6 Unlocking the Sharing Economy: Scaling Trust with Digital

Tim Berners-Lee, the father of the World Wide Web, once said, "The original idea of the web was that it should be a collaborative space where you can communicate through sharing information". The vision was to develop an information distribution channel–the Internet– facilitating communication and enlarging the collaborative space. In a very real sense, the sharing economy glorifies why the Internet was created in the first place.

6.1 A Disruptive Phenomenon

As its name suggests, the notion of ownership is not important in the Sharing Economy. Instead, the focus is on the usage and the utility derived from the consumption of a good or service. This is often illustrated by the expression: "I don't need a drill. I need a hole in the wall". So, while a DIY enthusiast will buy a drill they can use repeatedly, why buy a drill at all, if you rarely do small household jobs? Wouldn't it be better if one could borrow or rent the drill and/or use a service that will satisfy his/her need– i.e., make the hole in the wall, or better yet, hang the picture on the wall (regardless of the method)?

At present, we are already used to renting cars and accommodation on-the-go. Extending this idea to other areas makes sense since the owner of a good or service can earn money from it when he/she is not using it. So, you could make a parking space you don't use available to others. This is what Parkpnp is enticing you to do: "Did you know that 1 in every 10 cars which drives past your home is looking for somewhere to park? Why not put your driveway to work while you kick back and enjoy benefits of up to €2,000 a year?"[1] Digital technologies make it possible to connect owners of such goods and services with those who need them.

However, let us not get ahead of ourselves and first understand the evolution of the sharing economy. The sharing economy began with giving, sharing, and swapping *things*–on websites like Craigslist, on which people posted classified advertisements for the items they wanted to get rid of and possibly earn some money. The benefit was that others could get those items at a cheaper rate (or sometimes free). Facebook Marketplace is one of the recent examples of this model.

The next phase of the sharing economy evolution was in sharing *space* –living space or space in your car. Airbnb used this model for the living space to become one of the biggest players in the sharing economy. In just 10 years of its inception, it became the world's largest accommodation provider. Though owning no real

1 https://parkpnp.com/ie/rent-your-parking-space as accessed on May 23, 2022.

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estate, it lists more accommodation on its website than the Hilton and Marriott chains have rooms in their hotels after decades of doing business. The goal was not to create a marketplace where there is change of ownership but to match buyers and sellers. So, in the case of Airbnb, all accommodation remains the property of the host, there is just a "temporal rental" of an asset facilitated by Airbnb. BlaBlaCar is another example of the same model applied to ridesharing.

The sharing economy further evolved to encompass those who, for instance, "needed a drill but lacked the knowledge or training to use one". This was the genesis of the "service economy" that saw the emergence of sites like TaskRabbit or Fiverr where people posted small jobs, they needed doing and small service providers with relevant skills offered their service at low prices.

Thereafter came a more on-demand "gig economy", where people could establish themselves as independent workers, effectively creating their own jobs as Uber taxi drivers do. Irish grocery delivery company Buymie uses the gig economy principles to get pickers to shop on your behalf in your local Lidl or Dunnes Store and deliver your shopping list in less than an hour. By using existing shopping networks (actual shops) and flexible on-demand workforce, Buymie outcompetes on delivery time the traditional grocery websites (e.g., Tesco.ie) that support the cost of heavy infrastructure and logistics. Amazon Mechanical Turks is another, more recent example, in which Amazon uses the sharing economy model to perform what they call human intelligence tasks, such as writing product descriptions or identifying contents in an image/video.

The latest evolution is a move from services to highly skilled "expertise", with individuals sharing their knowledge for money. So, a business professor who offers to teach someone how to write a business plan in return for being taught another language by them would fall under the sharing economy, even though the deal is unbalanced, as one "expertise" would take much longer than the other to achieve. Gigster is another example of such a model that allows software developers a platform to offer their service for developing on-demand software.

However, there is no straightjacketing between the sharing and "non-sharing" (if one says so) economy as such.

For instance, would you consider an online learning platform, like Udemy, as part of the sharing economy? It provides a platform to the instructors and the students, respectively, to offer and access upskilling courses. While it is a platform, the content is simultaneously shared among multiple users. So, what classifies it better: digital platform or a sharing economy or perhaps both?

6.2 Seeing Through the Fog of Collaborative Economy

The notion of the sharing economy gets more confusing with the use of other terms such as collaborative consumption, collaborative economy, or peer economy, all of which are used interchangeably but have slightly different meanings. Because businesses create and exchange value differently through their diverse business models, the Collaborative Lab suggests there is a need to reach beyond current terminologies like “sharing economy”, “peer economy”, and “collaborative consumption”. While we need to differentiate between these terms more precisely, these can be collectively thought of as falling under the overarching term, “collaborative economy”.

A large element of the collaborative economy, of course, is collaborative consumption. It refers to the sharing, swapping, trading, or renting transactions that underpin collaborative consumption in the sharing economy. It may take the form of collaborative lifestyle, redistribution market, or product service systems. Under a collaborative lifestyle, resources are shared across a community. For instance, many cities have open book banks in public spaces, where anybody can put in a book or take one. Redistribution market refers to the situation when underused or unwanted goods are redistributed to those in need. For instance, Computer Aid, a charity organisation, collects unwanted computers from organisations and has sent those for use in more than hundred countries across the world. Finally, product service systems refer to the situation when people pay to access the service instead of owning the product. All major cities in the world now have some form of bicycle (e.g., Velib’ in Paris or Dublin bikes) and car sharing systems (e.g., ShareNow in Germany or GoCar in Ireland), often in collaboration with the city councils.

Finally, the sharing economy could be defined more specifically as an economic model in which underutilised assets are shared, on a payment basis, with others. In contrast to the product service systems in which an external entity “owns” the shared resources (and takes care of maintenance, etc.), in the sharing economy, the emphasis is more on person-to-person redistribution. The resource is owned by an individual, who decides to share the underutilised resource, often in return for some money. The resource could include anything from sharing a car ride (say via BlaBlaCar), renting out a room to a traveller (say, via AirBnB), or/and exchanging knowledge (say, via Gigster). The companies only provide the platform to share the resource, while the resource ownership remains with the individual offering it.

While many businesses claim to be part of the sharing economy, not all meet the definition of a sharing economy business. For example, GoCar appears to be part of the sharing economy because it helps people share vehicles. Yet, the company owns these vehicles, and there is no peer-to-peer transaction. Hence, GoCar only ticks some of the boxes of the sharing economy. It is even more debatable for a company like Etsy. This platform is used by those looking to sell handcrafted goods, but since these products are made specifically to be sold, Etsy is in fact more accurately defined as a marketplace. Hence, there are different categories of sharing economy companies (see typology of business model hereafter).

As more goods and services are exchanged between peers, the sharing economy is expanding into new dimensions such as car and bicycle sharing, social lending, space rental and co-working, the swapping of books, baby goods, toys, clothing, etc.

The sharing economy is now extending to other traditional sectors too. In the energy industry, for instance, start-ups are looking to cut the carbon footprints of cities by rebalancing energy consumption between commercial and residential buildings, depending on the time of day. In many countries, consumers may install solar panels on the rooftop of their houses/offices and sell surplus electricity (i.e., electricity remaining after their use) to the grid.

6.3 Value Drivers Behind Sharing Economy

The sharing economy is propelled by four sets of drivers – technological, social, economic, and behavioural.

Technological Drivers

Digital technology is a crucial driver of the sharing economy. Idle capacity was always there; now, the technology has provided the means to share the information on idle capacity. Mobile technology has unlocked the potential of the network economy by facilitating peer-to-peer connections. Social networking and geolocation make it ever easier to find goods and services that meet consumers' needs. Powerful algorithms on the application platform make it easier to match the peers with complementary needs. Finally, peer-to-peer payment enables individuals to cover the last mile in the sharing economy.

Social Drivers

With the advent of social networks, there has been a rejuvenation of faith in the importance of the community (virtual and real) with a sense of togetherness, intimacy, and trust. In addition, the increasing resource burden on the cities has made the wider population receptive to the concept of sharing resources. The sharing economy redistributes power since consumers no longer need passively wait, as they did in the past for offers to be created for them. Now, thanks to crowdsourcing, consumers can participate in the creative process by helping fund the making of an offer that meets their needs. As consumers do not have to wait for a company or organisation to make what they want, this changes their relationships with the producers of goods and services. Moreover, there has been a disillusionment with the consumerist culture due to climate change, resulting in active citizenship in caring for environmental resources.

Economic Drivers

The sharing economy enables the creation of monetary value by using the idle capacity of resources. For instance, Airbnb hosts earn money by letting their idle space, which would be otherwise underutilised. The rising cost of living in cities has made the asset owners receptive to sharing the resource to reduce operational cost. For instance, ridesharing apps like BlaBlaCar allow car owners to reduce the cost of the travel they would have anyway made. The success of these sharing economy companies also has a ripple effect in terms of a steady supply of venture capitalists ready to invest in new sharing economy companies. Last but not the least, pervasive unemployment/underemployment post-recession make sharing and swapping increasingly attractive to those wanting to save money.

Behavioural Drivers

Apart from the technological, social, and economic factors, certain behavioural drivers have greatly influenced the adoption of the sharing economy. New app designs have made the interaction between peers–from search to match to payment– seamless. The ease of use and convenience attract and maintain the members on the sharing economy platform. There is also a desire for authentic experience – actual homes instead of hotel rooms or fellow travellers instead of a taxi driver–underlying the adoption of the sharing economy.

6.4 A Typology of Business Models Behind Digital Sharing

Based on the analysis of 32 companies that are part of sharing economy networks in the UK, Ireland, and Denmark, Trabucchi, Muzellec, and Ronteau (2019) classify digital sharing models across a two-by-two grid.[2] The business models may be classified on two crucial dimensions (Figure 6-A) – the novelty of the shared asset and the temporality of the transaction. The assets may be existing (pre-owned) or new. Similarly, the transaction could be temporary (e.g., rent) or permanent (ownership). Based on the two dimensions, four classes of digital sharing models may be identified.

2 Trabucchi, D., Muzellec, L., & Ronteau, S. (2019). Sharing Economy: Seeing through the Fog. Internet Research.

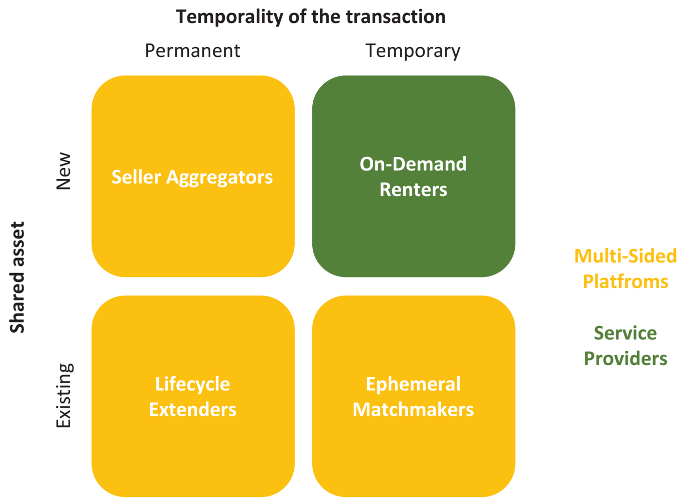

Figure 6-A: A Typology of Business Models Behind the Sharing Economy. (Source: Trabucchi, Muzellec & Ronteau, 2019)

Lifecycle Extenders

Under this business model, peers sell existing goods permanently. These are the companies that extend the life cycle of used products by connecting the owners (who do not want the product anymore) to their future users. Peer-to-peer apps such as Craiglist, Done Deal, or ReSecond function as lifecycle extenders, when the users use these to buy and sell second-hand goods. This model is particularly popular in the case of sustainable fashion movement through websites such as Depop or Poshmark which facilitate the peer-to-peer sale of used fashion products. This model is not limited to individual customers. Rheaply, a company that provides a B2B service in the reuse of physical IT resources across companies, is another example.

Seller Aggregators

Under this business model, companies function as aggregators for newly created goods. For instance, apps like JustEat or Deliveroo aggregate the food providers. While these companies are better classified as platform businesses, they effectively share their delivery infrastructure with multiple partners.

On-Demand Renters

Under this business model, companies temporarily share their assets with a wide group of users. All businesses that rent cars or bikes come under this umbrella. Companies like Hertz or Europcar manage a vehicle fleet that could be temporarily rented by the customers. While the companies take care of the insurance and maintenance, the customers use the resource on a need basis. As discussed in the first section, on-demand renters are an example of collaborative consumption.

Ephemeral Matchmakers

Ephemeral matchmakers are the best example of a sharing economy model. Under this business model, companies function as a platform to enable temporary transactions between peers–those who own underutilised assets and those who wish to use them. This is the most popular model for sharing accommodation (AirBnB, HomeStay, Vrumi) and commuting (BlaBlaCar, Uber, Lyft). Since both parties are often individuals (aided by the digital platform), ephemeral matchmakers are closest to the concept of the sharing economy.

Irrespective of the classification, digital sharing companies often involve sharing of resources between strangers. This is where trust and reputation come into the picture. This is discussed in the next section.

6.5 Lemons Problem and Online Trust

To be successful, sharing economy companies need to overcome two key issues. They need to provide assurance to the participants concerning the quality and reliability of the product/service offered (*lemons problem*) and the integrity of the other participants, as well as of the digital transactions themselves (*online trust*).

Lemons Problem

Much before the advent of the online sharing economy, Nobel laureate George A. Akerlof discussed the issue of trust and information asymmetry in his 1970 paper "The Market for 'Lemons': Quality Uncertainty and the Market Mechanism". Akerlof argued that in such markets, usually, the sellers have more information on the product (e.g., a used car) than the buyers. Traditionally, the buyers did not have any mechanism to determine the authenticity of the information provided in such markets. This effectively drives the prices of the goods (lemons) down since buyers would not want to take a risk. With time, this phenomenon (known as the lemons problem) drives high-quality goods away from the market, inundating it with inferior quality goods.

Since the lemons problem emerges from information asymmetry, a key task for the sharing economy platforms is to facilitate information exchange to build trust and reputation. In the sharing economy, success depends on a company's ability to build trust among strangers, which means continually monitoring online reputation, right from the beginning. Sharing economy platforms like Airbnb or BlaBlaCar connect the two sides of a business that are not otherwise connected. In fact, it is the main reason they come to such a platform. Developing and maintaining trust is a result of recurring transactions in traditional businesses. However, due to the temporary nature of the transactions, the two entities seldom engage in repeated transactions in the sharing economy. Thus, ensuring trust between the two sides becomes a concern and a key requirement for an ephemeral matchmaker.

Online Trust and Reputational Mechanisms

As with other platforms, the primary challenge for sharing economy platforms is how to connect those who "have" with those who "need". And even though we are already accustomed to sharing, this often means overcoming resistance to new experiences. So, while parents, for instance, often exchange used baby clothes with others in their network of friends and family, doing this with strangers with whom you do not have an interpersonal relationship extends the concept of community into another area entirely.

When it comes to inspiring sufficient trust to make participants willing to interact with strangers in ways they would normally reserve for family and friends, sharing economy platforms face issues similar to those of other multi-sided platforms–how to attract both sides of the platform and encourage them to return. There are three ways in which sharing economy platforms can measure and manage trust – i.e., trust in other network participants, trust in the value exchanged, and trust in the platform.

Certain reputational mechanisms play a key role in ensuring trust between the buyers and the sellers and overall trust in the platform. Sharing economy platforms use at least three reputational mechanisms – profile, secure messaging, and reviews – that contribute to overcoming biases and reducing the anxiety of interacting with strangers. The majority of the sharing economy players encourage the users to build a complete profile (e.g., a driver on BlaBlaCar or a host on AirBnB) on their platform. A typical user profile on such sharing economy platforms includes information such as name, photograph, age, gender, and preferably social media handles. To ensure that the participants are trustworthy, BlaBlaCar has developed a framework for trust conditions called DREAMS. The framework outlines the key tools to build trust in online communities:

- **Declared** – Declared identity including name, photo, and bio.
- **Rated** – Peer-to-peer ratings based on members' prior rideshares.
- **Engaged** – Financial commitment to the journey through pre-payment service.
- **Activity** – Last-seen date or response rate, providing information on a member's frequency of activity, and level of responsiveness.
- **Moderated** – Content exchanged by members moderated and verified by the platform.
- **Social** – Existing online social identity (Facebook or LinkedIn) connected with profiles.

All sharing economy platforms will use similar forms of checking mechanisms to improve online trust for participants. They also enable secure messaging among users within their platform. Secure messaging provides a way of continuous communication and coordination, helping in building trust and maintaining the history of their communication on the same platform. All platforms provide rating and review mechanisms that allow other users who have availed of the service to rate the trustworthiness and reliability of another user and/or the quality of the offerings. Research suggests that textual reviews and the rating system are the strongest reputational mechanisms on sharing economy platforms. Customers can view the ratings and reviews before finalising a transaction.

While reputational mechanisms like profile and review help in building trust in the platform and the users, the crucial question of ensuring trust in the value exchanged remains. In planning the planning of the sharing economy platform, a company must work out not only how to inspire trust but also how it can make sharing and swapping transactions more efficient for all. This means those developing sharing economy platforms must consider the products involved in transactions and how they can provide a structure to facilitate interactions between those who have and those who need them. They must also think about the service offered as a whole—in other words, what will be the core interaction facilitated by the platform?

In this, the data collected and monitored as well as the reviews generated by the participants about the products and contents, they find on the platform are both crucial. For instance, efficient algorithms are designed that match the users (those who have and those who need) in an optimal way. Basic changes in the user interface, such as providing shortcuts for most used options, or options to filter/sort, go a long way to reduce friction and add value for the users. Similarly, most sharing economy platforms have integrated digital wallets into their applications so that the user remains within the system.

In the long run, however, trust in the platform also comes into the picture. Such trust-building ability effectively determines a sharing economy platform's capacity to scale. As a company matures, it must also determine how to extract more value from its community. For instance, AirBnB builds on the trust ecosystem through its "superhost program", with hosts who consistently provide an exceptional level of service.

Superhosts get benefits in the form of being featured on the platform, attracting more guests, and receiving additional bonuses from the platform. BlaBlaCar has a similar programme where their most active drivers are recognised as Ambassadors, who get featured on the platform and receive special benefits such as availing car-as-a-service with their partners like Opel and ALD.

However, the sharing economy platform needs to be careful in exploiting its user data. One area that significantly affects trust is the conditions of use of customer data. If customers feel, for instance, they are being asked for too much information, or worry about what will be done with their details, they will lose trust in the platform and use it less. For example, parents on baby clothes swapping platforms who provide information about their child's age, gender, and other details may find it objectionable if the company uses their profile to advertise baby products to them. So, issues of trust may stem not just from concerns over the safety of the transactions but also from how data is exploited by a platform.

6.6 Key Takeaways and Further Considerations

1. Sharing economy is a collaborative economic model in which users share their underutilised (idle) assets with others on a payment basis.
2. Most sharing economy services are ephemeral matchmakers who facilitate the transaction based on matching those who have with those who need.
3. Online trust and reputation play a crucial role in the sharing economy. User profiles and review/ratings are the most effective reputation- and trust-building mechanisms in sharing economy platforms.

Market Configurations that suit the Sharing Economy

When starting a sharing economy business, entrepreneurs must primarily consider the liquidity of the assets. In other words, are these goods or services easy to share? For example, a parking space in a secure apartment block might not be shareable if the residents object to outsiders having access to the building. However, there are often solutions to problems like this, thanks to the Internet of Things, which, in this instance, could provide a temporary remote key to the garage.

The next thing to consider is an asset with a high idling capacity, one that is used only infrequently (Figure 6-B). So, if someone owns a surfboard but uses it only once a month, they could rent it out for 30 other days. They would have to accept the possibility of the board being damaged and requiring replacement now and then.

The sharing economy may work well for the items for which the cost of ownership is high. It can make generally hard-to-access items like luxury goods more available. Through Airbnb, travellers can rent a luxury home in a desirable location

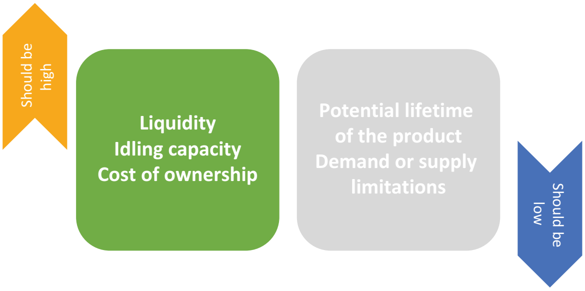

Figure 6-B: Characteristics of the Value Proposition in the Context of Sharing Economy.

at a lower price than if they booked a luxury hotel directly or through a letting agent.

In some cases, goods that quickly become obsolete are also good for sharing or swapping. Why purchase new baby clothes when they are only needed for a short time? Share them instead. In fact, in many cultures across the world (especially in Asia and Africa), it is customary for friends and family to gift old baby clothes when a baby is born.

The sharing economy also works well for assets that have low demand or supply limitations or the value of which increases when shared (e.g., travel experience or professional tips).