

Upscaling in the Sharing Economy: Insights from the UK

Vadim Grinevich and Franz Huber
with Linda Baines and Magdalena Eder



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About the authors

Vadim Grinevich

Associate Professor in Strategy and Innovation,
University of Southampton Business School, Principal
Investigator
v.grinevich@soton.ac.uk

Vadim's research expertise includes economics of innovation and entrepreneurship, innovation management, service and business model innovation (e.g. sharing economy models), knowledge transfer, and spatial dimensions of innovation and entrepreneurship. His research is funded by the British Academy and Newton Fund, the Southampton Strategic Research Fund, and the European Commission. Vadim previously held research posts at the University of Cambridge, working on projects funded by EPSRC, ESRC, NESTA, UK and Northern Ireland government departments, the National Institute of Advanced Industrial Science and Technology, Japan, and the Australian Business Foundation. Vadim was a Visiting Professor at the Economics Department at Tilburg University and a Regional Research Scholar at the Woodrow Wilson International Center in Washington, D.C. He was the recipient of the Cambridge University Trust Scholarship and the Cambridge Political Economy Society Award.

Linda Baines

Post-doctoral Researcher, University of Southampton
Business School
LBBaines@gmail.com

Linda has completed her PhD at the University of Southampton Business School. Her research interests include knowledge exchange, higher education, corporate social responsibility, ethics, innovation, the third sector and social enterprise. Outside of her research and writing, Linda is a third sector volunteer and co-chair of Wantage Summer Festival. Until September 2013, Linda worked at the Science and Technology Facilities Council (STFC) at Rutherford Appleton Laboratory (RAL) in a range of senior management roles, which included procurement, knowledge exchange, and strategic development.

Franz Huber

Professor in Innovation Management,
University Seeburg Castle (Austria), Principal
Investigator
f.huber@gatesscholar.org

Franz is the former Director of the Centre for Innovation and Enterprise at the University of Southampton Business School, and he remains affiliated with Southampton as a Visiting Fellow. He is also a Senior Research Associate at the Stavanger Centre for Innovation Research (Norway) and an External Examiner at Imperial College Business School.

He completed his Ph.D. at the University of Cambridge as a Gates Scholar.

His research expertise includes networks for innovation, innovative clusters and regional economic development, eco-innovation, and service and business model innovation in digital business.

Magdalena Eder

Postgraduate Researcher, University Seeburg Castle,
Austria
eder.magdalena@gmail.com

Magdalena Eder is completing a Master's degree in Business Administration at the University Seeburg Castle, Austria. Her research interests include economic psychology, user experience and service design. She has expertise in advertising, social media and on-line marketing strategy. She has worked for international advertising agencies and global brands such as Calvin Klein, Roberto Cavalli, Durex and Air Wick.

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Executive Summary

1. Context and Scope

1.1 Of the thousands of sharing platforms operating in the world, very few have become household names. Most sharing economy businesses appear to struggle to scale and expand across different locations.

1.2. With support from the University of Southampton Strategic Research Fund, this research project explores the enabling conditions and barriers to starting and upscaling¹ a sharing economy business. This report, which marks the completion of the project, develops a typology of upscaling models in the sharing economy across three key sectors: accommodation, transportation, and professional and personal services.

1.3. Based on interviews with 30 sharing economy businesses, the report also includes analysis of web-interfaces of 75 sharing economy platforms operating in the UK.

1.4 The platforms analysed fall under one of the following criteria:

- foreign sharing economy businesses who successfully expanded their operations in the UK;
- foreign sharing economy businesses who attempted to expand in the UK but later had to withdraw; and
- UK home-grown sharing economy businesses, expanding regionally, nationally or internationally.

1.5 The report advances current knowledge on the sharing economy, both conceptually and at an applied level. Aimed at academics, private businesses, investors and public sector bodies, a key finding of the report is that upscaling patterns of sharing economy businesses are only partially sector specific, and are not entirely attributable to particular type of sharing activity. This represents a significant opportunity for collaborative action, cross-organisational and cross-sectoral learning amongst sharing businesses in relation to business strategy, operations, marketing and stakeholder relationships.

1.6 The report starts by applying a business model perspective to extract patterns of upscaling and the associated drivers and challenges. It then proceeds to a systematic analysis of one major concern identified for all upscaling models: how to enable trust building through platform design. It concludes with a discussion on the lack of open innovation amongst sharing businesses which we argue is a critical barrier to upscaling, and which could contribute to broader acceptance of the sharing economy by consumers and policymakers.

¹ We understand upscaling as expanding the customer base and/or moving to new geographies.

2. Emerging upscaling patterns

2.1 We have identified four ideal patterns of upscaling which are located along the three business model dimensions:

- the geography of value proposition;
- upfront fixed capital requirements; and
- the extent to which service provision is associated with complex and iterative interactions with customers and other stakeholders.

Type 1: “Born global” - sharing economy businesses whose value proposition is from the start designed for multiple countries. Type 1 businesses are internationally transferable and sustainable from the very beginning of operations, with demand and supply side of the market shaping up automatically.

Sectors: Accommodation, personal and professional services.

Examples: Home swapping, short-term accommodation-sharing; virtual freelancer platforms.

Strengths: Initial start-up costs are relatively low. The interactions between the platform and the customers tend to be highly centralised, automated and standardised, with no need for “born global” businesses to be physically present in multiple international locations. Upscaling efforts are mainly about matching demand and supply via promotions and marketing campaigns.

Challenges: Developing data analytics capabilities; ongoing investment in technology development and public relations; interaction with policy regulators is increasingly important.

Type 2: “Local value potentially global” - sharing economy businesses whose value proposition can at first be sustainable on a regional and local level. These businesses may be viable internationally, but cannot be enabled automatically. They differ from Type 1 in that they require more local knowledge, local coordination and local testing in order to structure and grow a marketplace in a new location. This may also require having local and regional offices in place.

Sectors: Accommodation, transportation, professional and personal services.

Examples: Car- and ride-sharing; tools/equipment sharing, re-sale, handing over of redundant assets; business-to business storage sharing.

Strengths: Initial start-up costs are relatively low; having minimum viable product (MVP) before expanding.

Challenges: Ongoing investment in technology development, public relations, identifying local representatives, local partners/selecting service providers; balancing the standardisation

pressures and community building; integrating national legal frameworks (labour laws; taxation; privacy and data protection); unstructured data analytics.

Type 3: “Local infrastructure as product services” - similar to Type 2 in terms of the geography of value proposition (regional/local). However, Type 3 businesses are unable to start providing their services without significant upfront capital expenditure and prior, often formal, agreement with local authorities and other infrastructure regulators. The same two factors affect the pace of spreading of this model in new locations.

Sectors: Transportation

Examples: Business-to consumer short term car rentals.

Strengths: Having MVP before expanding; highly centralised, automated and standardised interactions with customers; one-sided platform, i.e. no need to orchestrate both supply and demand, and therefore, less demanding in terms of technology development and organisational capabilities.

Challenges: Upfront fixed capital expenditure; formal coordination with local authorities, transport infrastructure providers; ongoing public relations expenditure; working closely with local and national legal frameworks.

Type 4: “Co-created services” - sharing businesses that deal with sensitive personal services or bespoke professional services. In terms of the geography of value proposition (regional/local), this type is similar to Types 2 and 3. Type 4 businesses require little upfront investment to set up, making it close to Types 1 and 2 on this criterion. What makes them stand out is a significant amount of complex social (human-to-human) coordination required on the part of the platform to engage with different types of platform users to co-create a service experience.

Sectors: Personal and professional services.

Examples: Childcare and housekeeping platforms; project outsourcing.

Strengths: Initial start-up costs are relatively low; having MVP before expanding.

Challenges: platform design; experimentation with standardisation and customisation; integrating online and offline channels of communication; high quality of traditional forms of communication required; ongoing investment in technology development, public relations, identifying local representatives, local partners/ selecting service providers; proximity to national legal frameworks (labour laws; taxation; privacy and data protection); unstructured data analytics.

3. Trust and platform design

3.1 Sharing economy businesses across all of the upscaling types identified building trust and transparency as one of their main strategic objectives. Practical strategies to achieve this included a variety of platform tools and customer touch points, combining online and offline channels of communication and support. By carrying out service blueprint analysis on the web-interfaces of 75 sharing platforms, we visualised the steps that a platform user must undertake to gain access to and experience a platform service.

3.2 A key finding was that in comparison to the least upscaled platforms, the most upscaled platforms systematically offer more features, and require (and provide) more information and documentation that support a trustworthy and transparent process. This, we suggest results in a comparatively more collaborative user relationship. Examples of processes that encourage transparency and trust include clarity about secure payment options, registration requirements, communication rules, bestseller offers for consumers, advice to providers on the attractive offer design, as well as exposure to verifiable platform user testimonials and success stories.

4. Little open innovation and sharing amongst the sharing

4.1 Few sharing economy businesses strategically use open innovation for their business development. Many sharing platforms are reluctant to signal that they may need to draw on external sources of knowledge, technology and services. While organised as a collaborative platform for delivery of their services, most sharing platforms do not adopt a collaborative approach when dealing with common intra-organisational challenges related to shortage of knowledge and capabilities.

4.2 The lack of knowledge and resource sharing between the platforms themselves and other organisations in the value chain affects the attractiveness of the sharing economy offering, by limiting opportunities for incorporating complementary activities and offerings of third party platforms. The apparent lack of mutual trust among competing platforms also translates into a weak inter--platform co-operation when it comes to dealing with local, regional and national stakeholders, which represents an important common component in upscaling strategy for the majority of the platforms.

5. Conclusion

A key question informing this report is whether sharing economy businesses will be able to “cross the chasm” from their currently niche position and upscale to attract mainstream customers. Our analysis indicates that this can be achieved through closer knowledge exchange and inter-organisational learning among sharing platforms in relation to the value of their customer proposition, technology and operations management, and stakeholder engagement.

Upscaling in the Sharing Economy: Insights from the UK

1. Introduction

There has been an increasing interest in the emerging sharing economy phenomenon. This is mainly due to a wide range of its potential economic, social and environmental impacts. Enabled by digital platform technologies, the sharing economy allows households, individuals, businesses, government and non-government organisations to engage in collaborative production, distribution and consumption of goods and services (Botsman and Rogers, 2010; Stokes et al, 2014). Not only can this potentially lead to an increase in employment, economic efficiency, sustainable use of resources, broadened access to highly valuable assets, and enhanced social relationships (Belk, 2014; Hamari et al, 2015; Schor and Fitzmaurice, 2015; Thebault-Spieker et al., 2015), it also gives rise to new business models challenging conventional business and policy thinking about the role and functions of employees and the organisation.

Of thousands of sharing economy businesses operating in the world, very few have become household names. Most sharing economy platforms struggle to scale and expand across different locations. This could be due to their intrinsic technical characteristics affecting their ability to build trust and achieve critical mass of users. This could also be due to their deep socio-spatial embeddedness, which makes it difficult to expand in different geographical and institutional contexts. The current business and policy debate provides little or no analysis of these upscaling issues, with academic and industry research in general only now starting to systematically interrogate the popular claims about the sharing economy.

Hence, the aim of this report is to identify what enables and constrains upscaling in the sharing economy from an integrated business, technological and socio-spatial perspective, and to develop a related typology of upscaling patterns. We understand upscaling as expanding the customer base and the target geographies. We demonstrate the extent to which certain sharing economy models are context specific and may be subjected to institutionalised embeddedness and, therefore, difficult and costly to scale in other locations. By shedding light on enabling conditions and barriers to starting and upscaling a sharing economy business, the report aims to expand the innovative capacity of businesses and individual entrepreneurs, and inform regulators and investors about the features and composition of the sharing economy, and their implications for designing support mechanisms to maximise social and economic benefits of certain type of sharing economy platforms.²

² The report does not examine the strategic role of competition between sharing platforms for up-scaling. Due to scale effects, powerful players can dominate certain markets, which may make it difficult for others in the same market to scale. In particular, large players with considerable venture capital are able to strategically delay profits and make deficits when up-scaling. This is with a view of attracting the highest number of platform users in order to generate profits later, which represents a hurdle for new entrants to penetrate these markets.

The report is organised as follows. Section 2 describes the scope of the project and its analytical approach. Section 3 presents the patterns of upscaling identified, and their associated drivers and challenges. Section 4 proceeds to a systematic analysis of one major concern present in all upscaling models: how to enable trust building through platform design. Section 5 reflects on the relative lack of collaboration amongst sharing businesses which can hinder upscaling and broader acceptance of the sharing economy by consumers and policymakers, with Section 6 providing concluding remarks.

2. Scope and approach

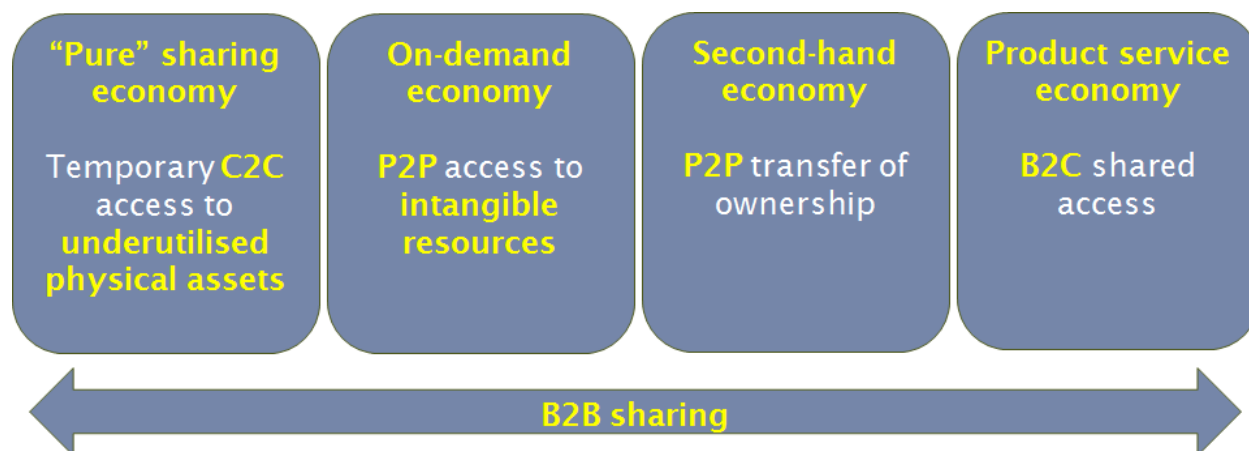
2.1 Sectors and types of sharing

The report is based on semi-structured interviews with founders or top executives of 30 sharing economy businesses, complemented by an analysis of web-interfaces of 75 sharing economy platforms. These include UK home-grown businesses, expanding regionally, nationally or internationally; and overseas-based platforms which established their operations in the UK, or attempted to expand in the UK but later had to withdraw. The report covers three key sectors of the sharing economy: accommodation, transportation and personal/professional services. The target population of sharing platforms was compiled using publicly available directories such as meshing.it, collaborativeconsumption.com and compareandshare.com, and was manually verified by analysing the content of web-interfaces of the platforms in question.

The final target sample of 75 sharing platforms included a range of businesses representing different types of sharing activities. These reflected the ongoing discussion on the sharing economy in a broad sense (Frenken et al, 2015; Belk, 2014; Bardhi and Eckhardt, 2012; Mont, 2002; Schor, 2015; Frei, 2005; Nesta and TSR, 2015; Derojeda et al., 2013; PWC, 2015; Matzler et al., 2014) and cover the following segments:

- “Pure” sharing economy such as consumer-to-consumer (C2C) platforms facilitating temporary, and possibly paid for, access to underutilised physical assets only (see Frenken et al, 2015 and Figure 1).
- Second-hand economy such as peer-to-peer (P2P) marketplaces facilitating the transfer of ownership (rather than access-based exchanges) of underutilised or redundant assets, including resale of second hand goods, gifting, swapping and bartering activities.
- On-demand economy including marketplaces facilitating access to intangible assets of individuals such as time and different types of skills (manual, specialised, professional); these may represent a combination of P2P and consumer-to-business (C2B) models.
- Product service systems (PSS) which are business-to-consumer (B2C) models where a platform owns and rents out assets which may be considered by consumers too expensive or impractical to own on a long-term basis, with consumers normally performing certain asset maintenance functions when renting and handing over the assets to other consumers.
- Business-to-business (B2B) sharing, renting, lending and re-selling of assets.

Figure 1: Sharing activities types analysed



Adapted from Frenken et al., 2015.

Table 1 is reporting the distribution of the sharing platforms studied by sector and sharing activity type.

Table 1: Sharing economy businesses studied, by sector and type of sharing activity

		Target sample	Interviewed
a) Sector	Accommodation	32	7
	Transportation	20	10
	Personal/professional services	23	13
b) Sharing economy type	Pure sharing	45	14
	On-demand	13	6
	Product service	8	4
	Second-hand*	4	3
	Business sharing*	5	3

* Second hand economy and business sharing platforms tend to be hybrid, by integrating other types of sharing activities (such as pure sharing and/or on-demand, and/or product service).

The sharing platforms analysed and interviewed differ in terms of their age and scale of their popularity among users. This allowed us to identify the key dynamic mechanisms and processes behind upscaling of sharing platforms, and uncover relevant events, actions, characteristics of stakeholders, and enabling and constraining institutions.

Table 2: Sharing economy businesses studied, by age and user popularity³

Year founded	Target sample		Interviewed	
	less than 2,000 monthly visits	8,800 monthly visits and above ⁴	less than 2,000 monthly visits	8,800 monthly visits and above ⁵
before 2000	8	3	1	3
2000-05	8	10	1	4
2006-10	9	14	4	6
2011-15	12	11	5	6

2.2 A three-perspective view

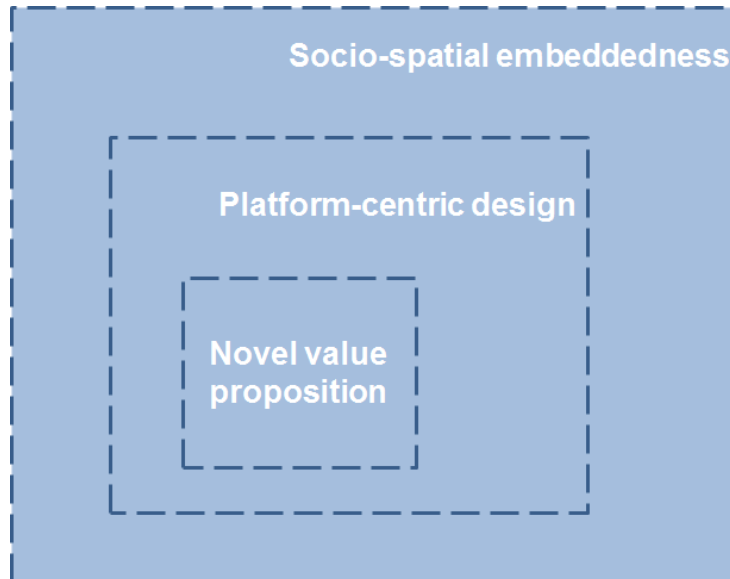
While making an analytical distinction between the “pure sharing” economy and the rest of sharing activities helps to structure our understanding of the sharing economy landscape, it may not be sufficient enough when it comes to our understanding of its upscaling patterns. Both pure sharing economy and other sharing-related businesses may have more in common than it may be implied by this distinction. In particular, this can be the case in relation to their business model configuration, which tends to be novel, operationalised through platform-centric design, and influenced by the socio-spatial context of the customer value proposition. Hence, it is these three interrelated perspectives (novelty of value proposition, platform centric design and geographical embeddedness) have become the focus of our interviews with sharing economy businesses (Figure 2).

³ There is no perfect measure of the number of users of different platforms, and the increasing use of mobile platforms instead of standard web sites adds further empirical uncertainties. We used <http://www.similarweb.com/> to track the average number of visitors per month for each web site from May to October 2015. The source provides data on web-sites with at least 2000 visitors per month.

⁴ The mean and median values for this group are 1,532,322 and 61,667, respectively.

⁵ The mean and median values for this group are 1,177,355 and 51,667, respectively.

Figure 2: A three-perspective view on upscaling in the sharing economy



2.2.1 Novel customer value proposition

Upscaling trajectories are embedded within any business model and its value proposition, i.e. a certain offering is supposed to attract a certain type of customers in a certain location. As far as sharing economy businesses are concerned, they are discovering and experimenting with an entirely different value proposition which distinguishes them as a group from the incumbent businesses. It is based on

- a cost-effective and convenient access to underutilised or redundant resources (Bardhi and Eckhardt, 2012; Belk, 2014; Eckardt and Bardhi, 2015; Matzler et al., 2014);
- an appeal to a different group of customers, normally ignored by mainstream businesses, such as those willing to use/reuse someone else's assets on a regular basis;
- a novel supply chain and operations model which makes it possible to outsource to customers a significant portion of conventional business functions related to management and maintenance of assets, customer service and marketing (French, 2015).

Based on this novel business model aiming at a new type of customers, the sharing economy remains niche. Therefore, from a niche business perspective, critical to upscaling is to understand how new markets are created around a new customer offering in different geographies, and what levers and processes can make it appeal to mainstream customers.

2.2.2 Platform-centric design

A novel customer value proposition of the sharing economy is enabled by on-line technologies, which are potentially highly scalable and capable of creating a trusted digital medium for connecting a large number of geographically distributed actors (Gansky, 2010; Schor, 2015;

Schor and Fitzmaurice, 2015). Sharing economy businesses operate as platform-centric organisations, with the majority of them representing multi-sided platforms, facilitating direct interactions between different customer types, in particular between service providers and service purchasers (Evans, 2009; Hagiu and Wright, 2013; Hagiu, 2014). Product services systems are one-sided, reseller type, platforms, where customers interact with the platform itself, rather than, via the platform, with each other (Evans, 2009; Salminen, 2014).

The configuration of the platform has important implications for upscaling. Firstly, this can manifest in relation to upfront capital investment requirements. One-sided product service platforms normally require large capital expenditure before they start to provide service, whereas multi-sided platforms may have more flexibility in terms of upscaling strategy as they normally have low or no fixed capital costs.

Secondly, the platform configuration matters when it comes to network effects. Both one-sided and multi-sided platforms can enjoy network effects, but the nature of these effects can vary depending on the platform configuration. One-sided platforms tend to benefit from direct network effects, with more new customers willing to use the platform as the total number of any type of customers increases (Salminen, 2014; Shih, 2011). By contrast, multi-sided platforms may suffer from direct network effects. For instance, an increase in the number of one type of customers (such as service providers) may discourage other potential service providers to join the platform if there are few consumers on the platform. Multi-sided platforms coordinate demand between different groups of customers, and tend to enjoy indirect network effects, i.e. more customers of one type willing to join the platform as long as the number of other types of customers increases. Because of this relative complexity of multi-sided platforms, they may be more sensitive to the issues of platform design, specification of access rights and activities allowed for different platform users, user-specific pricing structure and levels, and the order of dealing with and getting on the platform different customer groups (Shih, 2011).

Hence, defining the platform concept and configuration, understanding its implications for upscaling, and articulating the related internal and external resource needs such as technology and knowledge can be very important for developing and growing a platform-centric sharing economy business. On the implementation side, sharing economy platforms are facing the challenge of managing multiple networks of customers and other stakeholders. This extends beyond the issues of managing the platform composition such as scanning and matchmaking complementary customer groups and needs, and identifying potential free users, paid users, advertisers, etc. (Salminen, 2014; Shih, 2011), and can include elements of strategic level coordination such as building trust and transparency, engaging with platform users to co-create the final product, leveraging the capabilities of external partners to get access to certain resources (Dhanaraj and Parkhe, 2006; Klerkx and Aarts, 2013; Nambisan and Sawhney, 2011).

2.2.3 Geographical embeddedness

Actual activities of digital platforms and their users are situated in the material world and embedded in territorial socio-institutional settings. Place still plays an important role in the new

digital geographies (Zook et al., 2004; Leonardi, 2013). There are several interrelated dimensions of potential territorial embeddedness which can influence the process and pace of upscaling of sharing economy platforms:

Firstly, the value proposition and associated network effects tend to be of a highly geographical nature. Sharing economy platforms are designed to capture value from a certain geographical scale (city, region, country, multiple countries). The target territory is critical for the economic viability of any type of platform, and especially for multi-sided platforms, where developing a sufficient number of interdependent groups of customers (such as service providers and service recipients) has to be harmonised (matched) within the boundaries of the target territory.

Secondly, organising interactions between platform users may be challenging in certain geographical contexts. Internet and infrastructure development, and travel distance may influence the propensity of user interaction via a digital platform (Grimes, 2003; Norris, 2001). In addition to uneven distribution of internet and infrastructure connectivity, there are social, economic, and political reasons for why user engagement with online platforms can be unevenly distributed across space (Graham et al., 2015). For instance, users living in geographical areas associated with lower socioeconomic status or high crime may face difficulties in taking advantage of certain sharing economy platforms due to no services or more expensive services provided to them (Thebault-Spieker et al., 2015). Hence, offering platform services in new regions may require knowledge about digital and conventional infrastructure development, as well as the spatial distribution and socio-demographic composition of users in the target territory.

Thirdly, as with other types of economic action, the sharing economy is influenced by formal and informal institutions (Bathelt and Glückler, 2003). Platforms can be subject to institutional regulations regarding infrastructure, labour or other rules on city-level, on a regional, national or international scale. This may influence the potential for upscaling and for certain cases may imply that formal or informal coordination with policy makers, public sector organisations and other local, regional and national stakeholders is required. Cultural perceptions of the service offering and related societal norms may also matter (Tapscott, 1996). Understanding them could be important for developing effective communication, marketing, trust and reputation generation channels (Grabner-Kraeuter, 2002).

Overall, the above dimensions may shape the extent to which offering the service in new locations requires upfront investment in capital, knowledge and relationships.

To summarise, our interviews with sharing economy businesses were designed to unpack three interrelated perspectives on upscaling. First, it is the value proposition perspective concerned with the nature and novelty of the offering of sharing economy businesses. In this context, the upscaling challenge can be in finding the mechanisms to drive a new value proposition to mainstream customers. Second, it is the platform-centric perspective which focuses on technical and business challenges of operationalising a sharing economy value proposition through the digital platform design. Multi-sided and one-sided digital platforms are associated with different combinations of business opportunities, technology development demands, and investment

requirements, which can affect the upscaling path. Finally, the geographical embeddedness perspective acknowledges that both the value proposition of sharing businesses and its digital platform design cannot be considered in isolation from the socio-spatial characteristics of where the sharing economy platform originates and operates, which can again significantly influence upscaling processes.

The interviews were fully transcribed and analysed in an iterative process. This was combined with an analysis of the online presence and design of the platforms interviewed to get a deeper understanding of their value proposition and functioning. We first examined whether enabling and constraining dimensions of upscaling vary systematically by sector or sharing economy type. It emerged that neither sectors nor sharing economy types could fully explain the patterns of upscaling. Based on a three-perspective view, we identified consistent sets of relationships between upscaling dimensions recurring across different sectors and sharing economy types. These become the basis for generating four types of upscaling discussed below.

3. Emerging patterns of upscaling

The distinct ideal patterns of upscaling are emerging from positioning sharing economy businesses along the following dimensions:

- the geography of value proposition;
- upfront fixed capital requirements; and
- the extent to which service provision is associated with complex and iterative interactions with users, and/or other stakeholders (such as policy makers).

These ideal patterns are presented in Table 2 and can be defined as follows:

1. “born global”;
2. “local value potentially global”;
3. “local infrastructure as product services”;
4. “co-created services”.

Table 3: Typology of upscaling, by upscaling dimension

	Type 1 “born global”	Type 2 “local value potentially global”	Type 3 “local infrastructure as product service”	Type 4 “co-created services”
Sector/ sharing activity	<p>Pure sharing economy - accommodation (home swapping, short-term house-sharing)</p> <p>On-demand economy - personal/ professional services (virtual freelancer services)</p>	<p>Pure sharing economy - transportation (car- and ride-sharing); accommodation (shared renting); personal/professional services (tools/equipment sharing)</p> <p>On-demand economy - transportation (taxi driver services)</p> <p>Second-hand economy (re-sale, handing over of redundant assets)</p> <p>Business sharing (office- storage-sharing)</p>	<p>Product service economy - transportation (short-term car rentals)</p>	<p>On-demand economy - personal/professional services ('sensitive' services such as housekeeping, childcare; professional bespoke solutions)</p>
Geography of value proposition	<p>Global from the start</p> <p>Supply and demand popping up</p>	<p>Local/regional, sometimes national</p> <p>Potentially viable in other locations</p> <p>Local Minimum viable product (MVP); trial and test locally before expanding</p>	<p>Local/regional</p> <p>Potentially viable in other locations</p> <p>Local MVP (trial and test locally before expanding)</p>	<p>Local/regional</p> <p>Spreading to other locations is subject to careful business planning</p>
Upfront capital expenditure requirements for new locations	<p>Relatively little</p> <p>Ongoing technology development/data analytics expenditure</p> <p>Marketing/PR expenditure</p>	<p>Relatively little;</p> <p>Ongoing investment in identifying local representatives, local partners /selecting service providers is important</p> <p>Marketing/ PR expenditure</p>	<p>Substantive upfront financial investment in fixed assets</p> <p>Marketing/PR expenditure</p>	<p>Relatively little;</p> <p>Ongoing investment in identifying/selecting service providers and business development is important</p> <p>Marketing/PR expenditure</p>

Table 3 (continued): Typology of upscaling, by upscaling dimension

	Type 1 “born global”	Type 2 “local value potentially global”	Type 3 “local infrastructure as product service”	Type 4 “co-created services”
Customer engagement	Centralised/call centre customer support Standardised communication channels, routines, feedback and reputation systems Indirect - through data analytics	Balancing the standardisation pressures and community building	Highly standardised. Less socially complex	Complex social coordination between the platform, service providers and service recipients
Coordination with policy makers/regulators	Limited but becomes increasingly important, especially at national level Regulatory knowledge in different geographies is increasingly important	Clarification of national legal framework (labour laws; taxation; privacy and data protection) is important	Very important, especially at a local level, Effectively, a prerequisite. Local authorities, car manufacturers, transport infrastructure providers Importance of insurance regulations	Clarification of national legal framework (labour laws; taxation; privacy and data protection) is important

3.1 “Born global”

The “born global” type of upscaling (Type 1) is applied to sharing economy businesses whose value proposition is from the start designed for multiple countries. It is internationally transferable and sustainable from the very beginning of the business operations, with demand and supply side of the market shaping up automatically. Among the examples are platforms facilitating home-swapping and short-term accommodation rentals. The initial start-up costs for this type of platforms are relatively low. Their upscaling efforts focus on matching demand and supply, supported by data analytics and implemented through promotions and marketing campaigns. The interactions between the platform and the customers tend to be highly centralised, automated and standardised, with no need for the business to be physically present in multiple international locations. Box 1 provides further illustrations for this type.

Box 1: “Born Global”: Strengths and challenges in quotes

Strengths:

- **Globally transferable value proposition**

“The company was global pretty much from day one, there were no restrictions when the platform launched in 200X, about who could get onto the platform, so at that time, it was perfectly possible for there to be listings in London, Manchester, Edinburgh, wherever”.

- **The interactions between the platform and the customers tend to be highly centralised, automated and standardised**

“...you know, if you take a look at what happens when somebody comes on to the website. You know, they can virtually self-serve, versus in the past, you know, it took a human interaction on everything, right?...we can still do human interaction but it’s not required, right. So, you know, we do, we get involved, we help out, and we certainly have the customer service... But as far as pushing paper goes and ticking boxes and moving this data point over to that point, all that’s automated, so that’s allowing that scalability to happen”.

“...they [users] are all experiencing broadly the same thing, even though there are very different local characteristics, that works in the same way wherever you are... The buckets that the feedback and the insights fall into are broadly similar...”

“So from a technology point of view, I guess, what we’re trying to do is position it so that everything is available, essentially every piece of information is available to everybody else so that they can make those choices or see those options as transparent as possible”.

“But oftentimes there are things that have such global scale, ...with global distribution, and all the efforts for five years we’ve been doing trying to build local relationships don’t seem to matter that much”.

- **Upscaling efforts are mainly about matching demand and supply via promotions and marketing campaigns**

“The design is identical... What gets displayed in terms of the promotional, here are the places you could go, is going to vary from one place to the next. But it is a global platform and it works in exactly the same way, in various places. There are certain differences that we can trigger in certain places, so for example when it comes to payments, we are increasingly localising the payment methods that you can use. .. But no fundamentally, everything looks the same, the flow is the same, the way that things are displayed is the same, the kind of information you get is the same”.

Challenges:

- **Developing data analytics capabilities**

“...we are spending all of our time figuring out how to match supply and demand, this is a classic two-sided market place, and we have to keep a very close eye on places that people want to go and whether we have got the right kind of supply in those markets to deliver them”.

“When [the platform] was launched, the challenge from a business perspective was a home exchange platform versus some of the other sharing economy models, is that it is necessarily global from day one. And that means that there is a requirement in terms of scale up to have properties in places where people want to go, so it makes it a tricky one to determine exactly what scale looks like, because it is not just Cape Town, it is Copenhagen, it is not just London, it is Slough, it is everywhere”.

“...if you can track the dynamic in our ecosystem beyond just single static points on a map where we have XX,000 members, but the interactions that are happening. ... to our members, but it’s really important to us to understand the relationships that are being built. So the backend and the analytics is really critical in being able to meet the needs of our members”.

“...there is a process that we go through when we shape demand, which is yes we are a global platform, yes anybody can participate wherever you are... But we obviously do work to shape markets, where we think we need supply or where we have specific issues, so we have to think about our market on both sides”.

Box 1 (continued): “Born Global”: Strengths and challenges in quotes

“We found that the word community is utilised a lot in the sharing economy, but the reality is we use the analogy of a dating site a lot, and ultimately the goal is find a date or a marriage. And is there a community around daters, you know? So while we do feel we have a really active community, you really have to be careful how you throw that term around. And what we’ve found is it’s important for us to segment across our membership, and we have communities within our membership.”

- **Ongoing investment in technology development and promotion channels**

“I will say that a significant investment in technology is absolutely critical for, not only, our success but our survival”.

“The migration from desktop monitor to mobile devices like smartphones and tablet computers has gone a lot faster than we expected. We need to make our website more mobile friendly”.

“Even though we have a lot of traffic and could probably earn money at it, because we want to people to trust, and trust is core to everything we do, and I think [company A] was a natural partnership because if you look across we have XX,000 active listings but we probably have XX0,000 emails in our database. I’d guess that X0,000 of them have a [company A] membership, you know, so there’s this natural synergy already, and it’s a highly trusted brand, you know, it’s hard to, if you have a review site to keep that authenticity, that level of trust, that’s hard. So, and then, you know, it’s in the travel space, so on a consumer facing partnership I think we’d need a trusted brand probably in travel, right? “

“...we launched last year a specific product for companies that want to integrate [the platform] into their employee travel policy, and so we have done a deal with [company B] who are one of the big online travel platforms for businesses, and if you are a Facebook employee for example and you are doing a trip, you can now say oh I can stay in a Hyatt, I can stay in a Marriott, oh I can stay [with the platform], click... and that obviously looks slightly different, because it is on somebody else’s platform. And there are affiliate deals that we do with people, there is an integration with the [airline C] booking system at the moment that means that when you book [airline C] flights, you can also book [the platform]. But we always try and generate some brand consistency there”.

“...it is not a geographic challenge in that way, the challenge is making home exchange as a sharing economy more mainstream”.

- **Interaction with policy regulators is increasingly important**

“...anybody involved in tourism promotion and travel really in a particular city or a market, they are an important stakeholder for us. Local city councils and in the case of London, London boroughs have been quite important stakeholders, and in fact central government as well, so that is where I spend most of my time, is working on relationships with governments around, because whereas the laws that apply to online platforms are pretty stable, pretty predictable, the laws that actually apply to [users] who are engaged in the physical and legal activity of putting their property up on the website and welcoming guests, the rules that they face are very, very fragmented and very different, often from one district to the next, one street to the next, they can be different, so we have to be out talking to governments”

“....subject to whatever export and trade sanctions exist... So until recently, we were not able to have any listings or do anything in Cuba, North Korea, Syria, South Sudan, Iran... We recently, again because of sanctions, had to take down all of our listings in Crimea, because of US and EU sanctions... And I think there is a process that we go through when we shape demand, which is yes we are a global platform, yes anybody can participate wherever you are, subject to the export bans and the trade sanctions”.

*all quotes are by the platforms representing pure sharing economy activities in the accommodation sector

3.2 “Local value potentially global”

The “local value potentially global” type (Type 2) is demonstrated by sharing economy businesses whose value proposition can, at first, be sustainable on a regional and local level. It may be viable internationally, but cannot be enabled automatically. This distinguishes it from Type 1. Among the examples are car- and ride sharing businesses and platforms facilitating sharing of underutilised assets. They require more local knowledge, local coordination and local testing in order to structure and grow a marketplace in a new location. They may also require having local and regional offices in place (see Box 2).

Box 2: “Local value potentially global”: Strengths and challenges in quotes

Strengths:

- **Having viable minimum product before expanding**

“[The platform] was actually founded in [City A] initially and it’s historically a [country A]’s company but we are now active in XX countries....so now we have in a way, a recipe that often needs local adaptation of course...” (Pure sharing -transportation).

“I launched in [city X] first and gradually everything organically started to spread out from there .So I don’t know, yeah, if we went global... how we’d approach that. I think that would be logistically very difficult to go to every territory and check that you don’t like...” (Pure sharing - accommodation).

“We launched our first neighbourhood in the summer of 20XX in [city Y] and then the following months, month by month, we expanded to other neighbourhoods in [city Y] and then we expanded to the entire city and then we expanded to the rest of the [country]”. (Pure sharing - personal services).

“The [platform new product] will come to everywhere soon enough but we, we’re at the moment...still at a testing phase...” [On demand - transportation].

“The cluster model thing starts to work in the fact that you could get in there and start to build the networks locally and build up ...the other five spaces around it...” (Business sharing - property).

Challenges:

- **Ongoing investment in technology development, promotion channels and local partners**

“ I think because our platform interacts with other platforms so, you know, we do... we work obviously closely with Apple and Google on IOS and Android and things like that.... which itself, a lot of expertise in the technical, market form, and then we also use, we also collaborate with universities...in terms of our car technology and things like that.” [On demand - transportation].

“...another problem for us, to the scaling is actually technology ... So it’s made progress in recent times slower than it should have been and also means that when we go to other countries, there’s a lot more work involved in repurposing it for different territories...”(Pure sharing - accommodation).

“We need people who know the city and we need people who know how people get around in a city, how to market a product like [platform XY] in the city...where the regular base might be around the city. So they are essentially people who, some of whom get experience in the, in how, in how to recruit [users] and things like that in terms of just growing the number of supply hours we have”. [On demand - transportation].

Box 2 (continued): “Local value potentially global”: Strengths and challenges in quotes

“...quickly realised that the only way to be in any country in any language is to have people on the ground who know those countries. And that proves very expensive”. (Pure sharing - transportation).

“... where you're actually acquiring existing teams, not so much because of the assets of the company that have developed but more because of their understanding of the local market, their passion for ridesharing in their market and for us to actually acquire these teams, it allows us to have immediate local relevance and local understanding and it allows them to scale up their business instantly” (Pure sharing - transportation).

“...all that time every day you're out fundraising, you're out speaking to people, you're networking, you're trying to find PR stories, you're trying to get in the newspapers, get on the radio, get on the TV and speak to people so people start hearing about you, and you have to do a lot of work to get that name and your brand out there and kindly ask them for money. And that's very exhausting”. (Pure sharing - transportation).

“We don't work with a lot of parties that work for short term; we're really looking for permanent solutions and permanent partnerships, well not permanent but at least ones that – you know working with other parties is an investment so it's something that you want to get a return on and short lived relationships in what we do are not that cost efficient (Pure sharing - personal services).

- **Balancing the standardisation pressures and community building**

“...we're relying on ...our moderation team, our automated filters and ... the sort of user base ... police things as well”. (Pure sharing - accommodation).

“I guess as opposed to probably a lot of sharing economy businesses ours is probably not as reliant on technology but it kind of is in a way, and I guess we worked with kind of a lot more of a manual system for quite a while... “(Business sharing - property).

“Well we run experiments, so we adjust our application and then we see how people behave, whether they are behaving in a different way when we offer them different options”.(Pure sharing - personal services).

“...you have to be careful not to automate too much, and give them the option to have a conversation with a human....peer-to-peer platforms, they are based on trust. Trust in the system and trust in the other people, so if they feel that there's a human behind it, then it's easier”. (Pure sharing -transportation).

“...we try and have as many conversations with as many people as possible but on limited resources. Lots of it goes in phases. We found we'd stopped doing enough of it so we now do a lot more again”. (Pure sharing -transportation).

“ We're constantly on Facebook and Twitter, ...we've been using Instagram, Pinterest. XX of our employees are basically working 25 to 50% of their time...on our social media so they are retweeting information, sending out update information so we have facts and figures, updating users of new transport opportunities, new festivals new sports clubs that sign up to use them and then we're obviously hoping that that information is useful and that they are happy to retweet that or follow us back”. (Pure sharing -transportation).

- **Dealing with unstructured data**

“That's something we kind of learnt the hard way...from the start we've had a thorough database behind the system, but what we weren't doingyou need to be analysing data on a constant basis and the database in the first instance needs a lot of work to be structured as you want it and regularly updated so that it can okay and grow with you and give you the information that you, but also future investments you want to see. “(Pure sharing -transportation).

“we have many ways for our members to give us feedback. as part of this there [are] what we call people who are 'member voice' so they centralise all the feedback that members are giving and once they have the feedback you can see what are the

Box 2 (continued): “Local value potentially global”: Strengths and challenges in quotes

most redundant or the most frequent requests, they coordinate with the programme team so that the IT team is actively take into account the feedback from our community and is able to provide innovations that address this feedback from our members. We also have other ways- I mean, we also have recommendations on our different social networks whether it's on Facebook, on Twitter or else and so we are definitely open to having a process around anything we create so that it can continue to be improved, whether it's as a result of internal feedback or external". (Pure sharing -transportation).

- **Engaging with legal frameworks**

“...and the UK it's like a patchwork quilt of regulations effectively, so there are some things that are important, ...that are things that are in Leeds regulations that aren't in London regulations, that makes it difficult, we have to change our business model and the way we do business in every different city that we go to, so in a few years' time we might be in 50 UK cities and there might be 50 different ways we use that model". (On demand - transportation).

“ we feel that market is being heavily subsidised and supported by grants and funding, whereas our market has realistically not received any promotion, any of that at all over, certainly the last five years or so, we've not received any funding in that sort of, or grant allocation in the same way (Pure sharing - transportation).

“...well we don't try and change [existing regulations], we certainly try and get across to people how our business model is different to what has gone before because regulations aren't really equipped for an app based transportation service, they're more aimed at, you know, kind of dispatch in the kind of the industry and things like that so we, we try and get across to them that things, that certain requirements they might have aren't the ones that they should be focused on with us” (On demand - transportation)

3.3 “Local infrastructure as product service”

The “local infrastructure as product service” type (Type 3) is similar to Type 2 in terms of the geography of value proposition (regional/local). However, Type 3 businesses are unable to start providing their services without significant upfront capital expenditure and prior, often formal, agreement with local authorities and other infrastructure regulators. The same two factors affect the pace of spreading the model in new locations. Among the example are short-term car rental businesses (Box 3).

Box 3: “Local infrastructure as product service”: Strengths and challenges in quotes

Strengths:

- **Having minimum viable product (MVP) before expanding**

“... at that moment, [our] market was only [city R], being a city in [country A]. But at the heart of the business is of course it should be scalable, and so [the company] worked really hard on making this concept scalable, and in that sense, [it] could grow. [It] could grow nationally, and [it] decided a few years ago to also do that internationally, both in the UK and [country C].

“...you need a simple product portfolio which is easy, cleanly to copy paste, but if [otherwise], you would have a mess organising that on the backend so I think the biggest prohibitor to scaling up....if we stop providing standardised solutions. “

- **Highly centralised, automated and standardised interactions with customers**

“We have a system that allows for sharing cars, that allows for the back office to talk to or communicate with the cars...So in that sense, we have a very automated system and that is necessary in our eyes to run the car sharing company, in a reliable

Box 3 (continued): “Local infrastructure as product service”: Strengths and challenges in quotes

and customer-friendly way”.

“...when a member completes a reservation, ...we could send them a...survey for them to fill in and provide some sort of feedback on the service they've received. The things they liked about the service, the things they disliked and what they would like to see improved in the future and we will receive that information, analyse it and if we see common trends from our members then it would be something we would look in to developing in the future“.

“Exactly, yes. Both front office and back office are very much automated with very small engagement of face-to-face communication”

- **One-sided platform, less demanding in terms of technology development and organisational capabilities**

“We are very proud to have a platform that allows for very efficient processes...We basically do the quick fixes ourselves... it is cheaper but the bigger changes, either to the website or to functionality, that is something that our IT supplier deals with”.

“We take care of [website] in house, but when a member registers on our website or signs in to make a reservation..., those processes are actually handled by our software provider”.

“...so there's ultimately the membership database and the reservation system and the fleet database. But those three are all interrelated to some degree ... And then I guess, hanging off that, there are certain pre-sales websites..., there are the apps that are attached to the back end. But I think it's largely us knowing how our software works and how we can improve it, to improve the service here”.

Challenges:

- **Upfront fixed capital expenditure**

“...starting a new market is a costly process, very costly process, yes you've got to spend all that time engaging the stakeholders and you've got to invest in cars up front before you have any members, because you can't do any marketing until you have some cars”.

“We currently own our fleet outright. We did sort of look in to leasing options but again there were some issues there, like a lot of the – well car manufacturers they weren't really willing to lease us vehicles, being a new company”.

- **Formal coordination with local authorities and transport infrastructure providers**

“You need a very good relationship with the municipalities you work in, and you need to be allowed to get parking spaces in certain areas, and you need to be able to move and act quickly with them, decide quickly, in changing parking locations. But also talking about we already discussed having a partner or stakeholder like [XX] that really adds to the mobility concept that we have. A customer uses [us] in combination with public transport, so if we join forces, we can become more benefit for customers”.

“Well what we did [in city A] and this is what we've done in other cities as well, is we would start by finding our own parking spaces, privately. That is not easy, sometimes but that's what we would do; get ourselves established and then be talking to the Council about, look we provide the service, it would be even better if you could give us some very convenient parking spaces for our members, and then people see the service more and it will grow “.

“...it's the relationship with the Council that's most important. Because they make the parking available and they want to provide their residence and their businesses with a good amenity, so we need to provide that for them. So I would say that's the most important”.

“We came to the UK because we participated in a tender, actually for two municipalities”.

Box 3 (continued): “Local infrastructure as product service”: Strengths and challenges in quotes

“...even when you do get to one or two of the right people, you might find that... they actually have a different agenda to another department. So for example, there might be a parking department who are interested in the revenue that parking generates and there might be an environment department who want to reduce the number of cars, the less cars you have, the less revenue you have. So those two are immediately in conflict. And so sometimes you’ve got to talk to different departments and broker between them”.

- **Ongoing investment in promotional channels**

“...going forward, I think yes we will have to be more proactive on multiple levels, not only to customers but also to other mobility providers and see how we can combine, create a solution that fits better”.

“...everybody is using digital marketing now and of course that’s the same across all industries. There are some markets where having a street team presence is very effective, so we do see that in certain markets, certainly in North America and indeed in some European markets, so a street team can be effective in some markets”.

“marketing is a very important factor and again that’s something which ... brings sort of credibility to our business and it breaks down the barriers of trust so again as ...we don’t have much interaction with our members, the fact that they see advertisements around their local area then it gives further credibility and it lowers any boundaries and any restrictions that people or reservations that people may have in terms of signing up for our service”.

- **Dependence on local and national legal frameworks.**

“...that would sort of hinder us are – well yeah one being insurance, another would be our ability to well take on credit so in terms of new vehicles and again another is also actually obtaining contracts with local Councils”.

“...also insurance-wise, the UK is different than other countries, so there was some administration that made our business more difficult over there”.

3.4 “Co-created services”

The “co-created services” type (Type 4) is observed in sharing businesses dealing with sensitive personal services (such as childcare or housekeeping) or bespoke professional services. In terms of the geography of value proposition (regional/local), it is similar to Types 2 and 3. It is associated with little upfront investment to set up a business, making it close to Types 1 and 2 on this criterion. What makes it stand out is a significant amount of complex social (human-to-human) coordination required on the part of the platform to engage with different types of platform users to co-create a service experience (Box 4).

Box 4: “Co-created services”: Strengths and challenges in quotes

Strengths:

- **Having viable minimum product (MVP) before expanding**

“We started in one postcode, down in the southwest of London... we operate, right now, in London, [city A], [city B]. We also operate in [city C], in [country A], and [city C in county B]... And the nice thing about [city C] was it enabled us to scale there without having to make huge technology changes, in terms of language...it did, though, ...that we made that jump to allowing us to take Euros...And then going to [city C] was the next test for us, enabling us to grow, again, geography, but also time zones and deal with that expansion into a new market, and understanding that local market there. So I think we see that the expansion was all about us testing our ability to go to new geographies”. (On demand

Box 4 (continued): “Co-created services”: Strengths and challenges in quotes

economy - personal services).

“...We have clearly got something that is very niche, and there is a need and it works.” (On demand economy - professional services).

“Once we are profitable in the UK then we will fund international expansion, and we had a number of people ask us to come”. (On demand economy - professional services).

Challenges:

- **Integrating online and offline channels of communication; standardisation and customisation; high quality of traditional forms of communication required**

“We don’t believe that a human-based service business should be fully online. And so you can do it online if you want but 95% of our customers want to talk to a human being and because our focus is on the regular repeat customers we actually have a chat with them. Because almost every high value regular customer has some special requirements so we can talk through those with them”. (On demand economy - personal services).

“We really encourage, when the [service provider] and the customer meet for the first time...and for the customer to talk with the [service provider] and explain what kind of [service] they would like done ... and what schedule works best for both....We’re starting to do that [bringing the service providers in and the customers in] a lot more now. It takes a lot of effort and time to set up sessions...literally have them come in, sit with a cup of coffee or whatever, and just talk to them about how they’re doing...”(On demand economy - personal services).

“... we only automate tasks where we find it’s worthwhile automating them, we’re quite disciplined about that point” (On demand economy - personal services).

“...the pain point isn’t...convenience, the pain point is actually quality of delivery, because it’s very hard to find a [service provider] who’s high quality who you can also trust. What [the platform] does is try to help both sides of that marketplace; the consumers, we make it very easy to book, manage, pay, it’s all online, it’s all automated, you can manage your account online, it’s great customer service behind it...And on the [service provider] side where ...we say, “If you’re a great [service provider] we can provide you a higher number of jobs with a higher density of jobs”. (On demand economy - personal services).

“...one of the biggest issues when we started was people ...requesting illegal tasks and so they had to be screened out...it’s hard to automate that entirely because you can ask in very creative ways using no words that would be flagged up, and it’s clear to any human what you are asking is illegal, but it wouldn’t be clear necessarily to an algorithm or a computer”. (On demand economy - professional services).

“The other thing that we do is we ask the taskers to do tasks for us where there’s no end customer so we do a verification on whether they can actually do what they say they do, what’s their past work, we take up references as well and we do that more than we used to now...”(On demand economy - professional services).

“...a lot of [social interaction] happens...on the site itself...we have a messaging system between our customers and our [service providers]...we also quite heavily rely on traditional forms of communication, like SMS. ...We also do all of our phone calls through the web browser.... In terms of interaction out to the social platforms, like Facebook..., we do the standard things, like allowing you to share on the social platforms...In a lot of our emails, there will be shareable content. We have blogs, which we write for each different country...” (On demand economy - personal services).

“So if there are any issues with your [service provider] and you’re not happy with them then we can help replace that [service provider]”. (On demand economy - personal services).

Box 4 (continued): “Co-created services”: Strengths and challenges in quotes

“... every customer will have some sort of project manager or account manager, and so that person will ensure that the tasker, the seller, is doing the job, that the customer is happy with the job that's been done, and also look for other things which we can do for them to keep the subscription going”. (On demand economy - professional services).

- **Ongoing investment in technology development and promotion channels**

“More automation is required, a better way for the client to track all their tasks, what is being done for them, and see what the progress is, all these things are missing. So, no, there's a lot of issues that are still to be done and it's all the lack of money. If we had more money we could do it more quickly. But the basic design of bringing in customers and getting work done for them that works reasonably well”. (On demand economy - professional services).

“...as we get bigger every time we find ways to make that high quality [service] scalable, and that's not straightforward, that always needs changes and improvements...for both sides of the marketplace”. (On demand economy - personal services).

“it requires greater marketing... We hired some people... to go to events where we could meet customers directly and explain face to face. This is a higher cost of customer acquisition, and, actually it did work..The one biggest thing that we would like to do is to have the resources to be able to do the marketing because that will bring us in the customers.”(On demand economy - professional services).

“It comes down to marketing and getting the word out. So getting people to understand that there is this product there and that we exist...” (On demand economy - personal services).

“So the design team and the marketing team do work quite closely in each different country to work out what works best for that country. There are definitely visual differences. There's differences in how you communicate your product, how you market your product”.(On demand economy - personal services).

- **Identifying local representatives**

“So, for each country that we go to, we'll hire a country manager who will take care of running all of that piece of work. So they'll look at all the local regulations, the policies, come up with a suggestion for how the product should be adapted to fit that local geography...”(On demand economy - personal services).

- **Unstructured data analytics requirements**

“...then it comes down to...understanding that new geography, that new market, which is why I think there's a lot of competitive advantage when you do overcome all those hurdles and the issues of getting to that new geography, and you're there – then you can become the dominant player quite quickly, because the barriers to entry to get into that are quite high, into those markets....I think that's the main thing”.

- **Engagement with national legal frameworks**

“...there are regulations that are important and I think the issue is not that we need new regulations but that we need clarification of current regulations....the technology has blurred the lines between what people were doing in recruitment agencies and what we are doing, so it needs to be clarified.” (On demand economy - professional services).

“Labour laws is one really important thing for us. We don't employ the [service providers] – they're self-employed. So making sure that that's clear and is well understood in the geographies is important.From a technology standpoint, you've got to think about the local laws there – where can data be kept, what are your terms & conditions for the different countries”. (On demand economy - personal services).

Overall, it should be mentioned that these are ideal types, and there can be sharing platforms which represent more than one type or transform into other types over time.

4. Trust and platform design

Sharing economy businesses across all of the upscaling types identified building trust and transparency as one of their main strategic objectives. This can involve trust in the platform/business or trust in the individual users of the platform, often ‘strangers’, one engages with. Practical strategies to achieve this included a variety of platform tools and customer touch points, combining online and offline channels of communication and support (see Box 5).

Box 5: Generating trust through platform tools

“Trust? Absolutely, it’s the thing that drives them to do what they do I believe. Especially for the lenders; they need to trust the person that they lend their items to, in order to actually lend something. Without trust, there is no transaction...Human intuition is still the best mechanism for you know for trusting or not trusting a person. I think it’s what we’ve been wired for for tens of thousands of years and so we’ll need to write a pretty smart algorithm to be better than that – to beat that. But we can [provide] additional information to enable people to at least have something to base it on”.

“We have it all over the website, talk about [our service], who’s [doing what], who’s blah, blah, blah, all that type of thing, so I don’t think that needs to be made [more] public just because some people choose not to discuss those things”.

“We focussed very early... all our efforts around building trust and we’ve done that by using tools so that people feel that they choose whom they [get service from] ...So what we do is when someone becomes a member of our platform, they register by giving their name, by writing a short essay about themselves, putting a picture...they give their phone number and email which we check, which we validate and then they can do also a social connect, so they can connect to their Facebook account, for example, and the other members ...will see that ...that they have x-hundred friends so that helps to build trust in people’s mind...the key tool that consolidates that trust is ...the peer to peer rating... You also see public comments, public conversations so you see how active the members are and what interactions they’ve had with other members...”

“[For] the consumers, we make it very easy to book, manage, pay, it’s all online, it’s all automated, you can manage your account online, it’s great customer service behind it, all the stuff that you’d expect from a business that helps...And the bit that’s innovative is on the [provider] side where...we say, “If you’re a great [provider] we can provide you a higher number of jobs with a higher density of jobs”....and we display all that information up on their phone” .

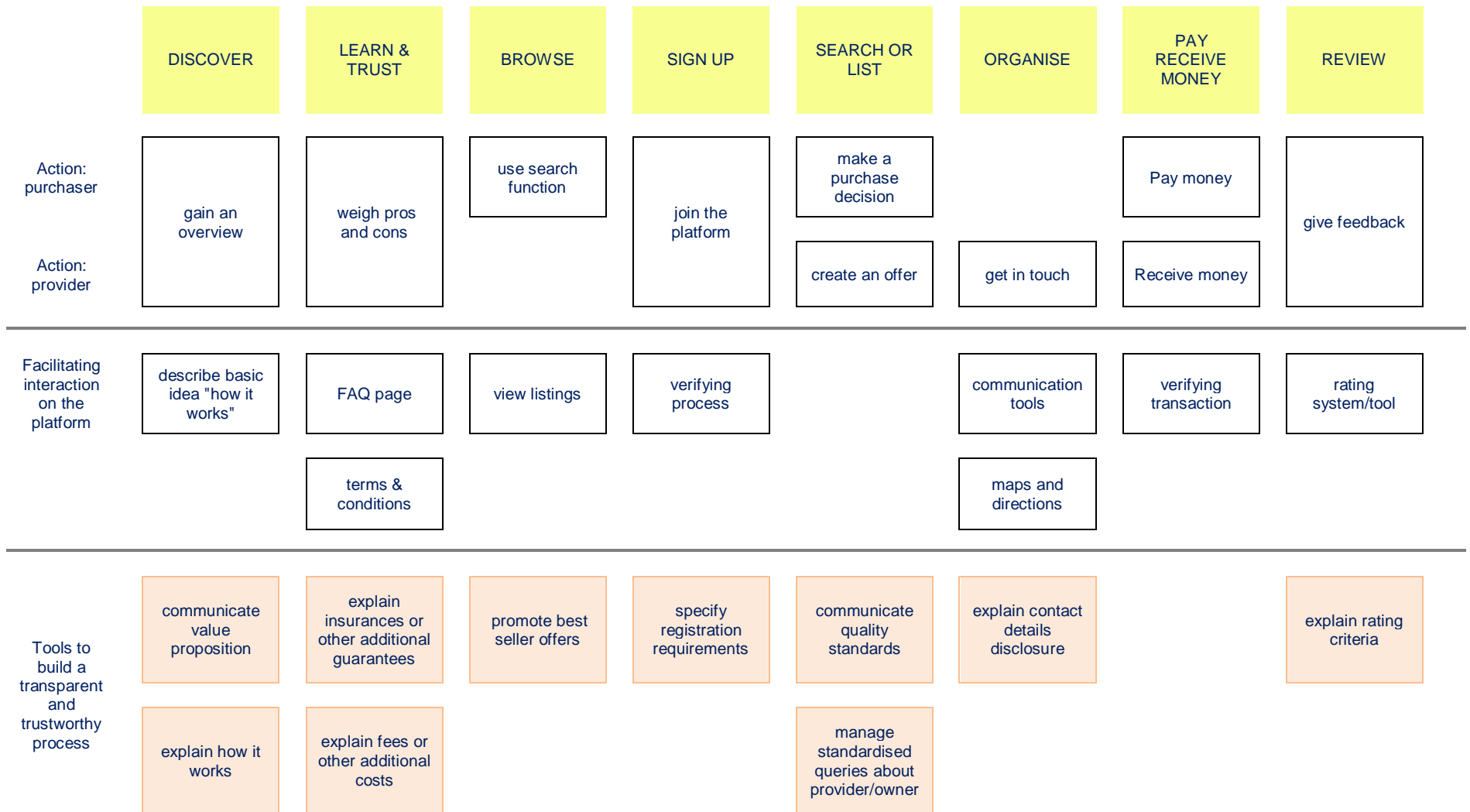
4.1 Service blueprint analysis

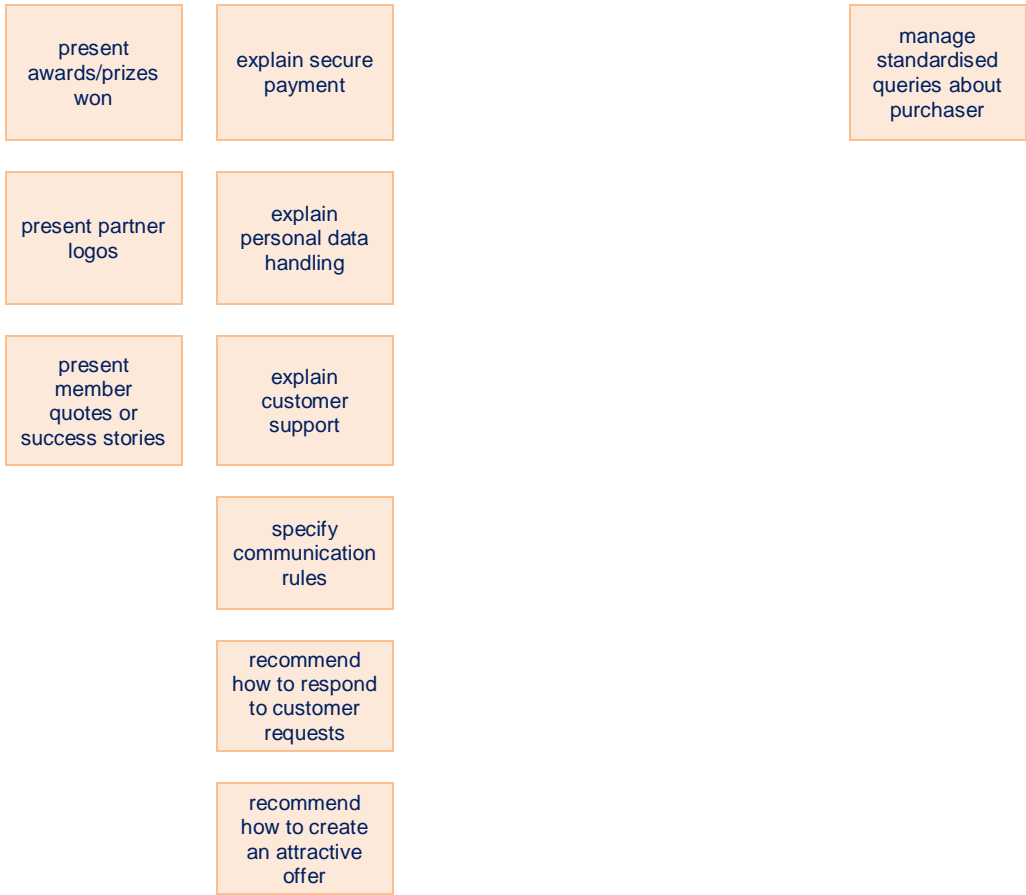
To obtain a systematic picture of the tools provided by sharing economy platforms to generate trust, we conducted a service blueprint analysis of the web-interfaces of 75 sharing economy businesses. Initially developed for the purposes of identifying failure points in a service operation, service blueprinting has become a widely used technique in a user-centric service design. It is particularly useful when it comes to plotting, developing and bringing together different business functions to deliver innovative services (Bitner et al, 2008). The technique is often presented as a set of “swimming lanes”, separately depicting customer actions, and corresponding visible contact actions by the front-office, invisible actions of the back-office, support processes, physical environment, and the linkages between them.

In the context of the digital platform analysis, the service blueprinting technique allows to visualise the steps that a platform user must undertake to gain access to and experience a platform service. The platform and its service can be presented as a set of digitally enabled touch-points. For instance, one touchpoint is when a potential platform user discovers the platform website. How is he or she introduced by the platform to its services? What information is s/he provided to learn more about the platform experiences? Is s/he treated as a potential provider, or purchaser, or both? Further touchpoints can be related to browsing experiences, registration and sign-in, listing and searching for items, offers and jobs, making a transaction, getting paid and making a payment, providing a review and receiving a feedback.

Figure 3 (which is an example of a generic platform service blueprint) presents all these different and seemingly isolated user touchpoints as part of one platform service. Underneath the experience points, it builds out a richer diagram depicting separately the actions of providers and purchasers, interactive activities facilitated by the platform, tools and information provided to build a transparent and trustworthy transaction process, and finally the backstage actions which are likely to be undertaken to support experience touch points.

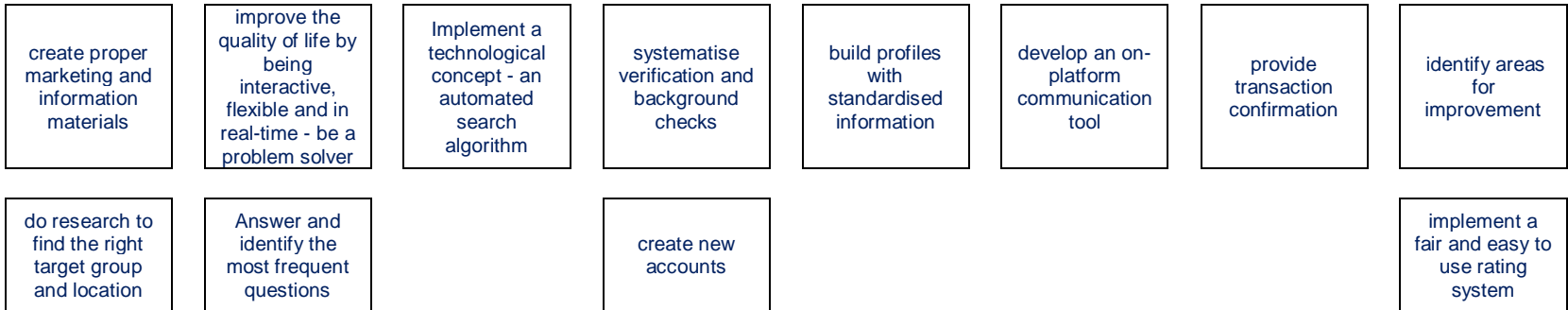
Figure 3: Service blueprint for a sharing platform





Line of visibility

Backstage actions



4.1.1 Facilitating a transparent and trustworthy process

Our content analysis of web-interfaces has focussed on a range of tools which can be used by sharing platforms to facilitate a transparent and trustworthy exchange process. These tools do not need to be always present, and can be used by platforms in various forms, selectively or in combination. Table 4 provides a detailed explanation of each tool to help understand how it can contribute to a distinctive platform offering.

Table 4: Trust-generating tools explained

Tools	Actions, processes and information required
Communicate value proposition	Create a unique selling proposition; with particular emphasis on the authentic peer to peer/sharing experience; user tests and tools provided to demonstrate benefits of the platform offer (e.g. saving time or money).
Explain how it works	Sell the experience: tonality and communication are matching the target group; sell solutions not products or services; story telling.
Present member quotes or success stories	Increase credibility by using testimonials; use communicator similar to the target group; the client and his/her solution is the focus of the success story, not the scope of service; use of videos.
Explain insurances and other guarantees	Detailed information about insurance/insurance provider and additional guarantees; communicate the sum insured.
Customer support	Personalise customer support homepage; offer live chat option; constant reachability; solution-oriented approach instead of bureaucratic processes; consider the customer history; offer a high variety of support channels
Announce communication rules	Define response times; set up guidelines and rules; select specifically tonality for the platforms; position as a reliable mediator between supply and demand.
Present awards/prizes	Statements about significance of the awards and prizes for the platform.
Present partner logos	Present cooperation with other well-known brands; use partners' brand to gain more attention.
Explain fees and additional costs	Transparency about fees and the purposes of fee collection (profit making, social aims etc); special fees or free trials for new users.
Explain secure payment options	Use of pre-payment systems; handling the whole transaction process via platform; offer a broad selection of cashless payment transactions.
Recommend how to create an attractive offer	Best practise examples and guidelines for creating an attractive offer; well-designed input mask with additional help sections and assistance.
Recommend how to respond to customer requests	Binding standards for response time; guidelines and valuable assistance, e.g. "FAQ's for supplier".

Specify registration requirements	Communicate what the platform undertakes against fake accounts; explain why verification is useful and necessary for both supply and demand side users.
Explain rating criteria	Define rating subcategories; communicate the benefits of the rating system.
Explain personal data handling	Offer to administer personal data from the user profile; confirm whether data can be used for other purposes; what data can be used and where.
Deal with standardised queries about provider	Encourage providers to complete entries in provider/owner profile (e.g. required for viewing other profiles).
Deal with standardised queries about service user	Encourage customers/service users to complete entries in user profile (e.g. required for contacting providers/other users).
Communicate quality standards	Quality standards in relation to uploaded and created content on the platform; service quality standards (e.g. security, user-friendliness, data verification, etc).

4.1.2 What tools make a difference?

In our sample of 75 platforms, 38 have a trackable presence on the Internet in terms of number of monthly website visits (as reported by the online tool SimilarWeb), with the remaining platforms recording no substantive website visit data (i.e. less than 2000 per month). Assuming that the most visited platforms are more likely to be most upscaled, we compare this group of platforms with the rest, in terms of platform design tools used to generate on-line trust. The results of this comparison are presented by Table 5.

Each reported variable corresponds to a particular service blueprint tool (as indicated on Figure 3). The value of each variable should be read as a fraction of platforms in each group deploying the respective blueprint tool. Blueprint tools are grouped into 3 categories such as those specifically designed for the supply side users, those specifically aimed at the demand side users, and those who provide an identical interface for both the supply and demand side users.

It can be seen from Table 5 that the most upscaled platforms systematically provide (and require) more information and documentation that support a trustworthy and transparent process. For instance, there is a significant difference between the most upscaled platforms and the rest in relation to the detail provided about secure payment systems used, with 60.5% of the most upscaled platforms offering a detailed description of secure payment options available for the demand side users (consumers) as opposed to 30.8% of the rest of the platforms. For the supply side users (providers), the percentages are 68.6% and 34.4% respectively.

Table 5: Web-interface comparison: the most upscaled platforms versus the rest (sample means and t-tests)

	Demand side tools			Supply side tools			Platform-wide tools		
	Upscaled	The rest	Difference	Upscaled	The rest	Difference	Upscaled	The rest	Difference
Value proposition communicated	0.948	0.757	0.191**	0.801	0.688	0.113			
How it works explained	0.895	0.649	0.246**	0.657	0.531	0.126			
Insurance/guarantees explained	0.711	0.568	0.143	0.658	0.563	0.095			
Fees and other costs explained	0.869	0.730	0.139	0.800	0.656	0.144			
Quality standards communicated	0.684	0.405	0.279**	0.714	0.500	0.214*			
Secure payment explained	0.605	0.297	0.308***	0.686	0.344	0.342***			
Handling of personal data explained	0.921	0.838	0.083	0.857	0.844	0.0134			
Registration requirements explained	0.500	0.324	0.176	0.572	0.219	0.353***			
Contact details disclosure explained	0.447	0.216	0.231**	0.371	0.25	0.121			
Success stories by platform users	0.815	0.378	0.437***	0.657	0.344	0.313***			
Rating criteria explained	0.316	0.189	0.127	0.315	0.219	0.096			
Bestseller offers presented	0.605	0.243	0.362***						
Queries about provider addressed	0.579	0.351	0.228**						
Queries about consumer addressed				0.343	0.094	0.249**			
Advice on how to respond to requests				0.457	0.031	0.426***			
Advice on how to create offer				0.514	0.250	0.264**			
Customer support process explained							0.948	0.784	0.164**
Communication rules explained							0.605	0.162	0.443***
Showcase awards & prizes won							0.263	0.0811	0.182**
Partner logos presented							0.368	0.189	0.179*

Note: * significant at 10% level, ** significant at 5% level, *** significant at 1% level.

Similarly, the percentage of platforms which provide detailed description of customer support services, communication rules and quality standards, and address standardised queries about providers and consumers, is significantly higher for the most upscaled platforms as compared to the rest of the sample. The proportion of platforms who offer specific advice to service providers on how to design an attractive offer and respond to customer requests is significantly higher amongst the most upscaled platforms too. The latter are also significantly outperforming the least upscaled platforms in terms of promoting their bestseller offers, presenting success stories and user quotes, demonstrating partners' logos and showcasing different awards and prizes won.

Overall, the group of the most upscaled platforms engages consistently more with each of the trust generating tools identified. The gap between the most upscaled and least upscaled platforms is less significant only in relation to the very few platform design tools which are normally thought to be part of any successful platform design, and were also frequently mentioned in our interviews with sharing economy businesses. These include fees and insurance guarantees explained, personal data handling specified, registration rules clarified and ranking systems provided.

5. Collaboration and open innovation strategy

The upscaling patterns identified are only partially sector specific, and only partially attributable to certain type of pure sharing or sharing like activities. This potentially represents a significant opportunity for collaborative action, cross-organisational and cross-sectoral learning amongst businesses deploying a similar upscaling strategy. For instance, non-competing platforms representing Type 2 transportation and personal services can potentially exchange knowledge in relation to stakeholder management.

There are also opportunities for collaboration and knowledge exchange among sharing businesses representing different upscaling strategies, especially in relation to platform design and the way-to-market activities (Table 6). In terms of the platform design and development, Types 1, 2 and 4 are represented by multi-sided digital platforms, which appear to be more demanding (compared to Type 3 one-sided platforms) when it comes to organisational knowledge and resource inputs needed to orchestrate imbalances in a market place. Large scale data analytics is an important driver of upscaling across all multi-sided platforms, with both Type 2 and 4 businesses being also affected by their capability to analyse unstructured data.

In relation to the way-to-market activities, marketing and market research are reported by the majority of the businesses interviewed to be the second largest expenditure item after technology development. It is notable that different types of sharing businesses use similar route to local markets, which again potentially represents an opportunity for cross-organisational collaboration and joint action to help to drive the sharing economy value proposition to the mainstream market (for instance, through complementary or integrated offerings and bundles).

Table 6: Typology of upscaling: platform design and ways to local markets

	Type 1 “born global”	Type 2 “local value potentially global”	Type 3 “local infrastructure as product service”	Type 4 “co-created services”
Platform design and development	Multi-sided global platform	Multi-sided generic platform	One-sided generic platform	Multi-sided generic platform
	Orchestrating global-local interactions	Orchestrating local/regional interactions	Orchestrating local/regional interactions	Orchestrating local interactions
	Inbuilt reputation systems	Both standardised and customised off-line services (local inspection/handover)	Limited and standardised off-line interaction tools	High quality of traditional forms of communication required
	Structured data analytics requirements	Unstructured data analytics requirements	Highly automated front and back office	Experimentation with standardisation and customisation
	Limited and standardised off-line interaction tools	Hybrid (solution-based) offerings	Structured data analytics requirements	Challenging to optimise
	Localised payment systems and promotions	In-house development/necessity driven outsourcing	In-house development/elements of strategic outsourcing	Unstructured data analytics requirements
	In-house development/ad hoc outsourcing			In-house development/mixture of ad hoc and strategic outsourcing
Ways to local markets	Partnership with destination marketing organisations important;	Partnerships with local players (private businesses, public sector organisations, investors);	Partnerships with local players (shareholders; local authorities); local tenders and contracts; local investors;	Investors, partners, blogs, public sector organisations;
	Interconnectivity with other global platforms	Brand recognition/Acquisition of local brands	Understanding local marketing channels (mix of offline and digital marketing)	Country managers
	Using members for promotion and marketing	Local “champions”		Understanding local marketing channels (mix of offline and digital marketing)

We find that these “collaborate to upscale” opportunities are acknowledged but not necessarily utilised by sharing platforms. For instance, many sharing economy businesses do realise that cross-platform sharing of user ratings could have substantive upscaling effects for the sharing economy of the magnitude similar to that for the credit-card industry from sharing credit scores of individual consumers (Stewart, 2014), but find it challenging to implement. Among the reasons not to engage in sharing can be high perceived costs of collaboration especially for small sharing economy businesses, mistrust among competing companies, and immaturity of the sharing economy as a whole, where getting access to conventional market support institutions such as insurance providers can be treated as a competitive advantage (Box 6).

Box 6: To collaborate or not to collaborate

"I think there could be more collaboration, certainly in our specific market but, you know ...all of these companies are all small businesses, yeah, and I don't mean to be sarcastic here or negative but, you know, they all think that they're all worth far more than what they are. And very few of them actually understand the benefit of collaboration, yeah? So that's item one. The reality is there are some technology challenges, right? You know, everybody does things slightly differently, right, and until there's a common platform, well, there's a cost associated with collaboration, right? ... There's massive benefits as well, but there is a cost associated with it. But you combine the fact that it's a small business and then there's a cost associated with collaboration, and then it just becomes too hard, right?"

"Well, there isn't a great deal of collaboration in the sharing space.... It's very paradoxical...My suggestion was that you cannot allow a commercial enterprise to provide you with its own review system. If you want it to be fully independent... Because the review system will be built within an inherent bias. So, what I suggested was that all of these platforms get together and they share their data....The problem is... the largest businesses that have the largest amount of data have vested interests in the form of their stakeholders and therefore they're not interested in that level of collaboration unless they can see how it would deliver greater profitability... So, my suggestion was that there should be an independent consumer watchdog which collated information - a certain amount of information in order to provide people with certain - independent verification and in terms of allowing us to grow."

"We are very open to all conversations. This market is, it's you know, potentially it's a billion, you know, billions of user market..."

"We regularly...meet with other start-ups who are in a similar space ...And a lot of the similar issues come up and they can be solved across these platforms. We always will have our specific differences. ..But, ultimately, these platforms operate in a very similar way...It's very important to share with other start-ups – even direct competitors discussing... Enabling both of you to operate in a new vertical can be a beneficial thing for both ...for both companies – instead of both of you not being able to operate there at all...definitely, there could be some interesting synergies there that both companies could learn from. I think, though, when it comes to data.... I think it would be nice to think that we could share all the data that we have with all companies, but that's not practical from a start-up perspective. A lot of the competitive edge does come from you having your own data and not sharing it directly with competitors..."

"The sharing economy UK, they're actually doing some efforts to open up the insurance companies .. to new sharing economy companies, but I think...our competitors [in the sharing economy]...do not want to open up about this because it's the biggest barrier to get in. So trying to keep this as secret as possible is... the way you go about it, but, in the end...You know, each company makes it pretty widely available who their insurance partners are, so it can't be a 100% secret, but the way you go about it, I think, is a big secret"

Few sharing economy businesses strategically use open innovation for their business development. Due to pressure from potential investors, many sharing platforms are reluctant to signal that they may need to resort to external sources of knowledge, technology and services. The apparent lack of mutual trust among competing platforms may affect the attractiveness of the sharing economy offering, by limiting opportunities for incorporating complementary activities and offerings of third party platforms. It may also translate into a weak inter-platform co-operation when it comes to dealing with local, regional and national stakeholders, which represents an important common component in upscaling strategy for the majority of the platforms.

6. Conclusion

Thousands of sharing economy businesses are experimenting with new value propositions based on cost-effective and convenient access to underutilised or redundant resources, an appeal to a different group of customers, often ignored by mainstream businesses, and novel supply chains and operational models. Very few, however, manage to succeed. By developing a typology of ideal upscaling patterns in the sharing economy, we try to understand what makes it easy and what makes difficult to start and grow a sharing economy business.

We identify four patterns of upscaling: *“born global”*, *“local value potentially global”*, *“local infrastructure as product services”*, and *“co-created services”*. These are only partially sector specific, and only partially attributable to certain types of sharing activity. Instead, they emerge from mapping out sharing economy platforms along the three business model dimensions such as the geography of value proposition, upfront fixed capital requirements, and the extent to which service provision is associated with complex and iterative interactions with customers and other stakeholders.

Getting the geographical scale of the value proposition right and understanding its implications for the platform design and the amount of effort, knowledge and investment needed to deal with relevant stakeholders appears to be critical for sharing economy businesses when it comes to finding the most optimal upscaling route. In this regard, we identify a considerable opportunity for collaborative action, knowledge exchange and cross-organisational learning among sharing platforms, which is acknowledged by the platforms themselves but rarely exploited.

Designing transparent and trustworthy sharing platforms is one of the key upscaling challenges facing sharing economy businesses. Our service blueprint analysis reveals practical service design strategies to facilitate trust among platform users through a variety of platform tools and collaborative customer touch points provided. Among the most significant of them are related to the clarity about secure payment options, registration requirements, communication rules, bestseller offers for consumers, advice to providers on the attractive offer design, as well as exposure to verifiable platform user testimonials and success stories.

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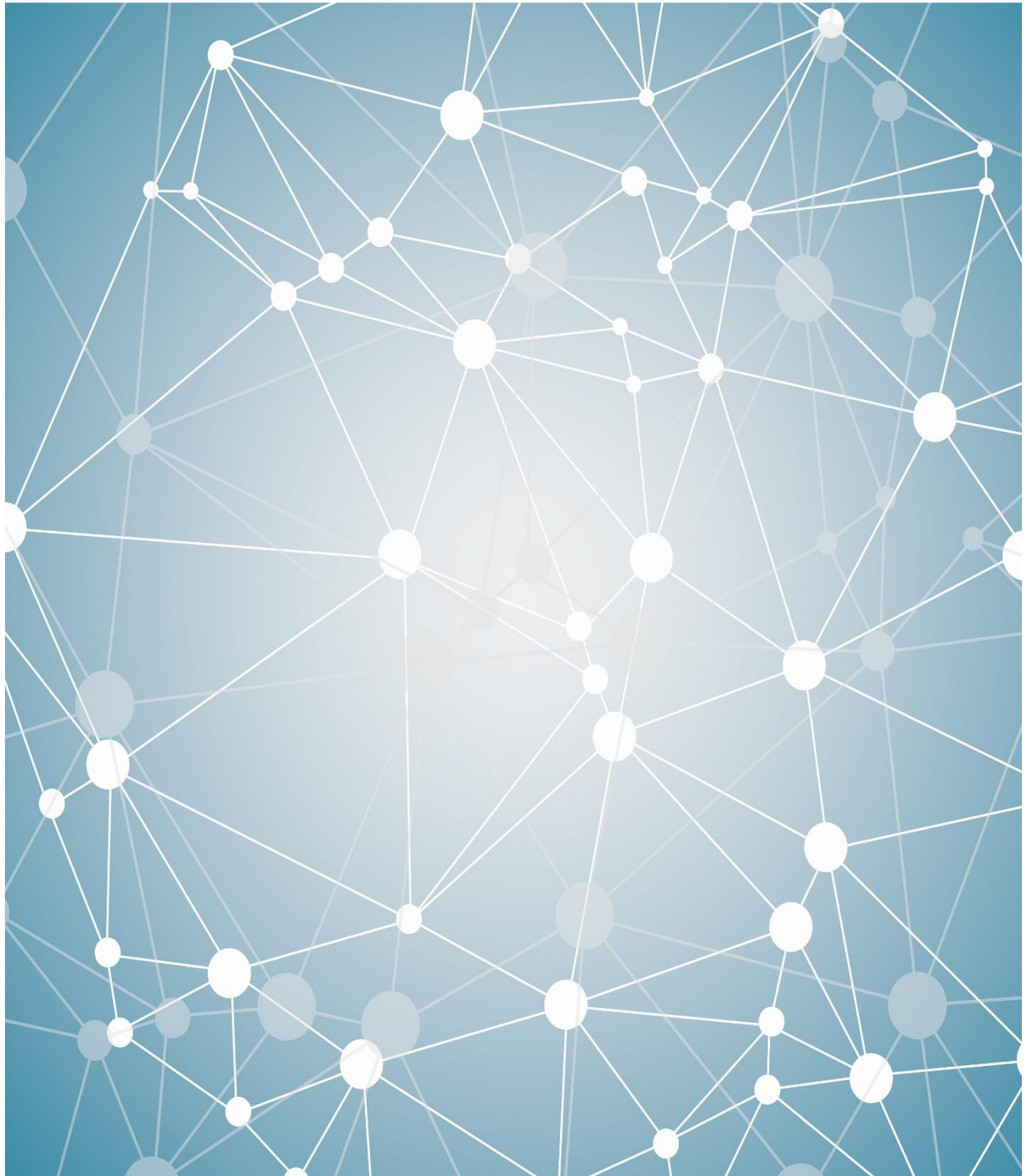
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