CSA GROUP RESEARCH

THE RISE OF THE SHARING ECONOMY

EXPLORING STANDARDS-BASED SOLUTIONS IN A CHANGING MARKETPLACE

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CSA Group

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The Mowat Centre is an independent public policy think tank located at the School of Public Policy & Governance at the University of Toronto. The Mowat Centre is Ontario's non-partisan, evidence-based voice on public policy. It undertakes collaborative applied policy research, proposes innovative research-driven recommendations, and engages in public dialogue on Canada's most important national issues.

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Foreword

The sharing economy has grown significantly over the past several years. Governments around the world have responded in a variety of ways to the new business models that have emerged from this growth. However, the fast-moving and dynamic nature of the sharing economy is prompting growing interest in the potential for alternative policy tools and approaches. In response to this changing landscape, CSA Group commissioned the Mowat Centre to conduct research on the potential to employ standards-based solutions in the sharing economy in Canada.

This report is based on a review of relevant literature and interviews with 18 Canadian and international external experts. Interviewees included representatives from government, standards organizations, sharing economy firms, consumer groups, industry and academia. The interviews are not attributed, with the aim of encouraging open and candid conversations. CSA Group shared insight and comments during the development of this report, as did staff from Innovation, Science and Economic Development Canada. Research, analysis and writing of the report was conducted by the Mowat Centre between September 2016 and December 2016.

The heart of this report lies in its identification of a number of key issues currently facing the sharing economy and an analysis aimed at determining which of these issues might be amenable to standards-based solutions. As a result of this analysis, a set of "Next Steps" were developed for CSA Group to build on existing work and to expand the role for standards in the sharing economy.

Based on the analysis conducted, CSA Group inteds to:

- Move forward with the development of an ISO International Workshop Agreement (IWA) focused on outlining broad principles for the sharing economy;
- Review existing standards, as well as standards currently under development, to assess the potential to incorporate the sharing economy into these initiatives;
- Prepare for the development of national standards intended to address particular sectors within the sharing economy;
- Ensure that all stakeholder groups are recognized and involved in the standards development process to the extent possible, particularly consumers and large firms that are currently dominant in their markets;
- Strategically engage with all levels of government — particularly regulators — in the standards development process; and
- Be flexible and adaptable in all work in this area in acknowledgement of the dynamic and fast-moving nature of the sharing economy, and consider the next generation of technological innovation that is likely to emerge.

Introduction

The sharing economy has grown rapidly over the past five years and is capturing significant market share in various sectors. Powered by the rapid evolution of mobile internet technology, sharing economy firms are providing consumers with quick and easy access to an array of goods and services. Many of these firms offer individuals the opportunity to engage in new economic activities through online marketplaces, such as short-term accommodation rentals and ride-sourcing, both as traditional customers and as providers.

Despite the benefits of the sharing economy, its emergence has also created a number of challenges as governments and regulators struggle to fit these activities into existing governance frameworks. To date, most of these efforts have been piecemeal and fragmented. Moreover, while numerous governments around the world have attempted a range of regulatory approaches, few jurisdictions have succeeded in developing flexible, effective regulatory responses in a timely fashion.

> *Powered by the rapid evolution of mobile internet technology, sharing economy firms are providing consumers with quick and easy access to an array of goods and services.*

Given this track record, it is worth considering alternative approaches outside of government regulation to address the issues raised by the sharing economy. Standards-based solutions, for example, have proven to be useful components of successful governance systems for many parts of the economy. Indeed, based on expert interviews and an extensive literature review, this report concludes that standards-based approaches represent an attractive potential solution to a number of the challenges raised by the advent of the sharing economy.

While standards-based approaches — which can include tools like guidance, training and certification in addition to the creation of traditional technical standards — have the potential to address gaps that currently exist, they are not a silver bullet. They are also not designed to replace regulatory efforts. Rather, they should be considered as part of a larger toolkit to respond to emerging issues associated with these new forms of economic activity.

Standards developing organizations can take specific steps to encourage the use of standards in response to several challenges that have arisen in the sharing economy. Most notably, they can collaborate in the development of a hybrid system of standards that would provide broad principles for the sharing economy at an international level, more specific international rules for a series of functionalities common to various sectors of the sharing economy, as well as a set of Canadian sector-specific standards that would build on these international components.

What is the sharing economy?

In order to get a sense of the tools most appropriate for use in response to the challenges generated by the sharing economy, it is necessary to outline the key characteristics of the sharing economy and the major trends in this area. This section defines and examines key elements of the sharing economy and identifies key sectors and stakeholders within it as well as the central challenges, opportunities, and trends which characterize it.

DEFINITIONS

While sharing might not be a novel idea, technological advancements and new business models are increasingly combining to play a disruptive role in the economy. This blending of technical and organizational innovation has provided individuals and firms with opportunities to build capital-light enterprises by leveraging under-utilized assets and connecting them with new markets. As a result, individuals can buy, sell, rent and exchange goods and services more quickly and conveniently — and often more economically — than has traditionally been possible.

There are numerous definitions of the sharing economy. For the purposes of this report, the sharing economy is defined as:

> *"An emerging form of economic activity enabled by the mobile internet and new business models, based on either: the sequential use of a product by multiple users facilitated by a central organizing entity, or the exchange of goods and services through peer-to-peer (P2P) platform markets."*

CHARACTERISTICS

This abstract definition can be tricky to connect to concrete real world examples as some features of the sharing economy are quite distinct and unique while others are clearly part of the broader digital economy. Ultimately, it is helpful to think of the sharing economy as a field of economic activity defined by the centrality of the following key features to firms' business models or offerings:

- Peer-to-peer transactions
- Digital platforms
- Reputational mechanisms
- Algorithmic optimization
- Mobile internet
- Sequential use of an asset
- Environmental and social appeal[1]

Peer-to-peer transactions

The sharing economy emphasizes new business models that shift away from traditional transactions between businesses and consumers and towards informal, small-scale online exchanges of goods and services between individuals.[2] Inspired by peer-to-peer (P2P) software architectures, P2P networks are distinguished by the fact that they are more distributed than traditional markets in which all consumers buy or sell products and services from a single central node. Instead, individual "peers" buy and/or sell directly to and from each other. It should be noted, however, that these transactions are often enabled by, and occur on platforms operated by, third parties. These exchanges, referred to as P2P transactions, have grown in popularity because they allow users to profit from under-utilized resources or to market their skills on a freelance basis.[3]

1 van den Steenhoven, J. Burale, I. Toye, V. Buré, C. March 2016. Shifting perspectives: Redesigning regulation for the sharing economy. *MaRS Solutions Lab*. https://www.marsdd.com/wp-content/uploads/2016/04/MSL-Sharing-Economy-Public-Design-Report.pdf pg. 14.
2 Katz, V. 2015. "Regulating the Sharing Economy". *Berkeley Technology Law Journal* 30(4) 1067-1126. pg. 1073.
3 Katz, V. 2015. "Regulating the Sharing Economy". *Berkeley Technology Law Journal* 30(4) 1067-1126. pg. 1073.

Digital platforms

The use of information and communication technology and its rapid development is central to the sharing economy. Digital platforms, typically in the form of web-based applications for internet-enabled devices, act as intermediaries and facilitators for P2P transactions. More importantly, however, these platforms add value to these services in critical ways. For example, platforms act as focal points around which consumers and providers can congregate. They can also underwrite the viability of the markets and systems they create by performing functions ranging from insuring transactions[4] to ensuring that fleets of shared assets are balanced appropriately across geographic networks.

Reputational mechanisms

Firms that operate in the sharing economy tend to rely heavily on reputational mechanisms such as user reviews, rating systems, verified identities and screenings. User reviews and rating systems are particularly common, usually through a process that encourages both users and service providers to rate each other.[5] These mechanisms are meant to engender a sense of trust between users and to act as a distributed market-based vehicle for quality control. If a user or service provider receives multiple poor reviews, they can find it difficult to find willing counterparties to transact with and can even be banned from future use of a platform by the firm that operates it.

Algorithmic optimization

One of the most novel aspects of the digital economy is the extent to which it uses new and sophisticated algorithms for a variety of purposes from matching individuals looking for a date to offering movie recommendations. In the context of the sharing economy, algorithms are critical as they reduce transaction costs in two ways. First, these algorithms allow particular activities — that might otherwise not be viable — to be organized and optimized, such as creating the best trips for anonymous strangers sharing a ride. This is especially important for activities that include the sequential use of an asset. Second, the algorithms facilitate the efficient discovery of providers by consumers within massive and otherwise difficult to navigate online marketplaces.

Mobile Internet

Effectively connecting consumers with goods and services requires systems that are dynamic and take location into account. Mobile technology that is sensitive to location enables the delivery of goods and services in the sharing economy to be optimized according to time and proximity. In so doing, this technology has enabled business models which would not have been convenient enough otherwise to become sufficiently viable to thrive.

Sequential use of an asset

A common characteristic in the sharing economy is the sequential use of assets by multiple users. Indeed, "sharing" in the sharing economy often refers to the shared use of a single asset by a number of users in sequence. Such sharing enables individuals to forego ownership of an asset by substituting access to that asset. There are two main models by which this is accomplished: a P2P model, in which peers rent their own assets to each other, or a fleet model, in which a single provider rents fleets of assets out to the market.

Environmental and social appeal

A final sharing economy characteristic centres on an attempt to reduce consumption and build community. Attempts to create positive environmental and social impacts are part of the sharing economy — though this feature is more likely to be important for consumers and not-for-profit providers than for-profit firms.

LEVELS OF MEMBERSHIP

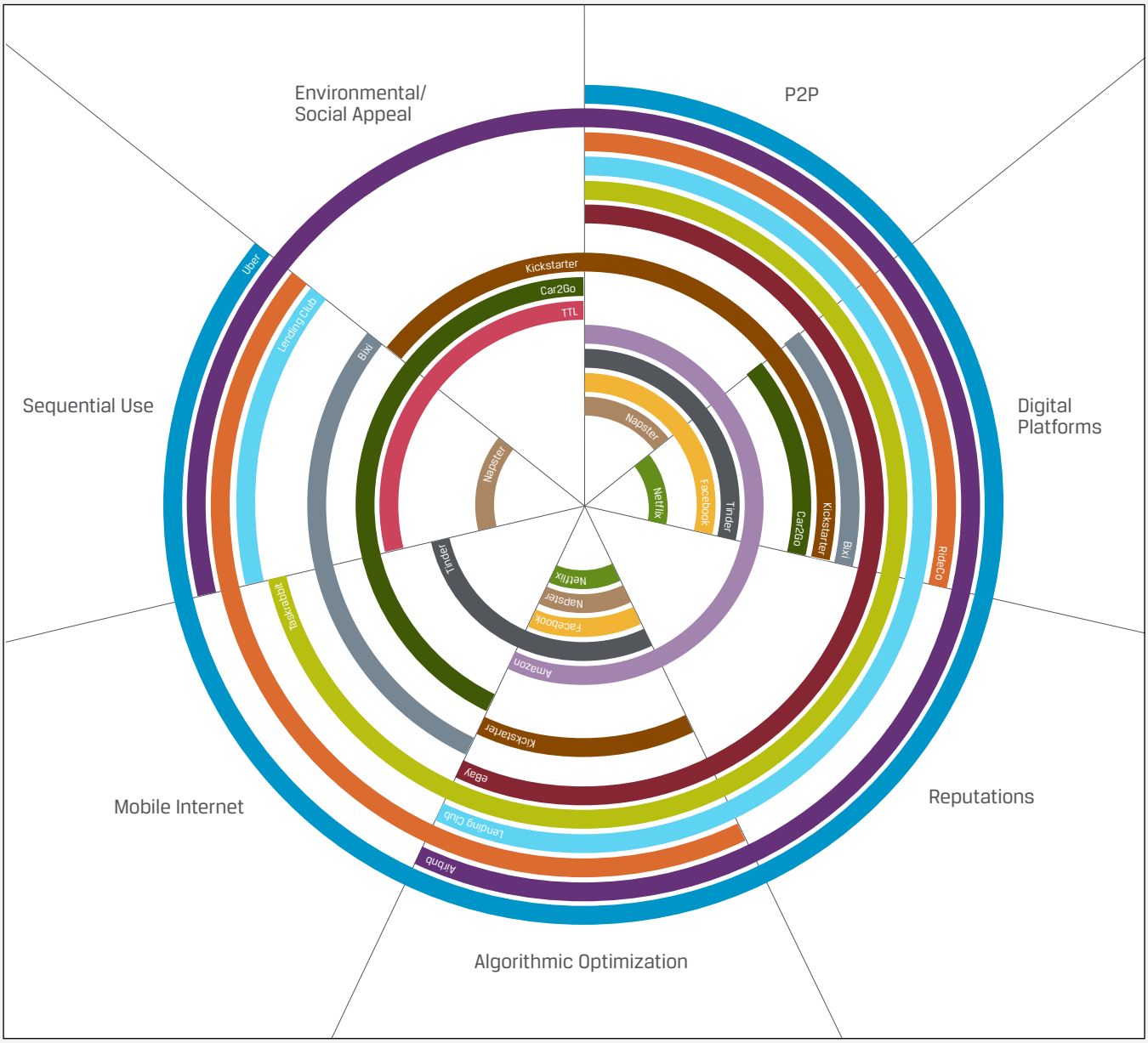
Significant diversity exists among firms making a strict differentiation between what is and is not the sharing economy difficult. Some firms are commonly identified as part of the sharing economy such as Uber, Airbnb and TaskRabbit. As is illustrated in Figure 1, these firms exhibit many (five or more) of the key sharing economy characteristics. Other digital firms, such as Facebook and Netflix, share some characteristics (fewer than four) with sharing economy firms but are not generally viewed as a part of it. Between these two extremes, however, there exist a number of firms which possess a middling number of characteristics (four) and whose membership

4 Telles Jr, R. 3 June, 2016. "Digital matching firms: A new definition in the 'sharing economy' space". *Economics and Statistics Administration Issue Brief*. U.S. Department of Commerce. http://www.esa.gov/sites/default/files/digital-matching-firms-new-definition-sharing-economy-space.pdf

5 International Consumer Protection and Enforcement Network. June 2016. *Online reviews and endorsements: ICPEN guidelines for review administrators*. https://www.icpen.org/files/icpenDownloads/ICPEN___ORE___Guide_1___Guidelines_for_Review_Administrators___JUN_2016_FNL_.pdf

FIGURE 1

How firms fit into the sharing economy



Characteristics	Uber	Airbnb	RideCo	Lending Club	Taskrabbit	Ebay	Bixi	Kickstarter	Car2Go	Amazon	Tinder	Facebook	Napster	TTL	Netflix
P2P	✓	✓	✓	✓	✓	✓		✓		✓	✓	✓	✓		
Digital Platforms	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			✓
Reputations	✓	✓		✓	✓	✓				✓					
Algorithmic Optimization	✓	✓	✓	✓	✓	✓		✓		✓	✓	✓	✓		✓
Mobile Internet	✓		✓		✓		✓		✓		✓				
Sequential Use	✓	✓	✓	✓			✓		✓				✓	✓	
Environmental/ Social Appeal		✓					✓	✓	✓					✓	
Score	6	6	5	5	5	4	4	4	4	4	4	4	3	2	2

within the sharing economy is debated and often depends on the tastes or purposes of the individual making the determination.

For example, many would certainly argue that Bixi — Montreal's bike-sharing program — is part of the sharing economy, yet it only exhibits four of the sharing economy characteristics. However, many others would argue equally strongly that Amazon and eBay — let alone Tinder — are clearly not. The fact that all these services score equally by exhibiting four of the critical characteristics highlights how the definition of the sharing economy has blurry edges. Moreover, the fact that the Toronto Tool Library only exhibits two of these characteristics, yet is arguably much closer to the prototypical sharing economy concept, further underlines the difficulties inherent in defining this evolving phenomenon.

Ultimately, a hard and fast definition is probably not desirable because the concept itself is shifting and changing as firms evolve and new ideas emerge.[6] Nonetheless, even if the borders of the concept lack rigidity the growing importance of the concept in the public discourse, and the real similarities between its core participants, clearly make the sharing economy an important focus for governance — especially if this governance is undertaken with the flexibility implicit in the hybrid model discussed in this report.[7]

MAJOR SECTORS[7]

Sector	Description	Examples
Transportation	The sharing economy has changed how people travel. While ride-sourcing apps have received the most focus, transportation in the sharing economy extends to bike-sharing, car-sharing, ride-sharing, shared parking and new forms of transit.	• Uber • Lyft • Netlift (Montreal) • Mobi (Vancouver)
Accommodation	The sharing economy enables homeowners to rent out unused space on a short-term basis through online platforms. This has impacted the tourism sector, raised concerns for the hotel industry and created new challenges for municipal zoning.	• Airbnb • HomeAway • VRBO
Retail	Online marketplaces allow individual providers to sell products directly to consumers. While such platforms have existed for some time — highlighting how the sharing economy overlaps e-commerce more generally — the scale of these exchanges has grown in recent years.	• eBay • Craigslist • Etsy
Services	Some platforms allow users to sell their labour and provide services on a task-by-task basis. This category is quite broad, ranging from cleaning and repair work to research and writing marketing material, to caring for pets in their owners' absence.	• TaskRabbit • Mechanical Turk • DogVacay
Finance	The sharing economy has extended into the financial sector despite its heavy regulation. Many platforms use crowdfunding from multiple sources to help finance creative projects or start-up companies. Others have penetrated the lending sector, connecting investors with businesses or individuals seeking to borrow.	• KickStarter • Indiegogo • Lending Club

6 For instance, while Lending Club is listed as using algorithms, its use of matching algorithms has been declining and its use of these algorithms may soon cease to be an essential part of its business model. If one were to require that a firm exhibit five of the sharing economy characteristics to qualify as a sharing economy firm, this change would disqualify Lending Club from membership in the sharing economy. It's not clear that this is a desirable outcome.

7 Johal, S. and Zon, N. February 2015. Policymaking for the sharing economy: Beyond whack-a-mole. *The Mowat Centre*. https://mowatcentre.ca/policymaking-for-the-sharing-economy/ ; Statista. "Number of eBay's active users from 1st quarter 2010 to 3rd quarter 2016 (in millions)". *B2C E-Commerce*. https://www.statista.com/statistics/242235/number-of-ebays-total-active-users/ ; Campbell, A. 24 February, 2016. "Handmade business industry sees robust growth, judging from Etsy results". *Small Business Trends*. https://smallbiztrends.com/2016/02/handmade-business-industry-etsy-results.html of-ebays-total-active-users/

STAKEHOLDER PROFILE[8]

Consumers	Providers	Platforms	Incumbents	Government	Public Interest
• Consumers benefit from lower prices, more options and greater convenience. However, the unregulated nature of the sharing economy also raises some safety concerns for consumers. • Businesses also participate in the sharing economy as consumers, and may change their internal operations accordingly (e.g. procurement of goods and/or services, enable reimbursement of travel expenses incurred using ride-sourcing services, etc.)	• Providers, often known as "service providers," can benefit from the sharing economy by earning supplemental income from the flexible work arrangements that it can enable. • Providers, especially those trying to use the sharing economy to earn a primary income, often face labour-related challenges in terms of income instability and exclusion from benefits and/or legal protections.	• Sharing economy platforms, and the firms that operate them, have a vested interest in friendly regulatory environments that interfere minimally in their operations. • Platforms have a strong incentive to prioritize customer experiences, as positive ratings and reviews are a key component of the sharing economy's success.	• Incumbent businesses have been vocal about the disruptions caused by the sharing economy in their respective sectors. • Incumbents often raise concerns that the rise of the sharing economy has resulted in a tilted playing field that unfairly advantages new sharing economy firms. Incumbents argue that they are required to operate under heavy regulatory regimes, whereas new firms with similar products and services are not.	• The relationship between platforms and government - particularly regulators - has sometimes been characterized by conflict and hostility, although some jurisdictions have managed to strike a balance and establish a good working relationship with firms. • Simultaneously, governments have a strong incentive to encourage the type of popular, technologically advanced, and innovative businesses that sharing economy firms represent.	• The sharing economy produces both positive and negative externalities. While the use of these platforms may increase social interaction and generate less waste, they can also threaten community safety. • Simultaneously, many sharing economy firms provide benefits for the general public by unlocking new economic opportunities, disrupting complacent and uncompetitive industries, lowering costs and making new goods and services available.

CHALLENGES AND OPPORTUNITIES

The rise of the sharing economy has resulted in significant opportunities and challenges for many stakeholders. This section provides an overview of the landscape, setting the stage for more detailed analysis in subsequent sections.

The significant growth and popularity of the sharing economy indicates that there are many opportunities associated with this new economic activity. Reduced transaction and overhead costs, in addition to greater competition, mean lower prices and more variety for consumers. Sharing economy firms generally offer more convenience and efficiency by offering on-demand and real-time services, often filling gaps that exist within established sectors. Innovation by these firms can also lead to the creation of new markets by stimulating consumption in new areas or at lower price points.[9] Sharing resources and the use of reputational mechanisms can provide additional benefits such as increased social cohesion generated by increased interaction with, and improved trust in, providers and platforms.

From the perspective of the provider, the sharing economy can provide supplemental income through flexible work arrangements. It allows providers to profit from otherwise under-utilized resources and skills. By leveraging excess capacity, the sharing economy also offers the possibility of increased sustainability and positive environmental impacts that arise from shifting from a focus on owning assets to simply accessing them on a short-term basis.[10]

Despite its benefits, the sharing economy also presents numerous challenges. For consumers, there are concerns surrounding the reliability of user reviews and feedback mechanisms, as these mechanisms can invite discrimination and disingenuous reviews can skew aggregate ratings. Extensive collection of detailed user data raises privacy and security issues regarding the use and protection of that data by the platform. Similarly, the terms and conditions that users are expected to agree to tend to be lengthy and inaccessible, leaving both consumers and providers largely unaware of their rights and the concessions and obligations they have accepted.

8 Infographic derived from Johal, S. and Zon, N. February 2015. *Policymaking for the sharing economy*.
9 Telles Jr, R. 3 June, 2016. "Digital matching firms".
10 an den Steenhoven, J. et al. 2016 .*Shifting perspectives*.

Service providers also face extensive labour-related challenges. Worker misclassification continues to be an issue as platforms often label workers as "independent contractors," a designation that can reduce the stability of their income, and make them ineligible for benefits and many legal protections. Furthermore, providers in the sharing economy are often responsible for their own training, capital investment and maintenance — expenses which can severely reduce their net compensation.

Governments — particularly regulators — face numerous challenges as sharing economy platforms and their operations do not fit neatly into existing governance frameworks. Issues such as taxation, compliance, competition, and accessibility are just a few of the many issues with which governments and other relevant stakeholders continue to grapple.

EMERGING TRENDS AND GROWTH

The growth of the sharing economy is expected to continue in coming years with PwC estimating that the key sectors of the sharing economy — identified as accommodation, transport, music and video streaming, online staffing, and peer lending — will see revenues grow from $15 billion in 2013 to $335 billion in 2025.[11] This figure will fluctuate depending on how one defines the sharing economy, but the upward trajectory remains the same. Regardless, there is general acknowledgement that these platforms are here to stay and that governments — and society at large — must find a way to adapt to them.

As a result, some platforms are beginning to collaborate with established operators. For instance, General Motors has partnered with Lyft to open rental hubs and develop technology for automated vehicles,[12] while start-up Recharge has partnered with various hotel outlets to book a stay by the minute via an online app.[13] While still not universal, this collaborative approach is in stark contrast to the conflicts that arose between start-ups and incumbents during the early days of the sharing economy. Similarly, large platforms like Uber, Lyft and Airbnb have launched separate offerings for business use — in part to integrate corporate accounts and allow businesses to differentiate between personal and professional expenses from employees.[14] Indeed, studies indicate that a significant proportion of these firms' customers are already businesses, with one report finding that, in the first quarter of 2016, 46 per cent of business travel expenses for ground transportation were from Uber and Lyft — a number that is 26 per cent higher than taxis.[15]

11 PriceWaterhouseCoopers United Kingdom. 2014. *The sharing economy — sizing the revenue opportunity*. PriceWaterhouseCoopers. http://www.pwc.co.uk/issues/megatrends/collisions/sharingeconomy/the-sharing-economy-sizing-the-revenue-opportunity.html

12 The Associated Press. 4 January, 2016. "General Motors invests $500 million in Lyft ride-hailing company". *CBC News - Technology and Scrience*. http://www.cbc.ca/news/technology/gm-lyft-1.3388500

13 Loizos, C. 24 March, 2016. "Recharge lets you book a hotel room — for minutes at a time". *Tech Crunch*. https://techcrunch.com/2016/03/24/recharge-lets-you-book-a-hotel-room-for-minutes-at-a-time/

14 Rao, L. 2 September, 2015. "Uber has signed up thousands of businesses for rides". *Fortune*. http://fortune.com/2015/09/02/uber-business-accounts-corporate/

15 Hatch, S. 22 June, 2016. "Uber and Lyft: Driving Hard Toward Meetings". *MeetingsNet*. http://meetingsnet.com/corporate-meetings/uber-and-lyft-driving-hard-toward-meetings

Responses to the sharing economy to date

Around the world, jurisdictions have taken a variety of approaches in response to the sharing economy. Unfortunately, government action to date has often been fragmented and uncoordinated and has generally led to a patchwork of responses that have ranged from banning sharing economy platforms entirely to essentially ignoring their existence.

In cases where government has aimed to regulate, it has tended to move slowly. As a result, governments have often attempted this task one sector at a time. For instance, the City of Toronto has developed regulatory plans for ride-sourcing platforms (such as Uber) but, as of December 2016, it is still developing a framework for regulating home-sharing services (such as Airbnb).

Given the complexities associated with the regulatory process, some jurisdictions have opted to use other tools to test certain responses. For instance, pilot projects have often been used as a method to experiment with a variety of approaches, including partnerships with sharing economy firms. This section examines the different actions governments have taken to date in various jurisdictions in response to the sharing economy.

PROACTIVE

As the sharing economy has grown, some governments around the world have started to think about how to regulate and respond to it in a proactive and collaborative way. The partnerships that some governments have struck with ride-sourcing companies such as Uber and Lyft provide some examples of such an approach. In Massachusetts, the state's transportation authority agreed in September 2016 to subsidize rides for disabled passengers taken via ride-sourcing platforms during a year-long pilot project.[16] In Portland, a "shared city" initiative was created through a partnership between Airbnb and its municipal government, which enables it to collect and remit taxes on behalf of hosts.[17] Canadian governments have aimed to engage in similar types of partnerships through pilot projects, including between the Ontario government and Airbnb to raise awareness about rights for hosts and guests while using the service.[18]

In the European Union (EU), discussions have centred on the need for consistency and to develop best practices for the sharing economy. Member states are aiming to develop a consistent and coordinated approach — not only to set rules but also to leverage opportunities in the sharing economy.[19] The European Commission has also developed guidance that aims to help various stakeholders — including governments, businesses and consumers — obtain insight on the degree to which existing rules can be applied to the sharing economy.[20]

Other proactive efforts include the use of regulatory and legislative systems to provide oversight on platforms within the sharing economy and to support its growth. Overall, proactive approaches have been identified as an effective stance, as it provides governments with a chance to leverage the opportunities associated with the sharing economy while also getting ahead of potential hurdles that may subsequently emerge.

However, it is not just governments that are taking proactive steps. Key players in the private sector have also responded in this way. For example, insurance companies have been relatively quick to develop insurance options that fit the needs of sharing economy providers, such as policies specifically targeted at ride-sourcing drivers. These efforts fill an important gap, as many of these drivers were previously only covered by their personal policies (which did not cover driving while using ride-sourcing apps) and commercial plans were too expensive to be feasible for part-time drivers. Similarly, some new condo developments have begun to

16 Dungca, N. 16 September, 2016. "MBTA to subsidize Uber, Lyft rides for customers with disabilities". *The Boston Globe*. https://www.bostonglobe.com/metro/2016/09/16/first-its-kind-partnership-mbta-subsidize-uber-and-lyft-rides-for-customers-with-disabilities/QDdHJgzg87JpwbOazyW14H/story.html

17 National League of Cities. July 2015. *Portland Homesharing Regulations*. http://www.nlc.org/find-city-solutions/city-solutions-and-applied-research/city-practice-database/portland-homesharing-regulations

18 Government of Ontario. 19 February, 2016. "Ontario Partners With Airbnb on New Pilot Project". *Ministry of Finance.* https://news.ontario.ca/mof/en/2016/02/ontario-partners-with-airbnb-on-new-pilot-project.html

19 Klobučar, S. Brunelet, N, Dallhammer, E. Schuh, B. 30 June, 2016. *Urban Impact Assessment: The Sharing Economy*. European Union: Committee of the Regions. http://cor.europa.eu/en/events/Documents/COTER/TIA/sharing-economy.pdf

20 The European Commission. 2 June, 2016. "A European Agenda for the collaborative economy". *News.* http://ec.europa.eu/news/2016/06/20160602_en.htm

explicitly include the ability to provide short-term rentals in their owners' declaration to entice both owners and investors.[21]

REACTIVE

While some governments have used their authority to support collaboration, as well as leverage other opportunities associated with the rise of the sharing economy, others have taken a more reactive approach. Reactive approaches range from restricting use of services to the banning of platforms from a given jurisdiction. For instance, cities such as Berlin have banned home-sharing platforms like Airbnb, noting concerns about its effect on housing availability and rental prices.[22]

Overall, reactive approaches have been seen as resistant to change. They can lead to regulatory efforts that address current problems but ignore hurdles likely to emerge in the future. Moreover, as the World Economic Forum notes, reactive efforts are often based on the assumption that regulations are static,[23] rather than acknowledging the need for flexibility in responding to these emerging technology platforms. The UK government also notes that reactive responses, particularly bans on certain types of services within the sharing economy, "don't recognize the reality of internet-enabled commerce."[24]

NON-RESPONSIVE

Some governments have opted to not respond to the sharing economy at all by avoiding any intervention and letting sharing economy firms operate freely. This is a particularly likely response for areas of the sharing economy that haven't received the same level of attention as ride-sourcing or home-sharing. According to one survey, more than half of all U.S. cities have done little to regulate the sharing economy.[25] While some proponents of the sharing economy push for limited government intervention, as they fear it would constrain innovation, little to no response by governments can exacerbate challenges associated with the sharing economy, such as precarious employment or consumer safety. This can in turn harm companies, as accidents and problems that would have been averted by effective governance can create significant negative publicity and even counter-productive regulatory overcompensation.

Nevertheless, a limited response by government doesn't necessarily mean that key issues such as quality of service or safety are being ignored. In jurisdictions where governments are largely non-responsive, this leaves room for other actors in the private and not-for-profit sectors to step in with their own solutions. Indeed, many firms in the sharing economy have adopted their own form of self-regulation through the use of reputational mechanisms. While some believe these mechanisms are adequate in their ability to correct some issues, they are not the same as regulation and legislation. Indeed, they can create an opening for further problems such as discrimination.

21 Attfield, P. 17 August, 2016. "At this Quebec condo, you won't have to hide your Airbnb rentals". *The Globe and Mail*. http://www.theglobeandmail.com/report-on-business/at-this-quebec-condo-you-wont-have-to-hide-your-airbnb-rentals/article31449267/

22 Payton, M. 1 May, 2016. "Berlin stops Airbnb renting apartments to tourists to protect affordable housing". *The Independent*. http://www.independent.co.uk/news/world/europe/airbnb-rentals-berlin-germany-tourist-ban-fines-restricting-to-protect-affordable-housing-a7008891.html

23 Rinne, A. 3 November, 2014. Four ways cities can embrace the sharing economy. *World Economic Forum*. https://www.weforum.org/agenda/2014/11/four-ways-cities-can-embrace-sharing-economy/

24 Government of the United Kingdom. July 2015. *UK non-paper on the sharing economy*. Department for Business, Innovation and Skills. https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/448442/BIS-15-434-UK-non-paper-on-sharing-economy.pdf

25 Peters, A. 6 November, 2015. "As The Sharing Economy Goes Mainstream, Most Cities Want To See It Grow". *Fast Company*. https://www.fastcoexist.com/3047153/as-the-sharing-economy-goes-mainstream-most-cities-want-to-see-it-grow

CASE STUDY
Sharing Economy UK's TrustSeal kitemark

The United Kingdom has taken a step to proactively respond to the sharing economy in a way that few other jurisdictions have done — by setting broad best practices for platforms to follow. However, it wasn't the government that took the lead in this approach. Instead, in July 2016, an industry body known as Sharing Economy UK announced that it was launching a pilot program "kitemark" — that is, a certification mark awarded on the basis of the achievement of a set of performance criteria. The aim behind TrustSeal, the name given to this pilot kitemark, is to foster greater trust within the sharing economy by identifying firms in good standing and ensuring the safety of consumers using sharing economy platforms.

Companies apply for accreditation against a list of "good practice principles" which were developed by industry leaders and sharing economy experts. These principles include:[26]

- Identity verification
- Criminal background
- Education and employment history
- Transparency
- Customer support
- Security and clarity of transactions
- Insurance and guarantees
- Data privacy

Applications are reviewed by PwC and the results of this review are reported to an advisory panel of business leaders convened by Sharing Economy UK. Successful applicants are given the right to display the kitemark as recognition of their certification.[27]

In a report which first introduced the concept in 2014, the minimum standards discussed also included: maintaining professional standards, incorporating dispute resolution mechanisms, providing insurance and ensuring the fairness of user review systems.[28] The report also noted the potential need for specific standards that address key sectors in the sharing economy including transportation and accommodation.

So far, at least four small-scale sharing economy companies have received certification through the pilot project.[29] Airbnb has also indicated that it supports the concept, calling it an "important development to set standards and expectations for users and to continue building trust."[30] It has not, so far however, sought to obtain accreditation under the kitemark.

Importantly, while this approach represents a potentially positive and proactive attempt at addressing several issues confronting the sharing economy, its abilities to address many of the most important of the sharing economy's challenges are limited. This is due to the fact that it has been primarily developed by an industry association that represents the interests of its member firms. It is not clear that the perspectives of other stakeholders, such as consumers and providers, have been adequately represented in the kitemark's development. Furthermore, while some information has been released on how firms receive certification, the details of how firms are judged and approved under the kitemark remain obscured.

26 Sharing Economy UK. *Sharing Economy TrustSeal*. https://sharingeconomytrustseal.com/about/
27 Sharing Economy UK. 7 July, 2016. *World's first kitemark for the sharing economy*. Press release. http://techcitynews.com/press_release/worlds-first-kitemark-for-the-sharing-economy/
28 Wosskow, D. November 2014. *Unlocking the sharing economy: An independent review*. Department of Business, Innovation and Skills. https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/378291/bis-14-1227-unlocking-the-sharing-economy-an-independent-review.pdf
29 Barber, L. 28 September, 2016. "Liftshare becomes world's first car sharing company to be awarded the sharing economy TrustSeal". *Liftshare Blog*. http://blog.liftshare.com/liftshare/liftshare-becomes-the-first-car-sharing-company-to-be-awarded-the-seuk-trustseal
30 Howard, B. 22 July, 2016. "What Does The Sharing Economy And Good Housekeeping Have In Common?". *Forbes*. http://www.forbes.com/sites/billeehoward/2016/07/22/what-does-the-sharing-economy-good-housekeeping-have-in-common/#47a3a3953b51

Standards and standards-based solutions

As interest is growing in alternative responses to the sharing economy, the potential for standards-based solutions has emerged as one potential tool. This section provides an overview of standards and standards-based solutions, including an assessment of their strengths and weaknesses. It also describes the connections between standards and a number of other related tools — such as guidance, certification and training — which are often used in combination with standards.

WHAT ARE STANDARDS AND HOW ARE THEY DEVELOPED?

Standards are best understood as sets of measurable, often technical, required parameters associated with a particular product or service. Standards first became important during the Industrial Revolution when the expansion of industry and long-distance trade increased the need for dependably consistent and interchangeable machine parts.[31] The widespread voluntary — and sometimes legally mandated — adoption of standards at national and international levels helped spark significant increases in economic efficiency. One of the most notable examples of this impact is the standardization of shipping containers which helped reduce the average cost of loading cargo onto a ship from $5.86 per ton to 16 cents.[32]

> *The widespread voluntary — and sometimes legally mandated — adoption of standards at national and international levels helped spark significant increases in economic efficiency.*

The International Organization for Standardization (ISO) is the primary international standards developing organization (SDO). It coordinates tens of thousands of stakeholders and experts who work together in a network of 238 technical committees, 521 subcommittees, 2,625 working groups and 151 ad hoc study groups, as of 2015.[33] Most of the participants are technical experts who have been selected and nominated by national standards bodies. Increasingly, however, representatives from other stakeholder groups — such as consumer advocates, environmental organizations, social and labour organizations, and intergovernmental organizations — are also participating.[34]

ISO's institutional design is intended to simultaneously foster consensus around a draft standard while making it progressively more difficult to back-track on decisions or alter the standard as it passes through the multiple stages of decision-making. In addition to these traditional processes, some SDOs have developed alternative processes specifically designed to produce rules more quickly for sectors that are changing rapidly. ISO's accelerated process is called an International Workshop Agreement (IWA). IWAs can be proposed by any ISO member and enable market players and other stakeholders to participate in the process without having to go through the usual national delegating process.

31 Ping, W. April 2011. *A brief history of Standards and Standardization Organizations: A Chinese perspective*. East-West Centre Working Papers, No. 117. http://www.eastwestcenter.org/fileadmin/stored/pdfs/econwp117.pdf pg. 4-6

32 Murphy, C. 2015. "Voluntary Standard Setting: Drivers and Consequences". *Ethics & International Affairs* 29(4) 443-454.pg. 452.

33 International Standards Organization. *ISO in figures for the year 2015*. http://www.iso.org/iso/home/about/iso-in-figures.htm

34 Mattli, W. and Buthe, T. October 2003. "Setting international standards: Technological rationality or primacy of power?". *World Politics* 56, p. 7; Webb, K. 2012. "ISO 26000: Bridging the public/private divide in transnational business governance interactions". *Comparative Research in Law and Political Economy Research Paper 21*

STRENGTHS AND WEAKNESSES OF STANDARDS-BASED SOLUTIONS

Standards-based solutions have their own inherent strengths. Some are particularly worth noting in the context of the sharing economy. There are several ways that standards could add value in the sharing economy realm, including:[35]

- **Greater speed and flexibility:**
  With less scope for political contestation, standards can usually be created more quickly and changed more easily when compared to legislation or regulation.

- **Potentially global scope:**
  Due to the global membership of the standards development infrastructure, it is much easier to produce global standards than many other forms of global governance agreements.

- **Foundation for future regulatory and legislative efforts:**
  While useful as governance instruments in their own right, successful standards have the added value of serving as the potential basis for regulatory or legislative efforts further down the road.

- **Diverse perspectives involved in development:**
  The standards development process brings together experts from around the world and leverages their collective wisdom.

- **Diverse membership and consensus decision-making build legitimacy:**
  One of the critical strengths of the standards development processes is its ability to bring together diverse perspectives and generate collaboratively produced rules which reflect a consensus.

However, there are also certain weaknesses that must be overcome to ensure optimal returns from a standards-based approach, including:

- **The need for buy-in from industry to achieve success:**
  Some industry players perceive advantages for themselves if they are able to avoid collaborative rule-setting processes and thus may resist standards development processes.[36]

- **The effect of consensus requirements on outcomes:**
  Inclusion of a diversity of perspectives is a strength of standards development, but it can also produce challenges as the variety of viewpoints can sometimes prove difficult to reconcile.

- **The speed of the standards development process:**
  While standards development processes are generally viewed as quicker than regulation or legislation, the consensus standards development process is still seen as too slow in some fast-changing industries.

- **Reduced democratic accountability and legitimacy:** While standards are usually either voluntary or referenced by government, the fact that their relationship to normal policymaking processes is limited poses some challenges.

- **Potential resistance by governments:**
  As they are responsible to the public, governments are hesitant to give up control over key decisions. Standards for the sharing economy will need to be preceded by significant trust-building.

COMPLEMENTARY TOOLS AND APPROACHES

Standards-based solutions include a variety of tools and approaches. **Guidance** can refer to a number of similar but distinct governance tools. At one end of the spectrum lie guidelines, directives which do not have the force of law or regulation but are issued by regulators as a means of assisting the compliance of regulated entities. Guidance of this sort includes specifications of more general principles-based regulation, "worked examples," statements made by regulators on formal occasions such as public speeches and

35 Please see Appendix A for a more in-depth exploration of standards, their history, uses, strengths and weaknesses.

36 The experience of the TrustSeal, as discussed in Section 4, is instructive as no large sharing economy firms have sought to gain accreditation under it, even though it was created by a sharing economy industry association. Attracting large, currently dominant firms like Airbnb, Uber, and Didi Chuxing (the dominant Chinese ride-sourcing firm) to any standards development process may present one of the greatest challenges for any move towards effective standardization in this area given that these firms may prefer to avoid any external governance of their actions.

informal advice provided by regulators in discussions with regulated entities.[37] Alternatively, guidance can refer to more practical instructions issued by industry associations, SDOs, and other similar organizations that focus more on providing "how-to guides" for implementing rules. In this form, guidance overlaps with best practices. In both forms, guidance provides useful supplemental information to regulated entities that can help to clarify their obligations and potential options for meeting them.

Certification usually involves an audit of compliance with a standard by an independent third party. If an organization is judged as being in compliance, it usually receives a form of accreditation. The involvement of a third party helps to increase the credibility of standards-based approaches. Third-party certification is especially useful for regulators and governments in technical areas because it frees them from the need to maintain high levels of technical expertise in these areas. Often, certification to a specific standard or standards is required by individuals or organizations procuring goods and services.

Certification to a particular standard often requires **training** in particular skills, techniques and systems. SDOs often work in collaboration with area experts to develop the training courses needed to teach individuals or organizations how to meet the standards they have developed. Training serves to prepare an individual or organization to demonstrate proficiency with a standard through an assessment of their mastery of a set of competency standards. Successful completion of a training course usually results in some form of accreditation. SDOs generally contribute to the assessment process by developing and, in some cases, administering the instruments which give form to these standards, such as written or practical tests against which individuals' competence is assessed.

37 Black, J. Hopper M. Band, C. May 2007. "Making a success of principles-based regulation". *Law and Financial Markets Review*. 191-206. http://www.lse.ac.uk/collections/law/projects/lfm/lfmr_13_blacketal_191to206.pdf pg. 197.

Key Issues

In considering the potential value of standards for the sharing economy, it is important to first determine the key issues which need to be addressed in this area. Once these are identified, the degree to which standards may have a role will be much clearer. This report has identified a number of key issues within the sharing economy that require a response:

- Discrimination, accessibility and inclusion
- Safety
- Labour challenges
- Negative externalities
- Online reviews
- Algorithmic openness and equity
- Dynamic pricing
- Competition
- Data-sharing and data protection
- Dispute resolution mechanisms
- Transparency

DISCRIMINATION, ACCESSIBILITY, AND INCLUSION

The increase in convenience and cost-effectiveness offered by the sharing economy has significant benefits, but they are currently not available to all customers to the same extent. For the full promise of the sharing economy to be realized, mechanisms must be put in place to ensure that old forms of discrimination are not given a new lease on life online and that new technologies and business models do not enable new forms of discrimination.

In many cases, discrimination in the sharing economy simply reproduces existing patterns, but does so online. For example, a recent field experiment conducted by a group at Harvard University concluded that guests with distinctly African-American names are 16 per cent less likely to be accepted for an Airbnb rental relative to otherwise identical users with distinctly White names.[38] Similarly, an October 2016 study found that users with "African-American-sounding names" experienced delayed service and increased wait times when using Uber and Lyft in Seattle and Boston. The same study also found that women using these ride-sourcing services experienced longer and more expensive trips.[39] Furthermore, opaque algorithms used by sharing economy platforms can unintentionally result in racial discrimination (the effect of algorithms on equity is discussed in a separate sub-section).

Importantly, discrimination is not limited to racial or gender discrimination. One of the most significant early critiques of the sharing economy concerns the accessibility of the services it offers, particularly for disabled persons. For example, ride-sourcing platforms offer an alternative to public transit or taxis — both of which are often required by regulation to have a designated number of accessible vehicles and spaces. Private forms of shared mobility are not yet obligated to have any level of accessibility in their fleets in most of Canada. Moreover, to the extent that these services are taking business away from traditional providers such as taxis, they may be undermining the viability of the accessibility systems put in place through the regulation of these services. Furthermore, there are also concerns that the online rating and review systems used by sharing economy platforms can enable discrimination against disabled customers through coded reviews.[40]

Finally, access for low-income individuals to the sharing economy represents another area of concern. Participating in the sharing economy generally requires access to a smartphone — or at least the internet — as well as a credit card.[41] While these both seem commonplace, there is a significant portion of the population who either do not have a smartphone (33 per cent — a percentage which rises to 42 per cent of those more than 35 years old),[42] do not use the internet (10 per cent),[43] or do not own a credit card (18 per

38 Edelman, B. Luca, M. Svirsky, D. Forthcoming. "Racial discrimination in the sharing economy: Evidence from a field experiment". *American Economic Journal: Applied Economics*. Forthcoming 1-36. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2701902 pg. 2.

39 Ge, Y. Knittel, C. MacKenzie, D. Zoepf, S. October 2016. "Racial and gender discrimination in transportation network companies". *The National Bureau of Economic Research Working Paper* 22776. 1-38. http://www.nber.org/papers/w22776 pg. 2 and 18.

40 Trautman, T. 30 June, 2014. "Will Uber Serve Customers With Disabilities?". *Next City*. https://nextcity.org/daily/entry/wheelchair-users-ride-share-uber-lyft

41 Ditta, S. Urban, M. with Johal, S. August 2016. *Sharing the Road: The Promise and Perils of Shared Mobility in the GTHA*. The Mowat Centre. https://mowatcentre.ca/sharing-the-road/ pg. 29.

42 Poushter, J. February 2016. Smartphone ownership and internet usage continues to climb in emerging economies. *Pew Research Centre*. http://www.pewglobal.org/2016/02/22/smartphone-ownership-and-internet-usage-continues-to-climb-in-emerging-economies/

43 Poushter, J. February 2016. *Smartphone ownership and internet usage*.

cent).[44] While the sharing economy has significant potential to benefit low-income consumers,[45] so far it has been wealthier individuals that have benefited the most from these services.[46]

SAFETY

Issues around safety have been raised since the advent of the sharing economy. As many platforms provide similar services to incumbent industries but operate in mostly unregulated spaces, there have been concerns over whether these firms can ensure the safety of participants — both providers and consumers. For example, ride-sourcing firms are not forced to abide by many of the regulations that govern taxicabs and short-term accommodation platforms are not held to the same health and safety requirements as hotels. In many ways, sharing economy platforms tend to shift the liability away from the platform or firm and towards other participants.

There have been many high-profile incidents where sharing economy participants have faced dangerous situations. For example, in 2015, a rope swing accident on an Airbnb host's property in Texas resulted in the death of a guest, and a second incident left a man hospitalized in Salta, Argentina after he was attacked by the host's dog.[47] On New Year's Eve in 2013, an Uber driver hit and killed an eight-year-old girl in San Francisco.[48] While all of these cases were eventually resolved, the firms in question were reluctant to become involved. Platforms often insist that their role is simply to create a marketplace that facilitates the matching of users and, therefore, fear setting legal precedents by taking responsibility for problems.[49]

Many argue that the safety concerns associated with the sharing economy can be adequately addressed through the use of reputational mechanisms such as rating systems that collect feedback and allow customers to avoid, and platforms to remove, sub-standard providers.[50] For example, if an Airbnb rental is in a dangerous neighbourhood or poorly kept, this will be reflected in guests' reviews. Furthermore, the use of new technology for smartphone applications provides additional peace of mind as individuals know that their location is being tracked and their driver's identity is known to the platform.

Others insist, however, that these mechanisms cannot replace effective regulation. While these mechanisms provide useful information, they do not provide much help when things go very wrong, such as in the case of an injury or death.[51] Consumers becoming reliant on these technological functions to ensure their safety can be dangerous, especially given that the accuracy and reliability of these systems is not assured.

Of course, safety concerns are not restricted to consumers. Providers can also find themselves in dangerous situations and facing firms that are reluctant to take responsibility for their safety. Indeed some actions by firms have reduced providers' access to employment benefits and legal protections.

LABOUR CHALLENGES

The rise of the sharing economy has resulted in labour challenges ranging from concerns over whether workers are making the equivalent of the minimum wage to questions regarding workers' rights to health insurance and other benefits. Many of the concerns ultimately depend on how workers in the sharing economy are classified — as employees or as independent contractors.

Sharing economy firms often rely on the "independent contractor" classification, arguing that it provides flexibility in workers' hours and work arrangements while enabling them to earn supplemental income. Critics point out that the informality of this work often translates into precarity and instability, arguing that providers should be considered employees. While the growth of precarious work is part of a much larger phenomenon, the sharing economy raises important questions about how society thinks about work.

44 Henry, C. April 2015. *2013 methods-of-payment survey results*. Bank of Canada, http://www.bankofcanada.ca/wp-content/uploads/2015/04/dp2015-4.pdf pg. 2.
45 Fraiberger, S. and Sundararajan, A. 6 October 2015. *Peer-to-peer rental markets in the sharing economy*. NYU Stern School of Business Research Paper. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2574337
46 Griswold, A. 19 May 2016. "Uber and Airbnb really are for the wealthy and well-educated". *Quartz*. http://qz.com/687471/uber-and-airbnb-really-are-for-the-wealthy-and-well-educated/
47 Kokalitcheva, K. 10 November 2015. "Who's liable when an Airbnb stay or Uber ride ends badly?". *Fortune*. http://fortune.com/2015/11/10/sharing-economy-safety-liability/
48 Kokalitcheva, K. 10 November 2015. "Who's liable?".
49 Kokalitcheva, K. 10 November 2015. "Who's liable?".
50 Sundararajan, A. 22 October 2012. "Why the government doesn't need to regulate the sharing economy". *Wired*. https://www.wired.com/2012/10/from-airbnb-to-coursera-why-the-government-shouldnt-regulate-the-sharing-economy/
51 Kokalitcheva, K. 10 November 2015. "Who's liable?".

One of the big problems with the independent contractor classification is that in Canada and the United States, many of workers' rights and protections, as well as the bulk of social benefits, are tied to the "employee" classification. Workers that are classified as independent contractors are often not covered by existing employment legislation. In Canada, for example, a company that uses this classification is not required to make employer contributions to Employment Insurance (EI) and the Canada Pension Plan (CPP) or provide any other benefits that could be given to an employee such as health, dental or prescription drug coverage. Platforms that employ independent contractors are also not obligated to pay minimum wages, provide vacation pay, public holiday pay, overtime pay, termination pay or severance pay.[52] In contrast, independent contractors in the sharing economy platform often experience unpredictability and income volatility, with no minimum earnings floor to ensure that their earnings are liveable.[53]

Additionally, providers in the sharing economy are often not covered by occupational health and safety legislation. Some jurisdictions such as Ontario use broad language to protect all "workers" — defined as "a person who is paid to perform work or supply service" — and thus protect independent contractors against violence and harassment in the workplace and provide them with the right to refuse unsafe work.[54] However, other jurisdictions such as the United States continue to use the "employee" definition in their federal occupational health and safety legislation thereby failing to provide independent contractors with these important protections.[55]

The lack of benefits, rights and protections offered to independent contractors is particularly concerning as their relationship with sharing economy firms often resembles the traditional relationship between employees and employers. For instance, firms have full control over the wages paid out to their providers and can easily prohibit them from using the platform, effectively terminating their employment. Indeed, providers can be banned from the platform if they receive poor ratings and there is often no process for appealing such a decision.

Indeed, providers can be banned from the platform if they receive poor ratings and there is often no process for appealing such a decision.

Many observers argue that the classification of independent contractors is a convenient loophole for corporations to avoid the costs of complying with existing legislation. Others contend that the classification of these workers as independent contractors is simply a by-product of the changing nature of work. Many jurisdictions, such as Ontario, are currently reviewing their employment standards legislation for these very reasons. This disagreement is also at the root of a growing number of class-action lawsuits focused on alleged worker misclassification in several jurisdictions.

The responses by sharing economy firms have been varied. In some cases, they have completely dropped out of the market: home-cleaning service HomeJoy shut down its operations in 2015, citing the slew of worker misclassification lawsuits.[56] Others have moved towards re-classifying their workers as employees instead. For instance, in certain US cities, grocery delivery platform Instacart now offers workers the option of converting their status to employee in order to receive workers' compensation and unemployment, social security and Medicare contributions.[57] Conversely, many firms simply refuse to budge on the matter. A potentially precedent-setting court case in the UK recently ruled that firms can no longer misclassify their employees in this way — a ruling that the defendant, Uber, plans to appeal immediately.[58]

52 Ontario Ministry of Labour. July 2016. *Changing workplaces review: Special advisors' interim report*. https://www.labour.gov.on.ca/english/about/pdf/cwr_interim.pdf pg. 135 and 142.
53 Field, F. and Forsey, A. September 2016. *Wild West Workplace: Self-employment in Britain's gig economy*. MP for Birkenhead. http://www.frankfield.co.uk/upload/docs/Wild%20West%20Workplace.pdf
54 Noack, A. and Vosko, L. November 2011. "Precarious jobs in Ontario: Mapping dimensions of labour market insecurity by workers' social locations and context", *Law Commission of Ontario* http://www.lco-cdo.org/vulnerable-workers-call-for-papers-noack-vosko.pdf pg. 38.
55 Pinsof, J. 2016. "A new take on an old problem: Employee misclassification in the modern gig economy". *Michigan Telecommunications and Technology Law Review*. 22(2) 341-373. http://repository.law.umich.edu/cgi/viewcontent.cgi?article=1220&context=mttlr
56 Huet, E. 17 July, 2015. "Homejoy shuts down, citing worker classification lawsuits" *Forbes*. http://www.forbes.com/sites/ellenhuet/2015/07/17/cleaning-startup-homejoy-shuts-down-citing-worker-misclassification-lawsuits/#48651cab7780
57 Alba, D. 22 June, 2015. "Instacart shoppers can now choose to be real employees". *Wired*. https://www.wired.com/2015/06/instacart-shoppers-can-now-choose-real-employees/
58 Osborne, H. 22 October, 2016. "Uber loses right to classify UK drivers as 'self-employed'". *The Guardian*. https://www.theguardian.com/technology/2016/oct/28/uber-uk-tribunal-self-employed-status Note that "self-employed" status in the UK is equivalent to the "independent contractor" classification used in Canada and the US.

It is also worth noting that there are other ways that providers are treated unfairly in the sharing economy. For instance, providers are often faced with burdensome costs, including paying for their own training, capital investment and maintenance costs — which can erode their net income.[59] The costs of fulfilling minimum standards, such as the performance of background checks, insurance, training and educational courses, are also often the responsibility of the provider. Additionally, sharing economy firms often seek to shift the risks, liabilities and costs of carrying insurance to users — on both the consumer and provider sides. In cities where these platforms are becoming more heavily regulated, such insurance is a requirement in order to operate but drivers are rarely, if ever, reimbursed by the platform.

NEGATIVE EXTERNALITIES

The consequences of the sharing economy for society at large are important to consider, especially given the scale of its growth and associated impacts. Many see the sharing economy as producing large positive externalities for society as people share under-utilized resources, generate less waste, interact with and gain trust in each other and rely more heavily on transactions between each other rather than with large and often remote corporations. However, the new and unfamiliar territory of the sharing economy and the ways in which it conflicts with existing safety and protection mechanisms can have equally widespread negative externalities.

An oft-cited example of such an externality is generated by home-sharing platforms such as Airbnb. The use of these platforms can transform the atmosphere of a given neighbourhood and raise concerns for neighbours if hosts rent out their spaces to a new set of guests every weekend. Indeed, several news stories highlight cases when Airbnb guests have vandalized homes or become involved in criminal activity.[60] These instances raise important questions about how to maintain the safety and well-being of those residing in the neighbourhoods of short-term rental hosts. The decision to accept the risks involved and rent out a space is ultimately left up to the homeowner, although the potential impact of these risks is much broader.

59 Osborne, H. 22 October, 2016. "Uber loses right to classify UK drivers as 'self-employed'".
60 Powell, B. 3 November, 2015. "Toronto Airbnb rental ends with police seizing guns, crack cocaine". *Toronto Star*. https://www.thestar.com/news/city_hall/2016/11/03/toronto-airbnb-rental-ends-with-police-seizing-guns-crack-cocaine.html ; Nerman, D. 29 April, 2015. "Airbnb nightmare renters leave Calgary home trashed". *CBC News*. http://www.cbc.ca/news/canada/calgary/airbnb-nightmare-renters-leave-calgary-home-trashed-1.3053555

Another set of externalities involves the ride-sourcing industry. Sharing economy firms have been hailed for making good use of underutilized resources thereby reducing waste and positively impacting the environment.[61] Uber has argued that the introduction of UberPool reduced CO_2 emissions in San Francisco by 120 metric tonnes in February and March 2015.[62] Conversely, critics of ride-sourcing argue that its introduction has increased the number of cars on the road and displaced public transit.[63] This could become a pressing issue for large and already congested cities like New York, and could negatively impact the efforts of jurisdictions as they seek to reduce their emissions.

ONLINE REVIEWS

Online reviews are increasingly playing a central role in the sharing economy. Indeed, some argue that they are an effective tool to ensure quality service and public safety when compared to traditional regulatory tools such as training and inspections.[64] Firms generally argue that review and rating systems enable consumers to avoid sub-standard providers by simply opting to not contract with providers with low ratings. Additionally, platforms also take direct action to remove providers from their platforms if their ratings fall below a certain threshold.

In both of these cases, it is true that these review systems perform some of the tasks typically done by regulators. However, the reliance on these ratings systems also raises important questions. For instance, there have been claims that these review systems have been used by both consumers and providers to enable discrimination through the use of coded language. Additionally, firms that use online review systems have been criticized for not offering adequate dispute resolution mechanisms for consumers or providers who feel that they have been unfairly rated or reviewed — a failing which places providers in a very vulnerable position.[65]

61 Botsman, R. and Rogers, R. 2011. *What's Mine is Yours: How Collaborative Consumption is Changing the Way We Live*. New York: HarperCollins.
62 Myhrvold, C. 16 April, 2016. *It's a beautiful (pool) day in the neighbourhood*. Uber Newsroom. https://newsroom.uber.com/us-california/its-a-beautiful-pool-day-in-the-neighborhood/
63 Westervelt, M. Han, E. Gopalakrishna, D. Klion, J. February 2016. *Emerging technology trends in transportation*. Eno Centre for Transportation and ICF International https://www.enotrans.org/wp-content/uploads/EmergingTech.v13.pdf pg. 8.
64 These claims parallel many technology firms', both within and without the sharing economy, claims that their data and their own internal safeguards are actually better at protecting individuals than are government regulation. See, for instance, The Tesla Team. 9 June, 2016. *A Grain of Salt*. Blog. https://www.tesla.com/blog/grain-of-salt
65 Field, F. and Forsey, A. September 2016. *Wild West Workplace*. pg. 9.

Additionally, in many cases, the review system is designed in a way that encourages inaccurate reviews. On many platforms, both consumers and providers are given opportunities to rate each other out of five stars. While both parties rate each other simultaneously, so as to not influence each other's rating and to provide an accurate assessment, this often does not occur for several reasons. First, individuals seldom use the full spread of the rating system, both contributing to and perpetuating a situation where any rating less than a full five stars can have significant negative repercussions for the individual being rated. Indeed, ratings as high as 4.7 out of 5 have been known to result in deactivation. Moreover, some firms such as Uber have also been criticized for not clearly communicating to drivers the ratings-threshold below which they risk being deactivated.[66] This can create significant social pressure against providing anything other than a full five-star rating for all but the most egregiously bad experiences, thereby severely handicapping the utility of the system. The resulting imprecision may encourage even conscientious consumers and providers to enter into private communications regarding ratings and areas that could be improved, thereby circumventing the purpose — and merit — of the entire system.

Stepping towards more comprehensive open-ended review systems illuminates an additional set of issues. The most important of these concerns is the reliability of the reviews and whether they are accurate appraisals. If reviews are not reliable — or are not seen as reliable by users — they cannot perform the functions that their proponents claim for them, thereby undermining an important benefit of the sharing economy.

Key to ensuring a high level of reliability is a strong approach to the management of these online reviews. In order for consumers to be able to trust online reviews, it is critical that reviews are fair, transparent, and based on defendable and transparent criteria. In order to ensure this level of fairness, review systems must include mechanisms for identifying and removing malicious, inaccurate and disingenuous negative reviews. Equally, however, mechanisms must also be put in place to ensure that misleading and biased positive reviews do not deceive users into engaging in transactions they would not have engaged in but for these deceptive reviews.

66 Allen, S. 27 January, 2015. "The mysterious way Uber bans drivers". *The Daily Beast*. http://www.thedailybeast.com/articles/2015/01/27/the-mysterious-way-uber-bans-drivers.html

Relatedly, the question of who is hosting and managing these reviews is also an important one. Firms have an incentive to present a comprehensive picture, as an inaccurate one might result in poor experiences and dissatisfied users. Nevertheless, firms may also have a conflicting incentive to facilitate as many transactions as possible given that many of these services' business models are built around assumptions of rapid growth in transactions aimed at capturing dominant market share.

It is in this context that transparency becomes especially important. Firms that are transparent about how they manage their review mechanisms provide users with an important part of the information they need to determine whether a review mechanism is reliable. In these contexts, it is usually possible to deliver this transparency in clear, non-technical language that can be easily audited because these protocols need not be proprietary or commercially valuable.

ALGORITHMIC OPENNESS AND EQUITY

The use of algorithms is one of the critical characteristics of sharing economy firms. Equity and clarity around how algorithms are used are likely to play an increasingly important role in the future of the sharing economy. For instance, as automated vehicles arrive, it is likely that there will be significant convergence between services such as ride-sharing, ride-sourcing and car-sharing.[67] One of the most important issues that will confront firms when automated vehicles begin to carry passengers — regardless of the ownership models — will be how the software handles "crash optimization." Crash optimization refers to the choices that the software makes when a crash is imminent, such as whether to prioritize reducing the total number of individuals harmed or ensuring that none of the injuries caused by the accident exceed a certain level of severity. Transparency around the logic a firm's software will use in such situations will be vital to building the confidence necessary, to say nothing of a supportive legal case, to enable the use of such cars.[68]

67 While many these terms and others are used inconsistently or interchangeably, there are important distinctions between these services. For a set of definitions that make these differences clear, please see Ditta, S. et al. August 2016. *Sharing the Road*. Chapter 2.

68 If acceptance of a set of algorithmic characteristics becomes an important part of a service's terms and conditions, this only magnifies the importance of the issues around terms and conditions discussed further in the Transparency sub-section. See Kirkpatrick, J. 6 June, 2016. "The ethical quandary of self-driving cars". *Slate*. http://www.slate.com/articles/technology/future_tense/2016/06/self_driving_cars_crash_optimization_algorithms_offer_an_ethical_quandary.html

Additionally, there are also rising concerns over the potential that exists for both intended and unintended discrimination to arise through the use of algorithms. Indeed, algorithms are only as good as the data which they mine and through which they have been trained. Because of this, databases that are biased, even unintentionally, will yield biased results. For example, algorithms that are used to help firms overcome biases in hiring may not meet their objectives if algorithms are trained on data that encodes prejudicial biases.[69] Also concerning, but potentially less likely, are malicious individuals using algorithms to mask discriminatory intentions.[70]

> *Indeed, providers can be banned from the platform if they receive poor ratings and there is often no process for appealing such a decision.*

Responding to these challenges is a particularly difficult question. In both the aforementioned cases, firms can plausibly claim that their algorithms are proprietary, meaning that it would be unreasonable for them to be required to reveal them. It is not yet clear how the rights of these firms to maintain their competitive advantage and benefit from their innovations can be protected while also ensuring that unlawful or undesirable discrimination is not encoded, purposefully or otherwise, into their functioning.

DYNAMIC PRICING

The controversy around "surge" or dynamic pricing represents another technical concern connected to the use of algorithms in the sharing economy. For example, if travellers expect to pay a certain price for a ride-sourced ride and are then charged more, this raises concerns about fairness from the consumer perspective — particularly if travellers are left with few options but to pay higher than usual fares. Moreover, there are a few specific cases, such as during natural disasters and other situations where public safety is threatened, when there is a strong public interest in capping the use of dynamic pricing. Ride-sourcing firms have prudently responded by accepting such caps in these situations. But in some ways, these concessions have only delayed a resolution of the concerns surrounding this practice.

A related issue is "price steering," a form of dynamic pricing whereby prices offered to consumers change due to a variety of factors such as previous activities online or an algorithm's evaluation of the consumers' income level, willingness or need to spend on an item.[71] To be clear, price discrimination, of which this is a form, is not new.[72] Historically, as patterns of price discrimination arose, many were determined to be unfair and outlawed. But the arrival of big data and algorithms allows for more opportunities to subtly engage in this practice. One author notes that as "big data and online buying increases the information that business have on us, the ease and profitability of first degree price discrimination will become difficult to resist."[73] Already, there are reports that online retailers will alter their prices based on the brand of device being used (Apple users tend to be charged more than PC users), user location (users in wealthier postal codes are charged more), and other bits of data.[74]

Such trends raise important questions over whether the introduction of dynamic pricing to sectors such as for-hire transportation threatens to undermine regulatory regimes, which form a part of a much larger system that cannot be so easily unpacked without important consequences. Dynamic pricing is already used in other industries, such as air transportation, in ways which take advantage of individuals' presumed ability to pay or the intensity of their need to travel on a particular day. Setting aside any concerns

69 For instance, while a bank cannot legally decline to make someone a loan on the basis of race, can it do so on the basis of that individual's mother's education level — which in the USA correlates strongly with race — if an algorithm finds this variable to be useful? For more on this topic see: The Economist. 25 February, 2016. "New rules for big data". *The Economist*. http://www.economist.com/node/15557487 ; Barocas, S. and Selbst, A. September 2016. "Big data's disparate impact". *California Law Review*. 104 671-732. pg. 674; Buolamwini, J. 16 May, 2016. *InCoding—In The Beginning*. Medium. https://medium.com/mit-media-lab/incoding-in-the-beginning-4e2a5c51a45d#.2r23lv9l4

70 Barocas, S. and Selbst, A. September 2016. "Big data's disparate impact". pg. 693.

71 Borchers, C. 23 October, 2014. "Online retailers found to shift offerings and prices". *The Boston Globe*. http://www.bostonglobe.com/business/2014/10/22/online-shopping-yields-different-prices-results-says-northeastern-study/ZbSVnoBxPJtA8STeWbpQ9H/story.html

72 In 1991, a study found that new car dealerships charged Caucasian women an average of 40 per cent more than Caucasian men. See Lam, B. 18 October, 2014. "Battle of the prices: Is it ever fair to charge one sex more?". *The Atlantic*. http://www.theatlantic.com/business/archive/2014/10/battle-of-the-prices-is-it-ever-fair-to-charge-one-sex-more/381546/

73 Ozimek, A. 1 September, 2013. "Will big data bring more price discrimination?". *Forbes*. http://www.forbes.com/sites/modeledbehavior/2013/09/01/will-big-data-bring-more-price-discrimination/#467d7a73792d

74 Alang, N. 7 November, 2016. "How dynamic pricing is squeezing consumers". *The Globe and Mail*. http://www.theglobeandmail.com/report-on-business/rob-magazine/how-dynamic-pricing-is-squeezing-consumers/article32653776/

over the acceptability of these practices, it is important to note that the regulatory system for the for-hire transportation industry was specifically crafted with an aim to ensure that individuals in vulnerable positions, specifically travellers, are not at risk of being taken advantage of when they are in great need and have few resources or alternatives. As firms become more adept at identifying individuals' characteristics — specifically the intensity of their need — there is concern that platforms and providers will unfairly exploit this knowledge.[75]

COMPETITION

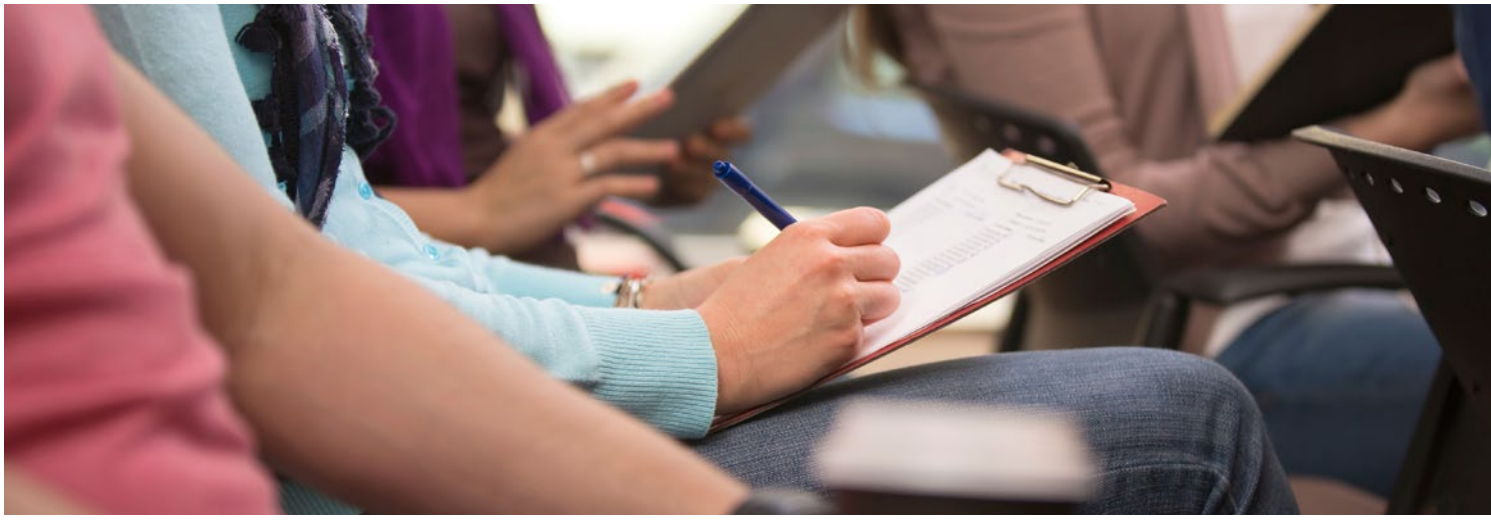
Encouraging robust competition in a marketplace by ensuring a level playing field is one of the most important objectives for the regimes which govern the various sectors of the economy. The advent of the sharing economy, however, has created significant new challenges for governments in this regard. Specifically, these challenges fall into two main categories: (1) difficulties in creating a level playing field in a marketplace with different types of participants; and (2) idiosyncratic features of the sharing economy that make it difficult to ensure a competitive marketplace.

Levelling the playing field for different types of participants

Typically, entities competing in a market are regulated in such a way that they all must meet similar requirements. For instance, all hotels are regulated according to the same code. Naturally this code includes some differentiation to recognize different formats within the accommodation sector such as bed and breakfasts. Nevertheless, these differentiations share a basic foundation of common regulation based on the similarity in the service being provided. Achieving a fair competitive marketplace requires similar services to be regulated comparably.

The arrival of the sharing economy has disrupted this governance pattern. Clearly, sharing economy services are different in significant ways from existing businesses which provide similar services. Nevertheless, even if Airbnb is not identical to a hotel company, it is similar enough to be competing in the short-term accommodation sector. Given this basic similarity, it stands to reason that at least some of the requirements that traditional providers must follow should also be required of new sharing economy firms.

Striking the right balance between similarity of regulation and recognition of the varying levels of risk associated with different types of service can be very complicated. An attempt to regulate Airbnb in Quebec — where hosts are required to register with the *Corporation de l'industrie touristique du Québec (CITQ)*, the provincial body responsible



75 Some might respond that the best answer to this problem lies with more competition, but as is discussed further below, this might not present such an easy solution either.

for regulating the accommodations sector — has encountered challenges. Registering with the *CITQ* involves obtaining a permit that costs $250, carrying an insurance policy worth at least $2 million, paying a nightly hotel tax, undergoing an initial inspection, having one's establishment evaluated by the government and receive a rating out of five stars, and posting a sign in a conspicuous place.[76] Unfortunately, this approach has also met with very low compliance to date — only 500 permits have been issued so far — which is a fraction of the approximately 10,000 units in the province that appear to be listed on various online platforms.[77]

Obviously, such a low level of compliance is indicative of a governance regime that is not functioning properly. One potential explanation is that the regulations are too onerous and duplicative of the systems that platforms like Airbnb already use. For instance, one could argue that the insurance carried by Airbnb makes such a requirement unnecessary. Moreover, one could argue that forcing providers, many of whom are casual hosts seeking only to supplement their income, to abide by commercial regulations serves only to raise the cost of entry into this market to impractical levels. While such an approach could be warranted if there were sufficiently large public health, safety or other concerns that needed solving, absent such a justification, the use of regulations in this context seems more likely to be anti-competitive. Additionally, by raising compliance costs, regulations risk rendering Airbnb's low-cost business model unworkable, thereby robbing consumers of this innovative service.

Conversely, there is one area where platform firms have unfairly and un-competitively benefited from regulatory arbitrage, namely taxation. If traditional accommodations are required to pay a hotel tax, it is not clear why Airbnb or its hosts should be exempt from this cost. The same argument applies to sales taxes. It is particularly striking, for instance, that taxi drivers are required to include sales tax as an identifiable part of their fare while ride-sourcing drivers are often not.[78] This imbalance is anti-competitive as it reduces the platform firms' costs significantly, which puts them in a position to offer lower fares than taxis.

Idiosyncratic features of the sharing economy

The second problem that the sharing economy poses from a competition perspective involves the idiosyncratic characteristics of platform businesses and the impact of these characteristics on markets. Despite its characterizations as a "wild west,"[79] the sharing economy is actually a fairly uncompetitive marketplace in some respects. One reason for this is that much of the sharing economy is still so new that it is not yet clear that a sustainable market actually exists in many of its parts. Many firms have attracted significant initial investment and then been forced to fold when it became clear that their proposed service or business model was simply not profitable.[80] Indeed, it is not even clear that the most well-known sharing economy firm, Uber, is even capable of making money in its current configuration.[81] Because of this, it is impossible to know whether the market dynamics would be different if potential entrants into the market did not need to compete with loss-making businesses only kept afloat by venture capital.

Another key way in which platform businesses are different from more traditional firms has to do with the high levels of market power that "network effects" have enabled platform firms to build. Network effects refers to "the effect that one user of a good or service has on the value of that product to other users. Positive network effects occur when increasing the number of users increases the value or utility of the

76 See *Corporation de l'industrie touristique du Quebec*. http://citq.qc.ca/en/index.php
77 Marowitz, R. 15 September, 2015. "Doubts raised over Quebec Airbnb, home-sharing regulation strength". *The Toronto Star*. https://www.thestar.com/business/2016/09/15/doubts-raised-over-quebec-airbnb-home-sharing-regulation-strength.html

78 The legality of this situation is not currently clear as the Canada Revenue Agency (CRA) has not yet clarified ride-sourcing drivers' responsibilities for remitting HST. (Uber does not collect or remit HST claiming that doing so is the drivers' responsibility). The CRA has also not clarified whether the first $30,000 of ride-sourcing drivers' revenues are exempt from sales tax. Either option is problematic. If drivers should have been remitting this tax but have not been doing so, ride-sourcing firms and drivers have profited from an unequal application of existing laws that has cost taxicab drivers significant revenues since 2014. Alternatively, if ride-sourcing drivers are entitled to a $30,000 exemption and taxi drivers are not, it is not clear on what basis ride-sourcing providers ought to be given such an advantage over taxi drivers. Powell, B. 21 July, 2015. "Uber says drivers are expected to collect HST". *The Toronto Star*. http://www.thestar.com/news/city_hall/2015/07/21/uber-says-drivers-are-expected-to-collect-hst.html
79 Field, F. and Forsey, A. September 2016. *Wild West Workplace*.
80 Hill, S. 27 March, 2016. "Good riddance, gig economy: Uber, Ayn Rand and the awesome collapse of Silicon Valley's dream of destroying your job". *Salon*. http://www.salon.com/2016/03/27/good_riddance_gig_economy_uber_ayn_rand_and_the_awesome_collapse_of_silicon_valleys_dream_of_destroying_your_job/
81 McAlone, N. 14 April, 2016. "Uber says it's 'profitable' in the US — here's how much it makes per ride". *Business Insider*. http://www.businessinsider.com/uber-says-its-profitable-in-the-us-2016-4

network to other users."[82] Network effects can be good for users as they increase the value of membership in a network, but also bad in that they create barriers of entry for competitors wishing to join this market for networks.

Positive network effects form an important part of the value-add for many sharing economy firms. For example, as more individuals join a bike-sharing service, the service will be able to expand the number of bikes and stations it offers and, in so doing, increase its overall geographic coverage and customer base. The downside of this "virtuous circle" is that every increment of improvement in the service offered by one network also serves to increase the height of the barriers to entry into that sector for potential competitors. As these barriers grow, it becomes harder and harder for competitors to join the marketplace thereby making it more difficult for a truly competitive marketplace to emerge.

DATA-SHARING AND DATA PROTECTION

The sharing economy relies significantly on data, which platforms use to update and tailor the services they provide to customers. The balance between sharing data and being transparent with the public, and protecting the data consumers are sharing with platforms, is an important ongoing issue. There are two main issues which must be considered in use of data within the sharing economy: data-sharing and data protection.

A key concern is the degree to which firms share data on their services — especially with regulators — which would allow for an assessment of the quality and impacts of their services. Many firms have been very reluctant to share data and, in cases when they do so, have been criticized for skewing it to support their own objectives.[83] Without sharing data, there are clear limitations on government's ability to provide oversight and accountability and ensure that the interests of various stakeholders and the public are being considered by these firms. Moreover, data is needed to properly regulate firms — to provide insight about how they are being used by customers and providers, as well as to support any enforcement activities. Furthermore, many firms have resisted requests by governments to share anonymized data in quantities and forms that could significantly enhance governments' planning and policymaking abilities. Resolving this challenge will only become more important as the sharing economy grows.

> *Many firms have been very reluctant to share data and, in cases when they do so, have been criticized for skewing it to support their own objectives.*

Privacy is also an important issue, particularly regarding the protection of personal customer information and confidentiality. Indeed, platforms collect significant quantities of customer data, including personal and financial information, as well as information on individuals' use of the platform. As some sharing economy firms have been reluctant to share data, they have been equally hesitant to provide clarity on how they use customer data and the degree to which they ensure privacy. For instance, Uber has come under fire for providing employees with easy access to user information, as well as for tracking customers in real time and even, in some cases, monitoring personal activities.[84] Many sharing economy firms have also taken limited steps to protect user data from outside sources, particularly government requests — though Lyft and Uber were found to have made the greatest efforts in this area.[85] In one report, which analyzed ten firms across various sectors, firms were judged based on whether a warrant was needed to share user information, whether they issue a transparency report, and whether they inform customers about requests for data by governments. In many instances, firms took none of these steps.

82 UK House of Lords. April 2016. "Online platforms and the digital single market". *Select Committee on European Union, 10th Report of Session 2015-16*. https://www.publications.parliament.uk/pa/ld201516/ldselect/ldeucom/129/129.pdf pg. 24

83 For instance, Airbnb has been accused of manipulating data it shared which had suggested that the majority of short-term rental listings on its site were casual as opposed to commercial hosts. See Kokalitcheva, K. 11 February 2016. "Researchers say Airbnb fudged New York City's listing data". *Fortune*. http://fortune.com/2016/02/11/airbnb-listings-research-data/

84 Mueffelmann, K. "Uber's privacy woes should serve as a cautionary tale for all companies". *Wired*. https://www.wired.com/insights/2015/01/uber-privacy-woes-cautionary-tale/

85 Cardozo, N. Opsahl, K. Reitman, R. 5 May, 2016. Who has your back? Protecting your data from government requests: Sharing economy edition. *The Electronic Frontier Foundation*. https://www.eff.org/who-has-your-back-2016 pg. 4.

DISPUTE RESOLUTION MECHANISMS

The nature of the sharing economy, which involves online transactions for various types of services rendered often purchased sight unseen, leads to significant potential for disputes — and the need for robust mechanisms to resolve them. Indeed, with the rise of online transactions in general, there have been increases in conflicts and misunderstandings associated with these transactions.[86] In many cases, traditional modes of dispute resolution were not sufficient to properly address those that emerged with new technologies. Web-based retail outlets that are heavily reliant on online transactions, such as eBay, learned early on that strong dispute resolution mechanisms are critical to success. Firms in the sharing economy have started to reach similar conclusions — a customer service manager at TaskRabbit noted that "dispute resolution is the one thing you can't get wrong."[87]

While consumer protection laws typically involve provisions requiring dispute resolution mechanisms, many firms in the sharing economy offer limited opportunities to complain or dispute decisions by firms beyond ratings mechanisms. Some services offer only limited options for contesting poor ratings. These limited options are a problem as poor ratings can negatively impact consumers' likelihood of being accepted by future providers. Such limited options are an even greater problem for third parties, such as a home-sharing host's neighbours, who do not even have the option of using the standard ratings system to share complaints. Given the limitations in rating and review systems (as discussed in a previous sub-section), such services are becoming increasingly important. Nevertheless, some sharing economy providers have tools in place to respond to customer concerns since brand reputation is considered critical to their success. In many cases, however, these systems are automated and not designed to address complex issues.

Often, the importance of these problems is even greater for providers. For instance, Uber drivers can be removed from Uber's platform if their aggregate rating drops too low. This effective termination comes without any pathway for disputing the rating. In an attempt to resolve this problem, some US drivers have taken the company to court. Unfortunately for them, a federal appeals court ruled that existing dispute resolution arbitration processes are sufficient — despite concerns that have been raised by service providers about their unfairness and opacity.[88]

TRANSPARENCY

In a number of the other key issues, the issue of transparency was raised as an important consideration. It is critical for firms to be forthcoming with information about the choices they make and the reasons for doing it, particularly how they will collect, use and retain data generated by

86 Katsh, E. and Rabinovich-Einy, O. 2015. "Technology and dispute systems design: Lessons from the Sharing Economy". *American Bar Association 21(2).* http://www.americanbar.org/publications/dispute_resolution_magazine/2015/winter/technology-and-dispute-systems-design-lessons-from-the-sharing-economy.html

87 Katsh, E. and Rabinovich-Einy, O. 30 January, 2015. "Dispute resolution in the sharing economy". in Gasser, U. Zittrain, J. Faris, R. Jones, R. (eds) *Internet Monitor 2014: Reflections on the Digital World: Platforms, Policy, Privacy, and Public Discourse*. The Berkman Center for Internet & Society 59-62. https://cyber.harvard.edu/publications/2014/reflections_on_the_digital_world pg. 60.

88 Mathewson, S. 14 September, 2016. "No day in court for Uber drivers". *Fordham Law News*. http://news.law.fordham.edu/blog/2016/09/14/no-day-in-court-for-uber-drivers/

users. Indeed, there are clear drawbacks to a lack of data transparency from a public policy perspective, as such data could help inform government efforts on topics such as housing and transportation.

Greater transparency would also help to improve consumers' trust in firms, as there is currently uncertainty regarding the way that customer data is used, the reliability of reviews on platforms and how algorithms impact services. For instance, one report found that Uber's lack of algorithmic openness, alongside its lack of interest in sharing data on supply and demand, makes its system "more vulnerable to manipulation than other online marketplaces," and has potential to enable drivers to induce surge pricing.[89]

Significantly, however, transparency does not just mean making information available to users, it also means making it available in ways that make it easy for users to quickly understand what they can and cannot expect of firms. A key way that this issue impacts both consumers and providers is through the terms and conditions that users must agree to accept before they can access a service.

Currently, the vast majority of sharing economy firms provide terms and conditions that are written in legal language that is all but impenetrable to the average user. Moreover, the length of these terms and conditions are often sufficiently excessive to function as a strong deterrent to reading and understanding them. A 2011 survey found that 93 per cent of Britons did not fully read the terms and conditions when signing up for online products and services and one-fifth of them experienced negative consequences as a result.[90] Firms often use the knowledge that most users will not read or understand these terms and conditions to reserve for themselves highly unbalanced rights and privileges compared to the consumers and providers who use their platforms.[91]

Some might argue that what are essentially legal contracts cannot be presented in any other way. But this is not true: the advent of plain language legislation and drafting clearly provide techniques for rendering legal texts more easily understood by individuals without the benefit of formal legal training. For example, one such technique focuses on writing with the most vulnerable individuals to whom a legal text might apply as the intended audience. In so doing, drafters can at the very least force authoritative interpreters of the text, such as courts, to confront the empirical reality of these individuals' experiences instead of relying on the more privileged experiences encoded in the assumptions of legal professionals.[92]

Additionally, drafters of terms and conditions can employ techniques such as hyperlinking to referenced documents and to explanations of obscure terms of art and concrete examples, as well as employing multimedia explanatory tools such as flowcharts, tables and even links to audio/visual materials.[93] Indeed, given that technology companies are some of the leading practitioners in end-user testing and user-centred design, this expertise should be applied to help reduce the incomprehensibility of the terms and conditions which accompany their products and services.[94]

89 Chen, L. Mislove, A. Wilson, C. September 2015. *Peeking beneath the hood for Uber*. FTC Public Comments. https://www.ftc.gov/es/system/files/documents/public_comments/2015/09/00011-97592.pdf

90 Smithers, R. 11 May, 2011. "Terms and conditions: Not reading the small print can mean big problems". *The Guardian*. https://www.theguardian.com/money/2011/may/11/terms-conditions-small-print-big-problems

91 Grothaus, M. 1 December, 2014. "I asked a privacy lawyer what Facebook's new terms and conditions will mean for you". *Vice*. http://www.vice.com/read/i-asked-a-lawyer-how-facebooks-new-terms-will-affect-my-online-life-183

92 Sullivan, R. 2001. "The Promise of Plain Language Drafting". *McGill Law Journal* 47 97-128. pg. 118

93 Sullivan, R. 2001. "The Promise of Plain Language Drafting". pg. 103.

94 The use of such techniques, such as audience testing, has been shown to significantly improve the ability of individuals to understand and make use of legal texts. See Sullivan, R. 2001. "The Promise of Plain Language Drafting". pg. 106-107.

Analysis

While this report has demonstrated that there are a number of issues that will require a response in the sharing economy, not all of them are appropriate for standards-based solutions. This section will provide a more in-depth analysis of the issues that this report highlights -- with a particular emphasis on those which have been identified as most likely to benefit from a standards-based approach. It will also include considerations of different approaches to standardization.

In identifying those issues for which standards-based approaches are appropriate, a number of criteria were applied. The fulfillment of these criteria can be tested by posing the following questions:

- Is there a gap in governance that needs to be filled?
- Are there standards-based precedents that can be drawn upon?
- Can minimum parameters be set?
- Would the market benefit from a consistent governance regime across multiple jurisdictions?
- Is wide-ranging stakeholder consultation needed to arrive at a generally acceptable solution?
- Is there industry or regulator buy-in?
- Could governance of the issue be accomplished within one of the four approaches to standardization outlined below?

Based on analysis guided by these seven questions, six key issues were identified as the most amenable to standards-based solutions, namely:

- Labour challenges
- Dispute resolution mechanisms
- Online reviews
- Data-sharing and data protection
- Competition
- Ride-sourcing[95]

95 Note that ride-sourcing was not identified as an issue in the key issues section. It is presented here because it offers an opportunity for a discussion of how a sector-specific standard might address a number of qualitatively distinct key issues simultaneously.

The remaining key issues will not be analyzed in this section as they were found to be less amenable to standards. There were a variety of reasons for this decision. For example, discrimination and inclusion are certainly important issues that can have detrimental impacts on society. Critically, however, their complexity and the fact that they touch on such fundamental and political questions as basic human rights means that these issues demand a response via government regulation and legislation. Similarly, negative externalities resulting from the sharing economy are inherently difficult to quantify and often demand a balancing of interests between groups within a society thereby placing such issues within a political context that makes the use of standards-based approaches difficult.

POTENTIAL APPROACHES TO STANDARDS-BASED SOLUTIONS

It is important to first outline the different potential standards-based approaches that could be used to address the key issues that were identified. The research conducted for this report pointed towards four possible approaches. These four options are not mutually exclusive — in fact, the fourth option represents an approach which combines two or even all three of these options according to the demands of the priorities being addressed.

A general cross-sector principles-based standard

A broad-based standard could apply to the platforms, consumers and/or providers that operate within the sharing economy. The Sharing Economy UK TrustSeal discussed in section 3 is a good example of such a standard. Aimed at improving consumer safety, sharing economy firms are able to apply for this accreditation and applications are assessed against a set of minimum standards in relation to eight broad principles.

This cross-sector approach can be beneficial in its ability to generate consistent best practices applicable in the sharing economy in jurisdictions around the world. The potentially global scope of such an approach can also represent a challenge, given the significant diversity among the activities, sectors and business models that constitute

the sharing economy. Jurisdiction over these issues can also cut across multiple levels of government, adding to the complexity of this approach. Consequently, any steps taken within this approach will need to tend towards more abstract statements of principles rather than detailed prescriptions. Ultimately, tools like the provision of guidance and training are well suited to this area, potentially even more so than certification.

A more detailed cross-sector functionality-based standard

Many of the issues that governance systems must confront in the context of the sharing economy are also challenging in the wider context of the digital economy. While still maintaining a global scope, another cross-sector approach could reduce the scope of a standard by narrowing its focus to specific functionalities common across the sharing economy. For example, ISO is already developing a standard to govern online consumer reviews as a means of addressing issues that are specific to that functionality.

Such an approach has the virtue of enabling SDOs to deal with more detailed and specific technical challenges that often lend themselves to quantification. This makes assessing compliance more objective — something that is especially important for certification. Pursuing standards-based approaches of this type has the virtue of maintaining a global scope while still enabling a narrow focus amenable to certification. However, unless standards are created for each functionality, it risks leaving important sections of the sharing economy unaffected.

A more narrowly focused sector-specific standard

A third approach focuses on developing standards for individual sectors of the sharing economy such as short-term accommodation or ride-sourcing. Such a sector-specific approach enables standards to be developed that meet the needs of a particular sector in ways that might not be possible if considerations from other sectors were included. Given that some sectors of the sharing economy have grown more quickly and come into more serious conflict with incumbents and government regulation than others, such an approach could be beneficial.

Since it is sector specific and not functionality specific, such an approach can incorporate both narrower technical forms of standardization as well as more abstract ones. Simultaneously, however, this approach runs the risk of being reactive because it is more likely to focus on the sectors receiving the most attention in the sharing economy with the result that it might lock specific sectors into less-efficient solutions or block the global development of cross-sector ones that might have emerged otherwise.

A hybrid system

The fourth option is a mixed system that incorporates aspects of a broad principles-based sharing economy standard, several cross-sector functionality standards, and potentially adapts these standards to a jurisdiction- and sector-specific standard.

The benefit of such a hybrid approach is that it allows for a degree of flexibility. It enables the articulation of a principles-based standard at an international level while simultaneously allowing a more specific focus to give these principles a national and sectoral adaptation. Similarly, it creates a general framework compatible with the insertion of an array of functionality-specific standards that maintain the benefit of an international approach while gaps in the functional architecture can be filled in within a comprehensive standard focused on a specific sector or jurisdiction.

ISSUE-SPECIFIC ANALYSIS

1. Labour Challenges

Many business models commonly used in the sharing economy conflict with existing labour regulations and legislation. Worker classification is at the core of this issue, as many providers in the sharing economy are classified as "independent contractors" rather than employees and, therefore, are not entitled to various benefits, rights and protections outlined in existing legislation.

Many see government regulation as a simple solution to this issue — by enforcing the classification of "employee" on all workers in the sharing economy, government can improve access to these benefits. Firms are resisting such a move, arguing that such a classification is incorrect and incompatible with their business models.[96] As an alternative, some have suggested that that the category of "dependent

96 Isaac, M. and Singer, N. 17 June, 2015. "California says Uber driver is employee, not a contractor". *The New York Times*. http://www.nytimes.com/2015/06/18/business/uber-contests-california-labor-ruling-that-says-drivers-should-be-employees.html?_r=3 ; See also Osborne, H. 28 October, 2016. "Uber loses right to classify drivers as self-employed".

contractor" should be extended or revised to classify workers in the sharing economy.[97] It has been argued that such a status would better reflect the nature of the work performed through sharing economy platforms where some aspects of these tasks align with the definition of an employee, while others do not (e.g. the relative flexibility of hours worked). In response, many governments are undertaking comprehensive reviews of their employment standards legislation. Ontario's Ministry of Labour, for example, has embarked on the *Changing Workplaces Review*, looking at how outdated legislation could be reformed to address these issues.[98] This is a lengthy and extremely complicated process, however, and it could take years before the review is complete and the government begins to make changes. In the meantime, providers remain disadvantaged by volatile incomes and burdensome costs. Therefore, the speed and flexibility of standards, relative to often slow bureaucratic processes, could be beneficial.

Moreover, government intervention may not be the best response. It is true that many workers feel disadvantaged by the current system and vulnerable to mistreatment by platforms. But a recent survey conducted by consulting firm McKinsey indicated that while 30 per cent of independent workers engage in this type of work out of necessity, around 70 per cent of independent workers do so as a preferred choice.[99] By involving workers in standards development processes, identifying potential solutions to gaps in the current system such as minimum earnings floors, reimbursement of some costs like uniform purchases or effective dispute resolution mechanisms, standards-based approaches could lead to a significantly improved labour situation relatively quickly.

Finally, there is precedent for the use of standards to improve labour conditions. *ISO 26000 – Social Responsibility*, for example, provides socially responsible best practices for improving employee morale, attracting investors, retaining talent and gaining competitive advantage.[100] This existing standard explicitly addresses similar labour concerns such as employment relationships, health and safety, social dialogue, human development and training in the workplace. The International Labour Organization (ILO) had an important role in shaping and guiding the development of the labour component of ISO 26000, having signed a memorandum of understanding with ISO to establish cooperation and a view that standards would complement world-wide fundamental rights at work.[101] ISO 26000 has generally been considered a success and could be used as a useful starting point in developing labour guidelines for sharing economy platforms.[102] Furthermore, the continued guidance of the ILO could be incredibly valuable, as the organization has already done extensive research on the economic and legal implications of casual labour and "crowd-working" platforms.[103]

Some early steps have already been taken by firms that have resulted in changes to their business models and operations aimed at benefitting providers. For example, TaskRabbit has introduced a wage floor that ensures "taskers" do not earn less than $12.80 per hour.[104] Juno, a new ride-sourcing app that competes with Uber but takes half the rate of commission, has also set aside a restricted pool of stocks to provide drivers with equity ownership.[105] Edmonton-based ride-sourcing app TappCar has partnered with one of North America's largest unions to ensure drivers have access to a mediated complaints process, health benefits and pensions at decent rates.[106] The approaches taken by these firms could be used as best practices, offering insight into how standards-based approaches could be developed to address labour challenges.

97 Sachs, B. 22 June, 2015. "A new category of worker for the on-demand economy?". *OnLabour*. https://onlabor.org/2015/06/22/a-new-category-of-worker-for-the-on-demand-economy/
98 Government of Ontario. July 2016. *The Changing Workplaces Review*. Ontario Ministry of Labour. https://www.labour.gov.on.ca/english/about/workplace/
99 Manyika, J. Lund, S. Bughin, J. Robinson, K. Mischke, J. Mahajan, D. October 2016. *Independent worker: Choice, necessity, and the gig economy*. McKinsey Global Institute. http://www.mckinsey.com/global-themes/employment-and-growth/independent-work-choice-necessity-and-the-gig-economy
100 International Organization for Standardization. *ISO 26000 — Social Responsibility. Standards*. http://www.iso.org/iso/home/standards/iso26000.htm
101 International Labour Organization. *International Organization for Standardization (ISO)*. Enterprise Development. http://www.ilo.org/empent/Informationresources/WCMS_101255/lang--en/index.htm
102 At the time of its second anniversary, 60 countries had adopted ISO 26000 as a national standard with 20 more countries in the process of reviewing it for possible adoption. See Lazarte, M. 2013. *ISO 26000: International forum revisits the road travelled*. ISO News. http://www.iso.org/iso/news.htm?refid=Ref1691 ; For measurements of project uptake and the use of standards in the Middle East & North Africa see ISO. *Benefits in applying ISO 26000: Selected case studies as a result of the SR MENA Project*. http://www.iso.org/iso/srmena_factsheets.pdf
103 Berg, J. and De Stefano, V. 20 May, 2016. "How are workers faring in the gig economy?". *Work in Progress*. https://iloblog.org/2016/05/20/how-do-workers-fare-in-the-gig-economy/
104 Botsman, R. and Keen, A. 10 May 2015. "Can the sharing economy provide good jobs?". *Wall Street Journal*. http://www.wsj.com/articles/can-the-sharing-economy-provide-good-jobs-1431288393
105 Martin, C. 1 October 2016. "Granting shares for fares: An Uber rival's play for drivers". *New York Times*. http://www.nytimes.com/2016/10/02/technology/granting-shares-for-fares-an-uber-rivals-play-for-drivers.html
106 Rusnell, C. and Russel, J. 2 March 2016. "TapCar, Edmonton's newest ride-hailing service, invites Teamsters to organize drivers". *CBC News - Edmonton*. http://www.cbc.ca/news/canada/edmonton/tappcar-edmonton-s-newest-ride-hailing-service-invites-teamsters-to-organize-drivers-1.3471748

Dispute Resolution

It is important for sharing economy platforms to effectively resolve disputes if they wish to ensure that consumers and providers continue to use their services. However, many firms in the sharing economy rely primarily on ratings systems to track performance — which can sometimes be biased and often tell only part of a story. Moreover, it can also be difficult to address the full range of disputes that may emerge through existing mechanisms. Indeed, there are a range of disputes that can occur between consumers and providers — but also between consumers or providers and firms themselves. An approach that brings all of these stakeholders to the table, as well as affected third parties such as neighbours of Airbnb hosts,[107] could be valuable in helping to address this issue.

Some key disputes that can occur within the sharing economy include:

- Property damage by customers
- Refunds and transaction issues
- Cancellations
- Unfair ratings or reviews
- Insufficient payment of wages
- Conflicts with managers

Poor ratings are an especially significant problem from the perspective of providers, as they can result in removal from a platform. While efforts have been made to address some of these types of disputes, others remain. For instance, Zipcar has reportedly received numerous complaints about arrival timing and the state of automobiles, as well as its perceived inability to effectively resolve issues that have been reported.[108] In general, the dispute resolution mechanisms that have been implemented in the sharing economy have been devised on an ad hoc basis and "frequently leave individuals without any clear understanding of how to address perceived reputational slights."[109] Moreover, the fact that firms are often both the defendant and adjudicator in these disputes undermines the impartiality and acceptability of many of these of mechanisms.

Dispute resolution is an area where standards could potentially make a difference in the sharing economy. One report found that sharing economy providers need "clear and constructive dispute resolution norms, designated and qualified conflict resolvers, and a systematic way to ensure that those norms are communicated to new members."[110] While existing consumer protection law generally calls for firms to provide dispute resolution mechanisms, there is a lack of clear guidance or best practices on how to effectively do so.[111] Attempts to improve dispute resolution within the sharing economy could build on existing efforts that incorporate the issue such as ISO 10003, a standard on quality management for customer satisfaction that includes guidelines for dispute resolution.[112]

There also exist some other models for a dispute resolution standard. For instance, sharing economy firms in the EU fall under the jurisdiction of a new online dispute resolution platform which provides a portal for individuals to submit, and for firms to respond to, complaints.[113] Currently, however, sharing economy firms are only required to inform customers about the portal.[114]

The global nature of the sharing economy means that firms around the world will face the issue of disputes and the need to resolve them. International standardization could represent a potentially efficient means of addressing this growing concern. Overall, it is in the interest of firms to ensure robust dispute resolution mechanisms exist, as this has a direct impact on consumer and provider satisfaction and, ultimately, on their bottom line. Furthermore, ensuring that dependable dispute resolution mechanisms emerge sooner rather than later can also help them "avoid some regulatory burden."[115]

107 Katz, V. 29 November, 2015. "Regulating the sharing economy". *Berkley Technology Law Journal* 30(4) 1067-1126. pg. 1111-1113.
108 Fierman, W. 25 May, 2016. "Zipcar customers are becoming disillusioned for one troubling reason." *Business Insider*. http://www.businessinsider.com/zipcar-customer-service-sharing-economy-2016-5
109 Dambrine, B. Jerome, J. Ambrose, B. June 2015. *User reputation: Building trust and addressing privacy issues in the sharing economy*. Future of Privacy Forum. https://fpf.org/wp-content/uploads/FPF_SharingEconomySurvey_06_08_15.pdf
110 Kulp, H. and Kool, A. 2015. "You Help Me, He Helps You: Dispute Systems Design in the Sharing Economy". *Washington University Journal of Law and Policy* 48 179-230. http://openscholarship.wustl.edu/cgi/viewcontent.cgi?article=1881&context=law_journal_law_policy. pg. 202.
111 Delany, L. 21 October, 2015. *Shared thinking for a collaborative Europe: Roundtables 1&2 Reports*. European Collaborative Economy Forum. http://eucolab.org/our-work/ pg. 12.
112 ISO. 2015. ISO 10003:2007. *Quality management — Customer satisfaction — Guidelines for dispute resolution external to organizations*. http://www.iso.org/iso/catalogue_detail?csnumber=38449
113 Osborne Clark. 28 January 2016. *Europe's new online dispute resolution platform: What do sharing economy businesses need to know?* http://connectedconsumer.osborneclarke.com/sharing-economy/europes-new-online-dispute-resolution-platform-what-do-sharing-economy-businesses-need-to-know/
114 Osborne Clark. 28 January 2016. *Europe's new online dispute resolution platform.*
115 Kulp, H. and Kool, A. 2015. "You Help Me, He Helps You".

Online Consumer Reviews

The use of online consumer reviews presents many challenges for sharing economy firms including reliability, transparency and discrimination. These challenges are not specific to the sharing economy, as online reviews are used broadly in the digital economy. In the sharing economy, however, the use of online reviews is especially common and often integral to firms' business models.

Given their flexibility and global scope, standards represent a useful alternative to slower moving regulatory responses, especially in a fluid area like review mechanisms. Mechanisms that facilitate an open conversation among consumers — as well as between consumer and producer — have been an incredibly useful development for ensuring quality and improving consumer experiences. The practice should not be restricted or constrained. Nonetheless, there are certain changes that can help to improve them from both a consumer and provider perspective. Bringing both of these groups to the table, in addition to experts in information and communications technology, can lead to a more legitimate and well-informed process.

Recognizing that a set of guidelines for the use of online consumer reviews would be useful, ISO is already working to prepare such a document. While still in its draft stages, *ISO 20488 Online Consumer Reviews — Guidelines for their collection, moderation and display* appears to provide a comprehensive set of best practices to address the gaps and challenges posed by online review mechanisms, such as:

- False positive reviews written by businesses about themselves aimed at misleading consumers
- False negative reviews written by competitors aimed at damaging a business' reputation
- Consumer reviews used to unfairly extort benefits from businesses
- A perception that reviews were unreliable due to questions about their veracity
- Concerns that businesses were removing negative reviews from display or giving positive ones undue prominence
- Businesses unfairly compelling customers to write positive reviews, penalizing consumers for negative reviews, and seeking to block consumers' abilities to write negative reviews.[116]

While not yet explicitly mentioned in the draft standard, specific consideration of the sharing economy could play a positive role in the development of ISO 20488. This could take the form of the creation of sharing economy-specific provisions or it could involve the incorporation of a "sharing economy lens" in the final draft.

Online review mechanisms are not just useful tools for platforms — they are also central to the business models of platforms and heavily relied upon by both consumers and service providers. Consumers seem to rely on ratings and reviews more heavily in the sharing economy than other instances, possibly because the sharing economy lacks other forms of regulation. Similarly, providers in the sharing economy are heavily reliant on consumer reviews as they can be the deciding factor in whether consumers continue to contract with them and even in whether they are able to continue using of the platform. This reliance on review and rating systems, especially when combined with a lack of regulation in this area, further heightens the importance of standardization.

Without some form of quality control over this important aspect of their business models, sharing economy firms are exposed to significant risks, such as how their imprecision can actually reduce transparency. If problems and complaints stemming from poorly-managed online consumer reviews continue to mount, the reputation of the entire sharing economy could be tarnished. If this occurs, government may feel like it must take action — a prospect unlikely to be welcomed by sharing economy firms. Alternatively, and for many of the same reasons, the proactive standardization in this area provides an opportunity to develop a best practices approach that has the potential to be referenced in regulatory regimes.

116 International Organization for Standardization and Association Française de Normalisation. 14 June, 2016. *Draft for CD Ballot ISO 20488 Online Consumer Reviews — Guidelines for their collection, moderation and display.*

Data security and data-sharing

The rise of the sharing economy has occasioned an increase in online transactions which require that both consumers and providers share significant levels of personal information with firms. The way that firms use this information is often unclear, however, including the degree to which they ensure the privacy and protection of data they receive.

In several notable instances, sharing economy firms have fallen short of even the minimum provisions required under existing privacy and data protection laws in areas such as tracking individuals' behaviour to ensuring the accuracy of ratings systems. As a result, there have been calls to ensure that the data systems on which sharing economy firms rely are properly designed through steps such as limiting access to identity information between customers and service providers.[117] However, many firms in the sharing economy have not taken such an approach and, instead, created systems that lack transparency for customers on how information about them is being used.

Privacy is a common issue across the sharing economy, which makes it ripe for a general standard. SDOs have already made strides in using such an approach to address the topic. For instance, CSA Group has developed a national voluntary standard on personal information protection, *CAN/CSA-Q830 model code for the protection of personal information*. It includes a series of principles for privacy, including accountability, consent, accuracy and safeguards.[118] Many of these principles address privacy issues that have emerged as important in the sharing economy. For instance, one of these principles is that the collection of individuals' data by an organization should be limited to that data which is relevant to the relationship between the individual and the organization. This effort eventually had an impact in setting an approach to a federal privacy law, the *Personal Information Protection and Electronic Documents Act*. Given this success, this standard could potentially also serve as a foundation on which a privacy standard for the sharing economy could be built.

A related issue concerns the degree to which companies are transparent in sharing the data they collect — not only to allay customer privacy concerns, but also to provide greater clarity to both the public and policymakers on how their services are being used. Ideally, policymakers could use this data, appropriately anonymized, to help guide their decision-making. For effective data-sharing to be possible, however, anonymization and compatibility of data formats will need to be addressed proactively.

117 Dambrine, B. et al. June 2015. *User reputation*.

118 CSA Group. *CSA Group Privacy Statement*. Privacy. http://www.csagroup.org/legal/privacy/csa-group-privacy-statement/

Data-sharing between firms and governments has emerged as a critical issue for a number of regulatory efforts within the sharing economy. For instance, the City of Boston's ride-sourcing regulation included a requirement for companies to share trip data every quarter with local governments as a means of supporting city planning objectives. To date, however, the data has been of only limited usefulness, with a city official pointing to two weaknesses in the agreement reached between the City and Uber: the level of detail of the location data (i.e. information is presented by zip code) and reluctance by Uber to cooperate with government objectives citing privacy concerns.[119] The City of Toronto similarly included data-sharing as part of its efforts to regulate ride-sourcing in the city and has developed a portal to exchange data with Uber. In Toronto's case, however, the type of data-sharing written into the agreement was determined by the municipal licensing department, not the planning department. It remains to be seen how useful this data will be for urban planning purposes.

In general, Uber has stated that it aims to limit the scope of the data that governments request of it — and the firm has come into conflict with governments because of this resistance.[120] Nonetheless, the details of how firms should share data, including the type of data they should provide to policymakers as well as specifics on the data they should and should not be allowed to collect and store, could serve as a useful subject for a standard. Firms might appreciate the creation of a standard as a way of alleviating their concerns that governments could request any and all data at their discretion, while also giving consumers and providers improved awareness on how their data is being used.

Data-sharing has emerged as a topic in some standardization processes, though there is currently no broad-based approach. In the case of electronic health records, a consensus process was developed with a variety of stakeholder groups representing industry, consumers, governments and other relevant organization to determine the content of data that should be shared, among other issues.[121] While there is clearly industry resistance to data-sharing, a standard that sets specific parameters and also ensures privacy could address some of those concerns, especially if it were produced through a consensus-based development process.

Competition

One of the great advantages of standards is that they have generated markets that are more transparent, competitive and efficient. Unfortunately, most areas of the sharing economy currently lack the standards needed to ensure competitiveness in these markets.

At a general level, standards could help sharing economy firms defend themselves against the attempts of regulators and incumbents to impose traditional regulatory regimes that threaten to negate the advantages of their new business models. Such regulation is often motivated by the fact that regulators and the public do not trust firms and their claims that their internal systems are better than regulations at preventing the problems that regulations have traditionally been used to address. Independent confirmation of these claims through certification to a standard devised by a respected SDO could largely eliminate this credibility problem. Moreover, because such a standard would be developed using that SDO's consensus-based standard development process, firms could ensure that their concerns are adequately addressed — something that may not occur in less open and consensus-based regulatory or legislative processes. Naturally, compromise would be required, but such a path could also forestall heavy-handed regulation developed by governments that are potentially under political pressure to act quickly.

Competition problems created by positive network effects are also likely to pose important challenges for sharing economy firms. The barriers to competition that these network effects create are a problem for the public good in that they block competition and, in so doing, inhibit innovation and competition.[122] The market power that the leading platforms accrue provides their owners with opportunities

119 Vaccaro, A. 16 June, 2016. "Highly touted Uber partnership has not lived up to hype so far". *boston.com*. https://www.boston.com/news/business/2016/06/16/bostons-uber-partnership-has-not-lived-up-to-promise

120 Lachance N. 12 April 2016. "Uber wants you to know it's tired of sharing data with regulators". *all tech considered*. http://www.npr.org/sections/alltechconsidered/2016/04/12/473985914/uber-wants-you-to-know-its-tired-of-sharing-data-with-regulators

121 American Health Information Management Association. "Data standards, data quality, and interoperability (2013 update)". http://library.ahima.org/doc?oid=107104#.WCZAci0rK01

122 For a discussion of how large tech firms are using their large revenues to fund 'shoot-out' acquisitions that allow them to clear competitors from the market before these deals become big enough to warrant regulatory attention see The Economist, 3 May 2016. "I am Bitcoin". *Money Talks*. http://www.economist.com/blogs/freeexchange/2016/05/money-talks-1.

to parlay dominance in one market into strength in others.[123] Consequently, regulators are unlikely to tolerate the current pattern in which a single firm like Uber or Airbnb dominates a particular sector — and are likely to take steps to increase competition in these markets. One idea for how to do this that is already gaining traction is to make customer and provider data portable.[124]

For the sharing economy, the most important data from a portability perspective is data associated with online reputations.[125] Reputations are based on records of an individual's past transactions, such as ratings or reviews, and are very important for effectively using services in the sharing economy. Currently, if a consumer or a provider decides to leave one platform for another, that person will be forced to start building a new reputation from scratch — as most platforms make it impossible for users to extract or transfer their data.[126] This creates significant obstacles to the creation of a competitive marketplace because it makes it difficult and costly for users (both consumers and providers) to transfer from one platform/network to another.

One of the most important consequences of these high "switching costs" is that it makes it extremely difficult for competitors to arise in areas where a firm already exists. Even if a competitor develops a better service, that competitor must offer a product that is superior enough to incentivize users to abandon the advantages associated with the reputations they have built on the other platform. They must devote time and effort to build a new reputation, and accept the opportunity cost incurred by leaving the old platform.

One can easily see the potential role that standards would play in this regard. Specific technical formats and protocols would be required to ensure that data from one platform was compatible with other platforms. Data-sharing agreements would be needed to establish the joint ownership arrangements between users and firms over the data created on these firms' platforms and it would be better if these agreements shared a high level of standardized content. This would allow firms to gather the data they need to improve their services, while also allowing users to maintain a copy of their own data which they could import to a competing platform.

Ride-sourcing

Some would argue that ride-sourcing firms like Uber have become popular because their primary competitor, namely the taxicab industry, had become over-regulated to the point that this regulation was perceived as contributing to poor service at a high price. The arrival of ride-sourcing has occasioned a number of municipalities to review their governance models for the for-hire vehicle sector and conclude that a general reduction in the regulatory requirements is in order. Interestingly, this has generally included the creation of a permanent new category of transportation provider in many cities, including Calgary, Edmonton, Ottawa and Toronto. The Government of Quebec is currently piloting a similar approach.

The response of many municipalities to ride-sourcing has opened up something of a governance gap in a number of areas. For example, in Toronto, city council reformed the framework regulating for-hire vehicles by eliminating the requirement that taxi drivers attend "taxi school," a 17-day training course provided by the city. This course covered a variety of subjects including customer service, first-aid training, and education about the legal and regulatory framework within which taxi drivers were expected to conduct their business. In Ottawa, similar taxi driver training has been retained but ride-sourcing drivers have been exempt from this requirement.[127] While it is largely recognized that the driver training that was required by Toronto was overly burdensome and inefficient, many suggest that a shorter course for all for-hire vehicle drivers that focused on certain key aspects of the professions would be desirable. There may be a role for an accredited third party to deliver such a course or for a standard which lays out the areas that such a course should cover.

123 Facebook's "Instant Articles" are an example of how Facebook is using its dominance in social networking to encroach on news. See The Economist. 16 May, 2015. "Friends with benefits?". *The Economist*. http://www.economist.com/news/business/21651264-facebook-and-several-news-firms-have-entered-uneasy-partnership-friends-benefits

124 The Economist, 25 February 2010. "New rules for big data" and The Economist, 15 September 2016. "A giant problem". *The Economist*. http://www.economist.com/news/leaders/21707210-rise-corporate-colossus-threatens-both-competition-and-legitimacy-business

125 Busque, L. 31 July 2012. "The role (and future) of social reputation". *The Huffington Post*. http://www.huffingtonpost.com/leah-busque/online-shopping-trust_b_1556885.html; See also PwC, 2014

126 Engels, B. 11 June 2016. "Data portability among online platforms". *Internet Policy Review* 5(2).

127 City of Ottawa. 13 April, 2016. *City council approves new vehicle-for-hire regulations*. The Newsroom. http://ottawa.ca/en/news/city-council-approves-new-vehicle-hire-regulations

> *The labour practices of ride-sourcing firms have been one of the most significant points of controversy within the wider discussions on the sharing economy.*

This pattern of differentiated — and arguably insufficient — training requirements is representative of a more general patchwork of similar but still idiosyncratic ride-sourcing regulations that have sprung up across Canadian jurisdictions. Given this unsettled governance environment, a strong case can be made for the utility of developing a standard specific to ride-sourcing. Such a standard would cover areas that are arguably important for the industry but not amenable to regulation.

In particular, six issues could be incorporated in such a standard. While some have already been discussed as having potential for issue-specific standards, the following should be incorporated in a standard document that is particularly focused on ride-sourcing — which may be separate from other broader sharing economy standards-based approaches that may be developed. Such a standard could draw on existing attempts to regulate the sector in Canada and create a first-rate comprehensive approach which municipalities could adopt off-the-shelf. This would be especially valuable for smaller jurisdictions that do not have the policy or research capacity to develop their own regulations. It would also be positive for ride-sourcing firms, as it would offer greater predictability and the prospect of much easier access to these markets. Finally, such a move might enable smaller centres to attract ride-sourcing firms to their jurisdictions.

- **Driver training:**
  SDOs could work with educational providers on the development of a targeted course that is efficient, effective, and economical. The course could be offered by institutions that were accredited by a third party against a training standard devised by an SDO.

- **Accessibility:**
  While Toronto has seen fit to include certain accessibility requirements in its for-hire vehicle regulation, other jurisdictions have not. These requirements include a provision under which any firm operating with more than 500 drivers shall also provide wheelchair accessible transportation at the same fare and within the average taxicab wait time.[128] The City of Toronto already requires that vehicles declared as accessible under this requirement meet an existing standard, CSA Group's *D409-16 - Motor vehicles for the transportation of persons with physical disabilities*. Any new ride-sourcing standard could build on this approach for larger population centres. Smaller centres might benefit from a second option specifically tailored to their needs in this regard and developed through a consultative process which would see them represented.

- **Labour practices:**
  The labour practices of ride-sourcing firms have been one of the most significant points of controversy within the wider discussions on the sharing economy. A ride-sourcing standard could address many of the problems in this area by, for example, setting a minimum earnings floor for workers after expenses, setting out transparent expectations for drivers and the processes by which they can be removed along with clear and accessible dispute resolution mechanisms for any conflicts drivers might have with consumers or the platform itself.

- **Data retention, security and privacy:**
  A ride-sourcing standard would specify acceptable technical standards for the length of the period during which data is retained by the firm and how the data was accessed and secured for internal company use. Such a standard would also set out technical requirements around anonymization of data and the conditions under which it would be shared with third parties, such as academic researchers and municipal urban planners. Finally, technical standards concerning which forms of data would be shared with regulators, the process around how requests for data from regulators would be handled, and the types and formats of data to be shared would also be clearly specified.

128 City of Toronto. May 2016. *Bill No. 571, By-Law No.-2016*. http://www.toronto.ca/legdocs/bills/2016/bill0571.pdf pg. 71.

- **Dynamic pricing:**
  In response to significant outcry over perceived price gouging, New York City negotiated an agreement with Uber to cap their practice of dynamic pricing at 3.5 times during natural disasters and emergencies or when the Office of the Attorney General triggers an agreement due to adverse weather conditions.[129] Similar restrictions could be adopted across Canada.

- **Taxation:**
  Currently, Uber does not collect or remit provincial, federal or harmonized sales taxes in Canada, insisting that it is the responsibility of drivers to do so. This potentially results in an unfair competitive advantage for the service over traditional taxicab services as well as lost government revenues. A ride-sourcing standard could include a provision specifying that adherents to the standard were responsible for including all applicable taxes within the platform-produced bill and would require them to split the cost of remitting this fee to the applicable government equitably with providers.

129 Hawkins, A. 21 January 2016. "Uber will only cap surge pricing during the blizzard if New York makes it". *The Verge*. http://www.theverge.com/2016/1/21/10810628/uber-blizzard-surge-pricing-cap-agreement-nyc

Conclusion

The sharing economy poses a number of important new policy questions across a range of fields. Given the diversity of these questions, a multi-faceted response is needed to fully address the breadth of issues it raises. This report has shown how standards-based approaches could be well-positioned to address a number of issues in the sharing economy that have, to date, resisted regulatory solutions. As such, this report finds that standards-based solutions ought to form a significant part of the governance response to the sharing economy.

As governments respond to the sharing economy, they should take into account the potential of standards-based solutions to add value through the full range of tools that constitute this approach including the development of guidance, training and certification. However, it is not only governments that must act to ensure standards are integrated into the governance of the sharing economy. Indeed, SDOs must take on a leadership role as well.

In light of these findings, SDOs should take steps to support greater inclusion of standards-based solutions in the sharing economy. In particular, an IWA should be pursued which focuses on outlining broad principles for the sharing economy at a high level. These SDO's should also simultaneously review existing standards and those under development to assess the potential to incorporate standards-based solutions into initiatives moving forward, as well as to prepare for the development of national standards that address particular sectors of the sharing economy.

At a general level, SDOs should ensure flexibility and adaptability when working in this area, taking into account the dynamic and fast-moving nature of the sharing economy, as well as the need to consider the next generation of technological innovation that will likely emerge.

One of the great advantages of the standards development process is how it can bring together a balanced diversity of stakeholders, including consumers (individuals and businesses), providers, firms, incumbents, governments and representatives of the public interest. This process enables all parties to reach a consensus on how to balance fairness, quality and safety of services with the benefits offered by the sharing economy such as convenience, efficiency and cost-effectiveness. Recognizing the importance of broad participation in the standards development processes, SDOs should focus on ensuring that all stakeholder groups understand the potential benefits of standards and on encouraging their participation in any standards development activities that are undertaken. Such encouragement may be especially important for large sharing economy firms that are currently dominant in their markets, and should involve strategic engagement with various levels of government — particularly regulators.

Many of the issues identified in this report are present in jurisdictions across the globe. Standards provide an opportunity to create best practices and leverage economies of scale while retaining flexibility for cities, regions and countries around the world to adapt global rules to their local context. This saves individual jurisdictions from having to rely solely on their own resources and capabilities as they chart a path forward.

Standards already play an important role in ensuring service quality. The advent of the sharing economy offers this trend an obvious new area for expansion. This report has noted that such mechanisms may sometimes be preferable to regulatory approaches due to swifter and less opaque processes, but that they can also serve as a foundation for subsequent regulation.

Since standards are often developed to be voluntary in nature, they can also serve as benchmarks for how firms in the sharing economy should operate. Ideally, companies could use this ability to benchmark as a means of improving their access to the global marketplace and avoid having to develop a different set of practices for each one of the various jurisdictions in which they operate.

Standards-based approaches offer significant value in responding to existing and emerging issues in the sharing economy. They are, however, just one of many approaches that must be considered as governance structures for the sharing economy are slowly assembled. Moreover, there are potential barriers that must also be overcome to move forward in this way. For instance, while some parts of governments may be open to the prospect of incorporating standards-based approaches, others may resist responding

to challenges in the sharing economy through methods that are outside the typical regulatory regime and may involve yielding a certain degree of control.

Therefore, SDOs should aim to work with governments and other stakeholders in this area to ensure that the potential value of standards is effectively leveraged in a way that is beneficial to all stakeholders and fills some key gaps that other regulatory approaches may be less able to address.

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CSA Group

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