A ‘Tripadvisor’ for disability? Social enterprise and ‘digital disruption’ in Australia

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Abstract

We explore how social enterprises can use platform technologies to plug 'informational gaps' in the provision of disability services. Such gaps are made more apparent by policies promoting self-directed care as a means of giving service users more choice and control. We use a case study of a start-up social enterprise seeking to provide a TripAdvisor style service to examine the potential for social innovation to 'disrupt' current models of service. The case study suggests that any disruptive effects of such changes are not due to new digital technology *per se*, nor to novel platform business models, but rather rest in the manner in which the moral orders which justify current patterns of social disablement can be challenged by social innovation.

Keywords: digital social innovation; disability, digital disruption, social innovation.

Introduction

In this article we explore how social entrepreneurs use digital platform technologies to enable service users to review and rank service providers in the disability care sector. This type of platform has more commonly been associated with the private sector and ‘disruptive innovations’ pursued by the likes of Trip Advisor, Uber and AirBnB to provide peer-to-peer (P2P) links that connect users and enable them to share both information and other resources (Botsman, 2011). In contrast to other citizens, people with a disability face multiple challenges in finding the information they need to access services, whilst service providers know little about the personal needs and requirements of their customers (Trigg, 2014). Moreover, these ‘informational gaps’ (McLoughlin, Bayati-Bojakhi, Purushothaman, & Sohal, 2014, Trigg, 2014) are increasingly being exacerbated by policy shifts, now prevalent in many countries, that aim to move away from ‘provider-centric’ delivery of services by creating a market for consumer-directed care based on an ‘economic model’ of the service user as a ‘consumer’ (APC, 2011).

In the past, disability has been viewed in terms of a ‘medical model’ of personal deficit, illness, or pathology best addressed in a paternalistic and provider-centric manner where the state essentially makes choices for and on behalf of service users who are able to exercise little control. More recently ‘disability’ has been viewed as socially defined by physical (e.g. building design) and cultural barriers (e.g. employer attitudes) (Oliver, 1992; Shakespeare, 2006). This ‘social model’ emphasises that it is cultural and physical conditions which are disabling, not the fact that a person cannot walk or has an intellectual disability. In this way current policy trends might be seen as assuming that such barriers can be more effectively overcome by empowering those with a disability as an ‘economic consumer’, creating at the same time opportunities for social and other entrepreneurs to provide new services and thereby reducing the role of the state as a service provider.

We begin by reviewing the literature on digital social innovation in the care sector, in particular as it pertains to on-line review and ranking platforms. Second, we outline the broader policy context that has given rise to the emergence of a new economy of disability care in Australia and the potential ‘disruptive’ threat of new digital social enterprises. Third, we provide a longitudinal case study of a start up social enterprise providing a ‘TripAdvisor’ style service for disability care service consumers. Finally, we consider how digital platforms might play a role in supporting the peer-to-peer sharing of lived experience and challenge the socio-political power imbalances and ‘moral orders’ which give rise to social disablement.

Digital social innovation, and the disability care sector

‘Digital social innovation’ has been defined as ‘a type of social and collaborative innovation in which innovators, users and communities collaborate using digital technologies to co-create knowledge and solutions for a wide range of social needs and at a scale that was unimaginable before the rise of the Internet’ (Bria et al, 2014, p.1). For many, this type of innovation is a potential source of ‘disruption’ of conventional provider-centric models by enabling users to interact with each other to satisfy their informational and other needs, the hallmark it has been claimed of a new ‘sharing economy’ (Botsman, 2011). In the disability sector, where basic consumer rights have long been denied service users, such developments have enormous potential (see e.g., Bria et al., 2014; Desouza & Smith, 2013; Hutchinson, 2016; Wojtak & Stark, 2016; Sammut, 2017).

A key enabler of such developments are digital platforms which allow the on-line P2P sharing of information and other resources. P2P platforms exploit the potential of using and sharing data through social media and other Internet-based applications. Leveraging this technology has provided the basis for both for-profit and not-for-profit enterprises to enjoy sometimes-remarkable growth over short periods of time (Belk, 2014; Kennedy et al., 2017). This has been achieved, in part, through the development of novel business models that create a two-sided marketplace based on 'crowd-sourced reputation protocols' (Kennedy et al., 2017, p. 1). Typically these take the form of peer-reviews through which service users and service providers receive and build a public rating which provides the basis for trust and reputation in the market place.

However the term P2P, which is usually traced back to computer architectures and the founding of Napster MP3 file sharing service in 1999, is often used ambiguously. Much hinges on how to define a 'peer'. For example in what sense are companies, individuals or households all peers? Similarly, what is being exchanged or shared between peers – information or other resources such as goods, services, and labour? Further is this being shared or exchanged in a paid, rented, or gifted basis? Given this ambiguity, P2P platforms have therefore developed in a variety of forms such as asset-intensive (e.g. AirBnB), labour-intensive (e.g., TaskRabbit) or service-focussed (e.g. Uber) (Cadagone, Biagi and Abadie, 2016, p7), whilst many P2P marketplaces platforms have subsequently become dominated by larger players (e.g. e-Bay) (Einav, Farronato and Levin, 2016; Hira and Reilly, 2017).

Customer review sites such as TripAdvisor claim P2P status on the basis that they enable the sharing of information about services by users which creates a more level playing field where individuals can interact with providers as (something more like) peers. '

Within the care and public sector in general there has been considerable enthusiasm regarding the potential for P2P platforms to disrupt hitherto provider-centric and state controlled approaches to the delivery of services (e.g., Lober & Flowers, 2011; Bria et al., 2014; Mansell, 2015). A range of digital social innovation initiatives have emerged in the USA, Australasia and Europe, seeking to develop platforms to enable crowd-sourced and peer-based knowledge creation (see e.g., Bria et al., 2014; Desouza & Smith, 2013; Mason, Barraket, Friel, O'Rourke, & Stenta et al., 2015). Proponents in the care sector claim that such platforms have the potential 'Uberize care' (O'Reilly, 2016; Wojtak & Stark, 2016) and support, 'a peer-to-peer network of actors who work together to improve value… around system-level challenges... to mobilise problem identification, solutions, and the kind of engagement required to select and buy into solutions' (Mansell, 2015, p73).

On the other hand, critics have also highlighted more negative aspects of P2P business models and the sharing economy ranging from: their use as a vehicle for tax evasion and avoiding regulatory compliance; encouraging the 'hollowing out' of tourist cities and undermining the viability of public transport; undermining labour standards and trades unions; and the creation of informational monopolies and that reinforce rather than challenge informational asymmetries (Codagone, Biagi &Abadie, 2016; Hira and Reilly, 2017; Slee 2017; Selloni, 2017). In considering the potential for P2P platforms in the care sector there are therefore good reasons to be cautious. First, assumptions that there is a latent demand for user-generated content and of a willingness and ability to share data for this purpose need to be questioned. For example, in the UK a website called *NHS Choices* was implemented to provide service users with more information about health and care providers, including services such as residential care homes, which users were able to supplement with their own ratings. Examination of this part of the website as part of our benchmarking exercise (see below) revealed that, out of 100 care homes, only five homes had one or more user comments. Similar observations were made in this exercise concerning the level of consumer comments in the cases of other platform websites, including *yourcarehome.com*, which covers a range of not-for-profit and commercial providers, and *Shop4support*, set up by a UK national charity involved in providing self-directed support.

Second, there is a general question of whether on-line user reviews are reliable and accurate. In the UK, the Competition and Markets Authority examined on-line reviews and endorsements across all economic sectors, following concerns that ‘fake reviews’ were being posted to sites, that the hosts of such sites were not publishing ‘negative reviews,’ and that some provider businesses were paying for endorsements where this was not being made evident to consumers (Competition and Markets Authority (CMA), 2015). Even where there is no intention to deceive, producing reliable and accurate reviews of complex service encounters is difficult. According to Trigg, ‘assessing the quality of services of any type is problematic’ since quality is ‘defined as much by the process of providing the service’ as ‘the final outcome’ and involves an interaction between the providers and users where ‘views will also be affected by the user’s own impact on the service as a co-producer and by their expectations of the service’ (Trigg, 2014, p365).

Third, there are challenges in assessing market demand for and predicting volume of use of on-line services, and a more basic questions of defining who exactly is ‘the customer’ and how the market should be segmented. Unlike say the market for hotel services, the social care sector is characterised by often long-term ‘relational contracting’, rather than short term contracts, or contracts with easy exits. Moreover, care is typically provided through a complex division of labour involving both paid and unpaid resources - e.g., relatives and support workers. This division of labour is not always visible or formally recognised, and is subject to gendered, class and cultural factors, which results in significant diversity in areas such as social care (Glucksmann, 1995; Wilson, Maniatopoulos, Martin & McLoughlin, 2012). These complexities mean that identifying customer needs, and the technological supports to meet them, is far from straightforward (Wilson et al., 2017), whilst there are related issues associated with social disablement concerning both access to the Internet and the digital literacy needed to use computers, mobile phones, and other means of accessing digital information.

The New Economy of care for disability and the prospects for ‘digital social innovation’ in Australia

In Australia, one in five citizens lives with a disability, many needing substantial and ongoing assistance in their everyday life (ABS, 2012). The inadequacy of disability support provision finally received official recognition in 2011, in a landmark report that famously concluded that ‘current disability support arrangements are inequitable, underfunded, fragmented, and inefficient, and give people with a disability little choice’ (APC, 2011, p5). In 2013 the Australian Federal Government began the trial implementation of the National Disability

Insurance Scheme (NDIS) to replace the long-standing ‘provider-centric’ state welfare model, widely regarded as a ‘broken’ system (APC, 2011). This ‘once in a lifetime’ (Bonyhady, 2016) reform is intended to transform the experience of those with a disability by providing them with choice and control over the services they need whilst, in turn, requiring care providers to compete and improve their services (Fisher, et al, 2010). The government agency charged with rolling out and operating the scheme has endorsed the view that such improvement will also require novel business models and digital technologies in order to enhance consumer empowerment offering opportunities for new market entrants (National Disability Insurance Scheme (NDIS, 2016).

[TABLE 1 ABOUT HERE]

The NDIS is based on an actuarial insurance model and involves a near AUD22 billion investment over a 5-year roll-out period (2015-2019). The scheme broadly reflects a variety of international efforts to personalise care services and make them more responsive to needs by recasting the citizen as an ‘economic consumer’ willing and able to assert their rights through choice-making actions (APC, 2011, Fawcett & Plath, 2014; Fotaki et al., 2008). A key feature of the NDIS is the introduction of individual or personal budgets to fund care needs of those with a disability (Yates & Alford, 2016). This replaces the existing approach, whereby budgets for care services had been allocated to state governments who either provided services themselves and/or contracted them out through a system of ‘block funding’ to care service providers (a diverse group drawn from the private, voluntary and community sectors). These providers were then subject to varying degrees of quality audit and regulation to ensure the fitness for purpose of the services provided and compliance with statutory and other requirements.

One effect of the NDIS, it is claimed, is to create a ‘quasi-market’ that effectively ‘manufactures’ social enterprises to meet new market demand as traditional funding streams, both public and philanthropic, switch to market-oriented impact investing, which favours outcomes-based funding models (Barraket, 2016, p73). At the same time, incentives for new entrants to provide novel service offerings and new means of delivery are created. The market also challenges and places new demands on existing service providers. In particular, they are required to become more customer-focused, to develop novel business models, to use new technology to underpin service innovations, and to operate in a more business-like way in order to compete. This has promoted rapid sectoral restructuring with many mergers and acquisitions, as existing providers have sought to position themselves for the NDIS and to face up to the prospect of new entrants into the market. One indicator of this new dynamic is the rush of existing care providers to register with the National Disability Insurance Agency (NDIA) (responsible for running the NDIS) to ensure they will be eligible to offer services to clients funded by the scheme. The most recently available figures show that there are now 14,271 registered providers (NDIS, 2018).

However, there are also indications that the new market is struggling to come to terms with the challenges it confronts. An early review of the operations of the NDIA observed, whilst noting that effective use of data (and the computing and information systems to provide it) were essential to the success of the scheme, that the existing systems were not ‘fit for purpose’ (Whalan, Acton & Harmer, 2014: 20). What is more, the online portal, the main interface for clients with the agency, initially suffered from ‘system defects’ and ‘gaps requiring further development,’ although these did not prevent the implementation of a ‘minimum viable product’ (PwC, 2016:7). More recently, the NDIA engaged in a much-reported showcasing of proposals for its website, featuring an avatar - ‘Nadia’ - voiced by Oscar Award-winning Australian actor, Cate Blanchett. The so-called ‘Nadia Project’, developed in collaboration with a New Zealand high-technology company, uses artificial intelligence technology to answer website users’ questions about the scheme. However, reputable news reports now suggest that this innovation is some way from being realised (Probyn, 2017).

Similarly, it appears that participants in the scheme and registered service providers are struggling to adapt. For example, many participants reported in an independent review of their initial experiences of the scheme that they found that the portal was not ‘user friendly’ and that they were having ongoing problems with access, which had ‘led to difficulties in accessing care and resources, as well as frustration, stress and an increased administrative burden for service users and carers’ (Warr et al., 2017, p37). A recent annual *State of the Disability Sector* report published by the peak body for non-government disability service organisations observed that, whilst the system and providers are under ‘immense pressure,’ early experience of the scheme has underlined ‘the value of data.’ (National Disability Services, 2017, p2).

All of this highlights some key questions and issues facing new entrants to the disability care marketplace. What forms might on-line platforms and associated business models take? What kinds of vision and motivation will lead social entrepreneurs to exploit the new opportunities offered by the new economy of care? What challenges will be faced and how will consumers and existing service providers respond? In the remainder of this paper we explore these issues through a case study of a start-up social enterprise seeking to leverage digital platforms to provide a new service offering intended to enhance consumer choice and control.

Research design and methods

Disability research has been accused of being both intrusive and as having little relationship to or impact on the needs of those with a disability (Oliver, 1992). Proponents of a more ‘emancipatory perspective’ seek to address these issues by combining a more phenomenological approach which seeks to capture the lived experience of those with a disability with socio-political perspectives that critique how power imbalances are the cause of disablement (e.g. Stone & Priestly, 1996). From the point of view of research design and emancipatory approach requires considering disablement as a social construct whilst adopting an overtly pro-emancipatory rather than the neutral standpoint traditionally valued in the positivist paradigm (Stone & Priestly, 1996; Oliver, 1992). The aim is to create benefit for people with disability, to give them control over research, and to adopt approaches to engagement and research methods which facilitate this.

Accordingly, our case study research was conducted through a close engagement between the academic research team and the social enterprise concerned over a two-year period in which we sought to develop a relationship consistent with the principles of ‘engaged scholarship’ aimed at the ‘joint production of knowledge (Van de Ven, 2007). Our case study was identified following an initial contact made by one of the enterprise founders with the lead author of this article. The idea of incorporating the, at that stage, nascent enterprise as a case study within a broader study of policy change around information governance in the social care sector in Australia and New Zealand was discussed. Once funding was obtained a protocol was agreed for including the enterprise in the study as an example of how social enterprises might offer new an innovative solutions to care service innovation. Consistent with this approach, one of the enterprise founders (also an academic) is a co-author of the paper contributing both to the writing and offering critical insights and evaluations of academic interpretations from the point of view of someone deeply embedded in the policy and practice of the disability sector.

Given our unit of analysis was the enterprise rather than its customers, people with a disability were not directly involved in the research (although some of the enterprise’s members did have a lived experience of disability). The nature of our engagement meant, however, that interests of the enterprise’s customers were foregrounded. For example, we have not included examples of consumer reviews in this article. After due consideration the academic team agreed with the enterprise that this would be inappropriate given that, even though the reviews are in the public domain, customers had provided them to the enterprise without giving explicit consent for their use for another purpose i.e. academic research.

A longitudinal approach was adopted to document the emergence over time of the enterprise’s development. During this process we sought to understand the development of the new service offering; document the process of developing, launching and marketing the digital technology platform; provide opportunities for the enterprise founders to get feedback on their business model (facilitated through interaction with an MBA class); and, co-develop a teaching case to educate Australasian public servants. Data were collected via interviews with one of the founders of the organisation and another key staff member and from analysis of a range of internal documents, reports and business models provided by the enterprise. The academic team had numerous informal conversations with the founder, documented in field notes, to monitor the development of the enterprise over the period of study. In addition web-site content was reviewed regularly as this evolved over-time.

Given the objective to conduct a longitudinal narrative data was analysed manually to construct an account of the motivations behind the start-up, the challenges faces, the responses of users and providers and future prospects for the development of the business, in particular in relation to ‘disruptive’ impacts. The case study was drafted by the academic team members and circulated to the enterprise for validation and feedback. Finally, contextual information on developments in the sector was drawn from the broader study in which the case was nested which involved 23 interviews with a mixture of social entrepreneurs, public officials and other stakeholders and a benchmarking exercise reviewing comparable developments in the UK.

Case study: a ‘TripAdvisor’ for the disability sector

There are an estimated 20,000 social enterprises in Australia (Barraket, 2016), of which 38% are less than five years old (Barraket, Mason & Blain, 2016). Within this population there is an increasing interest amongst new start-ups in social enterprise, social disadvantage, and impact, with the disability sector in particular providing a focus (Wulff, 2017). Notably, 20% of employees in the sector are people with a disability, which is double the rate of disability employment in the economy as a whole (Castellas, Barraket, Hiruy & Suchowerska, 2017). Our case study is a for-profit start-up social enterprise established by two career social workers (see Table 2 for a chronology of key events in the development of the start-up). The enterprise is illustrative of a handful of first-to-market start-ups that have emerged in Australia in anticipation of the roll-out of the NDIS. At the time of writing, the enterprise had five equivalent full-time staff.

The platform and business model

The platform developed by the enterprise works for users in a similar way to Trip Advisor by providing a means through which disability service users can share information about their experiences that can inform subsequent choices, and thereby provide them with more control over the manner and nature of services provided (in part by providing service providers with information about how they can improve their service offer). When a customer uses a service, they can choose to write an anonymous review about their experiences and publish this on-line using the platform (this is currently web-based). The reviews are organised for maximum accessibility and are searchable, allowing consumers to compare services within different categories (such as brokers who assist in managing budgets and finding service providers, car modifications, therapies or accessible holidays). All reviews are moderated to ensure they are informative, independent and accurate (see Figure 1). Moderation is conducted against guidelines which are designed retain the voice of the individual while also reducing the risk of defamation, supporting factual correctness, identifying and excluding reviews which are written to harm competitors, create unreasonable expectation of beneficial treatment, or make accusations of criminal conduct. The website also provides information and guidelines that help users understand how and why to write a review.

[TABLE 2 ABOUT HERE]

The basic on-line catalogue of service providers is sourced from the list of registered providers published and maintained by the NDIS. In similar fashion to the business model widely used by online directories (such as *TrueLocal* and *Yellow Pages*), providers can ‘claim’ their listing and are offered the opportunity to become subscribers for a one-off set up and an annual fee. Subscription allows a provider organisation to customise its profile and the information about its services that appears in the directory. Subscribing providers are also able to respond to reviews, and to access aggregated data that allows them to better plan, develop and grow their services in the new care services marketplace.

[FIGURE 1 ABOUT HERE]

Motivation and ‘vision’ for establishing the platform

The founders’ practice experience as social workers had made them all too aware of the challenges and problems faced by those with a disability, their families and carers in finding accurate, timely, reliable information about the availability of care services. Given this experience and knowledge, their idea was to develop an on-line platform to plug these informational gaps, which they judged would be further exposed as the NDIS was rolled out. ‘What if’, as one of the founders put it in describing the genesis of the idea, ‘people with a disability had access to the same type of information offered by P2P platforms in sectors such as hotels and transport?’

The initial vision behind the enterprise was twofold: changing the experience of people with a disability by fostering co-operative information-sharing between consumers, service providers and others, and helping empower individuals to control their own lives. This would enable consumers and providers to access, update and share information and, in particular, to share ratings, reviews and responses to user experiences. Moreover, the introduction of the NDIS presented an ideal opportunity to challenge the status quo by giving consumers access to on-line information that would allow them to exercise choice and control in an informed and meaningful way. Additionally, this meant that providers would be incentivised to improve their service offerings, differentiate these offers from those of competitors, and connect more directly with consumers.

Significantly, these goals were founded on a desire to achieve equal rights for people with a disability by establishing their place as active and empowered consumers in the new economy of care. The founders envisioned a society in which all people with a disability were supported by ‘relevant, reliable services’ that were ‘designed around consumer needs’ (Interview: team member). Underpinning this vision were two core value propositions. Consumers would be offered the information they needed to make informed choices about their care, to assert their consumer rights, and to provide feedback to care providing organisations about their experiences. Meanwhile, providers would be offered market exposure and the opportunity to both leverage service improvements through consumer feedback and create ‘social proof’ of their services’ efficacy.

These propositions reflected the founders’ conviction that it was primarily the assertion of consumer rights in a marketplace – rather than political advocacy – that would bring equality of opportunity to people with a disability. These ideals were also given expression in a range of key performance indicators that could in due course be used to assess the organisation’s progress. These included: demonstrations of consumer engagement; demonstrations of service provider investments in consumer rights, quality, and transparency; improvements in consumer experience as evidenced through reviews of service quality and experience; key partnerships with advocacy groups to advance the interests of people with a disability with policy-makers and government; and, a target that, as the enterprise grew, over 50% of voluntary or paid employees would be people with a lived experience of disability.

Challenges faced in implementing the platform

The enterprise website went live for the NDIS state trial site in April 2015, and across the rest of the state in January 2016. By 2017, the online directory listed services available to people with a disability in two of Australia’s states and one of its two territories. Eventually, it is intended to offer the directory to clients nation-wide, as the full NDIS scheme roll-out proceeds. During the initial implementation period, the founders faced two challenges. First, building their own business skills and the technical capabilities of the business. During 2014 they participated in various programs for social enterprise start-ups and in an NDIS ‘accelerator’ program. They also began working with a software developer to design the platform interface, and secured seed funding for the pilot website from one of Australia's major banks, via a social enterprise education institution. Second, considerable effort was also put into building relationships with existing service providers and other disability sector stakeholders as well as exploring further options for attracting grants, donations and other funding. Around this time the organisation recruited another team member with a deep and broad experience in the disability sector, advocacy, and business worlds – as well as lived experience of disability and a penchant for ‘disrupting and shaking things up’ (Interview: team member).

In fact, aligning the interests of service users and providers was recognised as a significant and ongoing challenge, in particular helping service providers to ‘understand that what we do is assist them to become customer-facing and until they do that, they won’t succeed in this new [NDIS] world’ (Interview: team member). With this challenge in mind, whilst the digital platform was being designed and refined, a marketing strategy was also developed which aimed to communicate the enterprise’s value propositions through five channels. First, users would be drawn by the website content itself, including blogs written by members of the disability community on topics relevant to consumers and providers. Second, resources would be provided to subscribing care providers enabling them to collect reviews and generate consumer demand by providing information about their services through the platform. Third, aggregated data on how consumers used the website would be offered to service providers, giving them insights into market trends and developments. Fourth, ‘community ambassadors’ would be trained to collect reviews and attend events to promote the website. Finally, the enterprise would continue to develop and maintain its online presence through social media, data analytics and Google Adwords campaigns.

Responses of consumers and service providers

The enterprise’s founders had always recognised that uptake and use of the service would depend on consumers having access to the website and for the information to be appropriately accessible for them to use it. In recognition of the specific issues facing people with a disability and the community of care around them, the enterprise works with disability support groups to provide education on consumer rights and information about making complaints, as well as contributing to the general up-skilling of consumers in giving feedback in a P2P environment. In turn, this outreach activity has helped generate new reviews and new reviewers. In the first months after going live, website visits and use grew steadily, site traffic doubled every 6 months and the user base expanded significantly each quarter. During 2016 the rate of review submission also grew strongly, doubling content over six months of live operation, and at the time of writing over 1,000 reviews have been published on the web site.

Initially at least and in contrast to consumers, service providers treated the enterprise's value proposition with some suspicion, perhaps fearful of the 'disruptive' threat posed to them as incumbents. A typical response was, 'we can't believe [you] are doing this to us' (Interview: team member). However, over time, there appears to have been a growing understanding and acceptance of the opportunity that the enterprise represents to service providers, assisted in part by the enterprise winning a high-profile industry award for its new start-up 'pitch'. Following this, there had appeared to be a 'sea change' in existing provider attitudes, and by mid-2016 more than 800 organisations had been listed on the website, many of which had claimed their listings.

Future growth and development of the platform

The founders considered the platform and business model had potential to evolve in a number of ways to enable the future growth and development of the business and its service offers. Even if the enterprise were to remain solely focused on the disability sector, there was the opportunity to reach a much larger pool of consumers beyond those eventually projected to be eligible for NDIS funding. The website might therefore extend its coverage to include other disability schemes – for example, by catering for people who acquire a disability through workplace or transport accidents.

Moreover, many service providers (especially larger organisations) typically offered services to many citizens beyond people with a disability, such as young adults and older people. There was therefore, scope to extend coverage to clients with other social care needs or to other service providers not in the care sector, such as those providing leisure, education or transport services. If those clients too became reviewers and consumers of P2P reviews, the site would be helping to improve the experiences of people with a disability in a much broader range of settings than currently envisaged, such as when visiting museums or using public transport. At an even more aspirational level, the platform could provide a basis for peer-to-peer provision of services (by people with disability for people with disability) and thereby further reducing informational asymmetries.

Other longer term possibilities included leveraging a growing repository of aggregated data about both consumers and providers of services to inform such things as sector-wide planning and policy or the development of consumer-focused business strategies by care-providing organisations – particularly by smaller operators threatened by the wave of mergers and acquisitions that had swept through the sector. With appropriate de-identification and consent, data might be offered as ‘open data’ to other interested parties or linked to other data to form ‘big data’ sets which, as in other sectors, could help generate a new understanding of consumer needs and requirements and how these could be addressed.

However, these opportunities notwithstanding, the enterprise had to date been developed on the back of ‘sweat equity’, investment, grants, donations and the contributions of volunteers. Whilst this approach had proved successful in the start-up phase of the business (by late 2016 the two founders were able to pay themselves a modest salary for the first time) the challenge was now to improve revenue flows through subscriptions, thereby reducing reliance on such *ad hoc* funding. This highlighted a broader question concerning the longer time viability of the current business model and whether to survive and grow the enterprise might need to seek out revenue from advertising or other sources which might be regarded as ‘at odds’ with its ‘social enterprise’ ethos and commitment to empowering consumers.

Social enterprise, digital disruption and moral orders

The idea of disruptive innovation, which has its origins in the computer peripherals sector, has seemingly become all pervasive in recent years. When applied to the care sector the theory suggests that the complex and high cost business models adopted by care providers are vulnerable to new entrants who use new technologies to provide new services which deliver higher quality outcomes at lower cost to service users (or their funders) (see Christensen, Grossman & Hwang 2009; Hwang & Christensen, 2012). However, as the originator of the theory of disruptive innovation has recently noted the ‘core concepts have been widely misunderstood’ and many of its key insights ‘frequently misapplied’ (Christensen, Raynor & McDonald, 2015, p. 46). In particular there has been a tendency to see the source of disruption as residing in the characteristics and capabilities of digital technology, rather than the new business models that provide a basis for delivering lower cost, higher quality care more efficiently and conveniently (Christensen, Grossman & Hwang 2009; Hwang & Christensen, 2012). In thinking about how digital innovation might transform the care sector, therefore, it is important from the perspective of disruption theory to consider alternative forms of business models that shape how digital technologies are implemented and used. In the case of the care sector, disruptive innovation theory has pointed to a need to clear up the poorly integrated, complicated and muddled models that dictate how care services are provided, and to develop more models which, *inter alia*, exploit the affordances of P2P networks to allow the sharing of user-generated content (Christensen et al., 2009).

However, the relevance of the theory of disruptive innovation to the care sector in particular and to public services more generally has attracted considerable criticism. For critics, the digitalisation of the care sector is not reducible to a question of selecting and applying the right business model that makes the adoption and use of digital technology both worthwhile and workable. In the delivery of care services, it is argued, there are more than just financial incentives at stake and the values and identities of those providing and receiving care are not the same as those driving business decisions (see e.g., Lepore, 2014). To be fair, proponents of disruptive innovation theory have also begun to question whether people in care and related sectors always 'behave as *homo economicus* or purely rational beings,' recognising that innovation challenges deeply embedded identities around the roles of service users and providers which means that the merits of digital innovation are not just judged as a matter of economic 'utility' (Christensen et al., 2013, pp. 4-6). Rather, the implications of digitalising aspects of the relationship between users and providers go beyond the disruptive effect on the technical or economic division of labour underpinning these roles and the relationship between them. That is, digitalisation strikes at what American sociologist Everett Hughes (1951) called the 'moral division of labour' which defines the rights, roles and responsibilities of professional carers in making decisions for and on behalf of their clients (see McLoughlin et al., 2017).

As we have noted, it is only recently that the idea that people with a disability should have equal rights has acquired widespread legitimacy. This has led to a shift in their relationship with service providers and other professionals from one of receiving benevolence (the ‘medical model’), to one where they are able to exercise the same consumer rights as to how and who meets their support needs, as other members of society are able to do to meet their needs for goods and services. In this sense, the division of labour between the provider of care and the recipient can be seen as a form of moral order which is used to justify (or challenge) the rights, roles and responsibilities of each party and to legitimate the institutional relationship between them (Boltanski & Thévenot, 2006). From an emancipatory perspective the potential for ‘digital disruption’ is therefore more than a technological or economic effect but something which challenges the existing ways in which cultural and physical phenomenon create social disablement.

In considering the nature of the disruption being pursued by our case study start-up it is therefore interesting to note that the enterprise does not justify its claim to ‘disruptiveness’ in terms of the innovation involved in the use of digital platform technology itself. Neither, as a for-profit organisation, does it see its business model as the source of disruption in exploiting the new quasi-market created by the NDIS. Rather, the enterprise’s claim to disruptiveness lies in building new collaborations and partnerships with both consumers – working with them to build the capacity to review service offerings based on their lived experience – and with service providers – by assisting them to understand how P2P data can inform the transformation of their organisations that is required to operate in the new care marketplace. The enterprise founders justify this approach by referring to the need for ‘anti-oppressive affirmative action’ which questions the suitability of paternalist approaches and deliberately refers to service recipients as ‘consumers’ because it, ‘defines them by their service use rather than by any physical, intellectual or other deficit' (internal document). Moreover, the P2P platform provides a powerful means through which users can document their lived experience as 'economic consumers' and collectively share information on how to exercise choice and control in practice.

Conclusion

The Australian NDIS programme represents an important experiment in the redistribution of the control of resources towards people with a disability, empowering them in the emerging new economy of care. In this context, the creation of new P2P flows of information, associated with the notion of a sharing economy, has the potential to overcome at least some of the informational problems of previous welfare and emerging market mechanisms, and perhaps decisively changing the established power and moral order which underpinned them. However, any view of digitalisation as automatically empowering within a market context is partial and limited by a narrow view of information as simply a resource that can, with training and support, be acquired and deployed. Rather, social innovation in the disability sector requires active engagement on the part of social enterprises in building collaborations and partnerships which address power asymmetries and the moral justifications which underpin them - what Wilson et al. (2012) refer to as 'innovating relationships' rather than just technology or business models.

In this sense, the key role of social enterprise in the context of the NDIS may well be to disrupt 'cognitive frames of reference around markets and issues' in order to deliver greater social benefit and ensure the principles of choice and control at the core of the scheme can be enacted in practice (Nicholls & Murdock, 2011, p. 4). We recognise however that to fully explore such propositions requires more extended study of digital start-ups as they cope with the inevitable challenges to their growth and development. We also acknowledge that the 'voice of the consumer' needs to be examined more directly than we have been able to do in our study. It would therefore be appropriate for further research to explore both the longer term development and survival of digital social enterprise and to examine from a user viewpoint whether and how web-based platforms provide an empowering way of articulating their lived experience of disability.

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Table 1: Disability Policy and. Key Events in Australia 2008-17

Date	Event
2008	- Ratified *United Nations Convention on The Rights of Persons with Disabilities* (July)
2011	- Australian Productivity Commission report *Disability Care and Support* (August)
2012	- Prime Minister announces commencement of scheme for July 2013 (April)
2013	- *National Disability Insurance Scheme Act* (March) - Federal Budget commits AUD14.3billion to implement scheme (May) - Three-year trial of scheme begins (July)
2014	- NDIA capabilities review declares ICT systems ‘not fit for purpose’ (January)
2015	- National Disability Insurance Scheme (NDIS) trial period
2016	- National roll-out of NDIS commences (July) - MyPlace portal goes live (July)
2017	- ‘Project Nadia’ trials postponed (September) - Australian Productivity Commission confirms scheme cost estimates accurate (October) - Quarter 1 2017-18 report (pub. September) shows scheme has 112,785 participants and over 10,000 registered service providers
2018	- Full scheme transition period
2020	- Target date for full scheme realisation

Table 2: Key events in development of Case Study Enterprise

Year	Event
2014	• Idea for the enterprise emerges from discussions between founders • Decision to build a P2P platform to plug new 'informational gaps' • Work starts with software developer to build content and flow for website
2015	• January - (ongoing): New members begin to join team, increasing experience and expertise • March - June: Founders undertake social entrepreneurship training and attend the School of Social Entrepreneurs' NDIS Accelerator program • April: website goes live as a six-month pilot • August: Founders undertake further social entrepreneurship training and secure external funding of AUD10,000 from major Australian bank • Relationship building with NDIS pilot site in regional Victoria commences • Analysis phase for website (3 months) • November: Enterprise wins award for pitch at major sector conference
2016	• January: enterprise starts trading in Victoria, expands across the state and starts selling "pre-subscriptions" in New South Wales • Funding for founders to undertake overseas study tour received from major Australian bank • Further social entrepreneurship training • December: Soft launch of website in New South Wales
2017	• February: Contracts secured to pilot website with two state disability insurance agencies • March: Official launch of website in New South Wales • July/August: Contracts started • October: Soft launch of website in the Australian Capital Territory