manufacturing car hand controls, personal care service delivery and oversight, providing travel, parking space advice, and legal services. Others described transforming a hobby activity such as craftwork into a small business. Technological advances have opened new avenues for entrepreneurs with disability, who described a variety of assistive technologies, such as messaging apps, wheelchair stair-climbers, electronic conveyancing, and speech recognition software. About half of the respondents had developed enterprises for non-disabled purposes including winemakers, transport operators, landscaping, and IT support.

The *Startup Muster*® responses presented a similar variety of industry engagement including education, transport, agriculture and manufacturing but with two major differences. First - and not surprisingly given the nature of the survey - there was a greater EwD involvement in technology related industries including social media, software development, medtech/healthtech/biotech, internet of things, artificial intelligence, virtual/augmented reality and fintech. Second there were much lower levels of disability specific enterprises and professional consulting services. About 85% of the respondents' enterprises were for non-disabled purposes as outlined above.

A personal story:

I have fibromyalgia. It's a lot like chronic fatigue and that it has a pain element, and other odds and things attached to it. Basically, it just means you have a lot of fatigue and vagueness, and pain. Yeah, and a lot of just random new symptoms that come and go like eye pain, and ringing in the ears, and just a lot of strange abdominal pain. Yeah, so basically, it's just you are constantly tired and in pain most of the time. There's still a lot of stigma with fibromyalgia. People don't think it is real. Because of just trying to live with chronic pain - it is very difficult to escape from that, from the stress and strain of other people's judgements.

Well, I was given the disability support pension. I just lived hand to mouth on the pension, going in and out of disability employment services. Basically, just trying to do my drawings, because one thing I could do was write stories and draw pictures. I was writing stories and I was writing comic books. At that time, it wasn't really considered to be any kind of artistic pursuit. But I slowly became part of a little community of cartoonists and just kept working away on my little projects. I started writing more and more comics, and just started trying to learn how to plan things basically and be able to build a bit of a future. Now I'm an award-winning cartoonist. I also do illustration and design work. I love designing characters and making stories, I also build scale models and make short films. I have a series of books published here in Australia and overseas.

I rely on my partner a great deal. She's well aware of what I'm living with and things like that. She's not trying to ... I've had trouble in the past, people just want to fix me. You can never be fixed. Just dealing with it, so it's not easy for her. She is a big support. Also, my employers, some of them are very aware of what I'm dealing with, and they've known me for a long time, and they're very supportive. My publishers are very supportive. They know what I'm going through. (Martin, O)

Motivations

The shift to entrepreneurship and self-employment for PwD may be perceived as a combination of pull/anti-pull and push/anti-push factors [17]. The attraction of self-employment stems from a desire by PwD for economic and personal independence in a way that can accommodate an individual's intra-personal lifestyle needs. Pull factors related to the possibility of higher income, flexibility in the workplace in terms of hours and location, and reasonable recognition of support needs, as well as the ability to bring about social change, and the likelihood of increased work satisfaction. Anti-pull factors were aversion to the risks involved in starting up a business, if that meant they needed to relinquish their Disability Support Pension.

From a push perspective, lack of opportunities or what the literature calls 'blocked mobility'[10] was identified by many participants. Largely associated with employer discrimination, EwD faced individual and institutional barriers in being embraced as a viable employee. They often experienced a lack of recognition of their qualifications resulting in a mismatch between their skills and labour market opportunities made available to them. As a result, participants felt they had no choice but to start their own business. This course of action was seen as a necessity after long-standing discrimination had resulted in blocked mobility or occupational skidding in the workplace.[18, 19] Counterintuitively, it appeared that experiences of discrimination indirectly prepared participants for tackling challenges, persistence, determination and even a higher appetite for risk. Disability entrepreneurship in Australia is, it seems, a highly contradictory phenomenon. Anti-push factors related to the security of having permanent employment and/or the risk of losing their disability support pension.

Sometimes motivations were a combination of push and pull factors. Whether pushed or pulled towards entrepreneurship, the participants demonstrated traits that supported a desire for autonomy. Autonomy through entrepreneurship relates to the potential for acquiring independence, enhancing work-life balance, resulting in improved agency with control over their lives through the instrumental improvement of being their own boss, flexibility around their own lifestyle, and the challenge of skill development where they are testing their ability for their new business enterprise. This links closely with the outcomes and benefits, discussed later tin the Findings. These motivations must be understood within the social ecology of the lives of the individual EwD themselves: the nature and timing of their disability, their education, personal circumstances, social support networks, gender, age, linguistic, cultural and religious background, where they live and their individual circumstances.

Table 4: Current Entrepreneurs with Disability - Top 10 Motivations

Motivator	Mean*
To help others	4.26
To be my own boss	4.24
To have a flexible work schedule and lifestyle	4.19
To develop new skills	4.01
To take advantage of my own creative talents	4.01
The opportunity for financial success	4.00
To test and prove myself	3.89
To realise my dream	3.75
To solve a problem I was experiencing	3.70
To meet people	3.63

*Mean calculated using Likert scale 1-5 values

Table 4 lists the top ten motivating factors as identified by survey respondents. This cohort focused mainly on push factors as noted in the table. Interestingly, however, interviewees had a slightly different focus. While they noted the need for financial success, they also described their passion to develop their own enterprise, particularly when they had identified a service or product that may be of use to other PwD.

> *Having a spinal injury costs a fortune, and so I realised my situation, of living with this, if I was going to live, being poor was not something I could think about. So that was a bit of a motivator, to be honest. (Judy, PM).*

> *I don't want anybody else to have to go through what I did. I don't think it's fair that when you're choosing university it's based on parking, rather than their program, or quality of university. That's not okay. It's not okay to not be able to go into the city to work because you don't think you can park there, it's too expensive, and you don't know any other way to get there. There's a whole bunch of fear that comes with taking public transport when you have limited mobility, and the whole point of what I built is to take away some of that fear. (Liz, O)*

In addition, this cohort described significant push factors they had encountered in the workplace. Discrimination is described as treating, an individual or an entity differently before the law due to their age, ability, sexuality, ethnicity, indigeneity, or gender. Apart from being unlawful, such stereotypical attitudes were very hurtful:

> *I was told I was unemployable by the CES in [location]. Whey told me when I went there, not long after my accident, looking for their help to get a job, 'No, I don't think you're employable Gus'. (Gus, PM)*

> *I was waiting in the waiting room and overheard the people who were about to interview me, there were two people. The man said, 'Oh, don't worry about the next interview, we're only doing it to be seen to be doing the right thing'. Great! (Caroline, PM)*

> *Hah! Choice had nothing to do with it. I tried to fit into traditional structured workplaces for several years, but it never worked. Across 8+ workplaces I've been bullied, undervalued, underpaid and even told to 'work on fixing' my disability because it's inconvenient for someone! Self-employment was the only option I had left for workforce participation. Workplaces say they're all about disability inclusion but in reality, only a very short list of disabilities are welcome. If you've got a visible disability that doesn't get in other people's way - you're OK - but if you have an invisible disability that annoys people, you're screwed. (Survey Respondent, PM).*

Barriers and challenges

Table 5 lists the top ten barriers identified by survey respondents.

Table 5: Top 10 Barriers that hinder Entrepreneurial Aspirations

Barriers	Mean*
Financial constraints	2.95
Uncertainty of the future	2.84
Lack of capital	2.78
Financial dependents	2.61
Lack of time	2.57
Physical access to spaces and places	2.42
Lack of confidence in my own ability	2.39
Transport related barriers	2.26
Compliance with government regulations / redtape	2.25
Access or cost of providing my own assistive technologies *(equal 10th)*	2.21
No one to turn to get some help *(equal 10th)*	2.21

*Mean calculated using Likert scale 1-5 values

Many of these factors were at the individual level, including lack of confidence in their own ability.

> *But working with a disability and having a disability can be really overwhelming. And the fear that I always had, the sort of anxiety that I had, was that people would think that I was in that job because I had a disability, NOT because I was competent and providing a unique result. (Kenan, S)*

Simply being a person with a disability presented huge barriers to self-employment or entrepreneurship, and participants described only being able to work to a certain level because of having to accommodate the disability. They described frequent and on-going episodes of ill-health:

> *And while I was in between being sick ... I was in the hospital when I started my NEIS program. I was working from a hospital bed during three of those months. I'm calling people, doing websites, I had the computer with me... yeah. (Pamela, PM)*

> *So we got to the end of the Accelerator and we presented to investors and we did really well. We absolutely did excellent on the pitch night, but a week later I was in intensive care. (Liz, O)*

However, most barriers for those with mobility, vision and cognitive disability were structural involving facilities, access and transport.

> *I mean I'm only a 15 minute drive to the city, but it would take me two hours by public transport just to get there in the morning because some buses weren't accessible, and I'd have to wait, and it would rain and I can't hold umbrellas. (Joan, PM).*

In addition, many entrepreneurs with disability experienced challenges in obtaining startup funding or loans.

> *Yeah, well, they wouldn't really give me a bank loan. I've got a mortgage, but because I'm not actually working at the moment because I've been sick, I can't get a loan. So, I'm on Centrelink for Newstart, but I'm not eligible for a pension even though I'm full-time in a wheelchair. So, credit card was our only option. (Pamela, PM)*

> *I've done it all myself, so, I had to fund it. I had to use my own private capital, and I have an overdraft. I pay the staff. It's been very lean. I'm only three years in, and it's definitely showing signs of promise, but the cash flow is difficult. (Gail, PM)*

> *Financially it was absolute hell, because I got no compensation from my motorbike accident. It was not a compensable claim, because I swerved to miss a dog on the road. There was no third-party insurance for me, nothing. So, bankruptcy was right there. That was another reason why I had to get out of hospital, because we just would have gone broke. (Hudson, PM)*

> *But you know, we are running out of money, and now that's why these crowdfunding campaigns are so important in the short term. I think what we want to do is basically stay afloat and carry on developing the site. What we want to do is stay afloat until we find a big corporate supporter who will enable us to roll out comfortably and employ and meet people, and pay ourselves, and become more than a one-man band. (Dave, PM)*

Negative societal attitudes towards disability were commonplace, and while some entrepreneurs mentioned small-scale personality conflicts, in a small number of instances the conflict involved appeared to border on bullying. Participants found that compliance with social service agencies such as Centrelink [36] and the NDIS was challenging, cumbersome, confronting and laborious.

> *It's quite frustrating that I am not taken seriously, because I don't have an assistive device, and that has always been the way, and the assumption that if you have a disability you don't work, you can't work, you are constantly dependent on somebody else, just getting through that whole stigma and stereotype program. (Liz, O)*

> *Other people who had been quite close friends, who also work in this space, just immediately saw me as threatening their work, and the things they do. When I was individual, I became a bit of a target. As a person with disability, which is what we're all meant to be supporting, it's been particularly disappointing to see that. (Neal, V)*

Another dominant theme that occurred in the interview group was the intersectionality of multiple issues that heighten vulnerabilities and compound the barriers and challenges to employment that they face. When people have multiple identities such as ability, gender, sexuality, seniority, and indigeneity they can become further marginalized through the intersectionality of those identities [47]. This is exemplified by the lived experience of one participant:

> *The issues I have with my mental health make it difficult for me to have self-confidence. Also knowing a lot of the statistics around investment in tech and all the bias and glass ceilings that women face, let alone, you know, people with disabilities, and people from like LGBTIQ backgrounds like me. I mean, the best thing I've got going for me is that I'm white. (Janet, P)*

For all PwD, there are barriers, but there are also enablers that can improve outcomes and deliver greater inclusion for PwD. Indeed, focusing solely on barriers - on what PwD lack - creates a deficit model that draws attention away from what they have - their determination, their abilities to shape their lives despite their disability constraints and the institutional and personal discrimination that they face because of it. In other words, a deficit approach to PwD entrepreneurship detracts attention from the *agency* of PwD entrepreneurs and the strategies that they employ to overcome barriers.

A personal story:

At 24 years of age while undergoing brain surgery to remove an arteriovenous malformation (AVM) in my brainstem – a congenital deformity present at birth – I had a stroke. Thankfully I survived but was faced a daunting list of physical challenges: I couldn't move, speak, swallow or blink. As a full-time occupational therapist working with stroke survivors, I was suddenly confronted with what life was really like for my patients. Eight years into my stroke recovery, I have now reformed my identity and adapted to my life as a disabled person. During this time, I have had intensive therapy – relearning how to speak and swallow in speech therapy, walk and blink in physiotherapy, adapted to my everyday activities in occupational therapy.

I don't think I ever fathomed that the aftermath of stroke would continue for the rest of my life. I have personally found engaging in meaningful tasks like writing, yoga and swimming has enabled me to deal with this grief better. Also, sharing my experiences with others, as both a patient and therapist, makes all that I've endured (and still do) worthwhile.

In my business I delegate some of the bookkeeping and accountants and an admin person who helps me with databases and stuff. My vision has been affected. So, entering e-mail contacts into my database … I delegate all of that to help me do more of what I enjoy. I get a pension, a disability pension, and most of my clients are in the health sector and they don't have high budgets. I also do a huge amount of voluntary things, so I do lots for the Stroke Foundation and they pay me as a consultant. It varies a lot, but I guess my disability pension helps me with my everyday expenses like my water bills and everything, but I never had a payout as I didn't have the insurance. So, everything from my recovery is self-funded. (Fran, ABI)

Enablers and ways forward

Table 6 lists the top ten enablers identified by survey respondents.

Table 6: Top 10 Enablers assisting in Entrepreneurial Aspirations

Enabler	Mean*
I can see opportunities for new businesses	3.52
Being in contact with people with positive attitudes towards disability	3.32
I have social and / or family support	3.05
I have access to mentors	3.00
I can see opportunities for entrepreneurship education	2.83
I am financially independent	2.74
Attending a start-up, innovation, entrepreneurship program or course	1.96
There is commercial or legal infrastructure that supports me	1.94
Previous experience starting an enterprise	1.92
I am single	1.87

*Mean calculated using Likert scale 1-5 values

The characteristics inherent in PwD - their agency - also positioned them to succeed in

entrepreneurship. These characteristics included innovative problem-solving skills, flexibility, tenacity, sense of humour, preparedness to seek assistance, grace under pressure, and creativity. Many had juggled salaried jobs while developing their startups and pivoted their original business plans while refining their future ideas.

> *You don't need to have a disability to be entrepreneurial. Entrepreneurial isn't a reason to – it's not something that you've got to say, well, I have this disability, therefore I can't be entrepreneurial. The roots of entrepreneurialism stems from your psychology. It's a psychological construct, this idea of self-efficacy, and the more you do, the more you conquer, the more you believe you can conquer. (Stan, PM)*

> *I just see myself as a successful businessperson who's making the best of everything … I think persistence and having a positive attitude are very important. I'm a massive believer of make the most of every day and don't let your disabilities hold you down. So, you have your down days but then you need to bounce back. (Ivana, PM)*

Importantly, a range of schemes including incubator and accelerator programs provided support to nascent entrepreneurs, and many participants had successfully identified organisations and institutions that they had enlisted for support or to add value to the enterprise. Some of these included funding opportunities such as grants or loans. While a third of respondents mentioned the importance of mentors, virtually all respondents benefited from high levels of backing from family and friends, in shaping and supporting their ventures.

> *I was able to get about four mentoring sessions, and that time was probably the most effective probably because she [mentor] has a disability herself and she's been involved in the training sphere for a very, very long time. So, with my time with her I basically structured and wrote three training programs. (Taylor, ABI)*

> *Yeah, so through these, whether it be Facebook groups or Slack channels, that's how I keep in touch with lots of people and Twitter as well, LinkedIn, always asking people that I am talking to, meeting people at entrepreneurial events, 'Can you introduce me to someone?' and building my network that way, has really helped me. Then those people that connect with my business idea or that connect with me personally have offered their time and they help me regularly. (Janet, P)*

> *I rely on my ex-husband a whole lot, we're best mates, best, best friends. So, we completely do 50/50 custody, raise our children together. He's still my best friend that I tell everything to, he's the only person who knows everything about me. So he's a massive, massive key support to me. And then my mum is a really, really key support and I've got some really close friends who live very nearby who are ... Yeah, so I've got a lot of supports around me and they're all aware of everything to do with me. (Brooke, P)*

A personal story:

I have mild cerebral palsy, affecting my coordination, my speech and the pace of my walking. I'm a self–employed winemaker. I've always found it hard to gain employment. I get to the interviews, but find people very much judge me on my disability. I have a strong need to prove myself, both at work and socially. Twenty years ago, in my first job I had to do three month's work experience to prove myself. All my employment, and now my business, have all been based on that three month's work experience. Now, if I had sat back and waited for a job to come along, who knows how my career may have ended up? But because I went out there and said, 'Guys, this is who I am, and these are my abilities,' they were able to see for themselves that I had the abilities to go further. I think my strong work ethic has come from my brothers, who were both very much sports minded. I was always down there watching them play sport, achieving, and I needed to achieve. I needed to show people I had abilities and I needed to work out where that was. For me it was in the workplace.

Friends and family are my support. They're the ones that help you and guide you and give you faith in your ability. Family and friends have been so important in my life. They are my 'Latte and croissant'.

From a workplace perspective there are a couple of people in the wine industry who have been my mentors. They've shown me how to make wine, and more importantly, they have shown me I've got the ability in the wine industry. I regard those couple of people highly, and when I have my down days, I think of them and the way they've told me I can do things. I am very proud of my own wine business. When I was sixteen years old I dreamt that one day I would like my own wine business to be able to make my own wine, and have my own wine label, and at the age of 35, I was able to release my first wine. So, it was a 19-year dream, but I'm a big believer in setting goals, and if I went through each individual goal to get where I was, I reckon there'd be hundreds of goals. I think it's also important to look at the "glass half-full" instead of the "glass half-empty". To me it is all about looking at all the positives, looking at everything we can do, and never worrying about the things you can't do. There's no point worrying about things because you can't do them. So, achieve what you can and strive hard for it. (Kenan, S)

Outcomes and benefits

Benefits to entrepreneurs with disability involve individual and community benefits. They include having enhanced meaning in life, purpose, opportunities to contribute, increased self-esteem, and a wider range of relationships with people in community spaces. A need shared by these individuals is to be positively regarded for their inherent skills and expertise, and their human potential, rather than being regarded through the lens of their deficits and negative stereotypes. Quantitatively and qualitatively, over half the respondents identified a desire to benefit the community around them, whether that be providing opportunities for employment, showing that those with disability can contribute economically and socially in a positive way, and providing role models for other PwD to forge their own journey through life. PwD entrepreneurs - like other entrepreneurs in the small and medium business sector - are embedded in family and social relations and networks and make business decisions for altruistic as well as personal wealth reasons. *Table 7* lists the top 10 outcomes identified by survey respondents.

Table 7: Outcomes of having your own business

Outcomes	Mean*
I have a sense of purpose	4.53
I have a sense of future	4.29
I now contribute to the community	4.27
I have increased my self esteem	4.11
I now have a better quality of life/ I am happy	3.98
I have a larger social network	3.91
I have a job that keeps me employed	3.84
I create employment for others	3.44
I have secured an income stream	3.42
I have turned a profit	3.40

*Mean calculated using Likert scale 1-5 values

Interviewees identified some additional outcomes, such as their autonomy in decision-making, the flexibility afforded by self-employment, and enjoying their new lifestyle.

> I'm very happy with the lifestyle. You know, how are we going to measure lifestyle? If I'd stayed in the banking industry, and just plodded along, and was still there now, I'd be way, way, way better off financially, but that's not the best measure. (Stan, PM)

Social Ecological Model of Disability Entrepreneurship

As introduced earlier in the paper the social ecological model provides a sound theoretical framework to value add to our understanding of disability entrepreneurship in Australia. The five levels of the model provide a mechanism for sorting the complex array of motivations, barriers, facilitators and outcomes that socially construct the disability entrepreneurship ecosystem in Australia for people who are self-employed, entrepreneurs or develop social enterprises. The five levels include: the individual (intrapersonal); interpersonal; organisational (meso); community; and sociopolitical (macro). *Figure 3* provides a summary of some key considerations at each of these levels with each being briefly discussed below.

At the individual level entrepreneurs with disability spoke of a number of considerations to do with their 'impairment effects', support needs, personal confidence or other social demographic variables that they perceived as challenging in mainstream employment where self-employment, social enterprise or entrepreneurial space could be built around these considerations. For example, either starting times, the number of hours worked, or when they work could all be built into the flexibility of their enterprise. In fact, these intrapersonal considerations contributed to the motivations for establishing their business enterprises and were interdependent and overlapping with the benefits that they received. Yet, as explained through the social model of disability and feminist disability studies [37], some of what the individual regarded as intrapersonal could be addressed through reasonable adjustments for interpersonal or structural considerations.

Similarly, at the interpersonal level communication in all forms of aural, visual and tactile can be addressed through a series of personal, assistive technology and procedural engagements that allow people with different types of disability and support needs to function more equitably, independently and in a more dignified manner. For example, the provision of alternative communication options promotes a level playing field for PwD. This can be as simple as someone who is blind being able to use their screen reader to access online information that is visually presented but when adopting W3C Accessibility Standards and protocols [38] converts that information into accessible format for screen readers. Yet, often alternative communication options have not been considered at a meso, community or macro level.

At the organisational level – embedded within the disability stereotypes held by key gatekeepers such as personnel offices, managers and employers -the greatest consideration was the attitudes of others towards PwD. One of the greatest drivers was blocked mobility the need expressed by many PwD informants of getting a good job, keeping a job or having any form of career development once in a job. Of course, 'getting your foot in the door', so to speak, was what many respondents found so difficult no matter how qualified or experienced they were for the positions they were applying for. For those who had jobs, they sensed the feeling that the non-disabled co-workers around them either did not value their contributions, felt they are only in the position to make up numbers or were left at the entry levels.

Within the community level there were a series of structural barriers that made traditional employment difficult at best and impossible at worst. It involved the accessibility of the local environment, transport interchanges, the connections to either salaried or entrepreneurial workspaces, and the premises for those with mobility and vision disability. Further, where it came to gaining knowledge through accessing educational services at a school, post school, vocational or higher education level, there were still many barriers to inclusion for this group. A great deal of 'the community' - whether that be general community interactions, government,

non-for profit or commercial organisations - still had ‘low expectations’ in the abilities of PwD to contribute at all levels. In specific reference to business education, self-employment, social enterprise and entrepreneurial specific programs, many lack inclusive practices to be accessed by people with moderate, severe or profound disabilities.

It was at the broader macro policy perspective where one of the most striking findings of the research was found. Australia is immensely proud of its social security safety net, which provides a sense of security to many in the community. However, for PwD, this same social security safety net can also be a Catch-22 to providing a space to innovate and create their own self-employment or entrepreneurial journey. NDIS, Centrelink, Job Access, Jobactive, Disability Employment Services, NEIS schemes and others all created a bureaucratic quagmire that was all but defeating the entrepreneurial spirit, passion and drive for some PwD. There is a fear of contravening systems that may leave people without social safety net support if they take the risk and venture down the micro-enterprise, self-employment, social enterprise or entrepreneurial path. This is a great barrier to disability entrepreneurship, but also a pivot-point for policy development: PwD entry to enterprise start-up programs should be matched by a removal of the onerous compliance obligations such as to apply for jobs for the duration of the program, for example; the ability to maintain access disability support pensions as a safety net during the enterprise start-up program would also lead to greater PwD interest in them.

Social Ecological Model of Disability Entrepreneurship

Public Policy

- United Nations Convention on the Rights of Persons with Disabilities, Australian Disability Discrimination Act 1992 (Cth), National Disability Insurance Scheme, political ideology (e.g. neo-liberal), state perspectives, standards and guidelines.
- Government macro-policy, disability employment, support for innovation & entrepreneurship, lack of disability specific entrepreneurial support
- Centrelink DSP social security payment eligibility, NDIS support in workplace, flexibility to deal with micro/small cash flow which stifles entrepreneurial risk
- Support of the risk of engaging with market environments

Community/civil society

- Relative state of Disability Citizenship – ease of social participation by PwD
- Geographic disparity - metro/regional/ remote
- Community attitudes, culture & discourse
- Availability and access to disability support and employment services
- Availability and access infrastructure: housing, transport, health, education, legal, finance
- Marketisation of disability with individualised funding has increased fragmentation

Organisational

- Industry and organisational, disability and access culture, mission statements
- Access to accelerator, incubator and scaling programs
- Attitudes – omission, overlooking or othering of disability
- Inclusive training, networking and mentoring opportunities
- Social networks beyond family and friends
- Other associated organisations in disability advocacy or information provision
- Access to communication services

Interpersonal

- Information search, alternative information provision, accessible format
- Access to social capital network members
- Attitudes of others towards disabilities
- Relationships with family, staff, friends and attendants.

Intrapersonal

- Physical, cognitive, sensory, mental health etc. ability
- Level of support needs, independence in communication, digital literacy
- Sociodemographic characteristics: age, gender, level of functioning, motivations, knowledge, goal-setting, self-esteem, loneliness, education,
- Intersectionality of disability with gender, sexuality, ageism, Indigeneity, CALD or religion

Figure 3: Social Ecological Model of Disability Entrepreneurship explained (Simplican et al., 2015)

The Next Step - Action Research

Action research is a process of 'progressive problem solving led by individuals working in teams to improve the way they address issues and solve problems' [48]. The typical Action Research Process is depicted in *Figure 4*.

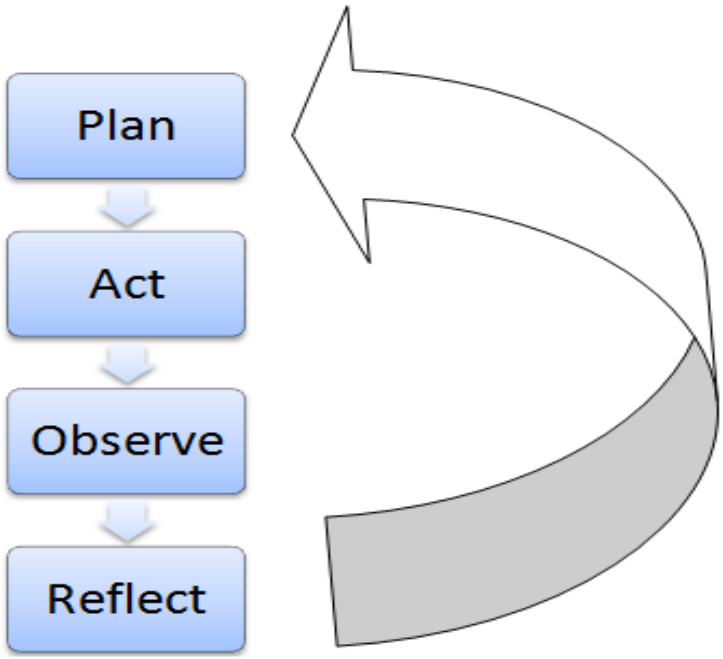

Figure 4: the Action Research Process

One big policy gap that we have identified in our research with stakeholders and EwD relates to the lack of business startup support programs designed to be inclusive. PwD who are interested in starting a business do not often get the support that they need. Moreover, startup programs are designed for cohort intakes into a common 'entrepreneurship education program' that do not really respond to individually different or bespoke pathways to entrepreneurship that PwD with different disability, social educational and economic circumstances. In other words, many existing business startup programs are not based on a social ecology model that identifies the different needs at different times of new business startups and develops bespoke pathways to a business startup on a one to one level.

We are shadowing an innovative program for facilitating new enterprise formation by PwD. The program, *IgniteAbility*® was designed to assist new enterprise formation by PwD and was established by project partner SSI, a not-for-profit which supports disadvantaged groups into entrepreneurship. *IgniteAbility*® is based on the *Ignite*® model that was developed by SSI for newly arrived refugees in Australia. The *Ignite*® model was based on principles which are client-centred and focus on an individual's passion for entrepreneurship and the development of a bespoke ecosystem of support which is tailored to meet the needs of each entrepreneur and their business venture. [39, 40]. One of the features of the *IgniteAbility*® program is that, like *Ignite*®, it has been developed and evolved at SSI in response to learnings gained over time.

Action Research Methodology

1. Researchers met with SSI staff, the Ignite® Program Manager and IgniteAbility® Facilitator through a committee on a semi-regular basis to gain an understanding of the evolution of the new program and the processes involved. Committee members provided a listening platform and reflected on practices being developed by SSI for this program which were suitable for the needs of the new client group.
2. One researcher spent five working days shadowing the *IgniteAbility*® Facilitator, during facilitation meetings of selected of clients as well as being present at a 'roadshow' delivered by the IgniteAbility® Facilitator thus enabling a deeper understanding of the processes involved in providing tailored support to *IgniteAbility*® clients. The researcher compiled comprehensive field notes.
3. Qualitative in-depth interviews were conducted with 10 *IgniteAbility*® clients to explore the views, experiences, and beliefs individual participants had in the program. This allowed us to investigate the motivations, enablers, barriers and outcomes for the cohort that impacted their entrepreneurial journeys.
4. Data comprised of three case studies: developed and written by an external consultant, minutes of committee meetings, interview transcripts from the selected clients undertaking qualitative interviews and the IgniteAbility® Facilitator, research notes and preliminary *IgniteAbility*® information on emerging client base.
5. NVivo, comprehensive qualitative data software, was used to organise, analyse and find connections across all the interview and meeting transcripts.

Early Findings

Challenges were identified in the identification, triage and staging processes for the initial program participants. IgniteAbility® facilitators worked with the Ignite® Program Manager, on program considerations including:

- extending program time frames
- enabling facilitators to spend more time with participants than they would have in the earlier *Ignite*® program
- reconsidering the involvement of significant others such as family members and carers
- reconsidering the nature of passion, independence, and 'viable business propositions'
- changes to referral processes, client selection and triage processes
- acknowledging the need to maintain regular and detailed interactions between participants and government agencies such as Centrelink, the NDIS and the Australian Taxation Office.

Summary of Key Findings

First, PwD entrepreneurs are spread across a **wide range of industries** in Australia. PwD have a comparative advantage in businesses that relate to their experiences as a person with disability. They know the market well and can spot market niches that have not been addressed or addressed adequately. Despite this the businesses of half of our informants were directed to the non-disability market. While PwD entrepreneurs are concentrated in the Health Care and Social Assistance, Education and Training, Professional, Scientific and Technical Services and Arts and Recreation Services industries in Australia, they are not confined to these industries. If the question is 'What is the typical PwD business?', The answer is that there is not one.

Second, men and women with a **range of disabilities** in Australia have set up their own business to move into entrepreneurship. Those with an intellectual disability have the lowest rate of entrepreneurship amongst PwD (9.0%) but this is only slightly below the average rate of entrepreneurship in Australia (9.2%). People from all other disability types have a higher rate of entrepreneurship than average: Sensory and speech (10.9%), Head injury, stroke or brain damage (15%), Physical/mobility (15.3%) Psychological (16.2%) and Other (15%).

Third, **gender** is an important aspect of PwD entrepreneurship. Across Australia the rate of female entrepreneurship is significantly lower than male entrepreneurship: In 2016, 33% of all business owner managers in Australia were female [41] with the rate increasing much faster than male entrepreneurship. Many women with disability also enter entrepreneurship, though there is a gap in research into their experiences. In the qualitative research conducted for this research grant female informants (54%) outnumbered male informants (46%). In future papers and reports from this research grant we will examine female disability entrepreneurs in more detail.

Fourth, the research identified the **major barriers** that our PwD entrepreneur informants experienced setting up and running their businesses. In declining order of importance, the barriers identified were financial constraints, lack of capital, uncertainty about the future, financial dependents, physical access to spaces and places and lack of confidence. While the first two barriers are common to all those who start up a business, the final four are influenced strongly by the social ecology of disability in Australia today. Policies designed to support existing EwD and encourage other PwD to set up a business should include innovative responses to addressing these barriers.

Fifth, the research identified the **major reasons** that motivated our PwD informants to set up their own business. Like most small business start-ups, the desire to 'be my own boss' was most important. The next most important factor reported by our informants was 'to help others'. This is a striking finding since economic theory focuses almost exclusively on individual wealth maximisation as the sole motivator for businesses in the capitalist market economy. Our PwD entrepreneur informants were equally driven to assist others as to help themselves. The other motivating factors were to have a flexible work schedule and lifestyle, to develop new skills and achieve financial success.

Sixth, the **outcomes** for PwD that emerge from acting on the risky task of creating jobs for themselves by starting-up a business have been revealed by this research project. PwD entrepreneurs report that they have a sense of purpose, a sense of the future and now contribute to the community. Increased self-esteem and a better quality of life accompany their move into entrepreneurship. They report a larger social network by creating jobs for themselves and others and a more secure income stream.

Seventh, given these strong outcomes of PwD moving into entrepreneurship policies designed to assist more PwD to make this move should be developed. Some PwD have drawn on existing, mainstream, entrepreneurship start-up or business accelerator programs to assist them setting up their own business. However much more can be done in the space of disability entrepreneurship start-up programs. The *IgniteAbility*® program established by SSI *to assist PwD in enterprise facilitation* is a promising model. *IgniteAbility*® is based on the *Ignite*® *Small Business Start-ups* model that was developed by SSI for newly arrived refugees. This research study is following the entrepreneurial journeys of PwD participating in *IgniteAbility*® and we will report on this at a later date.

Finally, while the research identified the barriers that PwD face when deciding to set up their own business in Australia an over emphasis on the barriers that PwD face can lead to a deficit model approach to PwD entrepreneurship, one that focusses more on what they cannot do and less on what they can do: their agency, determination and abilities to overcome the barriers. This helps explain what we can call the *apparent paradox of disability entrepreneurship in Australia today*: PwD face very high barriers yet they have much greater rates of entrepreneurship than other Australians. This is an apparent paradox because once attention moves to the agency of PwD and their abilities to overcome constraints in their lives their higher rates of entrepreneurship becomes explained.

Conclusion

The ABS [13] identified that PwD had a 40% higher rate of self-employment and entrepreneurship than the non-disabled. In the face of similar ABS evidence that PwD experienced high unemployment rates and low labour force participation rates in Australia, it appears that self-employment and entrepreneurship is one strategy that PwD have used to overcome the strong barriers to economic marginalisation and exclusion. However, a literature review revealed that there was little if any research into Disability Entrepreneurship in Australia. While there was considerable knowledge about barriers face PwD when attempting to enter the Australian labour marker—whether as employees as self-employed or entrepreneurs—there was limited research into how and why PwD entered entrepreneurship. As such, the research grant reported in this paper has sought to address for the first time the experiences of PwD who own and operate their own enterprises whether that be through self-employment, social enterprises or identify as entrepreneurs. In doing so the research has investigated the nature of their enterprises, their motivations, the barriers they face, the enabling strategies they use to overcome the barriers, and the individual and enterprise outcomes and benefits they receive for their endeavours.

In this path breaking first national study of disability entrepreneurs in Australia we have conducted in-depth interviews with 52 entrepreneurs with disability and 20 with key stakeholders. In addition, we surveyed 110 EwD online and drew on an additional 60 surveyed from EwD included in the *Startup Muster*®, and annual survey of start-up ecosystems across Australia. It is the voices and experiences of these 222 EwD that has formed the basis of this research report.

The report has revealed a rich tapestry of self-directed employment endeavour that in some ways mirrors non-disabled entrepreneurs and in other ways reflects the stark realities of a discriminatory mainstream workplace that blocks their mobility, and through a conscious choice, to flex their agency to risk and seek the rewards of entrepreneurial activity. The research can still be regarded as exploratory in nature and it has not been without its challenges, given the relatively small proportion of the disability population who are self-employed or entrepreneurs (13.1%), even though PwD are more likely to be entrepreneurs than other Australians. However, through a mixed method approach and by creating a data triangulation we have seen that entrepreneurs with disabilities, no matter what their type, have a commonality of experience that identifies some significant systemic issues to be addressed in order to make future entrepreneurial activity easier to achieve for this group of people and their significant others.

It is fitting that we conclude the report with the words of the lived experiences of one of these entrepreneurs:

A personal story:

I was injured in 1963 in a motor vehicle accident which left me a paraplegic. There was very little rehab and there was probably a little less expectation on people with disabilities back then in terms of life outcome, social participation and even longevity. I'm very lucky because I was a pretty mobile kid. I was the fastest kid in the wheelchair, and I was able to get around. When I left school, I did business studies there and then a short course in computing. I now work for myself as a private business consultant specialising in helping businesses and associations involved in the supply of assistive technology (aids and equipment). Throughout my working life, the only modification I have needed was the installation of hand controls in my motor vehicle to allow me to get to and from my workplace. I also own a pair of portable hand controls so I can drive hire cars when required. To this day when I meet new people, they're astounded to know I'm married to an able-bodied woman and then they're stunned that I've worked all my life. This is truly surprising whereas to me the assumption should be well, why shouldn't you work?

Having a job is a major enabler of all facets of my life. The income I earn enables me to enjoy a much higher standard of living, it allows me to connect and interact with a broad range of people. Through my work I travel and build relationships and self-esteem. I also feel proud that I am earning a wage and paying tax in Australia rather than having to survive on government payments (Don, PM).

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Appendices

Appendix 1: Questionnaire Survey Responses.

Respondent Descriptives: provides a statistical summary of the socio-demographic characteristics of the respondents to the online questionnaire.

Table 8: Socio-demographic characteristics of respondents

		% of responses
Disability	Person with a disability	91.6%
	Family member or attendant of a PwD	8.4%
Employment Status	Self Employed	48.3%
	Entrepreneur	28.7%
	A person who would like to be self-employed or an entrepreneur in the future	23.0%
Main Disability	Mobility /physical	49.6%
	Speech	0.8%
	Vision	5.0%
	Hearing	17.7%
	Intellectual/cognitive/learning etc.	10.1%
	Mental health	5.0%
	Acquired brain injury/neurological	1.7%
	Other (please specify)	8.4%
	I do not have a disability	1.7%
Cause of Disability	Congenital - I was born with my disability	38.9%
	Traumatic injury or medical condition etc.	28.4%
	Other (please specify)	8.4%
Level of Support Needs	None (I am independent)	27.4%
	Low	38.1%
	Medium	14.3%
	High	13.1%
	Very high (24 hours support)	7.1%
Gender	Female	51.2%
	Male	46.4%
	Prefer not to say	2.4%
Marital Status	Married	59.7%
	Single	40.3%
Number of Dependents	0	41.7%
	1	27.8%
	2	19.4%
	3	5.6%
	4	2.8%
	More than 4	2.8%

Age	Under 20 Years	1.5%
	20-29 Years	16.7%
	30-39 Years	25.8%
	40-49 Years	19.7%
	50-59 Years	31.8%
	60 Years and over	4.5%
Country of Birth is Australia	Yes	77.8%
	No	22.2%
Primary language spoken at home	English	97.2%
	Other	2.8%
Aboriginal or Torres Strait Islander Status	Yes	1.2%
	No	95.2%
	I would prefer not to answer	3.6%
Highest Educational Qualifications	Masters/PhD	21.7%
	University degree (including postgraduate diploma)	26.5%
	Undergraduate diploma or associate diploma	14.5%
	Certificate, trade qualification or apprenticeship	13.3%
	Completed Year 12	8.4%
	Completed Year 10	8.4%
	Did not complete year 10 (completed years 7, 8 or 9)	0.0%
	Primary School	1.2%
	Never went to school	0.0%
	Prefer not to say	2.4%
	Other (please specify)	3.6%
Current Main Employment Status	Looking for work/ unemployed	1.2%
	Retired	1.2%
	Voluntary unpaid work	3.6%
	Full-time education	2.4%
	Part-time paid work	10.8%
	Full-time paid work (30+ hours/wk)	18.1%
	Full pension	6.0%
	Self-employed	24.1%
	Running my own enterprise	26.5%
	Other (please specify)	6.0%

Appendix 2: Typology of in-depth interviewees

Table 9: Typology of in-depth interviewees

	Pseudonym	Gender	Age	State	Disability Type	Typology	Lives with	Supp. Needs	M/ status	Children	Type of business
1	Janine	F	31-64	NSW	Mental health	Anxiety	separated	None	partner	1	Entrepreneur/Manager
2	Brooke	F	31-64	ACT	Mental health	Anxiety	family	None	separated	2	Entrepreneur/Managing Director
3	Dave	M	31-64	NSW	Mental health	ASD/SCI	alone	Low	single	0	Sole trader
4	Jenny	F	31-64	NSW	Mental health	ASD/vision	partner	Low	single	0	Sole trader
5	Julianne	F	31-64	NSW	Mental health	Anxiety	family	nil	married	2	Nascent Entrepreneur
6	Vern	M	18-30	NSW	Mental health	ASD/ADHD	family	low	single	0	Nascent Entrepreneur
7	Josie	F	31-64	NSW	Mental health	Anxiety	alone	nil	single	0	Nascent Entrepreneur
8	Valerie	F	31-64	NSW	Mental health	Anxiety	alone	nil	single	1	Nascent Entrepreneur
9	Adrienne	F	31-64	NSW	Mental health	Anxiety	family	Low	married	6	Sole trader
10	Beatrice	F	31-64	NSW	Mental health	Anxiety	alone	Low	single	0	Nascent Entrepreneur
11	Maurice	M	18-30	NSW	Mental health	ASD/ADHD	family	low	single	0	Nascent Entrepreneur
12	Janet	F	31-64	NSW	Mental health	Bi-polar	family	Low	single	0	Sole trader
13	Glenys	F	31-64	NSW	Other	Diabetes	family	Low	separated	2	Sole trader
14	Martin	M	31-64	VIC	Other	Fibromyalgia	partner	Low	partner	0	Sole trader
15	Adam	M	65+	NSW	Other	Stroke	alone	Low	single	0	Nascent Entrepreneur
16	Fran	F	31-64	VIC	Other	CBI	alone	Low	single	0	Sole trader
17	Hamish	M	18-30	NSW	Other	MS	alone	Low	single	0	Sole trader

	Pseudonym	Gender	Age	State	Disability Type	Typology	Lives with	Supp. Needs	M/ status	Children	Type of business
18	Liz	F	31-64	NSW	Other	CHD	spouse	Low	married	0	Entrepreneur/partnership
19	Wendy	F	31-64	NSW	Daughter has ID	NIL	family	Nil	married	2	Sole trader on behalf of daughter
20	Liam	M	31-64	NSW	Sensory/Hearing	Hearing impaired	family	None	married	1	Sole trader
21	Sarah	F	31-64	NSW	Sensory/Hearing	Hearing impaired	alone	Low	single	0	Sole trader
22	Jack	M	31-64	NSW	Sensory/Vision	Vision impaired	partner	Low	partner	0	Sole trader
23	Neal	M	31-64	WA	Sensory/Vision	Vison impaired	spouse	Low	married	2	Sole trader
24	Kenan	M	31-64	SA	Sensory/Speech	CP	partner	Low	partner	0	Sole trader
25	Gregor	M	31-64	NSW	Physical injury	Leg injury	family	None	single	0	Sole trader
26	Pauline	F	31-64	QLD	Physical injury	Leg injury	family	None	married	1	Sole trader
27	Heath	M	18-30	TAS	ID	Congenital condition	family	Low	single	0	Sole trader
28	Isabel	F	18-30	TAS	ID	Congenital condition	family	Low	single	0	Sole trader
29	Alex	F	18-30	QLD	ID	Congenital condition	family	Low	single	0	Sole trader
30	Dave	M	31-64	NSW	Physical/Mobility	SCI/ABI	family	Medium	married	0	Entrepreneur/Manager
31	Hudson	M	31-64	SA	Physical/Mobility	SCI	spouse	Medium	married	1	Sole trader
32	Bill	M	31-64	NSW	Physical/Mobility	SCI	spouse	Medium	married	3	Entrepreneur/Managing Director
33	Nate	M	31-64	NZ	Physical/Mobility	SCI	spouse	Medium	married	1	Entrepreneur/Managing Director
34	Lillian	F	65+	NSW	Physical/Mobility	Post-polio	alone	Low	single	2	Sole trader
35	Gus	M	65+	NSW	Physical/Mobility	SCI	spouse	Medium	married	3	Entrepreneur/Manager
36	Stan	M	31-64	NSW	Physical/Mobility	SCI	family	Medium	single	0	Sole trader

	Pseudonym	Gender	Age	State	Disability Type	Typology	Lives with	Supp. Needs	M/ status	Children	Type of business
37	Don	M	31-64	NSW	Physical/Mobility	SCI	spouse	Low	married	0	Entrepreneur/Manager
38	Leigh	M	31-64	NSW	Physical/Mobility	SCI	spouse	Medium	married	2	Sole trader
39	Judy	F	31-64	NSW	Physical/Mobility	SCI	alone	High	single	0	Sole trader
40	Gail	F	31-64	QLD	Physical/Mobility	SCI	spouse	Medium	married	1	Entrepreneur/Manager
41	Lucas	M	31-64	NSW	Physical/Mobility	SCI	spouse	Low	married	0	Entrepreneur/partnership
42	Tom	M	31-64	NSW	Physical/Mobility	SCI	spouse	Medium	married	2	Sole trader
43	Pamela	F	31-64	NSW	Physical/Mobility	Congenital condition	family	Low	single	0	Entrepreneur/Manager
44	Joan	F	31-64	NSW	Physical/Mobility	Congenital condition	alone	Low	divorced	1	Sole trader
45	Taylor	F	31-64	VIC	Physical/Mobility	ABI	alone	Low	single	0	Sole trader
46	Deanne	F	31-64	NSW	Physical/Mobility	Amputee	partner	None	single	0	Sole trader
47	Ivana	F	31-64	TAS	Physical/Mobility	Degenerative cond	alone	Medium	single	1	Entrepreneur/partnership
48	Kate	F	31-64	NSW	Physical/Mobility	Degenerative cond	partner	Medium	partner	0	Sole trader
49	Michelle	F	18-30	NSW	Physical/Mobility	Degenerative cond	family	High	single	0	Entrepreneur/partnership
50	Caroline	F	18-30	QLD	Physical Mobility & speech	CP	mother	Low	single	0	Sole Trader
51	Mack	M	31-64	NSW	Physical Mobility	CP	alone	Low	single	0	Entrepreneur/partnership
52	Joe	M	18-30	VIC	Physical Mobility & speech	CP	alone	Medium	single	0	Sole trader

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