
Sharing and Caring

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Member Countries Report on the **Collaborative Economy**

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PREFACE

The main objective of the Cost Action “Sharing and Caring” is to develop European network of actors investigating the development of Collaborative Economy (CE) models, platforms and socio-technological implications. The network involves more than two hundred members (including scholars, practitioners, communities and policymakers) across 34 European countries, and 3 other associated countries. This “Sharing and Caring Countries Report” represents its first synergetic outcome and provides an overview of the Collaborative Economy phenomenon as interpreted and manifested in each of the countries part of the network.

According to the European Commission, the term Collaborative Economy is used interchangeably with ‘Sharing Economy’. The term ‘Sharing Economy’ was frequently used when early models (i.e.: Airbnb, ZipCar) appeared and gained popularity especially in the USA, but it was soon substituted with the term ‘Collaborative Economy’ in European contexts. The country reports in this collection often use the two terms interchangeably, further illustrating the fact that a shared, stable definition is still missing. However, the ambition driving the term Collaborative Economy is to create specific European economic models “with greater emphasis on the involvement of community” (Ouishare). In Europe, too, the definition of collaborative/sharing economy remains fuzzy, including both non-profit and for-profit models, and both monetary and non-monetary exchange among participants. The phenomenon is complex, covering various fields of activity, as well as operating on different levels, ranging from the international to the national and the local. Some definitions focus mostly on sustainability, while others highlight technological and financial aspects and business models specific to the phenomenon.

The examples cited in this report picture both aspects of the phenomenon: the collection speaks to the business side of peer-to-peer exchange and the use of intermediary digital platforms as well as a variety of bottom-up civic initiatives that aim at promoting new societal values among society members without a direct economic benefit. Both for profit and non-profit stakeholders are taking part and pushing forward the phenomenon, exploring challenges and opportunities offered by the expanding match between ICT infrastructure development and societal needs. In this report, national and local governments frequently come up as crucial stakeholders involved in the development of the Collaborative Economy, especially when it comes to laws and regulations.

The collaborative economy has the potential to create new opportunities for consumers and entrepreneurs, but also to introduce new threats and concerns. Big companies, like Airbnb and Uber, have been frequently subjects of critical, public debate related to issues such as labour conditions and real estate regulations, as well as emerging conflicts concerning the breach of local, regional, and European laws by these new business models. The role of national governments and local authorities could be crucial in promoting and developing the Collaborative Economy in a responsible and sustainable way.

This report illustrates the range of perspectives and experiences in different European countries, embracing the diversity that stems from their different historical, social and political context. Next to cultural and political factors that have shaped the attitudes, institutions, and practices that play a key role in how the collaborative economy is perceived and realized in different countries, another important issue relates to technological tools that are being used, including a range of mobile applications, social media platforms (such as Facebook), and other tools based on online social networks. However, in countries like Belgium, Poland, Estonia, Hungary there are many platforms in use that are specific to the collaborative economy (i.e. ListMinut, Bringr, Conceptz, znanylekarz.pl, Osta.ee, Miutcánk.hu).

In July 2017, representatives from each of the twenty-eight countries featured in this report were invited to produce short country reports including, definition(s) of the Collaborative Economy; types and models of the Collaborative Economy; key stakeholders involved; as well as legislation and technological tools relevant for the Collaborative Economy. The reports vary in length and in the level of detail included, in accordance with how much information was available in each respective country at the time of writing. We have compiled these early reports into this summary report, which is intended as a first step in mapping the state of the Collaborative Economy in Europe. A new version of the report is planned for 2019.

AUSTRIA

In Austria, both non-profit initiatives and for-profit companies are active in the field of collaborative economy. Old forms of collaborative economy, such as libraries or the sharing of equipment in agriculture, have a long tradition. Since the global spread of new platforms and network activities, the collaborative economy has also experienced a new boom in Austria.

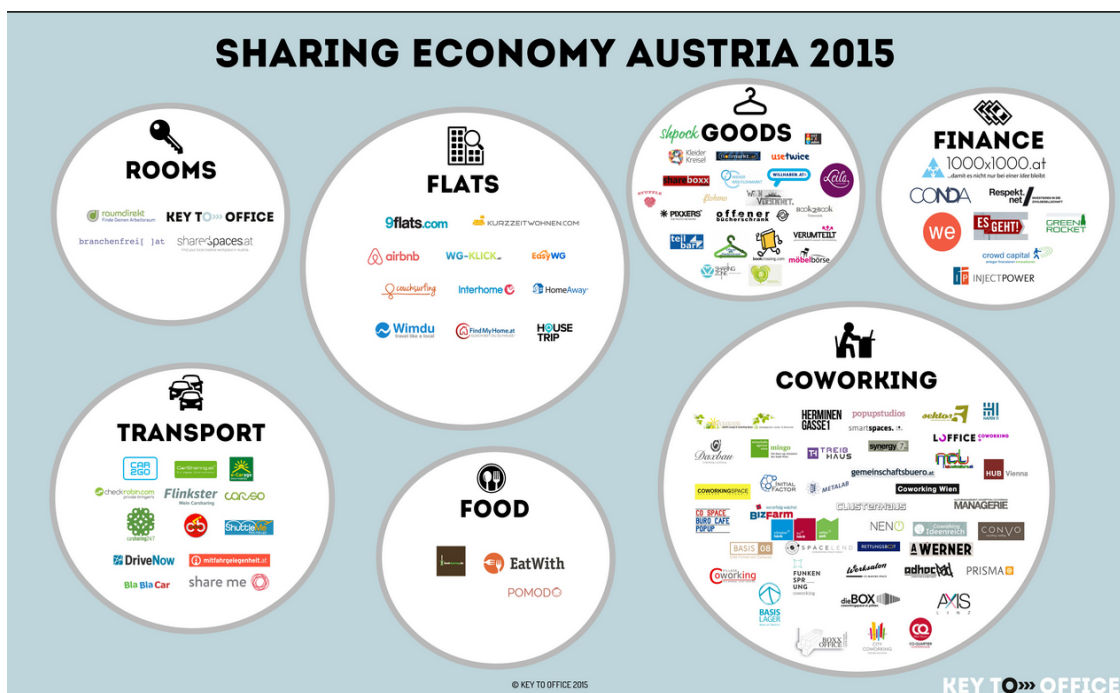
According to a survey carried out in the year 2015 about awareness and publicity of platforms in Austria, it became manifest that among the young population (15-29 years old), Couchsurfing.com was the best known, car2go.com the second most popular and mitfahrgelegenheit.at the third most popular platform in the area of the collaborative economy. The latter was taken over by BlaBlaCar.de and became a for-profit platform.

Types and models

Typologies are found mainly in the following areas:

- Give, give away
- Apartment Sharing
- Co-working
- Room Sharing
- Car sharing
- Finance
- Community/neighbourhood gardens

The following info graphic also represents a view of the state of the sharing economy in Austria in 2015:



Available at: <http://at.keytooffice.com/wp-content/uploads/2015/05/Infographic-2015.jpg>

Key stakeholders and initiatives

The range of key stakeholders is very diverse. National initiatives are usually run by the non-profit sector. Regarding business platforms, the global players (Airbnb, UBER etc.) are mainly represented. Overall, Austria is characterized by a low level of risk-taking in the start-up business – also in the area of collaborative economy.

In the community space, initiatives include:

FragNebenan (<https://fragnebenan.com>): is a social enterprise setting up a social neighbourhood platform that aims to activate neighbourly exchange by connecting neighbours to each other. The idea is based on diversity of talents, interests, and needs.

Talenttauschkreis Wien: Talenttauschkreis Wien is an older version of recently emerging digital initiatives. It started in 1995 as a place where people can find others to organise exchanges. They also use Cyclos like SuttonShares and support local exchange. Just recently Talenttauschkreis joined to the umbrella group of Tauschkreis-Verbund.

Talenteverbund: The Talenteverbund or Tauschkreis-Verbund is the joint institution of many exchange platforms from Vienna, Lower Austria and Burgenland. The aim is to extend and connect the existing platforms.

Zeitbank 55+ (<http://www.zeitbank.at>): a time banking platform targeted to citizens 55 and older.

Legislation and technological tools provided

The landscape is mainly occupied by bottom-up initiatives. There are funding programs for start-ups in the area of social entrepreneurship, but there is no dedicated funding program for the collaborative economy.

In 2016, the Chamber of Labour in Austria presented a position paper in which was established that sharing services should provide compensation for increased risk and income decrease to the the actual service providers. Among others, this was motivated by the entry into the “ecosystem of the Sharing- Platform” where the platform owner specifies the rules (GTCs). In particular, service platforms (on which human labour is offered) are often highly profit oriented; therefore, special attention should be paid to this area¹.

In the same year (2016) the City of Vienna published a position paper with the title “Turning the sharing economy into a fair economy in Vienna” and formulated rules for the collaborative economy, especially in the area of accommodation and transport. In particular, the following questions were discussed²:

- How will be taxes and social contributions collected?

¹ https://media.arbeiterkammer.at/wien/PDF/studien/digitalerwandel/AK_Policy_Paper.

² <https://wien1x1.at/site/klemens-himpele-kommunale-antworten-auf-die-share-economy>.

³ https://www.parlament.gv.at/PAKT/VHG/XXV/III/III_00198/Immanc_381597.pdf.

⁴ https://www.werk.be/sites/default/files/rapporten/deeleconomie_voorstel_idea_consult.pdf

- How will a fair remuneration level be achieved?
- What insurance is required?
- How can discrimination against providers be prevented?
- How are cartel prices avoided?
- How can fair competition be ensured?
- Will there be an increase or a decrease of car traffic?
- Are apartments withdrawn from the housing market?
- Are the platforms really just IT service providers?

Among other things, the city of Vienna created a checklist for the rental of apartments.

For sharing services, the legal situation about where neighbourly help ends and black labour starts is ambiguous. Services that do not exceed the limits of neighbourly help are generally exempted from tax. Unfortunately, there does not exist any exact definition for neighbourly help in Austria. The only official text that could be found so far is mentioning it in the context of voluntary work in a footnote to the “Sozialbericht 2013-2014”³:

“Die Nachbarschaftshilfe (informell freiwillige Tätigkeiten außerhalb des eigenen Haushalts) bezieht sich hauptsächlich auf Besuche bei betreuungsbedürftigen Menschen sowie auf Hausarbeit, Reparaturen und andere handwerkliche Arbeiten für Freunde bzw. Bekannte.”

“Neighbourly help (informal voluntary activities outside the own domestic home) is defined as visits to people who need care, as well as household chores, reparations and other handicraft work for friends or acquaintances)”

Up to now, no specific technological tools to support the collaborative economy have emerged.

Prior reports and research

- Herbert Bartik, Johannes Lutter, Eugen Antalovsky: The Big Transformers Sharing- und On-Demand-Economy auf dem Vormarsch. Wien 2015 im Auftrag der Stadt Wien, MA 23 – Wirtschaft, Arbeit und Statistik. [*The Big Transformers. Sharing and on- demand economy on the rise. Vienna 2015 on behalf of the City of Vienna, MA 23 – Economy, Labor and Statistics*]. Retrieved from: <https://www.wien.gv.at/statistik/pdf/big-transformers.pdf>
- City of Vienna (2016): Position paper "Turning the Sharing Economy into a Fair Economy". Retrieved from: <https://www.wien.gv.at/wirtschaft/standort/pdf/share-economy-in-vienna.pdf>
- EU AAL-funded ‘Give and Take’ project and related reports. Empowering volunteers and members of communities with better digital tools. Available at: <https://givetake.eu>

³ http://www.parlament.gv.at/PAKT/VHG/XXV/III/III_00138/imfname_381597.pdf

BELGIUM

In Belgium, the Flemish government and the Federal Government play the biggest role in the move towards the circular and the sharing economy. The definition used in Belgium (Flanders) for this purpose, is based on a **definition** created by Idea (2017) for the Flemish government⁴, which defines the **sharing economy as an economic system that allows consumers and companies to make temporary use of underused property, good or service, paid or unpaid.**

Thus, the following transactions are not included in the definition:

- Professional renting services. These fit under the product-service economy, where a consumer gives access to services using a product, while the person offering the product remains the owner;
- Transactions where the owner transfers the ownership rights to the other (exchange, second hand, etc.);
- Transactions where the owner provides permanent usage of the product (not temporary);
- Transactions without an online component happening outside of the digital sphere.

Types and models

The following Table lists different sharing economy types/models and examples for Belgium.

Item	Scheme	Description	Url
Food	Boeren en buren	Online buying from local farmers	https://boerenenburen.be/nl-BE
	Rekub	Matching food providers/ local restaurants with citizens for availing of food surplus	https://www.rekub.be/
	Smart Symbiose	Industrial platform for sharing side product streams	http://www.smartsymbiose.com/
	FoodWin	Network Food Entrepreneurs	http://www.foodwin.org/
Water	Ducoop	Water recycling based on a cooperative model	http://ducoop.be/initiatieven

⁴ https://www.werk.be/sites/default/files/rapporten/deeconomie_voorstel_idea_consult.pdf

Space	Bao Living	Modular living	http://baoliving.com/
	ZapfloorHQ	Management platform for co-working spaces	https://www.zapfloorhq.com/
Building Materials	RotorDC	Re-use of construction materials	https://rotordc.com/
Materials	Peerby	Platform that allows people to borrow things from their neighbors	https://www.peerby.com/?host=wijdelen.be
	Hexalina	Reputation management service using blockchain	http://hexalina.io/
	Sheltercare	Rental service for tents at festivals	http://www.sheltercare.info/
	Buggybooker	Rental of buggies for children	https://www.buggybooker.com/
	Tournevie	Tool library for exchanging goods	https://www.tournevie.be/english/#introduction
	Spelothek	Library for exchanging and renting toys	http://www.spelotheken.be/
	Swishing	Platform for exchanging clothes for free	http://www.swishing.be/
	Instrumentheek	Library for tools	http://instrumentheek.be/
	Kodibox	Rental service for moving boxes	https://www.kodibox.be/nl
	Any Green	Rental service for plants	https://www.anygreen.be/en/
Transport & mobility	Fstr	Carpooling app	https://carpool.fstr.eu/en/about-fstr/
	Avantida	Sharing empty containers in transport sector	http://www.avantida.com/356-2/
	BringMe	Last mile delivery box	https://www.bringme.com/en
	Cargostream	Collaboration in supply chain ecosystems	https://www.nallian.com/communities/cargostream
	Bepark	Parking renting system	https://www.bepark.eu/nl/belgie
	Trivizor	Platform for coalitions and collaboration among shipping providers	http://www.trivizor.com/

Energy	Ecopower	Cooperative for sharing investment in solar energy	https://www.ecopower.be/
	Econation Lightcatcher	Lightcatcher to reduce energy cost in industrial areas	http://www.econation.be/en/what-is-lightcatcher/

Table 1: List with different type/models sharing economy platform.

Key stakeholders and initiatives

There are different think-tanks working on the circular economy, among which the Commons workgroup. At the same time, the business community plays an important role, as well as banks: an example is ING which provides significant financial services to support the sharing economy.

Different types of (elements) of the sharing economy can be discerned in Flanders. A first category is the **decentralized type organized with no commercial purpose**. This is often characterized by bottom-up initiatives managed by self-organized groups. The most common platforms used are Facebook and a platform created by the organizers themselves; examples include the car sharing platform Dégage, online Facebook groups where people can give away or sell second hand products or sharing platforms as Peerby. The reasons for sharing are to share the costs of ownership, or reciprocity.

A second category is said to encompass **decentralized commercial initiatives**. These are typically platforms that support matchmaking, where Uber and Airbnb are the most common examples. The services or goods are transferred from person to person, but the platform operates as a matchmaker for commercial reasons, and thus sells a service; local examples are TaskRabbit and ListMinut.

A third category consists of so-called **centralized groups**, where goods are rented out or shared by a central body. The central body owns the goods. The most common example is a car sharing platform where the platform owns the cars, such as Vélo or Cambio. These types, however, do not strictly fall under the definition discussed in the introduction of this document.

Legislation and technological tools provided

The government plays an active role as a facilitator in Belgium (mainly in the Flemish region). In particular, the governmental organisation OVAM emphasizes the importance of the circular economy, under which the sharing economy fits. The Circular Economy is an important transition priority for the government, and the OVAM plays an important role with the department ‘Vlaanderen Circulair’. The Federal Government plays the role of regulator, mainly for legalising the sharing economy and for ensuring the sharing economy is taxed in a similar fashion as other businesses.

Different sharing platforms are recognized as official sharing economy platforms⁵ (ListMinut, Bringr, Conceptz, Heetch, PWIIC, Branpont, Menu Next Door and FLAVR). As a user, one can use the platform based on an advantageous tax scheme. If a user earns less than 5,100 EUR in one year, only 10% of the tax is due . Bigger names, such as Uber, Airbnb, Deliverou are not yet integrated, as they do not fall under the current legislation. The sharing economy platforms have a complex legal status that makes inclusion of other platforms difficult to legislate. To date, only platforms allowing users to earn additional money are accepted, and thus situations when the user makes it the main income source have not yet been legalized (so far these are governed by a lenient policy).

Most commercial initiatives use private platforms and/or websites as platforms. In the more bottom-up initiatives, Facebook is the most commonly used platform. There are some experiments applying Blockchain to digital platforms, e.g. <https://juru.io/>.

Extra issue: Privacy

With the General Data Protection Regulation (GDPR) coming into force, new actions will be required by data controllers and processors of personal information. Depending on the type of data collected, a Data Protection Impact Assessment (DPIA) will be necessary for certain operations. While there is broad agreement on the general process (which consists of three parts, that is, a data mapping, an assessment of the mapping and proposed solutions for identified risks), and the fact that the GDPR is a continuation of previous legislation⁶, many sharing economy organisations and employees are uncertain how to implement the GDPR into their new systems. This uncertainty hampers the development process as data protection authorities can only refer to the Article 29 Working Party (WP29) guidelines and wait for sector wide codes of conduct to apply the GDPR to specific cases. This is a ‘chicken and egg’ situation, since entire sectors are waiting for national data protection authorities to present standardised definitions and processes.

Secondly, even if standardised solutions that comply with the GDPR exist, the sharing economy will have to work on transparency in terms of privacy statements, icons and other forms of visualizations to explain the often-complex data flows between different actors in a sharing economy framework.

Prior reports and research

(The reports below are in Dutch)

- <http://vlaanderen-circulair.be/nl/nl%20http://do.vlaanderen.be/65-maatregelen-voor-een-vlaamse-deeconomie%20https://www.bewustverbruiken.be/artikel/vind-je-weg-in-de-vlaamse->

⁵ <https://www.geekster.be/tech/deeconomie-flavr-platforms-belgie/>;

<https://financien.belgium.be/nl/vzws/deeconomie/aanvraag-tot-erkenning-van-een-elektronisch-platform>

⁶ For example, guaranteeing the right to access, rectify, delete have been included in previous regulations. But the principle of accountability, for example, under which data controllers have to show how they implement and guarantee these legal requirements, has changed.

BOSNIA & HERZEGOVINA

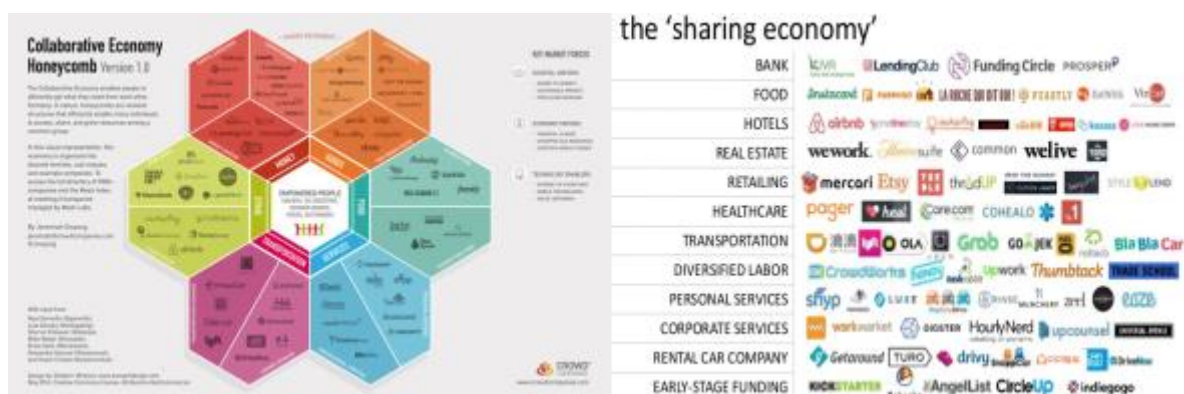
The collaborative economy in B&H is a term used to refer to a broad and varied group of experiences that, in different ways and sectors, promote the use of digital platforms to connect distributed groups of people and enable them to exchange, share resources, or collaborate in different ways.

It is also an economic movement where common technologies enable people to get the goods and services they need from each other, peer to peer, instead of buying them from established corporations.

Collaborative economy platforms are continuously being launched by companies, non-profits, informal groups, or even public actors, and operate sometimes locally, sometimes at a national or even global scale.

According to Petropoulos (2017), the collaborative economy is characterised by a great variety of business models with common element - the use of under-utilised assets for the extraction of economic benefits.

It spans multiple sectors each of which has its own market characteristics.



The emergence of the collaborative economy comes with the spread and revitalization in the past years of powerful discourses about “collaboration”, “participation”, “sharing”, and so on, which are of course not new in human history, but are gathering momentum also due to the economic crisis and the need of people to feel connected and access resources in convenient ways.

In terms of industrial sectors, the most touched by the collaborative economy initiatives mapped are mobility, energy, tourism, finance, and food, although there are also other

sectors and multi sector initiatives, and many more may be identified by our mapping in the future.

BULGARIA

The “sharing economy” is defined as “an economic system based on sharing underused assets or services, for free or for a fee, directly from individuals”, which actually includes the “collaborative consumption”, because the financial component is considered. Another related term to sharing economy is the “peer-to-peer” trade, where individuals transact directly with other individuals through an Internet platform maintained by a third party, to offer and purchase a variety of products and services, including travel products and services such as accommodation, car rental, food and drinks, and tour guiding.

The Bulgarian population is very open to different forms of the sharing economy – they are willing to offer and use services such as Uber, or sharing books, clothes and other assets through Internet platforms, and more often share rooms, apartments and houses as an alternative of hotels.

In a global report of Nielsen, quoted by PricewaterhouseCoopers (PWC), Bulgaria takes the 7th place in willingness to participate in sharing communities – free of charge or in exchange for money.

Types and models

In the report is stated that in Bulgaria, passing your traveling ticket to another person on entering public transport means is quite common. According to PWC, transportation is one of the most developed sharing economy sectors. As an example, they point out the collaborative Bulgarian-Belgian platform CarAmigo: from July to December 2016 in Bulgaria were registered over 450 cars and more than 1300 users, willing to use peer-to-peer transportation.

Peer-to-peer accommodation is also developing in Bulgaria. Home sharing platforms (for free such as Couchsurfing.com or paid on Airbnb.com) prevailed over the classic forms of accommodation, such as hotels. As far back as two years ago, Airbnb hosts offered more beds than all the hotels in Sofia and at the time over 300 users have signed up for the platform. The numbers for Plovdiv, Burgas and Varna are similar, and in the summer the offers for the Black Sea coast are significantly rising.

The PWC report states also that sharing used books and text books is a well-known form of sharing economy in Bulgaria. Very popular nowadays are the apps, web pages and social media groups for selling and purchasing clothes and accessories.

A newer trend are the peer-to-peer workspaces and offices – the owner or tenant offers others to share the working space. Even more often empty industrial buildings are provided for concerts, theatrical productions and exhibitions. The largest shared workplace in Sofia is

CowOrKing Space. The ambition of the owners of CowOrKing Space is to develop their project in other Eastern European countries. Entrepreneurs will then be able to easily share knowledge and experience with each other through the online Puzl platform that will connect all the co-working spaces.

Finally, people across the country enjoy music videos, hilarious accidental camera footage and even breaking news reports, all in this one big online community, where they can comment and share freely. Vbox7.com is the biggest online platform for video sharing in Bulgaria, with over 2.1 million unique visitors per month, who spend at least 20 minutes a day watching videos. It is mainly used as an entertainment, music, sports and even news source, and each registered user can upload his/her own videos.

Key stakeholders and initiatives

There are several sectors where the sharing economy manifests itself in Bulgaria .

Bulgarian tourism has not realised the full impact of the sharing economy yet, but progress is visible. Providing accommodation for friends and relatives, and for their friends and relatives, has been a regular practice for most of the seaside inhabitants (Stors and Kagermeier, 2014). On the other side, the immense growth of construction of holiday apartments and homes has naturally led to the need to regain the invested capital. Holiday rentals, as discussed above, do not pertain to the real sharing economy, but they are quite popular in Bulgaria, especially in the regions with concentration of such investments, i.e. Black Sea Coast (especially Sunny Beach, St. Vlas, Golden Sands regions) and mountain resorts (Bansko, Razlog, Pamporovo regions). However, there is abundance of “infomediaries”, or web sites, providing space to advertise holiday homes or vacation properties, e.g. pochivka.bg, bgvakancia.com, rooms.bg to name just a few. Their business model is to provide free of charge platform for property owners in the form of a catalogue, where they include their offers, which attract visitors to this platform and stimulate the sale of advertisement spots. In this regard, Airbnb is considered as an infomediary by the Bulgarian hosts – yet another website for presentation of the available accommodation space.

Rent-a-car industry is not so popular in Bulgaria, but it appears that ride sharing has evolved far before the term “sharing economy” has been used. Since 2008, there have been several alerts in the media about the new phenomenon “carpooling”, i.e. sharing the trip costs among several people, traveling in the same direction. Surprisingly, this model has been accepted by the Bulgarian public and there are a number of such Bulgarian web sites in operation.

The introduction of Uber in Bulgaria has provoked public discussion, opening again the question of the offering of pure shared products vs. the commercial model, using the label “shared service”. The world champion of the sharing economy, Uber, has a large R&D centre in Sofia, Bulgaria, tapping into local engineering talent. Beside Uber, two Bulgarian companies that aggregate transportation services for the benefit of both clients and suppliers are also growing well.

The third sector where the sharing economy is advancing is personalised tour guide services. Their model of operation consists of personal guides, who usually are local people and know their locality from every angle, in much more detail than the typical tourist view; they offer interesting, thematic, often low-cost tours for individual tourists or small groups. Such tours go beyond the regular trips, organised by the tour operators. As their names imply, these are fully organised trips, including not only the services of a guide, but also transportation, meals, additional administration. Hence, the sharing tours sites take over the role of tour operators in organising and combining several services into a tour.

There is also the additional services company SPARKS, enabling sharing of electric vehicles in the cities.

Legislation and technological tools provided

For time being there are no regulations, strategy or mechanism concerning the sustainable future development of the sharing economy in Bulgaria, but one can say that the attitude toward the sharing economy is favourable.

There are also no particular technological platforms to support the collaborative economy. The collaborative economy is developing through the use of social platforms (Facebook), Websites, Mobile phone apps, open source software & hardware.

Prior reports and research

- <http://investsofia.com/en/sia-attended-a-conference-dedicated-to-eu-regulations-over-collaborative-economy/>
- <http://www.criticatac.ro/lefteast/an-economy-of-taste-the-case-of-uber-in-bulgaria/>
- <http://magazine.ouishare.net/2013/11/central-and-eastern-europe-is-joining-the-collaborative-revolution/>
- Transportation - TaxiStars (<http://taxistars.net/>) and TaxiMe (<https://taxime.to/>) - Spark.bg (<http://spark.bg/>) – Uber (<https://www.uber.com/bg/careers/>)

CYPRUS

The concept of the collaborative economy is not new in the case of Cyprus, despite the absence of an officially accepted terminology to describe the phenomenon and/or statistics and reports regarding the state of the collaborative economy in the country. While it is difficult to provide any information in terms of the collaborative economy in Cyprus due to the lack of data, an overview of societal trends on the island indicates that the concept of the collaborative economy is growing steadily. For example, an increasing number of people are using online platforms to buy, sell or swap products (i.e. www.bazaraki.com).

Types and models

Perhaps the most established example of the collaborative economy in Cyprus is property rentals. It is related to the most important economic sector that is tourism.

Key stakeholders and initiatives

The creation of such platforms tends to be driven by private initiatives, as the government of Cyprus and formal authorities have not officially addressed the growth of the collaborative economy on the island. Evidently, a legal framework surrounding the concept is missing. Consequently, an unofficial debate has arisen amongst stakeholders directly affected by the collaborative economy (e.g. hoteliers) with critics highlighting the negative impacts of the phenomenon. The basis of the critique lies on the fact that the collaborative economy is growing uncontrollably, reinforcing illegal activities such as undeclared income for taxation. In order to exemplify the impacts of the phenomenon and address issues regarding its sustainability in the long-term, it is more appropriate to concentrate on a single case of the collaborative economy in Cyprus.

CROATIA

Croatia does not have an official (or prevalent) definition of “collaborative economy”; it usually operates with the official EU definition: “...business models where activities are facilitated by collaborative platforms that create an open marketplace for the temporary usage of goods or services often provided by private individuals. The collaborative economy involves three categories of actors: (i) service providers who share assets, resources, time and/or skills - these can be private individuals offering services on an occasional basis (“peers”) or service providers acting in their professional capacity (“professional services providers”); (ii) users of these; and (iii) intermediaries that connect - via an online platform - providers with users and that facilitate transactions between them (“collaborative platforms”). Collaborative economy transactions generally do not involve a change of ownership and can

be carried out for profit or not-for-profit.” Furthermore, the term “collaborative” (translated in Croatian) is rarely used; this (socio)economic system is usually labelled as “sharing economy.” As an illustration, Google Web Search offers only a couple of results on “Collaborative economy” (translated in Croatian) and most of them are either translated official documents made by EU (European Commission) or news (in Croatian) reporting about EU recommendations regarding Collaborative economy in Europe.

The national sharing economy is often described (within public and professional discourse) as a system that accommodates a wide range of business practices; including practices that usually do not fall under the sharing but the rental and/or on-demand economy. For example, a newly-founded Croatian car sharing company has all characteristics of a traditional rent-a-car company, apart from the fact its customers can’t rent cars offline, and can rent cars per minute instead of per day.

Besides these fundamentally “non-sharing” organisations within the national sharing economy, another issue lies in “non-sharing” parts of organisations/platforms that usually are considered as “true” elements of global sharing economy. For example, a part of the Airbnb organisation in Croatia consists of traditional accommodation providers who use Airbnb platform solely to get more customers.

Types and models

Within the inclusive definition/approach:

1. For-profit sharing – a) Cars (e.g. Blablacar, Uber, SpinCity); b) Travel arrangements (Ajmoskupa.hr); c) Living spaces (Airbnb, HomeExchange); d) Boats (UberBoat, Click Boat); e) Different kinds of services and goods (Njuškalo), f) Working spaces (about 15 organisations provide co-working spaces);
2. Non-profit sharing – a) Living spaces (e.g. Couchsurfing, HomeExchange); b) Travel arrangements (Ajmoskupa.hr).

Key stakeholders and initiatives

The key stakeholders are individuals/organisations which either start and run their own business ventures (e.g. SpinCity, Njuškalo) or serve as Croatian branches of foreign/international companies (e.g. Uber, HomeExchange).

Generally speaking, people in Croatia use all the above-mentioned services quite often; both non-profit and for-profit sharing economy ventures have been particularly welcomed in bigger cities and other tourist areas. In most cases, safety related issues regarding the usage of often unregulated transportation and/or accommodation services do not represent a major concern. However, a widespread debate about the unfair market competition created by collaborative economy organisations is currently on the scene. The state has started to look for a solution that would benefit the Croatian economy as a whole.

Legislation and technological tools provided

The actors rely on themselves; there is no additional support for organisations of collaborative economy (apart from the official state support for all entrepreneurs, regardless of their business model).

Websites and apps seem to be the major technological platforms used.

ESTONIA

Over the last years, Estonia has been proactively attempting to update its legal framework in order to better adapt to the changes of the techno-economic environment. In this regard, significant legislative action has been put forward aiming to support entrepreneurship and limit the negative externalities, while economic assessments have been conducted in order to better inform policy making. Estonia has a strong advantage for implementing shared economy platforms, as digital government is implemented in the cloud through their own platform (x-Road) in Estonia, and Estonian citizens have advanced digital skills.

The biggest turnover from online platforms was generated in the finance and accommodation sectors. The market size of the transportation sector is still moderate, since the first companies entered the market only four years ago. In the coming years (until 2020), the biggest growth in terms of turnover is expected to occur in transportation sector (estimated increase around 600%)

Key Stakeholders and initiatives

The Estonian Government is actively researching the possibilities of taxation of sharing economy, and considers digital economy and sharing economy as part of their priorities for future development of Estonia's economy and society. A Sharing Economy conference took place at the Estonian Parliament (February 2016). The Section for Economic and Monetary Union and Economic and Social Cohesion (ECO) of the EESC organized a public hearing on Taxation of the sharing economy (September 2017).

The Ministry of Economic Affairs and Communications commissioned Technopolis and Ernst & Young to research the impact of sharing economy to Estonia. The results have been made public in January 13, 2017. Some main figures are summarised below:

- The revenue of the sharing economy in Estonia in 2016 was 40.3MEUR.
- The market share of the sharing economy is 0.1% in Transport, 1.0% in financial services and 7.8% in short-term housing sector.
- Research indicates that sharing economy in Estonia should grow by about 27% in comparison with the traditional economy by 2020 (assuming a growth rate of 5% for the traditional economy): potential of quadruple revenues by 2020.

Most of the sharing economy companies were created between 2011 - 2016. At the end of 2016, there were 48 big sharing economy platforms, with 7 of them in the sector of transportation (6 are originally created in Estonia).

Types and models

Transportation: platforms in transportation consist of:

- Car rental by private persons. Also, new start-ups are trying to conquer other sectors of car rental, like Lurento, which is a luxury car rental marketplace with the best selection of luxury and sports cars,
 - Sharing ride & taxi services (Taxify, Uber, Wisemile AS),
 - Logistics (PostPal, Shipitwise),
 - Information about free parking lots (Barking).
- Licensing: Flexible regulation. Private-hire drivers and taxis on similar legal footing. Rideshare law removed the requirement of professional training for taxi drivers, and instead left it to the taxi and rideshare businesses to arrange all necessary training. A common licensing and quality vetting process will be put in place.
- Tax regulation: Authorities are linking up Uber drivers digitally to the tax office in a move that may set a precedent for regulating the new sharing economy.
- Drivers' insurance: Private-hire drivers and taxis are on similar legal footing. A common licensing and quality vetting process will be put in place. Insurance for ride-booking services is an unresolved question. (November 2017)

One third of car rides are made for shopping. Estonian companies have already proposed a convenient solution to this as well: the delivery robots that bring one's shopping bag home.

- **Accommodation:** Airbnb, VRBO, Couchsurfing.
- **Co-working spaces:** Lift99, Spring Hub, Estonian Office, Regus, 1Office Estonia, Technopolis Ülemiste (office hotel), sTARTUp HUB Coworking Space, SPARK, Apraaditehas.
- **Reselling:** Ebay, Osta.ee (top re-selling platform inside Estonia).
- **Crowdfunding:** Hooandja: launched in 2012, it is considered the "Kickstarter of Estonia." It is a crowdfunding platform where creative ideas can find support. The platform has over 43,000 regular contributors and its user base covers 180 countries. Hooandja has supported over 620 projects and helped raised over 1.9 million EUR.
- **P2P Lending:** Realstate: Crowdestate p2p lending platform; EstateGuru.

Fund wise is Estonia's first equity-based platform for small to medium businesses in the Central and Eastern European region. The platform focuses on hardware, consumer products, ICT, energy and clean tech, and gaming projects. Fund wise was built by the same team behind Hooandja.

Investly: launched in 2014, it is the first peer-to-peer lending and invoice financing business platform in Estonia. Investly helps small businesses release cash tied up in invoices, helping them to get working capital from investors globally. The company has recently opened an office in London.

Bondora: Headquartered in Estonia, this is a leading peer-to-peer lending platform for investing in European non-bank personal loans. All loans are issued by the parent company, Bondora AS, which retains a share of the risk of every loan it offers through the Bondora.com marketplace. In 2014, Bondora secured a peer-to-peer lending license in the UK from the Financial Conduct Authority.

Legislation and technological tools provided

- 2016: Working information interface between Uber and Tax Office.
- 2017: Additional interfaces between Tax Office and Taxify (Ride sharing), Autolevi (Ridesharing) and Estateguru (Real-estate crowdfunding) .
- October 2015: the Tax Office of Estonia and Uber established a working group to automate information exchange.
- May 2016: Estonian Sharing Economy Association established.
- February 2017: Sharing Economy Conference held at The Parliament of Estonia.
- May 2017: 319 Uber and Taxify drivers declared 450 000€ income to the Tax Office.
- June 2017: The Parliament of Estonia voted to enable ridesharing & delivery robots in traffic, a big step forward for sharing economy.
- November 2017: a so called “Uber” regulation for ridesharing came into force on 01.11.2017, considered a compromise after 2 years of mediation. Essentially, it brings relatively small changes to existing regulations: a) less is more – only minimal regulation by the state; b) no formal training requirements for the (taxi) drivers; c) taxi drivers can use electronic platforms to offer their services; d) taxis are required to have taxi meters, but drivers can go without if the platform calculates fare and enables the client to cancel based on cost.
- January 2018: a new act enables simplified taxation for occasional services provided by a private person to another private or legal person. Essentially, it regulates the creation of a special “entrepreneur” account in the bank, from where taxes are automatically withheld and transferred to the Tax Board, introduces simplified tax rates, with no book-keeping or tax declaration necessary.

Prior reports and literature

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FINLAND

The definition of *collaborative economy* remains fuzzy in Finland. Overall, the term is considered to be broader than the notion of the sharing economy – the latter being more commonly used in the press, typically to refer to platform-based businesses and micro work, although often with allusions to community-driven initiatives, too.

Types and models

As for examples of the collaborative economy in Finland, the biggest and most widespread are self-organised local support/sharing/second-hand sales Facebook groups, e.g. mothers of young children have tens of local “Emergency coffee” (Hätäkahvit in Finnish) groups where help is asked for and offered. There are a few food co-ops, too, like Oma Maa and Lahden ruokaosuuskunta, as well as time banks like Stadin Aikapankki. Overall, there are around 20 local time banks in Finland.

Next to these grassroots-driven arrangements, there are also big-company led initiatives such as Drive Now car sharing (BMW and the OP bank), along with city-led services such as city bikes in Helsinki, and Varaamo for renting out the school and office spaces of the city. In relation to public services, it is worth pointing out the amazingly good public library system that has in recent years begun to include tool libraries as well.

Moreover, there are startups like Sharetribe (offering software for quickly setting up multi-sided marketplaces), Coreorient (24h smart container to pick-up shared items etc.), Faraday and Shareit Bloxcar (peer to peer car sharing solutions), as well as Nifty Neighbour (a platform for community building / neighbour support). Next to these, big international actors like Airbnb and Uber are active in Finland, too, as it can be expected.

Key stakeholders and initiatives

In general, the collaborative economy is “here to stay”. Many of the practices that are emerging are not new per se, but digital platforms have offered them a new boost. Moreover, trends such as moving from ownership to access and the need to have on-demand services / “everything as a service” support the growth of collaborative economy in Finland.

Legislation and technological tools provided

Attitudes toward the collaborative economy are generally positive. There has been interest in the topic from the public sector, too, including the Committee for the Future at the Finnish parliament. However, it is not clear which Ministry should be leading up these efforts, and this has been a challenge – an issue that partially goes back to the fuzzy definition of the phenomenon, as well as its potential to touch upon a range of policy issues that traditionally have been addressed separately. Regulatory work is still lagging behind and typically it is

not yet clear how (or which) existing laws apply to collaborative economy activities or whether these will be somehow adapted to better accommodate novel practices.

One particular challenge is insurance policy that also impacts the collaborative economy. There has been rising interest in experimentation and experiment-driven policy making in Finland, and the political discourse currently embraces citizen-driven innovation.

As for the technological tools used to support collaborative economy initiatives in Finland, big general-used services, like Facebook and WhatsApp, play key roles in supporting local grassroots arrangements. Sharetribe's platform allows for quickly setting up peer-to-peer marketplaces and is relatively well-known in Finland as the company has been active in the country for several years by now. Then, there are of course different apps for different services (such as car sharing etc.). As one notable technological tool, time banks in Finland typically run on Community Exchange System, a South African service developed for this purpose.

Extra issue: Sustainability

Sustainability time-wise is challenging for grassroots level initiatives, as these are often coordinated by only a few volunteers who struggle to get more people involved in carrying out the work of keeping such initiatives running, despite potential participants' positive attitudes. When these volunteers don't have the energy to continue, there is always a risk that the action dies. For bigger actors, the risks around temporal sustainability have more to do with the regulatory uncertainties.

Environmental sustainability of collaborative economy arrangements is not clear in many cases. For instance, Airbnb has not been able to show evidence of environmental benefits, rather vice versa: people seem to travel more because of the service. The same is true with Uber – in the end, it doesn't differ from a taxi service from the environmental sustainability point of view.

Social sustainability has been discussed a lot when it comes to platforms and work. "Platform economy" has a risk to increase the amount of unpaid or underpaid micro workers, and there is discussion on how to avoid that by regulation etc. This is related to a broader discussion around "the future of work", including issues like structural unemployment and worries about automation "taking away" jobs.

FRANCE

The collaborative economy and sharing economy have been a topic of interest in France for several years, with researchers, associations and even the government writing reports and memos about the phenomenon and the key actors in the field. The term “sharing economy” is associated to collaborative consumption and is not clearly distinguished from the term “collaborative economy”. An official definition was given by the ministry of economy (<https://www.economie.gouv.fr/dgccrf/Publications/Vie-pratique/Fiches-pratiques/economie-collaborative> - 2016): “The collaborative economy or sharing economy is today an innovative mode of consumption, manufacturing and trade. It brings together initiatives like loan, rental, gift, barter, or sale of goods and services between individuals, carpooling, and the exchange of equipment between neighbours.”

This interest can be related to a historical phenomenon in France: the importance of cooperatives. The French cooperative movement is one of the most advanced in the world. Started by its members in 1968 as Groupement National de la Coopération (GNC), Coop FR (<https://www.entreprises.coop>) is today the voice of more than 23,000 French co-operative businesses in every sector and their one million employees. In 2014, their combined turnover was nearly **307 billion euros**, including subsidiaries. **26.1 million members** participate in the democratic governance of co-operative businesses. They are strongly rooted regionally, with 73% of the headquarters located in the regions outside Paris.

This historical phenomenon is combined with a long tradition of analysing the way the Internet is impacting our daily lives. In particular, we can quote the FING (Fondation Internet Nouvelle Génération - www.fing.org), a think tank that existed for 18 years. FING helps businesses, public sector institutions and local communities to anticipate changes inspired by technology and its uses, and to open up their innovation processes. FING is a nonprofit organisation based in Paris, France. Its 300+ members include large corporations as well as start-ups, research labs, public entities, universities, trade associations. Another important actor is Ouishare (<http://ouishare.net>), a non-profit founded in January 2012 in Paris whose mission is to “build and nurture a collaborative society by connecting people, organisations and ideas around fairness, openness and trust.”

Combining these two historical perspectives, France has embraced the critique of the sharing economy and its platform, and the framework and movement related to Platform Cooperativism has been adopted by the major thinkers of the domain.

Types and models

During one year (March 2014 - March 2015), FING and OuiShare led an action research named Sharevolution (partners were ADEME, Bouygues Immobilier, Bouygues construction, EDF, regions Ile de France and Nord Pas de Calais, Renault). This research was dedicated to the collaborative consumption and the sharing economy in France. The final report of this research identifies 4 main models:

- **Re-distribution:** the oldest collaborative model, aiming at transferring a good from one person to another. Selling second-hands goods: LeBonCoin, Videdressing, MonExTel; selling home-made goods: Etsy, aLittleMarket; donation of used goods: recupe.net, Freecycle; barter of used goods: MyRecycleStuff, Pretachager
- **Product-services:** selling of the function of the product instead of the product
 - Material goods: Renting objects between individuals: Zilok, Placedelaloc, Bricolib, RendezVous; Lending objects between individuals: ShareVoisins, Peerby; Renting B2C: Pley, Kiloutou, Lokeo; Lending B2C: ToolPool
 - Mobility: Renting cars between individuals: Drivy, Koolicar, Flightcar, Easycarclub; B2C car and bike sharing.
 - Space:
 - Lodging between individuals: short stay: Airbnb; Flat exchange: GuestToGuest; Couchsurfing: couchsurfing.org.
 - Shared workplaces: coworking: Copass; Renting offices between companies: BureauxAPartager; Meeting spaces: Breather
 - Other kinds of spaces: Storage between individuals: JeStocke; Parking places between individuals: JustPark; Events: SnapEvent.
- **Peer-to-peer/on-demand services:** here, a service is exchanged, instead of a product as in the two previous categories. Some people wishing a service are linked to other people offering this service, mainly through an app.
 - Mobility
 - Traditional carpool: long-distance: BlaBlaCar; Home to Work: IDvroom, WeDrive
 - Real-time carpool: P2P taxi: Uber, ChauffeurPrivé; urban carpool: Lyft, Djump, LeCab
 - Logistics, P2P delivery: urban: Instacart, TokTokTok; long distance: Nimber, mmmule
 - Services to individuals: general: Stootie, TaskRabbit; Cleaning: Hepling; Laundry: Washio; Pets: DogVacances; Security: Musketeer.
 - Healthcare and wellbeing: coaching P2P: Vint, Helparound
 - Catering: Takeaway: SuperMarmite; Home Delivery: Deliveroo; Chef coming at home: LaBelleAssiette; Host tables: Cookening.
 - Experiences: travel guides: Vayable; collaborative trips: Tripnco; lectures between individuals: LiveMentor
- **Local cooperatives:** important model in France, based on local networks, less platform oriented, often related to time-banking and short supply chains issues.
 - Food: Short supply chains: AMAP, LaRucheQuiDitOui, LaLouve; P2P agriculture: shared gardens, urban farming, sharing vegetable gardens: Plantezchezvous
 - Local exchanges: Local currencies: SEL; Time-Banking: Accorderie; Exchanging knowledge: Réseaux d'Echanges Reciproques de Savoirs ; Neighborhood networks: Peuplade, Ma-Residence, Voisins
 - Lodging: Flatsharing: auTroisieme; Participative Lodging
 - Infrastructure

- Energy: P2P energy providing: Vandebrom; Participative funding of renewable energy: Energie Partagée
- Telecommunications: Wifi sharing: Wifis.org, Fon; Mesh Networks: Freifunk, Guifi, Firechat.

Some actors are defined as enablers, in the sense that they provide services to the players of the collaborative economy:

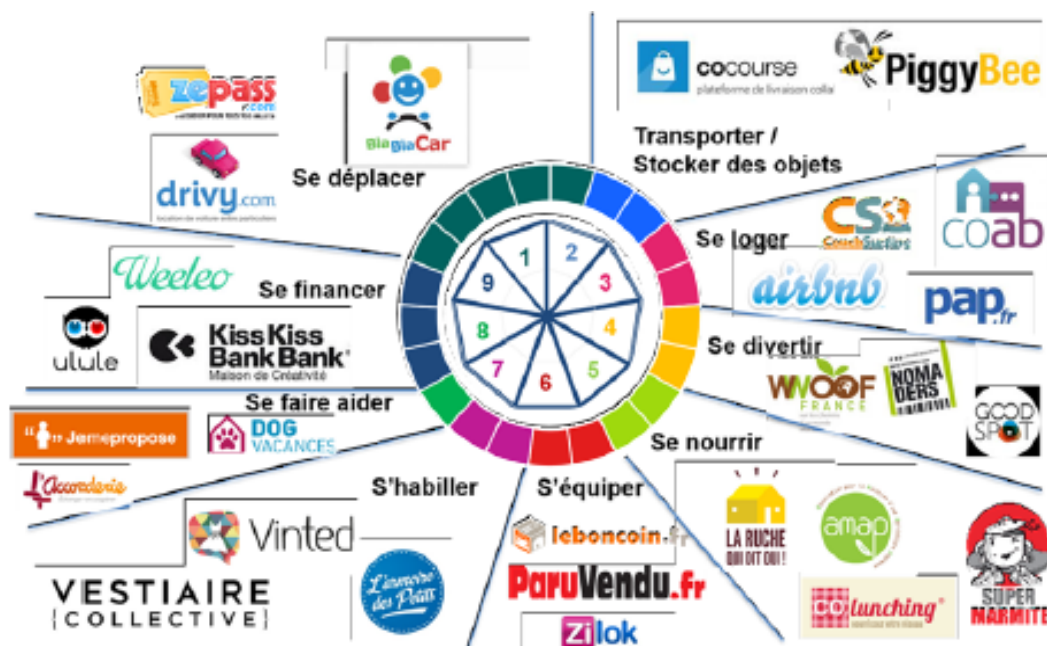
- services for users: welcoming visitors, yield management, fidelity services.
- tools for players: reputation management, marketplaces engines, payment engines, cars fleet.

The report identifies seven different business models:

- subscription: couchsurfing, velib, ...
- pay-per-use: Lokeo, velib, ...
- service fee: Airbnb, BlaBlacar, TheFoodAssembly
- freemium: Pretachanger, leboncoin.fr, yerdle, ...
- resale: vestiaire collective, ...
- advertisement: leboncoin.fr, freecycle.org
- subsidy: freecycle.org, ...

Key stakeholders and initiatives

The PIPAME (Pôle Interministériel de Prospective et d'Anticipation des Mutations Économiques) published in July 2015 a report on the stakes and the perspectives of collaborative consumption. This report identifies nine domains for platforms (see figure below). These nine domains include 276 actors, with 70 % of these having their head office registered in France.



Études économiques du PIPAME, juillet 2015.

Source

Examples of active platforms organized in nine domains

Several examples of partnerships between "traditional" companies and platforms show that the collaborative dimension can be a source of growth. Thus in 2012, Citroën had agreed on an experimental basis with Zyllok auto (now Ouicar), an online car rental site, a partnership allowing individuals to have a Citroën electric car for 90 € per month (excluding insurance) during 23 months. In return, they were invited to register on the Citroën Multicity website and to offer other individuals the rental of their car, without being required to accept rental requests that could be addressed to them. In case one accepts a request, the "owner" of the car has to pay a commission to Citroën, who hoped to make this business model profitable.

In 2015, Leroy-Merlin, a large retail chain specializing in construction, DIY and gardening, joined forces with Frizbiz, a site that allows individuals and professionals to offer services in the DIY sector. Leroy-Merlin promotes this site to its customers who can benefit from assistance to carry out installation or renovation work following the purchase of products in its stores.

In 2015, the group La Poste became a shareholder of the Stuart platform, which connects customers who need to deliver products of all kinds and couriers. In the area of local logistics, a highly competitive market, this investment enables La Poste to have a more diversified service offering.

Moreover, there is a real complementarity between the traditional economy and the collaborative economy when the platforms intervene in markets that are not covered by traditional companies. The Costockage platform thus argues that, in the field of leasing storage space in urban areas, especially in large cities, professionals in the sector do not succeed to meet the demand despite the construction of numerous storage spaces in the periphery, because of the high growth of needs and the scarcity of available land. Also, the platform aims to meet a real need without jeopardizing the activity of professionals in the sector. In the same way, according to Boaterfly, private hire of boats as proposed by the site is developing in a niche market where professionals are not very active. Finally, Heetch justifies the use of non-professional drivers on a time slot (8 pm to 6 am) during which the supply of professionals or public transport is insufficient. 48% of passengers surveyed by Heetch say they had no alternative transportation on their last trip (including personal car, public transportation, walking, bike or the taxis).

Finally, beyond the company partnerships, several large groups invest in the collaborative economy via investment funds dedicated to digital innovation - like the MAIF group.

Legislation and technological tools provided

The French law is evolving to embrace the collaborative economy:

- The Finances Act for 2015 opened the possibility for housing platforms to collect the tourist tax. In Paris, Airbnb started to collect this tax since the 1st of October 2015. The amount is 0,83 € per night and traveller. In total, the collection of this tax should bring several millions of euros to Paris municipality.
- The Senate issued a report on the taxation of the collaborative economy that includes the following statement: “the automatic collection of the tourist tax by the platforms is an important step forward: it is a simple and efficient process that demonstrates that a modernization of the tax collection in the framework of the digital economy is possible.”
- A provision of the Finances Act for 2016 expects collaborative platforms to inform their members of the amount they have to declare to the tax authorities. These platforms will have to send their members an annual report of their income.

A project for an Act related to fighting fraud was presented in the Council of Ministers meeting on the 28th of March 2018,. Compared to previous project, this Act includes innovations to detect fraud, and in particular: the definition of the precise arrangements to implement the automatic communication of the income obtained by users of the collaborative economy platforms, communication that will be implemented in 2019.

Prior reports and research

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- Report published by the Ministry of economy on stakes and perspectives of collaborative consumption (2015): <https://www.entreprises.gouv.fr/etudes-et-statistiques/enjeux-et-perspectives-la-consommation-collaborative>
- Report on collaborative economy to the prime minister, by Pascal Terrasse, deputy. It was delivered on Feb. 2016: http://www.gouvernement.fr/sites/default/files/document/document/2016/02/08.02.2016_rapport_au_premier_ministre_sur_leconomie_collaborative.pdf
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GERMANY

A structural study by the Fraunhofer Institute for Labour and Organisation IAO assigns the currently highest economical relevance with regard to the sharing economy to peer-to-peer platforms. Services for sharing mobility, tools and accommodation are the most established in this regard. A study undertaken by the European Commission shows that Germany is with 20 % just briefly above the EU average (17 %) regarding the establishment and use of sharing services.

Types and models

In the mobility category, internationally established companies – such as “Uber” or “Blablacar” – dominate the market, but German companies are also represented, e.g. “Flinkster” (car-sharing service of Deutsche Bahn). Similar structures can be observed in accommodation, where the public perception is also moving towards embracing internationally established companies like “Airbnb”. For goods and services, however, the market seems somewhat more heterogeneous and the topics here are, in particular, the sharing of food and clothing. There are also many smaller companies and informal communities on social networks in this area, e.g. “Kleiderkreisel”, “Kleiderkorb” or “Netzwerk”.

Key stakeholders and initiatives

The main interest groups in the area of the sharing economy is represented by individuals and companies as providers or clients of sharing services. Non-profit organisations and communities are mainly active in the area of goods/services, for instance food-sharing. Due to sustainability being a big topic in the political discourse, the government also shares a great deal of interest in the topic. At the moment, this is especially the case for sustainability in the mobility sector, in order to be able to implement the government's climate policy goals. However, in some areas there are also points of contact with the state regarding legislation. Examples are e.g. the demarcation between neighbourhood assistance and undeclared work or the recent legal disputes with Uber, which were caused by the potential competition and negative effects for German taxi companies.

Legislation and technological tools provided

In spite of the neighbourhood assistance, which is strongly anchored in Germany, various surveys (such as a study by the European Commission) show that most Germans prefer a company as a provider of services. A population survey by TNS Emnid on behalf of the Verbraucherzentrale Bundesverbands (vzbv) provides possible reasons for this result: users perceive their connection with companies as providing a higher level of security in general and in terms of insurance protection and legal certainty. The comparative and selection options also play a relatively important role, as well as the trust in such offerings. Furthermore, the media presence, as well as the experience of the private environment is responsible for the public perception and utilisation. In order to highlight the attractiveness of this sector, the legislation is promoting new opportunities. For example, on 1 September 2017 a new law entered into force, allowing users of car-sharing vehicles to park free of charge on certain assigned areas. Insurance companies also increasingly offer solutions that are tailored to the new requirements of the sharing economy and which are designed to increase trust in the services. Research efforts and their support also tend to be moving in this direction.

The technological and social development of the collaborative economy relies mainly on dedicated applications/apps of providers and general social platforms such as Facebook (e.g. "Netzwerk").

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GREECE

The terms used in Greece are “*economia diamirasmou*” (sharing economy) and “*sinergatiki economia*” (collaborative economy) and they are used mostly under the same concept of activities supported by new technologies and the Internet (open source software & hardware) with the scope of sharing capital assets (including human capital). It is a fast-growing type of economic activities and there is an open public debate on its merits, but also its pitfalls especially for the tourism industry. Amidst the crisis that began in 2008, a great number of private houses are shared through popular platforms in an attempt to cover some of the expenses that owners face due to the high property taxation. A big event titled “Sharing Economy Greece” took place in March 2014 in Athens, and one of the questions discussed was: “What is the sharing economy and why should you care?”

Currently, the collaborative economy is lightly regulated or completely unregulated hence the initiative of the Ministry of Economy to issue a legal framework (under discussion since 30/9/2016) on how to put forth laws that govern such activities that up till now fell under the grey economy. The overall narrative is that it may give a boost to the wounded economy.

Types and models

Rent it-market focus- marketplaces-commercial platforms

- House sharing under platforms such as **Airbnb** (private initiatives within the tourism sector)
- **EasyBike**: bikes for rent. A network in 16 cities in Greece, Cyprus and Poland over 1.500 bikes in 75 stops <http://www.easybike.gr>
- **StayInAthens**: accommodation for exchange students in Athens with rent www.stayinathens.com

Startups:

- **Mermix**: Mermix is an innovative service (created in 2013) that connects farmers who own idle farming equipment, with renters who need tools to do their agricultural work.

“You don't have to buy it! Just rent it!” is the overall concept. It was funded under the **Future Internet Enabled Agricultural Applications, FP7 project No. 632874**
<http://www.mermix.gr/en/content/what-mermix>
& <https://www.youtube.com/watch?v=bc7gK4bgqJM>

Social Cooperative Enterprise (Koin.S.Ep)

- Commons Lab Makerspace, Herakleion, Crete

Exchange between beneficiaries for free

- **Time Banks:** a public initiative that falls under the social economy framework and is funded by PA (Partnership Agreement for the Development Framework) 2014-2020 for tackling poverty by skill swapping banks: <https://www.youtube.com/watch?v=oPYk8wtcYaw>)
- **Carpooling models:** Hopin: www.hopinside.com/en & CarPooling <http://carpooling.gr/>, both supported by Ministry of Environment, Energy and Climate Change within “sustainable mobility aims” <http://84.205.246.56/Default.aspx?tabid=628&language=el-GR>

Local community initiatives:

- The Phygital project in **Tzoumerka**; target groups include active entrepreneurs and freelancers; local SMEs and micro-enterprises from different sectors, as well as activists, hobbyists and communities contributing to open source and social innovation projects and the wider public. The added value of the project lies in the empowerment of more people to adopt sustainable patterns and work towards making a positive social impact, by co-designing and co-producing new solutions for local challenges and openly sharing the benefits on a global level. <http://www.interreg-balkanmed.eu/approved-project/29/>
- **Sarantaporo** (a Greek village) Residents Create Commons in Rural Greece Through a DIY Wireless Mesh Network: <http://www.shareable.net/blog/sarantaporo-residents-create-commons-in-rural-greece-through-a-diy-wireless-mesh-network> & https://www.youtube.com/watch?time_continue=28&v=m3bi6CGq7os .
- **Co-Hab Athens** is an applied research project aiming to elaborate collective ownership models as a long-term proposal for reclaiming quality of habitat & housing as a right in the centre of Athens. It was initiated on January 2016, with first thoughts coming through conversations with the research group on urban commons. Co-Hab Athens aspires to be an exchange platform for urban researchers and activists on the issue of collective ownership. Focusing on the concept of de-commodification of urban land, they seek and promote synergies with existing paradigms that have successfully been implemented abroad and with similarly oriented on going projects. <https://cohabathens.com/>

- **Urban agriculture** –bottom up or top down gardens (they operate under different governance models) in almost every Greek city in which people share seeds, tools, knowledge, tasks within the garden etc.
- **Consumers Cooperatives or cooperatives between consumers and producers** : such as BiosCoop <http://www.bioscoop.gr/> & Koukouli <http://www.tokoukouli.gr/> and some emerging CSA models (community supported agriculture)

Key stakeholders and initiatives

Several groups of citizens, enterprises, networks and organisations have discovered the merits of self-organisation and the potential of social and solidarity and sharing economy. We see all types of stakeholders being involved from government and local authorities, non-profit organisations, businesses, social innovation, grassroots initiatives, groups, individuals etc. They are all trying to put their mark on this newly emerged and currently very fluid ecosystem.

Legislation and technological tools provided

The important difference between the sharing economy and the traditional economy is that it has lowered significantly transaction costs through the use of new technologies and the Internet. Thus, its sustainability is guaranteed as long as there are technological improvements that lower the barriers to entry and exit in the collaborative economy. Legislation is currently sparse. Market participants (both buyers and sellers) are not regulated or protected as in traditional market operations. As long as this remains so, individuals will be hesitant to commit to the collaborative economy as readily as to the traditional economy. In addition, an important problem is tax evasion. The Greek state has lost an estimated 350 million euros in tax revenues and 15,000 jobs annually due to the uncontrolled sharing economy, which is estimated at being worth more than 1.5 billion euros. A new legislation is under consideration by the Government. Some of the projects are supported under the Social Cooperative Enterprise (Koin.S.Ep) Greek law, which is a legal form that expresses best the goals and the values of the Commons in order to work towards financial sustainability, while serving social goals, by using open technologies and by creating and managing common goods.

Internet, websites, mobile phone apps, open source software & hardware seem to be the major types of technology used.

Prior reports and research

- A recent conference held at Thessaloniki <https://commonsseauth.wordpress.com/> with a plethora of presentations on the Commons .
- 9th-11th of June 2017, the 4th European Social Solidarity Conference in Athens, called UniverSSE 2017. <https://www.facebook.com/univerSSE2017/>
https://www.youtube.com/watch?time_continue=15&v=Wpw3kKfYtWk

- Grant Thornton (2015) The influence of Economía diámirasmou in hotelia in Greece. [in Greek]
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HUNGARY

Regarding definitions, we could not find a consensual Hungarian term that best describes the sharing/collaborative economy phenomena. Very often the term ‘sharing economy’ is used without translation. The meaning is debated, and six common characteristics have been identified by the PricewaterhouseCoopers study (Osztrovits et al. 2015) that best describes sharing economy: sharing, unused capacities and resources, on-demand, IT platform, trust-based relations through personal interaction and community experiences, aiming for sustainability. In essence, the sharing economy in Hungary is in a transitional phase from the emerging to fast approaching state. A new Sharing Economy Association has been established recently that brings together stakeholders from different sectors for business modelling, regulation, cooperation.

Types and models

Three ideal types are often mentioned: redistribution markets, product service systems, and collaborative lifestyles. In reality, we see the different combinations of these ideal types.

In Hungary, most examples are consumer-to-consumer models, and only some are B2C.

The main logic and characteristics of the sharing economy have been recorded in Hungary for long, before the advent of digital collaborative platforms. In food supply, many forms of sharing and exchange have been part of the households’ strategies and became part of the everyday lifestyle and food provisioning. In the tourism sector, already during the 1970s and 1980s, several forms of proto-sharing-economies have often started under the auspices of state-owned travel agencies (IBUSZ, COOPTOURIST) to rent out private or municipal flats for foreigners (at the most popular summer holiday destination, the Balaton). The practice of home sharing for foreign tourists through „Zimmer Frei” became known Europe-wide for such summer cottages in the Eastern bloc. Unregistered rental of property has been among the most common black economy activities since the political transitions in 1989.

- Following its November 2014 launch, **Uber** had already 160,000 customers and 1,200 drivers by mid-2016, before it was banned in Hungary for the benefit of licensed taxi service. In passenger transport, the main players are **Oszkar.com** (with more than 200 thousand members), **blablacar.com** and, most recently, **taxify.eu**.

- **Airbnb** lists more than 8,000 apartments in Budapest, which represents circa a fifth of all short-term rental outlets in Hungary.
- **MOL Bubi** is a B2C public bike-sharing system with so far 1,286 bikes can be hired from 112 docking stations in the centre of Budapest.
- **Yumber.com** was a locally developed application to connect self-made cooks preparing meals at home for travellers and workers from nearby offices looking for authentic home-made food (similar to Eatwith and Feasty). Unfortunately, it ceased its operation just recently.
- **Rukkola.hu** is a free online book exchange platform where users can share part of their bookshelf. The platform links more than 37 000 users and 100 000 books.
- **Miutcánk.hu** is aiming to create safe and prospering neighbourhoods by linking people in the same street. The platform has 40,000 registered users in Budapest, where people are cooperating in sharing tools and resources.

Examining the challenges of business modelling, Kecskeméti (2016) contended that *„new business models should assure state organisations and legislative bodies that the revenues generated are transparent and participants are paying their taxes fairly. (...) The new business models require new approaches in taxation as well: there is a need for a more simplified reporting system with fair rates to pay. It is better if operators proactively prepare master plans with special attention to tracking sales and reporting and paying taxes. Of course, cooperation with local authorities is also essential – which should also be more flexible themselves.”*

Key stakeholders and initiatives

The main stakeholders are businesses (start-ups) and non-profit organisations. These are also part of the social innovation community in Hungary including grassroots. Involving the public sector is challenging, and it is necessary to create a more developed ecosystem of the collaborative economy. There are specific examples that explicitly aim at top-down strategies/policies to meet bottom-up initiatives.

The main customers or end-users of the sharing economy are highly educated urbanites, according to a new non-representative survey by the Sharing Economy Association in Hungary. The main motivations are low prices and easy access dominates the choices, whereas a common hindrance is online payment. All other social groups in the society are under informed about the sharing economy services, four-fifths (81%) did not even hear about.

Sustainability is a main motive in the collaborative economy, but this is not much present in the narratives around the issue, which is dominated by rethinking business in a shrinking economy. Not surprisingly, future expectations about the sharing economy are often

associated more with price competitions, better use of resources, a more prosperous economy (Sharing Economy Szövetség 2016).

The PwC report contends that the economic viability of sharing economy companies is questionable in the medium and long term, after the aggressive, typically venture capital-fuelled, market acquisition phase of their life cycle. Main expectations for sharing economy are related to reaching and acquiring new customers, boosting the loyalty of existing customers, establishing new revenue channels.

Prior reports and research

- Kecskeméti A. (2016) Hungary: The painful birth of the sharing economy. Euromonitor Blog, Date: 5.11.2016. URL: <http://blog.euromonitor.com/2016/11/hungary-the-painful-birth-of-the-sharing-economy.html>
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- Osztrovits Ádám, Kőszegi Árpád, Nagy Bence, Damjanovics Bence (PricewaterhouseCoopers) (2015): Osztogatnak vagy fosztogatnak? A sharing economy térnyerése, URL: http://www.pwc.com/hu/hu/kiadvanyok/sharing_economy_ternyerese.html
- Ranchordás Sofia (2016) Home-Sharing in the Digital Economy: The Cases of Brussels, Stockholm, and Budapest. Impulse Paper prepared for the European Commission, DG GROW.

ICELAND

No official definition is in place. The basic idea is to share products and services between individuals without the involvement of a third party. The modern definition has an extended meaning, which includes not only local but also international sharing. Moreover, the sharing economy has linkages to the co-operative ideology, where the business idea is based on collaboration instead of individual entrepreneurship. In general, the sharing economy is considered as an element which enhances sustainability. This contributes to the increased popularity among the public.

The attitude towards sharing economy is changing, as new facets of the phenomenon emerge. In some of the sharing economy organisations, management is becoming more centralised and

is moving into the direction of becoming a profit organisation to benefit the founders. The definition might therefore be moving from the more romantic one, where all participants are gaining equal shares and having the mission of enhancing sustainability, into the direction of becoming a for-profit organisation for a few individuals.

Types and models

Two main models exist in Iceland:

- That of Airbnb;
- Online second-hand sales combined with communications between individuals who share experiences and advices (www.bland.is). This online communication site is directed to local inhabitants in Iceland. It started by individuals with the business idea to sell and buy used children clothes. It then extended to parents who exchanged ideas and experiences with children care. The site gradually grew and became the main centre for selling and buying second hand goods, not only clothes but even furniture, cars and other goods. This site has now also become a major discussion forum for individuals interested in that specific theme.

Key stakeholders and initiatives

The two above mentioned examples, Airbnb and bland.is, are both privately owned organisations. However, the basic reason for the success is grassroots activation and the increased awareness of environmental responsibility and sustainable lifestyle. In the case of Airbnb, the enormous growth is partly originating in the exploitation of the growth in the tourism sector in Iceland and the lack of hotel rooms for all foreign visitors. According to recent research, most Airbnb accommodation in the capital city, Reykjavik, consists of whole apartments and quite often the same landlord owns several apartments. The original idea of Airbnb was renting an extra bed or an extra room in one's own apartment. This is an example of how the original sharing economy ideology is moving towards the regular private business concept.

Legislation and technological tools provided

The only technology tools are online communication and booking features.

Some attempts have been made to scrape some statistical information on the size and dimension of the operation from the Airbnb site. The owners do not publish such information at their own initiatives, and only make public information which can be used as promotion for their activities.

Other: Sustainability

The collaborative economy is not sustainable in Iceland, in the sense that individuals would be sharing goods and services without the involvement of intermediates. All attempts to live up to the sustainable development ideology seems to end up in private enterprise.

Nevertheless, the reason for the collaborative economy's popularity is that the clients/customers also gain revenue from the involvement.

If the users consider participation in collaborative economy to be favourable to them or if the involvement harmonises with their lifestyles, the collaborative economy will exist.

A potential threat is that of the private ownership becoming too dominant and the system starting to function around private profit only, leaving out the social responsibility aspects that helped promoting it in the beginning.

Prior reports and research

- Jonsson, Orn Daniel & Saemundsson, Rognvaldur J. Isolation as a Source of Entrepreneurial Opportunities: Overcoming the Limitations of Isolated Micro-States. *International Research in the Business Disciplines*, Vol. 5. Elsevier. 2006.

IRELAND

Two different perspectives could be adopted for looking at the situation of the collaborative economy in Ireland. According to the definition provided by European Commission, the term is used interchangeably with 'sharing economy' and extends to commercial initiatives. However, the definition provided by Ouishare has a greater emphasis on the involvement of community, at least at some form or capacity, to be considered as collaborative economy: "The collaborative economy is defined as initiatives based on horizontal networks and participation of a community. It is built on 'distributed power and trust within communities as opposed to centralized institutions' (Botsman), blurring the lines between producer and consumer. These communities meet and interact on online networks and peer-to-peer platforms, as well as in shared spaces such as fab labs and co working spaces"⁷.

As we will discuss below, the collaborative economy in Ireland encompasses initiatives that foreground societal benefits of such an economic model and also that seek new business and for-profit models and ventures. There is a wide range of 'objects' or 'goods' being shared in Ireland, from physical objects such as living and co-working spaces, food, foreign currencies

⁷ Cited from Ouishare: http://ouishare.net/en/about/collaborative_economy; and for the EC's definition, see http://ec.europa.eu/growth/single-market/services/collaborative-economy_en [Accessed 7 June 2017]

or means of transportation, to immaterial labour, such as skills, expertise or time. However, in the cases where the item that is exchanged for-profit is expertise or knowledge, there can be a grey area for distinguishing consultancy and sharing economy (e.g. global tax return services; <https://www.taxback.com/en/>).

The extent to which these initiatives are established also varies. For example, food coops and food sharing initiatives have a more established presence in major cities, e.g. Dublin and Limerick, and also have wider support and customer base. FoodCloud is a fully operating start-up and social enterprise aimed at reducing food waste. Co-working spaces (for-profit), Fab labs and maker spaces are becoming widespread. Hackathons and civic hacking (such as Code for Ireland, Coding Grace) have established regular occurrences.

Types and models

We provide a table with brief description of each types/examples here.

Item	Scheme	Brief description	URL
Room/house/ tools/	Tryilo	Neighbourhood rental platform	https://www.tryilo.ie/
Energy	Urban Volt	sharing savings in energy consumption between companies and customers after customers' transition to LED lighting	http://urbanvolt.com/howitworks
Foreign currency	Currency Fair	P2P currency exchange	https://www.currencyfair.com/
Time	Whitebarn	Volunteer exchange	http://www.whitebarn.info/s/volunteer-ireland
Transportation	DublinBikes	Bike share	http://dublinbikes.ie
Food	FoodCloud	'FoodCloud Hubs works with food businesses nationwide who have volumes of surplus food, such as farms, manufacturers and distributors to manage ad-hoc and regular supplies of surplus as efficiently as possible'	https://food.cloud/how-foodcloud-hubs-works/
Work space	Dogpatch Labs	Co-working space	http://dogpatchlabs.com/

Work space, equipment, skills, blueprints	Fablabs and maker spaces	Different models; maker spaces are collectively owned, Fablabs are organisations	http://tog.ie http://fablab.saul.ie http://wecreate.ie
Advice/knowledge	Zero Waste Ireland	sharing advice for reducing the quantity of waste produced in the home	http://zerowasteireland.com/
Skills, expertise	Civic hackathons/civic hacking	sharing and collaborating for addressing community or societal issues or technology developments	http://codeforireland.com
	Meitheal	Capacity building to support for socially and economically disadvantaged groups	http://www.meitheal.ie/
Finance	Crowdfunding	Eliciting funds for causes and initiatives	Http://FundIt.ie

Table 2: List with different type/models sharing economy platform. Only one example per typology has been chosen. A more complete and up-to-date directory can be found at: <https://www.sharingeconomyireland.com/directory>

Key stakeholders and initiatives

Key stakeholders include: businesses (SME or multinational), communities of interest, charities and NGOs, social enterprises, local communities, Tidy Towns associations, initiative groups, communities that meet predominantly online (meet ups, Facebook groups and pages, message boards- e.g. Boards.ie).

The government delegates a large number of healthcare and community responsibilities to NGOs and charities and these receive state funding. However, as the funding levels are not appropriate, a lot of these activities are left to volunteers, who are there to help their peers (patient groups, cancer support groups, mental health associations, etc.) Ireland has an old tradition called “**meitheal**” that saw people in rural communities coming together on a neighbour’s farm to help save the hay or some other crop. Each person would help their neighbour, who would in turn reciprocate. They acted as a team and everybody benefited in some way. This built up strong friendships and respect among those involved in the meitheal. This tradition is continued to this day in both rural and urban environments, and has been extended to include all kinds of other activities.

There are a lot of bottom-up initiatives that are actively fundraising and organising themselves. There is a particular propensity to help in major disasters and calamities that happen abroad. In general, the social fabric is very well woven and with good ties overseas.

Legislation and technological tools provided

There aren't any particular mechanisms in place, other than the natural inclination toward collaboration. The social economy is not really seen as "economy". At the same time, entrepreneurship culture is highly valued, and many start-ups placing themselves in the "sharing economy" category are supported with grants and hosted in business incubators and accelerators

At the moment, from the government perspective, taxation seems to be the main concern, while from the unions and academic perspective, the workers' rights are in focus.

In May 2017, The Department of Jobs, Enterprise and Innovation held a conference on the Future of Work in Dublin that touched on the issues of the Collaborative Economy (<https://www.djei.ie/en/Publications/Publication-files/Conference-on-the-Future-of-Work.pdf>)

Sharing Economy Ireland (<https://www.sharingeconomyireland.com>) is 'a non-profit industry association bringing together Ireland's sharing economy, taking initial steps to establish active support for responsible development and awareness of the collaborative economy' (<https://www.sharingeconomyireland.com/about>).

Most initiatives, projects or companies have their own dedicated websites, particularly the commercially-driven ones. Many use Twitter and Facebook pages and groups to maintain communication with members or promote events or themselves. Mailing lists are less popular, but some cooperative organisations still use them.

Prior reports and research

- The Collaborative Consumption website has published a series of case studies from Ireland: <http://www.collaborativeconsumption.com/?s=ireland>, all signed by Elizabeth Douet, member of the Collaborative Consumption global curators team.
- Sharing Economy Ireland - Media Release- https://docs.wixstatic.com/ugd/9a8157_12a02fe4daf24f5ea5f9b7111e141919.pdf

ISRAEL

The sharing economy in Israel is a rising phenomenon. There are various conflicting definitions of what the sharing economy actually is. The Weconomize Israel (a research non-profit group) has embraced the term collaborative economy and focuses mostly on sustainability in cities. Other definitions focus on technological and financial aspects of the sharing economy.

There are two main categories of sharing economy projects in Israel. The first category includes social and communal enterprises. These enterprises are geared towards sustainability and solidarity. Examples include the Jerusalem time bank, and multiples sites that facilitate

donating and swapping of goods (Agora, Beinenu, O-share). O-share also supports self-growing of sustainable, local food. All these examples and many others build on Israel's social and communal ethos, such as the Kibbutz (a collective community traditionally based on agriculture).

The second category is technology-oriented. Israel is often referred to as the start-up nation, and collaborative tech-based companies are examples of this high-tech influence. *Fiverr* is an Israeli created international site that connects entrepreneurs with freelance workers. *Eatwith* is also an Israeli site that connects local cooks that host dinners in their home and people who seek a fresh dining experience (*see* the case study analysis). *Waze* is another notable example. It is a community based traffic navigation app. It essentially gathers routes and traffic information from its users to improve navigation in congested areas. Waze is also promoting a pilot initiative called *Waze carpool*.

Alongside these two prominent categories, there are also traditional peer-to-peer models in Israel. *E-loan* is a peer-to-peer lending market. *Rentib* is a peer-to-peer rental including cars, drill, bikes and other possessions. Larger, global sites such as Airbnb or Uber are also a topic of discussion in Israel. Airbnb is widely used in the big cities (Tel Aviv and Jerusalem), yet it remains completely unregulated thus far. Uber has yet to claim a presence in Israel. The minister of transportation has been fighting against it, supporting the strong taxi drivers union. Israelis typically use Get-Taxi, an app that connects passengers with licensed taxi drivers, but without the need to call a taxi station.

Key stakeholders and initiatives

The key stakeholders in Israeli are grassroots groups that support sustainability and communal solidarity. The urban sustainability project has conducted experiments in the city of Holon that include ride-sharing of children's after school programs, and sharing used baby equipment. Other stakeholders are high-tech entrepreneurs. Finally, local administration in several cities also support share economy initiatives. The City of Tel Aviv, for example, has been innovative in facilitating transportation innovations. The local government supports a bike-sharing program (Tel Ofan) and it has also created a new car-sharing enterprise in collaboration with Car2Go.

It is worth to mention that large unions in Israel and the hotel industry are fighting against major sharing economy initiatives such as Airbnb and Uber.

Legislation and technological tools provided

Regulation in Israel is lagging. There are no clear rules yet, and no attempts at enforcement. The only exception is the Minister of Transportation's ban on the activity of Uber. Although the regulation of the sharing economy is typically done in cities, Israel is a rather small country with a population of about 8 million people. We expect future regulation to be state-wide rather than local.

Sustainability is promoted by the urban sustainability group and by other grassroots organisations. It is not systematically regulated by the government.

Prior reports and research

There are two limited reports in Israel – one by the Weconomize group and the other by the Urban Sustainability project. Both reports are limited to the urban environment. The urban sustainability project is an experimental endeavour that researches opportunities for supporting trust and collaboration in cities.

Shelly Kreiczer-Levy is currently conducting a study on the sharing economy in Israel and mapping the various local institutional arrangements. Preliminary results will be available for the next version of this report.

ITALY

Italy has been historically characterised by interesting experiences of social mutualism, such as the Workers' Mutual Aid Societies founded in the second half of the XIX Century. At the turn of the millennium, other experiences emerged under the pressure of the financial crisis and cuts in spending on the institutional welfare. They include ethical purchasing groups, free software communities, co-housing, self-revitalisation projects of old/abandoned buildings, Fab Labs, co-working spaces, time banking, social cooperatives, ethical finance, urban vegetable gardens, and self-organised gyms. These bottom-up initiatives aim to develop new social relationships together with alternative forms of economy and cooperation. According to Carlini (2011), they have brought forward the “economy of us”: a set of experiences based on social bonds in which groups of people seek community-based solutions to economic problems on the basis of principles of reciprocity, solidarity and sociality.

Types and models

Several virtuous examples were identified; we summarise them in this report grouped by their main target: **purchasing, collective finance, housing, sport, culture, health and well-being.**

Purchasing. Solidarity purchasing groups (Gruppi di Acquisto Solidale, GAS) are the most common collective purchasing organisations in Italy. They form alternative networks managed by groups of citizens who come together to buy food and other goods at wholesale prices and/or from small local producers, to be redistributed between members. Founded in the '90, they reinforce and celebrate ethical values, respect for the environment, and solidarity between consumers and producers. The number of GAS registered a growth of almost 50% per year between 2011 and 2014, when they reached the total of 2000 (Carlini, 2011). As by 2014, these groups involved more than 400,000 people, which caused a notable drop in purchasing from large retailers and hypermarket chains (Tozzi, 2014). GAS members usually

meet up in schools or offices. They are neighbours and/or friends often involved in the activities of a social centre. GASs are geographically distributed in rural and metropolitan areas alike. They exploit an array of computer-mediated communication tools including email and digital platforms alongside with word of mouth, and they leverage social networks both for organising transport and for supporting local agricultural projects. In 1997, the Italian Online Network of GASs was created. It aimed to put groups in contact with each other, thus encouraging the exchange of information and the sharing of practices and management models, promoting a philosophy of ethical consumption. Nowadays, there are over 1,000 groups registered with the Network. Over the years, GAS have become a powerful tool in counterbalancing the economic power of the Mafia in Southern Italy. A successful example is the Libera Terra initiative, which includes different social cooperatives run by young people who developed several social projects exploiting assets and lands confiscated from criminal organisations. Their mission is to restore dignity in territories with a strong Mafia presence, by creating autonomous and cooperative farms that are self-sufficient and capable to create jobs.

Collective finance. Interesting examples of collaborative economy in Italy are the Mutual Aid and Ethical Finance Groups (MAG). MAG are financial cooperatives supporting job creation and company development through fundraising and the use of private capital. Such companies are legally registered as cooperatives or associations and operate in respect of high ethical values (e.g. solidarity, ecological, cultural and environmental values). MAGs collect money from shareholders as share capital to finance social projects by providing loans with favourable interest rates and repayment conditions. Once funds are returned, they are immediately reused. A paramount example is the case of the Tomasoni's organic dairy farm in Brescia that was saved from bankruptcy thanks to the members of 90 ethical purchasing groups that together raised the necessary money through the *Mag2 Finance* in Milan (Carlini, 2011, p. 10). These bottom-up micro-credit experiences are numerous, such as the Ethical and Social Fund of Piagge, founded in a suburb of Florence, which in 10 years has granted 141 loans worth 315.000 Euros in total. A different example is Rimaflow in Milan, where a group of workers who had been laid off by the Maflow automotive factory, due to its closure in 2012 have reconverted the factory into a "citadel of the other economy", where electrical equipment is reused and recycled. Similar experiences can be found also in other cities, such as Officine Zero in Rome.

Housing. In Italy, and particularly in Rome, there are several "**squat houses**", many of which have been transformed into social and intercultural laboratories partially because of the presence of different migrant communities. A typical example is Porto Fluviale, a military warehouse which was abandoned for years. Since 2003, 450 people from three continents live there and the environment has been refurbished by the inhabitants. The external walls are covered with murals by the street artist Blu, who turned them into an immense work of urban art. Inside the building, there is a space for socialising and sharing experiences called "Fronte del Porto". Other experiences are **self-revitalisation projects and co-housing**. Over the last 12 years, in Rome, the 100 members of the cooperative Inventare l'Abitare (Creative Living) have co-designed the refurbishment of 8 abandoned public places, now devoted to residential purposes, through an open and collaborative approach.

Sport. Community-based and **self-organised gyms** are popular. They are often located in places also hosting other social activities, but sometimes they emerge as isolated “strongholds”, providing new places of encounters between concrete buildings and degradation. Most of them have been opened up with the help and support of the neighbourhood. Such gyms have spread exponentially (at least 20 in Rome, and 60 throughout Italy). They oppose the commercialization and commodification of sport, with pricey branded equipment and exclusive premium memberships, and promote sport accessibility to all, as demonstrated by very low course fees. They have courses for children and the elderly, carry out parallel cultural activities for the neighbourhood, and organise boxing and martial arts events.

Culture. There are several collective initiatives in the Italian cultural context. The most paradigmatic example was **Teatro Valle** in Rome. The building dates back to 1727 and was closed in 2011. At that point, it was suddenly occupied by craftsmen, artists and citizens, becoming one of the most interesting cultural sites of the city up to 2014 when it was closed by the municipal authority. Another example is **Macao** in Milan an arts, culture and research centre occupied by artists and cultural workers.

Health and well-being. The **Ambulatorio Medico Popolare** in Milan aims to respond to the increasingly privatisation of the healthcare system and react against the economic impoverishment of people. There are also many **grass-roots schools** for migrants that provide free Italian classes, as well as experiences of **self-organised crèches** for precarious workers, such as L’Alveare in Rome, a co-working space for children, where many projects are carried out in support of parenting, training activities and cultural events.

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LITHUANIA

The collaborative economy is a relatively new and innovative phenomenon in Lithuania. The first sharing economy businesses appeared in Lithuania only a couple of years ago. There is no definition of the collaborative economy within the Lithuanian legal framework. The essence of sharing economy in Lithuania is reflected by the model: one entity directly providing services to another entity, usually the goods or services being offered on dedicated Internet platforms. The main economic engine of sharing, on the service provider side, is the ability to get additional income, the employment of its assets, items or sharing their skills; on the user side- it is having a wider choice, easier and cheaper to book services or items. There are many platforms in Lithuania where individuals can share services and/or goods for free and/or for very symbolical price, and in that way they contribute to social engagement and the development of solidarity spirit, to support those who are in need and to contribute to social cohesion.

Types and models

Lithuanians are increasingly using globally operating platform sharing services: renting property (houses, apartments), cars (Airbnb, Uber, etc); changing unwanted and unneeded items with others, and thus they not only benefit, but also provide potential customers for a service, or sell goods at competitive prices. Lithuania is developing, and new peer-to-peer money lending platforms help small and medium-size businesses to obtain funding for business development in easier and faster ways (www.savy.lt). On the other hand, Lithuanian citizens are quite active, and are creating themselves new sharing platforms, such as transport services (www.kasveza.lt); lending services (www.savy.lt); sharing for free photos (www.realisbeautiful.lt; <https://welovelithuania.com/duk/>) and different other social sharing initiatives.

Key stakeholders and initiatives

Research and statistics on the topic of the collaborative economy are scarce in Lithuania. Therefore, currently it is difficult to provide any clear picture of the key stakeholders in collaborative economy. However, we assume that the main stakeholders are the individuals level. Also, collaborative economy is being developed primarily with the help of online. For example, Šumskis (2016, p. 093) in his review of the sharing economy in Lithuania defines it as “a type of business model where the online platform enables buyers and sellers to communicate directly”. According to him, the main players in the market of the sharing economy are usually freelancers.

According to Eurobarometer (No. 438/2016) survey, 61% of Lithuanians have heard about collaborative platforms (defined as “an internet based tool that enables transactions between people providing and using a service. They can be used for a wide range of services, from renting accommodation and car sharing to small household jobs” (Q1) in the survey).

However, 3% declared to have used them regularly (3% used it once, 4% few times). Nevertheless, about 10% provided services at least once on such platforms.

Legislation and technological tools provided

In Lithuania, compared to other countries, the sharing economy is gaining ground relatively slowly. Therefore, there is not enough economic data to evaluate how significant this progress has been for the Lithuanian economy. The sectors that the sharing economy business models emerge in are rather different and completely separated (taxi-Uber; Airbnb; peer lending platforms, etc.) and meet strict legal regulations in force in Lithuania. In general, more and more calls are heard for stricter regulation of the short-term rental housing platforms like Airbnb, which are becoming an alternative to hotels. At the end of 2015, the Parliament adopted additional new consumer credit legislation, adjusting to the rapid development of a popular peer lending platform. The Parliament set limits so that companies lending more than 5,000 euros have to register as legal entities. It is important to note that such restrictions do not counteract the free movement of capital, which is a fundamental value of the European Community under the EU Treaty. This has led to both – different attitudes of the governmental institutions and different paces of development. In order to understand how sharing economy markets operate, an analysis of the relationship between the governing bodies and the sharing economy is needed.

The technological progress, particularly the development of the internet, mobile devices and digital platforms, have contributed towards providing better information to the people in Lithuania on the concept of sharing economy and facilitating their access to these services (digital platforms like Airbnb, Uber, Savy, etc). The use of these technological achievements is reinforced by the parallel development of social networks, i.e. themselves helped by technological innovation (www.kasveza.lt – car pooling services, www.realisbeautiful.lt - sharing free photos, etc.).

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THE FORMER YUGOSLAV REPUBLIC OF MACEDONIA

In FYR Macedonia, there is no official definition of the Sharing Economy. The Macedonian language term "spodelena ekonomija" is rarely used, instead of that the English word "sharing economy" is usually used in regular communication.

Besides the fact that Macedonian citizens have a long tradition of sharing stuff between neighbours and friends, the sharing economy is still in its infancy. The problem probably lies in the fact that the sharing is more conceived as caring, so there is no expectation of financial benefits from sharing some stuff or helping some friend.

Types and models

In FYR Macedonia, people can be seen sharing their flat, sharing one car for going to work or to school, and neighbours are often using the same equipment and facilities for various purposes. Thus, people are constantly sharing things based on societal values, rather than economic benefits. In Macedonia, most of the people are living with their families, so, they aren't able to rent their flats or apartments when they are away. The same goes for cars, which are usually used by all the family members. Also, there is a lack of trust and sense of collaboration in the population, which is another obstacle towards the development of sustainable sharing economy.

Besides all of the barriers, the collaborative consumption of the population in Macedonia is permanently increasing, and in a sense, the citizens begin to be part and play according to the principles of the sharing economy, hence realising the benefits brought by sharing instead of owning things. It is almost certain that the population in this region will start to participate extensively in the sharing economy in the near future. The sharing economy will be an important sector of the economies of the country and change the consumer behaviour resulting in a better financial position for its people.

Social networks are the most impactful Internet mechanism driving the sharing economy, by bringing together supply and demand at an unprecedented speed and scale. The availability of digital platform renders transactions cheap and easy, so by using social networks, businesses involved in the sharing economy can define and deliver highly targeted, very personal goods and services at the right time and location. Building on this, in Macedonia a large number of collaborative economy initiatives use Facebook groups as a supporting platform. For example, there are a lot of Facebook groups that facilitate searches for a roommate. Another example are groups dedicated to those who are searching accommodation. Through the group, people pair up and then continue to search for apartments together. Other examples are the groups dedicated to car pooling, and those groups are very popular among students who try to minimise the cost of transport.

There are also a couple of web platforms that are used for sharing transportation. They use the principle of car sharing or share travel costs. Drivers who travel from one city to another are advertising available seats in their vehicles, and passengers with the same destination can easily and simply get in contact and arrange to travel together.

Among the well-known global services, Airbnb is the most developed in FYR Macedonia.

Key stakeholders and initiatives

In this phase, the primary stakeholders that are driving the sharing economy are self-organized internet communities, which are trying to optimise travel costs or to find more affordable solutions for some of their problems.

Another important stakeholder is becoming the city of Skopje. The city is participating in the Horizon 2020 project SocialCar, whose goal is to develop public awareness of the common journey through the city, reduce environmental pollution and lower transport costs. SocialCar is a research and innovation project that seeks to incorporate carpooling into existing mobility systems, using robust planning algorithms and big data integration from public transport, carpooling systems, and crowdsourcing. The project brings together developers, social scientists, economists, transportation engineers, car poolers and public authorities from Italy, Greece, United Kingdom, Luxembourg, Poland, Switzerland, FYR Macedonia, Croatia, Slovenia, the Netherlands, Hungary, Spain, and Belgium. Their mission is to design, develop, test and roll out a service that simplifies the travel experience of citizens in urban and peri-urban areas. SocialCar defines data processing flows and design algorithms to match travel requests with the integrated public-private transport supply, complemented by a reputation-based mechanism. Many existing journey planning tools do not provide information for multi-modal trips, connecting individual and collective transport services. Often, the proposed options require multiple public transport interchanges and result in long and convoluted multi-leg journeys to make a successful door-to-door trip. SocialCar enhances the public transport network by introducing a wider variety of complementary services including carpooling/sharing, bike sharing, taxi and other on-demand services. Citizens will be given access to this unique service that optimizes the use of all available mobility resources in the sharing economy. SocialCar will reduce travel times and costs, increase convenience, and contribute to the better environmental performance of urban transport networks.

Legislation and technological tools provided

Currently, there is no any particular legislation that is dealing with sharing economy.

Social networks are the primary technology platform that is utilized for current local sharing economy initiatives. There are also a couple of web platforms that are used.

Prior reports and research

- There are currently no official reports dealing with the sharing economy in FYR Macedonia.
- We found one research paper that is tackling the concept of sharing economy in Macedonia.: Pandev, Vase and Janeska Sarkanjac, Smilka "Sharing economy.", The 14th International Conference for Informatics and Information Technology (CIIT 2017), Mavrovo, Macedonia (2017): 125-129. http://eprints.finki.ukim.mk/11388/1/978-608-4699-07-1_pp125-129.pdf

MALTA

The way in which the collaborative economy is defined in Malta includes, in fact, any initiative that blurs the direct relationship between the consumer and the producer. The collaborative economy in Malta includes all actions taken in order to *share information, which, in turn, facilitates the consumption of goods or services*. The collaborative economy is built around networks of people, usually consumers themselves, who share knowledge amongst themselves. Malta is a small country where the people are well connected to each other and where aspects such as strong family traditions and solidarity on the island create a well suited environment for the collaborative economy.

Tourism is one of the main pillars of the Maltese economy and it generates around 20% of the GDP. Tourism accommodation is a key revenue maker. Airbnb is the main rental site for real estate in Malta between individuals and is mainly used by tourists.

Types and models

Although in general, international online platforms such as Facebook, Amazon, Ebay, Alibaba are used extensively, the Maltese have also ventured to establish their own online platforms for collaborative practices. The local platforms identified so far are:

- RUBS: <https://www.facebook.com/groups/392053800845753/>
- Deal Today: <https://dealtoday.com.mt/>
- Justlanded: <https://www.justlanded.com/>
- Maltapark: <http://www.maltapark.com/>
- Min Ipartat u Min Ibigħ : <https://www.facebook.com/partatubiegh/>
- Yellow <https://www.yellow.com.mt/>
- I Sell
Malta: http://www.isellmalta.info/catalog.asp?catid=799&show=closed&sortpref=title_asc&startcount=164&endcount=188&page=24
- Bum a Lift: <https://www.bumalift.com/>
- RUBS (in particular the property page), Justlanded and Facebook are other platforms for real estate rental between individuals. These are used mainly by the locals, because they often find long term rentals advertised there. Facebook, Maltapark, Min Ipartat u Min Ibigħ, I Sell Malta, eBay and Amazon are platforms for resale and reuse of goods or services. Yellow and TripAdvisor are sites used for the sharing of contacts and user reviews. Bum-a-lift is a car-pooling and car sharing initiative in Malta, which covers university and school transportation, as well as to/from office transportation.

Key stakeholders and initiatives

A further example of collaborative practices is constructed around the travel of teenagers back home on the weekend, after their weekend trip to the local nightspot and clubbing area. Since

the public transport system does not operate late at night, the Minivan companies have organised a service for young people, which can drive them to their door after a night out. This service does not operate via an online platform and is run very much by being at the agreed pick up point and time.

The welfare and social policy system in Malta also provides other services which could be considered as part of the sharing economy. A typical example would be the day-care centres in the hometown for elderly people. These centres are run by the state at no cost for the attending elderly people, and offer some respite to the family of elderly people, as well as something to look forward to for the attendee.

Although examples of crowd funding are present in Malta (e.g. the recent call to the public to donate funds to cover the legal battle in favour of free media, and other political initiatives), most of these efforts are conducted using traditional media channels, especially the radio. There are no organised online crowd funding initiatives yet in Malta, to the best of our knowledge.

Finally, the sharing economy has a presence in Malta. The country has great potential and the sharing economy may well continue to develop. The further development of tourism is a vital strategy, but there is still much progress to make regarding sharing between Maltese people.

Legislation and technological tools provided

No legislation reported.

Websites, platforms and social networks seems to be the major types of technology used.

THE NETHERLANDS

Various definitions of the collaborative economy are used in the debate in The Netherlands. Some speak of a ‘sharing economy’, a ‘gig economy’, ‘the collaborative economy’ or in a broader sense about ‘digital platforms’. A Dutch term used regularly is ‘deeleconomie’ – a literal translation of sharing economy (delen = to share). This Dutch term refers both to platforms that allow citizens to make use of each other’s goods, as well as platforms that offer services. In a report to the Dutch government, TNO (a Dutch office for research and consultancy) uses the term ‘platform’, defined as ‘a (technological) basis for delivering or aggregating services/content from service/content providers to end-users.’ (TNO 2015) Their examples include sharing economy platforms, but also entertainment and e-commerce platforms such as Netflix, Bol.com and Facebook.

The Rathenau Institute, which has just released an English language report on the sharing economy, uses two definitions: the sharing economy and the gig economy. In this report, the sharing economy is defined as “consumers granting each other access to under-utilised physical assets (“idle capacity”), possibly for money”. This definition has three elements. First and foremost, these are transactions between consumers themselves (“consumer-to-

consumer”, also referred to as “peer-to-peer”). Secondly, the transactions involve “temporary access” to an asset and not the permanent transfer of ownership. Thirdly, they involve assets that are not being used and not services. In contrast, in the gig economy, consumers provide services for one another, rather than providing access to goods. In other words, those transactions do not involve renting out a car or lending a saucepan, but providing a taxi journey or a cooked meal as a “service”. (Rathenau 2017). According to Rathenau Institute (2017) ‘23% of the Dutch population participated in the sharing economy in 2016, compared with 6% in 2013.’

Share.nl – a Dutch organisation that explores and consults on the sharing economy – speaks about the collaborative economy. They define it as referring to “economic systems of decentralized networks and marketplaces that unlock the value of underused assets by matching needs and haves, in ways that bypass traditional institutions.” (Share.nl 2017, <http://www.sharenl.nl/welcome-to-the-collaborative-economy-ecosystem>)

Extra issue: The Public Debate

The sharing economy is hotly debated in the media and in politics. Cases such as Airbnb and Uber are widely discussed. Part of the discussion focuses on economic opportunities provided by new digital platforms; yet there is also a lot of concern for the ways that public values (various definitions abound, but they usually include quality, affordability, inclusivity, accessibility of particular services) are anchored through these platforms, and what the rise of platforms means for arrangements with regard to the organisation of labour in society, many fear a further flexibilisation of labour and an undermining of workers’ rights; others see opportunities for economic growth; others still are interested in platform cooperativism.

Debates about the sharing economy are also tied to debates about the negative consequences of tourism. Especially Amsterdam has joined the ranks of cities like Barcelona and Venice, in which local residents feel overwhelmed by masses of tourists who - in the views of these locals - are taking over their city. In that light, recently, the introduction of sharing-bikes by a Chinese company in Amsterdam was greatly discussed, mostly as an unwanted usurpation of public space.

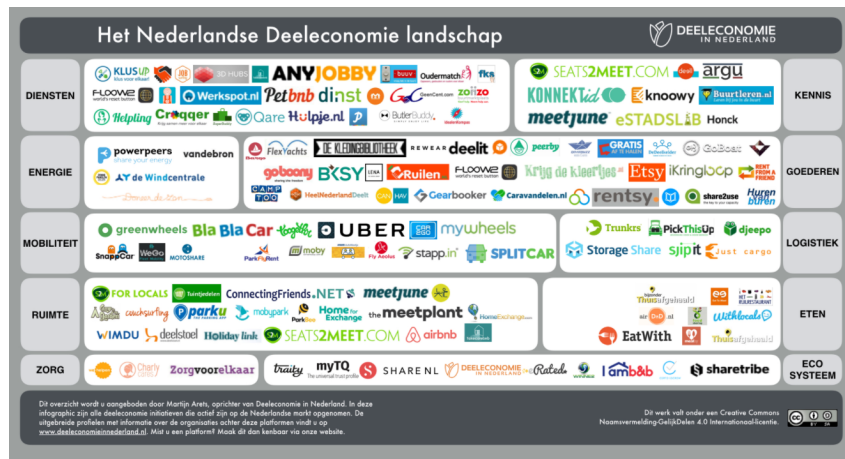
In some cases, the sharing economy is also seen as an opportunity to increase the sustainability of cities, as well as improve social capital, although there is not much proof yet to underwrite these claims.

There is a much broader debate in the Netherlands about the rise of a ‘participation society’, or ‘do democracy’ or ‘hackable cities’ (www.thehackablecity.nl), in which citizens have become more active as ‘placemakers’ or ‘citymakers’. Many of these projects are organised by professional architects or designers, who have started to organise local collectives around issues of communal concern that try to change the place they live, or start organise collective resources in new ways. The Dutch government itself is involved in this movement (<http://doedemocratie.net/>) and has started to map local initiatives (<http://krachtinnl.nl/>).

Moreover, a large community of thousands of citymakers has emerged around the activities of Pakhuis de Zwijger in Amsterdam (<https://dezwijger.nl/>). Last, there is also an interest by various parties in the development of a circular economy, and experiments abound. All these examples are usually not referred to as part of the sharing economy, but most, if not all of them make extensive use of all kind of collaborative online platforms. For instance, a cooperation of local communities has developed their own online neighbourhood platform software (<https://gebiedonline.nl/>).

Types and models

There are various initiatives to map the collaborative economy in The Netherlands. The research project ‘Deeleconomie in Nederland’ has counted around 250 platforms. A catalogue of 150 of these is available at <http://www.deeleconomieinnederland.nl/>, and as a spreadsheet is available here: https://docs.google.com/spreadsheets/d/1IgaTSb1-sTU4DEHKiTINGUb9PN-5yQ4u6rTbGkNZR6_M/edit#gid=0



Overview of Dutch sharing economy, by Martijn Arets; http://www.deeleconomieinnederland.nl/infographic_deeleconomie_landschap/

Translation: Diensten-> Services; Energie->Energy; Mobiliteit -> Mobility; Ruimte -> Space; Zorg -> Care; Kennis -> Knowledge; Goederen -> Goods; Logistiek -> Logistics; Eten -> Food; Ecosysteem -> Ecosystem

Key stakeholders and initiatives

ShareNL (<http://www.sharenl.nl/>) is an organisation that drives the debate and acceptance of the sharing economy in The Netherlands and beyond. They have launched the concept (and network) of the ‘Sharing City’ that cities worldwide can subscribe to. (Sharenl.nl)

Deeleconomie in Nederland (<http://www.deeleconomieinnederland.nl/>) is another group that maps initiatives, does research & consultancy on the topic.

Pakhuis de Zwijger in Amsterdam is an important organiser and meeting place for ‘citymakers’, it has a community of 122.000 members and organises numerous events, reunions, round tables and other formats for the exchange of knowledge.

Various research institutes, such as The Rathenau Institute, are concerned with the theme, as well as numerous university research groups.

Legislation and technological tools provided

In the Netherlands, **the city of Amsterdam** is very involved in the debate. It has taken stance on Airbnb by setting a limit on the maximum number of days that houses can be rented out through the platform (now to 60, this may be reduced to 30). The city also promotes itself as a European capital of innovation that is based on the Amsterdam-approach. This means an approach to smart cities that is not based on technology per se, but rather seeks alliances with civil society and is organized around societal challenges. The city has adapted an action plan for the sharing economy (see <https://amsterdamsmartcity.com/projects/sharing-economy>; <https://www.slideshare.net/shareNL/amsterdam-actionplan-sharing-economy>; <http://www.nesta.org.uk/blog/how-amsterdam-developing-collaborative-economy-works-everyone> ; and <http://www.sharenl.nl/amsterdam-sharing-city-projects>) that consists of 5 main actions: Stimulating the sharing economy; Leading by example; A sharing economy for all Amsterdam citizens; Rules and regulations; Putting Amsterdam on the map as a Sharing City. In Amsterdam, this programme so far has led to a small number of experiments.

A business model that would allow collectives to capture the public values they create to sustain themselves as an organisation is still missing. Websites, platforms and social networks seems to be the major source of technology used.

Prior reports and research

Various governments and institutional reports have appeared in the last few years. Most of these are in Dutch.

- van Dijck, Jose, Tomas Poell and Martijn de Waal *De Platformsamenleving. Strijd Om Publieke Waarden in Een Online Wereld. (The Platform Society: the Struggle for Public Values in an Online World)* Amsterdam University Press, 2016. Available at: <http://www.oopen.org/download?type=document&docid=618753>
- Eijk, Nico van, et al. *Digital Platforms: An Analytical Framework for Identifying and Evaluating Policy Options.* 2015. Available at <http://www.ivir.nl/publicaties/download/1703>.
- Frenken, K., A. van Waes, M. Smink & R. van Est, A fair share – Safeguarding public interests in the sharing and gig economy. The Hague, Rathenau Instituut, 2017. Available at: <https://www.rathenau.nl/en/publication/fair-share%C2%A0%E2%80%93-safeguarding-public-interests-sharing-and-gig-economy>

- ShareNL ‘Innoveren in de deeleconomie: rapport geschreven in opdracht van het Ministerie van Economische Zaken’. 2015. Available at <http://www.slideshare.net/shareNL/sharenl-onderzoek-iov-ez-innoveren-in-de-deeleconomie-18-12-2015>
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NORWAY

In Norway, just like in other European countries, several definitions of collaborative economy can be found. None yet have reached the level of unanimous recognition.

A Governmental White Paper on the Collaborative Economy (NOU 2017-4) defines the collaborative economy (CE) as “economic activities, conveyed through digital platforms that facilitate the performance or exchange of services and competencies, assets and property, resources or capital, without transferring ownership rights, and mainly between private individuals.”

In their attempt to map the sharing economy in Norway, Fafo takes a starting point in the following definition of sharing services, which emphasises three key features (Jesnes et al., 2016, p. 7):

1. An intermediary in the form of a digital platform;
2. Which helps to connect complementary players, who can be considered as providers and customer;
3. Who exchange a set of benefits from provider to customer. There can be a wide variety of benefits, from services, asset/property sharing, to capital, expertise and labour.

According to the SIFO report by Slettemeås and Kjørstad (2016), 5.5 per cent of the Norwegian population can be classified as active users of sharing economy services. Only a minority of the population (45%) at the time of their study had heard of the term “sharing economy” (in the Norwegian form “delingsøkonomi”). This shows a relatively low uptake, in line with most other European countries.

In Norway, Fafo and SNF, were commissioned by the Ministry of Labour and Social Affairs, to conduct a survey (Jesnes et al. 2016a) similar to the Hertfordshire study. In this survey (including 1,525 adults aged 18 and above), 10% answered that they sometimes work for an online platform; 2% of the respondents performed platform work on a weekly basis, 1% on a monthly basis, and 6% at least once during the last year. Having interviewed platform companies giving much lower estimates of gig-workers connected to their platforms, the researchers warn against taking these figures too literally (ibid). (Dølvik, & Jesnes, 2017, p. 25)

Types and models

As of 2016, there were about 30 platforms involving labour in Norway (Dølvik, & Jesnes, 2017). Slette-meås and Kjørstad (2016) investigated the uptake of and knowledge about specific sharing economy services in Norway:

- **Finn småjobber** (Odd Jobs) – 76% heard of it, 7% were registered members, 2% were active users.
- **Airbnb** – 42% heard of it, 8% were registered members, 3% were active users.
- **Uber** – 41% heard of it, 3% were registered members, 1% were active users.
- **Couchsurfing** – 30% heard of it, 3% were registered members, 1% were active users.
- Among the services established in Norway, **Nabobil** (Neighbourcar) is the most popular one (p2p car rental), followed by **Nimber** (p2p transport service). In absolute terms, these services have few members and few active users.

The example of the online marketplace **finn.no** (<https://www.finn.no/>) is interesting given its importance in the Norwegian market and its local nature. Next to finn.no, there are a range of smaller initiatives. An example is **Tise** (<https://tiseit.com/>), an app for second-hand fashion which caters to a young, fashionable, social media-savvy crowd and is comparable to Depop. Finally, **Nabobil** presents an interesting case of p2p car rental.

Key Stakeholders and initiatives

The key stakeholders of the sharing economy in Norway:

- The government is not involved; maybe partly through court rules on legality of services like Uber.
- The local authorities are also not involved.
- Non-profit organisations – partial involvement;
- Some businesses. An example is Bazeat (bazeat.no) where a small, local firm is developing a peer-to-peer based platform for small scale sales of local food.
- Some organisations involved in social innovation
- Grassroot initiatives (e.g. local car-sharing),
- Some groups (e.g. <https://www.facebook.com/matvett/>,
- Individuals
- Researchers.
-

Legislation and technological tools provided

At the moment, the legal situation of the sharing/collaborative economy is not clarified. This is especially true for the classification of workers involved in the gig economy. “In many instances, the nature of the relationship will have to be assessed in each particular case. Until more cases have been tried in court, it will be challenging for the authorities, companies, job-seekers, and the social partners to judge whether the platform and/or the customers have entered into a contract of employment, freelance work or business service with those being assigned to perform work via the platforms” (Dølvik, & Jesnes, 2017, pp. 31-32).

Moreover, profitability is not well documented. “A mapping conducted in Norway suggests that there in November 2016 were about 30 platforms involving labour in Norway. As the sharing economy is still evolving and platforms are established and disappear rather frequently, the numbers are likely to change fast.” (Dølvik, & Jesnes, 2017, pp. 22-23) Many of these companies are start-ups and have not found their desired business model yet.

A white paper that has been produced (NOU 2017-4) shows that the collaborative economy is being taken seriously at governmental level:

In the Norwegian Labour Force Survey, the categories that might include some sharing economy workers (self-employed without own employees and permanently employed with few hours) have remained stable in the past 15 years (Nergaard 2016). (Dølvik, & Jesnes, 2017, p. 23)

Since Norway is a country with very high Internet connectivity and mobile Internet use is commonplace, a lot of sharing initiatives and platforms rely on mobile – and sometimes mobile only – services. We did not find any reliable information about how sharing economy companies employ cutting edge technology such as artificial intelligence, Internet of Things, robotics etc. However, we would assume that the Norwegian sharing economy platforms and initiatives are closely observing international developments in that area, following market trends and implementing them whenever possible.

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POLAND

There are various types of collaborative economy initiatives in Poland - both non-profit and commercial. The country has both large international players (Uber, AirBnB, BlaBlaCar), as well as thriving domestic players, including some going out into international markets.

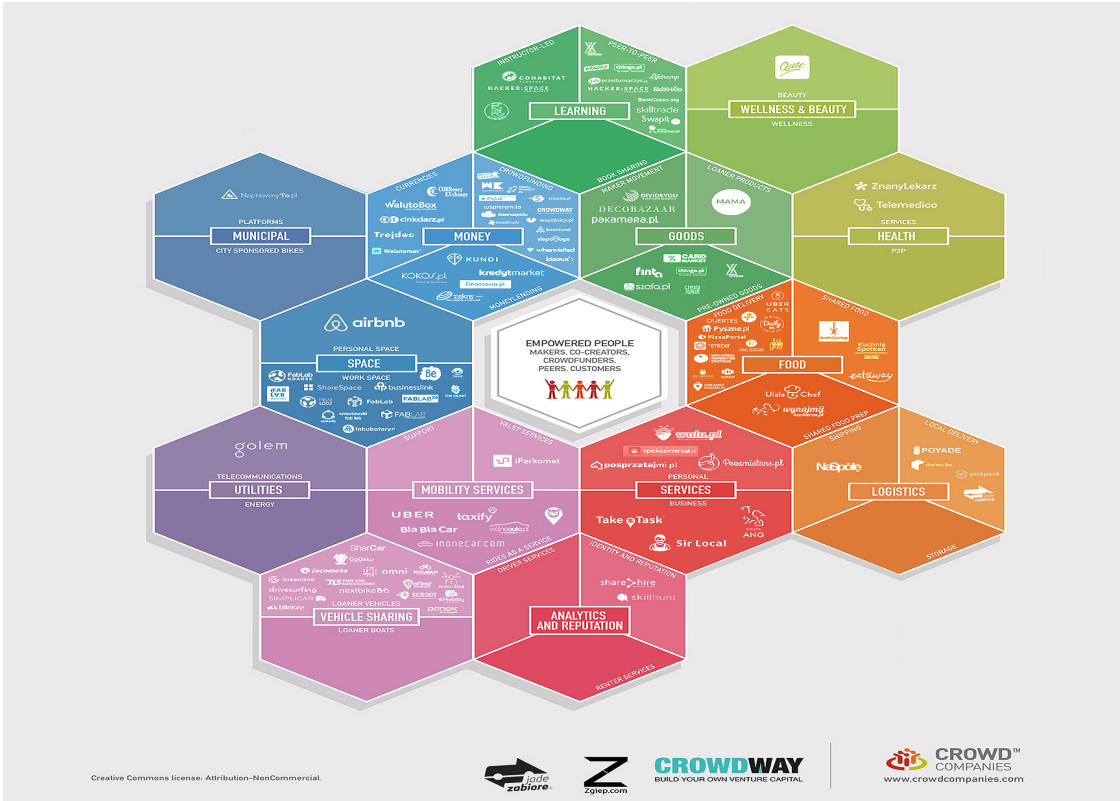
Over 92% of Internet users in Poland are aware of the concept of sharing economy, 42.8% use it, and more than 12.8% use it regularly (Sokołowski, Starzyński, Rok, & Zgiep, 2016). Actually, the phenomenon is so complex that there is no single definition of sharing economy. One of the most interesting definitions included in the report mentioned above is: "Change from one-to-many model to many-to-many model". The collaborative economy is a different business philosophy that changes the current "rules of the game". An example of such a practice may be the disclosure of inventory levels by pharmacy chains to share this information with other competing entities - as a result, the consumer may find the medicine he/she is looking for simply at the nearest pharmacy, regardless of whether it belongs to a specific company or to the competition.

The problem, probably affecting all post-communist countries, is the social trust level, significantly lower than in the western EU countries. This is possibly a historic result, as in the communist era cooperative organisation (the legal form of economic activity) used to be imposed on people as the only acceptable modus operandi.

Types and models

- Car and scooter sharing in cities (e.g., Vozilla, Panek, jedenslad),
- Bicycles sharing (e.g. NextBike, Veturillo),
- Mobility services (e.g. Uber, BlaBlaCar, jadezabiore.pl),
- Sharing a flat or room (e.g. Airbnb, Couchsurfing, otodom),
- Online courses (e.g. Khan Academy, Coursera, Udsa, Skillshare),
- Provision of services by private persons (e.g. TakeTask, Freelancer.com);
- Shared offices – co-working (e.g. MyMeetingRoom, Business Link and few dozen more),

- Co-financing of projects and loans from individuals (eg PolakPotrafi.pl, Kokos.pl, Pomagam.pl),
- Sale of food products directly from farmers (eg. RanoZebrano.pl, Local-Rolnik.pl, food cooperatives, eg. <https://www.dobrze.waw.pl> - not applicable to markets).
- Sharing resources – znanylekarz.pl, ktomalek.pl , yanosik.pl
- Second hand/second use - gratka.pl, tablica.pl – bought by Naspers [NPN](#) (JSE) and rebranded to olx.pl (olx=on line exchange).
- Local initiatives – platforms for participatory budgets in cities (eg. <http://twojbudzet.um.warszawa.pl>) .



Polish Collaborative Economy HoneyComb 2.0 (date of publication 10.2017)

Key stakeholders and initiatives

The range of key stakeholders is very diverse. The main interest groups in the area of sharing economy are related to individuals and companies as providers or users of sharing services. A lot of initiatives have social/community aspects, e.g. crowdfunding for many cultural initiatives. There are also occurrences of violent conflicts between stakeholders e.g. Uber and taxi drivers. Nevertheless, in this case, taxi drivers' protests haven't met social support.

The sharing economy is active on two totally different levels: one is that of big international players (Uber, Blablacar, AirBnB), and the other country and local initiatives aiming to help local communities. Some big international players, like eBay, left the country's market, because of a local competitor (sharing platform Allegro.pl), which was stronger.

Legislation and technological tools provided

At the moment, the legal situation of the sharing/collaborative economy is not clarified. Both VAT and income taxes are calculated based on general rules. Some interpretations of tax regulations exist, e.g. that occasional sharing of a car or other activities do not generate income and thus do not need tax payment, nevertheless, both individuals and companies have lot of legal and tax dilemmas in relation to the sharing economy (PWC, 2016). It is generally assumed that semi-professional sharing economy engagements require self-employed status and taxation.

The collaborative economy runs mainly through dedicated web platforms and mobile applications of providers, and general social media platforms such as Facebook. Some Polish platforms primarily dedicated to local market currently run in other countries, like znanylekarz.pl (“a well-known doctor”, owned by docplanner.com) cloned in Italy (MioDottore), France, UK, Spain, Portugal (Doctoralia), Hungary (Ismertorvos), Czech Republic (ZnamyLekar), and 11 other countries.

Prior reports and research

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PORTUGAL

Regarding the term “collaborative economy”, we consider it as encompassing a number of aspects, specifically: i) forms of production and distribution of material and symbolic goods, ii) service provision that leverages digital technologies to connect goods producers, and iii) service providers who do not necessarily share the same physical space or do not necessarily work at the same time. Within the boundaries of this definition, digital technologies not only allow for connections among goods producers or service providers, but they are often the way through which customers are reached and the economic exchange takes place, be it for a fee or based on a gift economy model. Digital technologies, and the data produced through them, are also a way through which performances are monitored, through extensive data collection,

while new services, goods, or commercial strategies are envisioned based on the collected data.

Types and models

In this scenario that connects producers, product, and customer through digital technologies and data, we can identify four main ideal types of economic organisations in the collaborative economy:

1. Commons-based peer production, in which a commons is voluntarily produced and shared without any direct financial compensation, and that is freely accessible to the general public; the most notable examples are Free and Open Source Software (FOSS) or Wikipedia.
2. Platform cooperatives, in which goods or services are provided, locally or globally, by workers-owned cooperatives that relate to customers through digital platforms and democratically modify their internal organisation and their relations with customers on the basis of digitally produced data;
3. Local organisations, cooperatives or companies, often start-ups, in which goods or services are provided by a platform that combines novel ways of connecting demand and supply, a reduction of costs for customers, often through working conditions appealing to marginal workers and decreasing the overall compensation of labour, and the introduction in a market of available goods that were not accessible to customers before; local companies experiment with novel data treatments, finding unconventional ways to maximize their understanding of the market, in order to be appealing for financing by venture capital or for being acquired by bigger companies;
4. Transnational companies or cooperatives, in which a good or service is provided in similar ways as by local companies, but at a trans-local, transnational scale; the intra-capitalist competition among these organisations pushes toward a monopolistic or oligopolistic ambition, implying an intensive exploitation of data and machine learning, the convergence of services among companies, high financial evaluation, and the constant acquisition of smaller companies.

Extra issue: Sustainability

In general, we look at the sustainability of collaborative economy in the same manner we do for other business models: for a collaborative economy endeavour to be sustainable, there must be an enticing value proposition for all actors involved. That said, many collaborative economy initiatives are based on exploiting inefficiencies of traditional models. In those cases, sustainability may be compromised in the long run, since, by addressing the inefficiency, this will be mitigated, thus making the opportunity less attractive.

While we do not know of any mechanisms or strategies already in place to ensure sustainability, there have been calls for government intervention (and disclosure of said plans)

from opposition parties, and the government itself is creating (sectoral, case-by-case) responses to the challenges of integrating the new platforms within existing business environments, particularly in the local tourism and transportation domains.

In the field of social economy, Cooperativa António Sérgio para a Economia Social (CASES, 2016) has published results that indicate significant socio-economic impacts of these organisations in 2013, as it represented 2,8% of Gross Value Added; 5,2% of total income; and 6% of paid employment.

The organisational approach of Social Entrepreneurship has been connected to sustainable ways to promote social innovation, that is, to improve social conditions through cooperative and democratic processes, guided by the paradigm of sustainable development. However, the Portuguese reality is yet distant from that conceptual framework, in some dimensions.

A recent study on social entrepreneurship, with the main aim of understanding the dynamics and representations of the concept in the field of Portuguese social economy, analysed 84 organisations. The theoretical profile of a social entrepreneurship venture included four areas of sustainability: organisational or managerial; financial; social; and environmental. The environmental dimension was not considered due to its minimal representation, limited to domestic recycling in the organisations' infrastructures (Parente et al, 2014).

Focusing on the first two areas, the study has found that: 17% of them have low tendency for entrepreneurship, as they present strong dependencies on the State, or on for profit entities; 58% have moderate tendency for social entrepreneurship, as they only present some initiatives on financial sustainability; and 25% have strong entrepreneurial tendency, with consistent financial and organisational practices. From this third group, 7 case studies were selected for their entrepreneurial potential. In this intensive phase, the social dimension of intervention with the public was analysed: the diversification of activities is a common trait, although their integration with the organisational mission is often partly neglected; the practice of networking with other organisations of all types is another common tendency. For the goals of this COST Action it is interesting to highlight that external organisational communication, although greatly dependent on online platforms, did not prove to be a consistent base of legitimisation (Parente et al, 2014).

Prior reports and research

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ROMANIA

There is no official definition of the collaborative economy in Romania. Likewise, the collaborative economy is not a topic of interest for the academic sector. Moreover, while in practice there are many examples of entrepreneurship initiatives built on the collaborative economy concept, the concept itself is not popular, being introduced in the public discussion by the media only in the last years. Thus, the most visible definition is the one provided by Wikipedia (Romanian version): “The collaborative economy is a socio-economic system built around the sharing of material and human resources. It includes the shared creation, production, distribution, trade and consumption of goods and services by different people and organisations.”

Types and models

According to the 2016 Eurobarometer “The use of collaborative platforms”, 20% of the Romanian consumers have used services provided by the collaborative economy, while the average at the European level is 17%. Interesting enough to be mentioned, in this respect, Romania holds a similar position to Germany and Estonia.

The most visible collaborative economy examples in Romania include worldwide known platforms like Uber and BlaBlaCar.

While the practice of collaborative economy is in an early stage of development, the Romanian initiatives cover a variety of fields and come in different organisational forms. “Bike Kitchen Timisoara” is a do-it-yourself bicycle repair studio run on a non-profit basis. The members of the association are sharing the space and the necessary tools to repair bicycles. They are also sharing specific knowledge, so that the organisation can enable citizens to acquire practical knowledge concerning bike repairs (more details at <https://bikekitchentimisoara.wordpress.com/>).

“Alergotura” is a non-profit association created in 2011 as the result of a social entrepreneurship initiative. The objective of the organisation is to promote and develop jogging and recreational running activities. The target group consists of people of all ages, from kids to the elderly. The idea is to create opportunities for individuals to participate in weekly scheduled events called “ture” (Romanian for rounds, laps), giving almost everyone who would like to start jogging a starting point and initial support. The “ture” are perfect opportunities to socialise and are the main driver of Alergotura in promoting a healthy lifestyle (more details at <http://alergotura.ro/>).

In terms of organisational-legal forms operating within the collaborative economy in Romania, most of the main types of social economy organisations are present: associations, cooperatives, credit unions of pensioners and employees. The category of cooperatives includes various types of cooperatives: agricultural, craft/workers, consumer and credit cooperatives. More details can be found in the Atlas of Social Economy in Romania 2014.

Key stakeholders and initiatives

In Romania, based on their number and their visibility, the key stakeholders in the collaborative economy are not-for-profit organisations. There are also entrepreneurial initiatives that run on commercial basis (e.g. Uber, BlaBlaCar), but their number is quite limited and, in most of the cases, they are built on foreign business models.

Considering the novelty of the public discussion on the collaborative economy, it is difficult to discuss about an ecosystem of the collaborative economy in Romania involving individual entrepreneurial initiatives. Regarding the organisational actors of the collaborative economy, the issue of sustainability would concern the ecosystem of the non-profit organisations operating under the concept of collaborative economy. So far, one cannot identify top down strategies and policies meeting bottom up initiatives.

While the practice of individual entrepreneurship initiatives is in an incipient phase, as mentioned above, the sustainability of the collaborative economy in Romania would refer mostly to the not-for-profit organisations operating under the concept of collaborative economy. And there are no mechanisms or strategies in place to secure its sustainable future (e.g. there is no mention of the collaborative economy in Romania's development strategy for 2015-2035 conceived by the Romanian Academy).

Legislation and technological tools provided

No legislation reported.

As in the case of the international practice, the collaborative economy in Romania is supported by technological tools with global spread: mobile phone networks, Internet (Romania being among the top countries in regard to the quality of the Internet services), social media etc. The use of the platforms in the collaborative economy activities developed in Romania is rather connected with business models operated by foreign enterprises (e.g. Uber, BlaBlaCar).

Prior reports and research

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SLOVENIA

There is no single unified definition of the collaborative economy in Slovenia. This was clearly communicated in a conference that took place in Ljubljana in March 2017, organised by the Slovenian office of the European Commission and the Ministry of Public Administration in cooperation with the Slovenian Press Agency. However, at the conference a reference was made to the definition of the collaborative economy as it was stipulated in the EC June 2016 Communication titled *“A European agenda for collaborative economy”*: « (...) *business models where activities are facilitated by collaborative platforms that create an open marketplace for the temporary usage of goods or services often provided by private individuals. The collaborative economy involves three categories of actors: (i) service providers who share assets, resources, time and/or skills — these can be private individuals offering services on an occasional basis (‘peers’) or service providers acting in their professional capacity (“professional services providers”); (ii) users of these; and (iii) intermediaries that connect — via an online platform — providers with users and that facilitate transactions between them (‘collaborative platforms’). Collaborative economy transactions generally do not involve a change of ownership and can be carried out for profit or not-for-profit.* »

As elsewhere in the EU, the term “sharing economy” (in Slovenian *“delitvena ekonomija”*) is in Slovenia interchangeably used with the term “collaborative economy” (in Slovenian *“sodelovalna ekonomija”*). While the former has been used frequently at the inception of the phenomenon, lately, the latter has been gaining momentum.

The collaborative economy is becoming more and more established in Slovenia, with several sharing initiatives surfacing in the past few years. “Prevozi.org”, for example, an online platform, where private individuals offer a ride to strangers for a small fee, has been around for several years and is extremely popular. The issue has been a “hot topic” in the media since 2015, when the government intensified its efforts to start the debate on legal reforms to accommodate foreign sharing economy companies in Slovenia.

Types and models

As in other countries, the main two types of collaborative economy are the non-profit and the for-profit model. On the one hand, a **for-profit platform** for sharing electric cars has been established in July 2016, with the support of the Ljubljana Municipality (i.e. capital of the Republic of Slovenia) and under the auspices of the Minister of Public Administration for the Republic of Slovenia, Mr. Boris Koprivnikar. The company *Avant2Go* started with 30 cars with the goal to expand their network of cars to 500 by 2018.

Another car sharing platform is *Posodiavto.si*, an online platform with a low monthly subscription fee, which brings together people willing to rent their cars and those who want to hire them. According to its creators, their primary goal was community building, not generating profit. The model is not turning a massive profit, however, since it is still not

completely free, it belongs somewhere in the middle of the two extremes (for profit and not for profit).

On the other end of the spectrum are **non-profit initiatives**, such as the *Library of Things* or the above-mentioned *Prevozi.org*. A number of not for profit initiatives based on the concept of exchange have been set up as well; two representative examples are *Izmenjevalnica* (clothes swap initiative) and *Zelemenjava* (exchange of seeds and surplus products from the garden). In these two cases, there is no real online platform where exchange would take place—an online presence merely serves the purpose of advertising the initiative and the exchange events that take place.

Key stakeholders

The main stakeholders in collaborative economy in Slovenia are the government, the local authorities, especially the municipalities of Ljubljana and Maribor, grassroots initiatives, NGOs and private individuals, and, to a lesser extent, also the business community.

The government has been quite active in the field of the collaborative economy. In December 2015 and in September 2016, the Minister of Public Administration, Mr. Boris Koprivnikar made an official visit to the USA with the goal of establishing development cooperation (with companies such as Uber, Celtra, Tesla, LinkedIn, Google and Facebook) and discovering new business models of the collaborative economy.

Slovenian municipalities, for now, do not seem to play a particular role in enabling the collaborative economy in general. However, several Slovenian municipalities are focusing on sustainability, in particular sustainable mobility. The municipality of Ljubljana has been making efforts to reduce carbon dioxide emissions and has therefore been a part of two environmentally friendly collaborative economy initiatives, *Avant2Go* and *Bicike(LJ)*. In Maribor, a Common urban eco garden was set up by an NGO *Urbane Brazde* and local gardeners, with the support of the municipality of Maribor.

Grassroots organisations, NGOs and private individuals have been somewhat active in establishing non-profit sharing models. A good example is *Prostorož*, an organisation that deals with issues related to public urban space, that set up the non-profit *Library of Things Prevozi.org* as well as *Zelemenjava* and *Izmenjevalnica* were set up as not for profits by private individuals.

Top down strategies have not been particularly helpful in enabling existing bottom up initiatives. For example, due to intricate legal demands that must be fulfilled by property owners if they want to rent out their rooms through Airbnb, 85% of real estate in Ljubljana is rented out illegally. However, this might change with the upcoming results of the above-mentioned second government working group.

Legislation and technological tools provided

Two working groups, comprised of government officials from various ministries, have been established and have started working on legal reforms that would secure a legal framework for the labour, tax and consumer protection aspects of the collaborative economy. The first working group, established in September 2015, was unsuccessful, leading to stricter controls over the accommodation providers. The second group, led by the Ministry of Economic Development and Technology, established in November 2016 has a wider scope of activities. It has been examining existing rules in all aspects relevant to collaborative economy and is planning to propose legal reforms to allow all service providers a framework within which they can carry out their activities legally.

The most widely known collaborative economy initiatives in Slovenia do tend to put the concept of sustainability at the forefront of their model. The car sharing initiative *Avant2GO* and the bicycle sharing model *Bicikelj* as well as *Prevozi.org* and *Posodiavto.si* are all born out of the need for sustainable mobility in the city of Ljubljana. The aim of the *Library of Things*, *Zelemenjava* and *Izmenjevalnica* is reducing consumption and waste. The land for the Common urban eco garden in Maribor was given to the organisers of the initiative by the municipality under the condition that the gardens will be cultivated in accordance with organic farming standards.

For now, there appears to be no mechanisms in place to secure a sustainable future for the collaborative economy; however, the government working group might come up with some guidelines. At a recent roundtable, the Minister of Economic Development and Technology, Mr. Zdravko Počivalšek, did point out the need to create an inclusive framework for the collaborative economy, one that takes into account the needs of all stakeholders.

Internet related technologies are at the centre of the collaborative economy examples, although the digital platform of the non-profit initiatives are almost inexistent, e.g. the *Library of Things* or *Prevozi.org*, have no real online platforms where exchange can take place and their online presence merely serves the purpose of advertising the initiative.

Prior reports and research

As far as we could find, there are no special governmental reports, but several academic and magazine articles have been published along with several university level final theses. For instance:

- Mišič, Luka, 2017, Izzivi sodelovalnega gospodarstva (*Challenges of collaborative economy*). Pravna praksa legal journal, May 11, 36(18), pp. 17-19.
- Kralj, Rok, 2013, Inovativni podjetniški modeli ekonomije delitve v Sloveniji (*Innovative business models of sharing economy in Slovenia*), Master thesis, DOBA Faculty of Applied Business and Social Studies Maribor.
- Kralj, Rok, 2011, Ekonomija delitve: pot do pravične in trajnostne družbe (*Sharing economy: the path towards just and sustainable society*), Self-published.

- Pance, Nataša, 2016, Pojav souporabe na področju kratkoročnega oddajanja nepremičnin turistom kot priložnost za rast slovenskega turizma (*The emergence of sharing in the short-term tourist rentals of real estate as an opportunity for the growth of the Slovenian tourism*), Master thesis, Faculty of Management, University of Primorska.
- Pahor, Marko, 2016, Koga moti delitvena ekonomija? (*Who is sharing economy bothering?*), Finance Magazine, December 8.
- Košak Klemen, 2015, Delitev iz obupa (*Sharing from despair*), Mladina Magazine, December 24, pp. 78-83.

SLOVAKIA

The situation of the Collaborative Economy in Slovakia is a bit different from that of the Western European countries, because this topic has been given little attention. Data from the area of sharing economy is not available from the Slovak Statistical Office and there is no analysis that would examine its impact. In Slovakia, sharing as a source of income is minimal. The first sharing economy businesses appeared in Slovakia in 2015. There is no agreed definition of collaborative economy in the Slovakian legal framework.

According to Eurobarometer (No. 438, 2016) survey, 59% Slovak respondents have never heard of collaborative platforms. Only 1% of them have heard of these platforms and paid for a service once and 6% respondents use the services of these platforms regularly (at least every month).

Types and models

In Slovakia, there are established mobile platforms for public transport in cities – such as: **Hopin** (since 2012) in Bratislava, Košice and Michalovce, **Liftago** (since November 2015), **Uber** – but only in the capital city Bratislava (since August 2015), **Taxify** (from December 2016) in Bratislava. The platform **BlaBlaCar** (active in Slovakia since January 2016) is used to transport passengers over longer distances.

- **Hopin**: HOPIN Taxi is the first Slovak application for ordering taxis; it is free for smartphones and tablets. Currently, it has branch offices in several cities in Slovakia, Czech Republic, Ukraine and Slovenia. However, Bratislava is the city where the HOPIN crew is indeed very numerous and taxis with this mark can be found at every step. The number of taxis are among the great advantage of the service.
- **Liftago**: Liftago is a Czech start-up that creates a technology platform for optimising urban transport in Czech Republic and also in Slovakia. It was established in 2015 in Prague. The aim of the company is to bring about a Smart Cities vision, where people give up their car ownership and also avoid parking problems. The goal of Liftago is to

create a free market that can be used by current transport providers as well as future technology providers. In the outlook of the coming years, in addition to improving the conditions of the taxi market, there are alternative methods of bike-sharing, car-sharing and more. Liftago Taxi is the first transportation service launched by the company Liftago. It is a taxi aggregator that connects licensed taxi drivers with passengers through free mobile applications or via a third person (hotel software, restaurant or dispatching company). The mechanism aims to tackle the problem of inefficiency in this sector of urban transport. The project is beneficial to all inhabitants, because it is designed to improve the traffic in the city. Liftago for passengers is available for iOS and Android for free. The application for drivers requires an Android operating system and is also free. Liftago is based on the business transaction model, where the source of revenue is the transaction fee of the driver (or a dispatcher) for a brokered order. Liftago also differs from existing start-ups such as Uber or Lyft **by making use of the already existing transport capacities of existing taxi drivers**, as well as supporting free market access, when the price is not fixed by Liftago, but by the transport provider on the basis of offer and demand.

- **Uber:** Uber is a passenger transport service that uses modern technology (mobile applications) instead of classic dispatching. It became available in Bratislava in August 2015. Taxi drivers in Bratislava complain that Uber does not follow the rules for taxi services. According to the law on road traffic, every vehicle collecting a fee for transporting up to nine people, including the driver, is a taxi service and needs to follow several rules. The driver must have a driving licence for at least three years, as well as a licence for service. All vehicles need to be properly marked, have a meter and be insured. Moreover, as of April 2015, they need to have electronic or virtual cash registers. The first test drives, however, showed that many Uber drivers don't meet these requirements. Taxi drivers consider it unfair that while they need to follow rules, those driving for Uber don't have to. Uber claims not to be a taxi company, but rather a mobile platform provider, operating a mobile application for ride sharing between drivers cooperating with Uber and registered customers. This is less than clear, however, as Uber's fees per ride are higher than other traditional ride sharing companies, where the remuneration only covers part of the expenses for the car and fuel (i.e. BlaBlaCar). For many Uber drivers, it is the pay which lures them to the site.
- **Taxify:** The application Taxify launched in Bratislava in December 2016. It aims to treat its customers better than other similar services and offer lower prices. Founded in Estonia 2013, Taxify is the second biggest European taxi application, active in 21 cities in 15 countries. People in Bratislava can currently order a taxi service via four mobile applications: Uber, Hopin, Liftago and Taxify.

Comparing the prices of each form of transport in Bratislava

Price	UberX	Liftago	Common taxi
Per 1 kilometre	€0.39	€0.70	€0.80
Starting rate	€1.20	€1.30	€1.50
Minimum fee	€2.00	€3.00	€3.90
From the airport to the centre	€7.00	€8.00	€10.00

- **BlaBlaCar:** BlaBlaCar is the Internet platform and the largest community for long-distance transport cooperation in the world. In the first year of BlaBlaCar's operation in Slovakia, customers were transported on 41,700 different routes throughout the country. Slovak people travel not only across Slovakia, but also internationally - most often on the route from the capital city to Prague or Vienna. Last year's results also confirm that passengers use the service for longer distances. The average length of the route last year was 317 km. The busiest seasons for drivers last year and co-drivers were a pre-Christmas week and a summer season. The reason is that before the Christmas holidays, public transport is overcrowded and it is impossible to travel without prior reservation, and during the summer, BlaBlaCar is popular for traveling to various kinds of summer festivals.
- **Airbnb:** The web-based service for rental accommodation Airbnb entered the Slovakian market in 2015. In February 2017, more than 2,000 accommodation offers were registered in the country. The number of Slovaks using the service in the past year grew by 143%. Most guests book stays in Bratislava, Košice and Piešťany. More than 44,000 visitors visited the capital last year, a year-on-year increase of 184%.

Legislation and technological tools provided

The Slovak government supports the development of the collaborative economy in accordance with EU laws and regulations. No collaborative platform has been banned or restricted by the government. However, there are efforts to align collaborative platforms with traditional service providers regarding taxation.

The progress of the technology, particularly the development of the Internet, mobile devices and digital platforms, have contributed towards informing Slovak people on the concept of sharing economy and facilitated their access to these services (digital platforms used by Airbnb, Uber, Taxify, BlaBlaCar, etc).

There is also reluctance regarding new technologies. Slovaks are not yet enthusiastic adopters of mobile apps. There are questions regarding the trustworthiness of new forms of service – and in the case of a shared economy, trust is crucial. Thus, many people are waiting for these services to be first tested by others.

Prior reports and research

Reports/articles with regard to the collaborative economy in Slovakia:

- <https://euractiv.sk/clanky/podnikanie-a-praca/slovenske-predsednictvo-prebera-iniciativu-v-otazke-zdielanej-ekonomiky/>
- <https://euractiv.sk/clanky/informacna-spolocnost/zakazovanie-zdielanej-ekonomiky-ma-byt-len-krajnym-riesenim/>
- <http://www.teraz.sk/ekonomika/ppellegrini-kolaborativnej-ekonomike/228394-clanok.html>
- <https://www.aktuality.sk/clanok/384550/zdielat-a-zarabat-v-digitalnej-europe/>
- <https://www.aktuality.sk/clanok/508063/co-je-to-zdielana-ekonomika/>
- <https://ekonomika.sme.sk/c/20360937/stvrtina-slovakov-cestuje-kazdy-den-vacsinou-za-pracou.html>
- <http://www.ubertaxi.sk/co-je-uber/>
- <https://www.pcrevue.sk/a/Zdielana-ekonomika--Je-stat-pripraveny-na-novu-formu-prijmov>
- <http://hnonline.sk/expert/898455-zdielana-vz-seda-ekonomika-stat-chce-skrotit-podnikatelov-ktori-nemaju-pravidla>
- <http://www.sharilo.com/ked-menej-znamena-viac-alebo-ako-meni-zdielana-ekonomika-svet>
- <https://aktualne.centrum.sk/slovensko/politika/zastupca-uberu-mame-7000-ziadosti-od-ludi-ktori-chcu-za-nas-jazdit.html>
- <http://www.iness.sk/sk/stranka/12573-Taxikari-hrozia-v-Bratislave-zablokovanim-dopravy-Sme>

SPAIN

The Sharing Economy is an economic and social model where agents temporarily share assets, goods and services which are in many cases underused, in exchange for money or other services, using online platforms.

Types and models

In Spain, the growth rate of the Sharing Economy seems unstoppable and it is being introduced in traditional sectors such as the manufacturing sector, the provision of professional and financial services and more substantially, in the tourism sector as well as in the accommodation and transport subsectors.

The sharing economy represents the latest trend that is taking place in collaborative tourism, specifically in the transport and accommodation sectors in Spain. This trend is not devoid of obstacles, due to the pressures that traditional competitors and public administrations are trying to place on it, due to its rapid development.

Even in the housing sector, the sharing economy is playing a role leading to the concept of “collaborative housing” (Nasarre, 2018): the collaborative economy model being applied to the funding, access and organisation of housing. There are initiatives in real estate crowdfunding and in many fields of the so-called “proptech”. Finally, there is an increasing interest in certain big cities in promoting co-housing (eg. through cooperatives), although with limited success. Due to housing market pressure, people are forced to co-live through room rental.

Key stakeholders and initiatives

The main stakeholders are the national and local governments, traditional companies, customers, employees, the young generation and new players.

In the case of Spain, the sharing economy emergence happened during the last financial crisis, which has reduced people’s buying power worldwide. However, little research has looked deeper into conceptual models and empirical analyses that would be useful to understand the antecedents, consequences and contingencies associated with the sharing economy in Spain. In line with that data, an insight into the key principles that drive and accelerate the growth of sharing economy markets and the principles that predict imminent failure is also important.

Currently, there are daily reports in the news about the main sharing economy companies like Airbnb, or Car2go and their operations in Spain among others. However, the information is merely descriptive, and what is lacking is a deep analysis. Some issues that require answers yet are (the list is not exhaustive):

1. What are the strategies, resources and capabilities deployed by companies in the sharing economy?;
2. What are the strategic responses from competitors?;
3. The diffusion and consequences of sharing economy companies regarding the market dynamic and performance;
4. The organisational design and behaviour;
5. The role of trust and ethics in the development of sharing-economy markets;
6. The relationships, changes and lessons for supply chain and accounting.
7. To what extent new technologies supporting disintermediation, such as blockchain, are playing (or will play) a role in the near future of the collaborative economy? Big companies are starting to tokenize their offers, the use of cryptocurrencies is increasing and smart contracts start to be developed.

Although sustainability and the environment have been some of the main points for the creation and involvement in the sharing economy, Barnes and Mattsson (2016) found that environmental concerns were considered of minor importance in this context. We do not have information about the role of sustainability principles in promoting sharing economy in Spain yet. This point is relevant, given the role of sustainability in tourism in order to build a long term social and responsible strategy for maintaining the natural, historical and cultural resources and heritage (Alonso-Almeida et al., 2015; Alonso-Almeida, 2013).

Legislation and technological tools provided

Finally, the sharing economy also raises questions regarding governance and social impact. A ‘Sharing Economy in Tourism’ roundtable took place in Madrid on March 23 2017 (information available in: http://aece.es/mesadebate_turismocolaborativo/), that stressed the lack of regulation. All stakeholders represented – academia, companies, public administrations, associations - asserted that regulation is the key critical point at this stage. However, there is still a lot of confusion about what regulation to implement. In addition, one perceived advantage of the sharing economy is that it could help solve some problems related to public good and social issues. Nevertheless, empirical research is very scarce yet. Other concerns are employment and working conditions in the sharing economy.

Although it is true that the collaborative economy lacks a holistic general legal framework in Spain, several legal initiatives exist already, creating a starting point for a legal framework to regulate collaborative economy initiatives, such as:

- court decisions that are limiting the activity of specific companies (e.g. the Uber case, which should be coupled with decisions coming from the European Court of Justice; BlaBlaCar, Cabify);
- court decisions that deal with the rights of “self-employed” workers in the collaborative economy (e.g. Deliveroo);

- administrative directives at local level limiting the number of residences that can be used as tourist accommodation through platforms (e.g. in Barcelona),; court decisions regarding the impact on multi-family buildings and in relation to the hosts' role as collaborators of the public administration (tax collection, registering their license number);
- Incoming taxation rules for collaborative economy.

Websites and apps seem to be the major types of technology used. Some examples of websites are **Lendi** - <http://lendiapp.com> (borrow anything from neighbors), **Yo no desperdicio** - <https://yonodesperdicio.org/?locale=es>. (to share surplus food) or **SocialCar** - <https://www.socialcar.com/en/> (to sell or rent private cars between individuals). Another example of popular mobile app of the collaborative economy is **Wallapop** (buy-sell marketplace of things).

Prior reports and research

Research articles:

- Alonso-Almeida, M.M.; Bremser, K. (2017). Sharing Economy and Tourism: Lights and Shadows. MIC 2017 Managing Global Economy, Venice, Italia. 24-27 de Mayo de 2017.
- Alonso-Almeida, M.M. (2017). Sharing Economy and Tourism in Spain; A descriptive approach. SHARING ECONOMY 2017 Collaborative consumption: current trends and visions in key economic areas for Germany and Southern Europe. Faro, Portugal. 3-4 de Mayo de 2017.
- Canigual, A. (2017). Hacia la ciudad colaborativa. *Revista de Estudios para el Desarrollo Social de la Comunicación*, (15), 176-193.
- Lambea-Llop, N. (2016), A policy approach to the impact of tourist dwellings in condominiums and neighbourhoods in Barcelona, *Urban Research & Practice*, DOI: 10.1080/17535069.2017.1250522.
- Miralles, I., Dentoni, D., & Pascucci, S. (2017). Understanding the organisation of sharing economy in agri-food systems: evidence from alternative food networks in Valencia. *Agriculture and Human Values*, 34(4), 833-854.
- Munoz, P., & Cohen, B. (2017). Mapping out the sharing economy: A configurational approach to sharing business modeling. *Technological Forecasting and Social Change*, 125, 21-37.
- Muñoz, P. J. (2016). El consumo colaborativo en España: experiencias relevantes y retos de futuro. *Revista CESCO de Derecho de Consumo*, (17), 62-75.
- Nasarre-Aznar, Sergio, (2018), "Collaborative housing and blockchain", *Administration*, vol. 66, no. 2 (2018), pp. 57–80.
- Nasarre-Aznar, Sergio (2018, 2), "Ownership at the stake (once again): housing, digital contents, animals and robots", *Property, Planning and Environmental Law (JPPEL)*, Vol. 10 Issue: 1, pp.69-86.
- Rodríguez-Antón, J. M., Alonso-Almeida, M. D. M., Rubio-Andrada, L., & Celemin

Pedroche, M. S. (2016). La economía colaborativa. Una aproximación al turismo colaborativo en España. CIRIEC-España, revista de economía pública, social y cooperativa, (88).

- Valenzuela, L. A. (2017). Nuevos modelos de economía compartida: Uber economy como plataforma virtual de prestación de servicios y su impacto en las relaciones laborales. Relaciones Laborales y Derecho del Empleo, 5(1).
- Simón, H., Lambea, N. and Garcia, RM., (2017) "Shared ownership and temporal ownership in Catalan law", International Journal of Law in the Built Environment, Vol. 9 Issue: 1.

Reports and web articles:

- The Gig Economy in Spain: From the Shadow to the Light <https://medium.com/switch-collective/the-gig-economy-in-spain-from-the-shadow-to-the-light-829e9d9a48cd> Regulatory approaches to the sharing economy (Zuloaga, D.) <https://iea.org.uk/wp-content/uploads/2016/07/Regulating%20the%20sharing%20economy%20Briefing%202016.pdf>
- Assessing the size and presence of the collaborative economy in Europe <https://publications.europa.eu/en/publication-detail/-/publication/2acb7619-b544-11e7-837e-01aa75ed71a1/language-en>
- Collaborative Consumption; Spain <http://www.collaborativeconsumption.com/tag/spain/>
- Sharing Spain <http://www.sharingespana.es/>

SWEDEN

In Sweden, **sharing economy** (*delningsekonomi*) is the most common term used in press, though this is typically primarily used to refer to the big platform companies, such as Airbnb and even on demand labour services like Uber. This is also the term that gets used most commonly in public sector efforts. There is broad interest in the collaborative economy in Sweden, with relatively intense academic research in the domain and with the government giving proper consideration to the issue as well. Among the bigger cities, it appears that Gothenburg and Malmö are more active on the local level than Stockholm. A key resource for learning more about the collaborative economy in Sweden is the thorough report, written by Dr. Karin Bradley (member of the COST Action): **Sharing economy – on the terms of the users:**

<http://www.regeringen.se/495f62/contentassets/82aabf7f731c4e18aaee3b8dc3621063/delningsekonomipaanvandarnasvillkorsou201726>. The report (in Swedish) includes an English summary. Here are some key quotes to provide more background on the state of the collaborative in Sweden:

“The sharing economy has been the object of great media interest in recent years. It has given rise to considerable debate and many questions. Several new enquiries and reports deal directly or indirectly with this type of economy. In simple terms, the sharing economy refers to that part of the economy in which private individuals, often via websites and mobile apps, can hire, hire out, exchange or loan resources from each other, such as machines, tools, vehicles, accommodation and labour. The number of platforms within the sharing economy has grown quickly. There are several predictions pointing to that this economy will grow considerably, not least in quantitative financial terms. However, the sharing economy is not a new phenomenon. Neighbours, friends and acquaintances have always lent each other tools, machinery and agricultural implements or helped each other out with services and favours of various kinds. The new factor is that websites and mobile apps now permit a more systematic sharing with a much wider circle of users than before.”

“The enquiry uses the term sharing economy to designate that part of the economy in which private individuals grant each other access to underused resources, property as well as services, both free of charge and in return for payment. This can be done with the aid of digital platforms or via analogue forums, but their common feature is that resources can be shared with users beyond one’s own circle of acquaintances. Examples of such platforms, whereby private individuals can come in contact with each other, include Airbnb and Couchsurfing, which mediate short term accommodation between private individuals in many countries via their websites.”

“The results show that less than about ten per cent of the population have used sharing economy services at some time during the last two years. Most of them used these services only occasionally. A clear majority, namely 80 per cent, of those who have participated in the sharing economy state that their experiences have been primarily positive. The most widely reported problems concerned unfriendly treatment, delays or nonappearance as well as problems with payment. Between six and 18 per cent of the group which experienced problems describe situations to which consumer legislation would be applied, if it had been applicable to the relationship in question. This means that, generalised across the population as a whole, approximately 0.3 per cent have experienced problems in the sharing economy of a type which, in contrast to aspects such as unfriendly treatment, can be countered or remedied by civil legislation.”

“The survey showed that the main reason for not using sharing economy services is simply that the respondents were unaware of their existence. Those who were aware of the availability of these services stated in the first place (83 per cent) that they did not need such services as the reason for not using them. Just under a fifth stated insecurity in relationships with private individuals and that they preferred professional counterparties as the reason for avoiding the sharing economy. The enquiry has shown that the sharing economy is still at an early stage in Sweden and that experience of its use among the population is still very limited. This applies particularly to difficulties and problems which may be countered by legislation.”

Types and models

In terms of examples of the collaborative economy in Sweden, it is first important to note that Sweden is a country that is characterised by unusually high levels of trust and also a place where **different structured forms of sharing and co-using have long been built into how things are operated and how people go about their everyday lives**. It is not at all unusual for apartment buildings to have shared laundry rooms (*tvättstuga*), communal rooms for social events, or even shared guest rooms that residents can use when they have visitors. On the city and neighbourhood level, similar things can be seen, for instance, regarding the popularity of libraries. This has an impact on how local forms of the collaborative are being brought in: for example, the city of Solna (close to Stockholm) is experimenting with incorporating citizen-led initiatives like the co-working concept Hoffice into the library.

Key stakeholders and initiatives

However, the term **collaborative economy** is more popular among those actively promoting and creating collaborative arrangements. Particularly noteworthy is **Ouishare Sweden**, perhaps the most active community working on the collaborative economy in Sweden. It is *“the local group in Sweden of the global community OuiShare. Our mission is to build and nurture a collaborative society by connecting people, organisations and ideas around fairness, openness and trust. OuiShare activities consist of building community, producing knowledge and incubating projects around the topics of communities and the collaborative economy (Kollaborativ Ekonomi på svenska), as well as offering support to individuals and organisations through professional services and education. Since 2011, we have been developing a framework that explains and brings together different phenomena into one coherent vision. The collaborative economy (den Kollaborativa Ekonomin på svenska) is defined as initiatives based on horizontal networks and participation of a community. It is built on “distributed power and trust within communities as opposed to centralized institutions” (R. Botsman), blurring the lines between producer and consumer. These communities meet and interact on online networks and peer-to-peer platforms, as well as in shared spaces such as fab-labs and co working spaces.”* OuiShare Sweden (<https://www.facebook.com/groups/OuiShareSweden/>) has a relatively active Facebook group.

Overall, it seems that initiatives that are not connected to a pre-existing structure (the housing association, the library...) have a harder time to flourish. This is true of commercial actors, too, where Airbnb hosting is, on one side, limited by what housing associations agree to permit tenants to do. As is common for civic initiatives, efforts such as the Hoffice network run the risk of relying too much on a few central volunteers which makes them more fragile than they might need to be. Technologically, there are local efforts such as the Buddler platform (<https://www.buddler.com/>) but it still seems common to rely on Facebook for organizing, too, such as in the case of Hoffice.

Legislation and technological tools provided

As an important recent example, in December 2016, the Swedish government decided to set up “a special enquiry to carry out a descriptive survey of various models that permit or facilitate transactions in which private persons sell, hire out, lend or give away material or financial resources, co-own or co-utilise such resources or offer services, analyse the roles of various users and their legal position in such transactions, determine whether the existing legislation is fit for purpose or whether there may be a need to make constitutional changes, both nationally and within the EU, specifically in matters relating to property law, the consumer rights sections of market law, product safety, inspection and dispute settlement as well as to determine whether there is a need for other measures designed to promote positive developments, for instance as regards information or cooperation between various players in society”.

To the degree that Uber is of interest here, it is worth noting that in the deregulated taxi market of Stockholm, the peer-to-peer version of the service (Uber POP, known in most countries as UberX) got banned and is no longer available. While one can still use Uber in the city, it now differs less from regular taxis, as the necessary permits for operating as a driver are the same.

Prior reports and research

- Dr Karin Bradley (member of the COST Action): **Sharing economy – on the terms of the users:**
http://www.regeringen.se/495f62/contentassets/82aabf7f731c4e18aaee3b8dc3621063/delnings_ekonomipaanvandarnasvillkorsou201726. The report (in Swedish) includes an English summary.

SWITZERLAND

A recent study from Deloitte (2015) illustrates the growth of the collaborative economy in Switzerland. The study divides the Swiss sharing economy into five areas: transport, accommodation, goods, services and financial services. Today, well-known sharing economy companies such as Airbnb and Uber are competing for customers with their traditional counterparts in accommodation and taxi industries. For example, a study led by the Valais Tourism Observatory in the summer of 2015 put Airbnb’s market share at 10-15% of the total hotel room supply in certain Swiss cantons (Deloitte 2015). This number has most likely increased since then. The study also found that 55% of Swiss consumers are willing to use sharing economy platforms, in contrast to 45% of the US consumers. However, the study also found significant regional differences within Switzerland: while in the French-speaking part of Switzerland (roughly 23% of the population), 65% of participants are in favour of sharing economy services, only 32% of consumers in the German-speaking parts (which represents

about 63% of the population). No data exists for the Italian-speaking or Romansch-speaking parts of the country (8% and 0.5% of the population, respectively). Despite these differences, Swiss consumers seem to be overall in agreement that the collaborative economy will lead to lower prices and a wider choice. The recent study of the sharing economy landscape in Switzerland (von Stokar et al. 2018) commissioned by Foundation for Technology Assessment (TA-SWISS), not only illustrates the particular opportunities and challenges of the sharing economy in the country, but also offers a set of strategies in order to maintain its positive dynamic development, and also provides actionable recommendations how to mitigate its potential negative consequences.

Types and models

Airbnb and Uber are successful in large parts of Switzerland (Deloitte 2015). In addition, an increasing number of start-ups have formed in the area (see e.g., Ingber & Jürgensen 2014). The most popular ones have already expanded their business abroad. For example, **Housetrip** from Lausanne, a Swiss equivalent of Airbnb, has become one of the largest platforms for renting places across Europe. It was recently acquired by Tripadvisor. **Sharoo**, a car-sharing start-up from Zurich, is considered a pioneer in the field of software development for vehicle sharing platforms (Deloitte 2015). **Mila.com**, a platform for matching tech-savvy individuals (both professionals and private persons) with consumers in need of tech assistance, has expanded to 150 European cities.

It seems that most of the Swiss sharing platforms adopt a classic model of revenue generation: retaining a transaction fee (as a per cent of the transaction value or using a fixed fee) each time they match a producer and a consumer. However, there are local grassroots initiatives that seem to be operating based on altruistic and communal values. For example, **pumpipumpe.ch**, an online service that provides a set of stickers for one's mailbox to let neighbours see what things they could borrow from that specific household. The service offers a search and a map interface to find available household items from close-by neighbours, though it does not specify how the sharing transaction should take place. There is no monetary compensation explicitly designed and endorsed by the platform.

Key stakeholders and initiatives

The main stakeholders in the Swiss collaborative economy are predominantly businesses (including start-ups) that establish online platforms for delivering goods and services to individuals. However, we have also observed occasionally federal (e.g., as in the promotion of **Mobility** car sharing through the federal rail services, SBB) and local governmental collaboration (e.g., as in **Publibike.ch**, a bike sharing initiative operated by the Swiss Post, which collaborates with municipalities in setting up bike rental services in several Swiss cities) within the ecosystem of the collaborative economy. Several grassroots initiatives and non-profit enterprises are also present - however, their role in overall ecosystem seems still small. In addition to abovementioned pumpipumpe.ch, an advocacy group called **sharecon.ch**

has promoted sharing economy initiatives in Switzerland (since 2013), and supports founders by providing networking opportunities with industry, policy-makers, and the society at large.

Large Swiss companies such as Migros (supermarkets), Mobiliar (insurance), Nestlé (food), SBB (rail) and Swisscom (telecommunication) have also realised the potential of the sharing economy (Deloitte 2015). The political framework for start-ups in Switzerland is relatively good, given the established infrastructure, a well-functioning labour market, high education standards and low regulatory hurdles. Nevertheless, experts identified several challenges when it comes to sustaining sharing economy start-ups: little financial support beyond the development of the initial idea (e.g. particularly when a product reaches the market), the relatively small size of the Swiss market, and high labour and production costs (Deloitte 2015).

With regard to policy, there seems to be no specific framework in place that regulates sharing economy business models. Some legal experts argue that many of the legal questions and uncertainties can be answered using existing laws and regulations (Deloitte 2015; von Stokar et al. 2018). Nevertheless, there are growing concerns (Deloitte 2015) from politicians and the general public about safety (for taxi services, e.g., via Uber) and hygiene standards (for room rentals, e.g., via Airbnb).

Legislation and technological tools

Overall, a large majority of Swiss consumers (63%) agrees that the collaborative economy in general offers a more sustainable way to use underutilised resources (Deloitte 2015). Nevertheless, we are not aware of any policies/mechanisms in place to secure its sustainable future. While we see growing governmental interest in supporting car sharing initiatives (e.g. Mobility), stronger incentives (e.g. tax breaks for the shared car use) and more active participation overall would be beneficial for supporting and promoting collaborative economy initiatives. In addition to that, only few non-profits operate in the Swiss sharing economy - most businesses in this area are for-profit. Furthermore, despite the historic importance of local communes in the Swiss society, only few community-based non-profit initiatives are active in the sharing economy sector.

Smartphones and online platforms are ubiquitously used by consumers and producers of the sharing economy services. An April 2017 study ranks Switzerland #3 in world-wide smartphone penetration (Newzoo 2017). Consequently, fielding online-based/mobile sharing services has a low entry barrier in Switzerland.

For example, Sharoo develops their own car-sharing software that allows finding and unlocking vehicles using consumers smartphones (Newly Swissed 2014). Similarly, the car sharing initiative from Luzern, Mobility.ch, uses RFID based readers to provide access to their car fleet. Due to the partnership with Swiss Federal Railways (SBB), customers can use the popular “SwissPass” card (which functions as a popular half-fare rail-card) to access any of the 2900 Mobility vehicles across the country.

Prior reports and research

In our summary above, we drew heavily on the 2015 Deloitte report and on a 2014 Neue Zürcher Zeitung newspaper article (Ingber and Jürgensen 2014, in German). The sharing community service sharely.ch prepared and published online an infographic of Swiss sharing economy services in November 2015, but this has since been removed; however, the infographic can still be found on their Twitter account (Sharely 2015). Ultimately, the recent study (von Stokar 2018) commissioned by TA-SWISS provides further details on the emerging landscape of the sharing economy in Switzerland.

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UNITED KINGDOM

Britain has a large stake in the collaborative/sharing economy, endorsed by the UK Government as a business opportunity (BIZ 2014). It is therefore more useful to think in terms of kinds of services (reflected in the headers), rather than individual platforms and projects. Below are listed services, each of has a different model of provision, financing and use of digital networks, as noted below each.

Regarding the collaborative economy, it also exists the extensive literature coming out of the UK, such as Nesta's work (www.nesta.org) and the library run by the Collaborative Economy Lab (<http://collaborativeeconomy.com>).

Types and models

Crowdfunding: Crowdfunder is UK's nearest equivalent to *Kickstarter*: a major rewards-based crowdfunding platform, which supports community enterprise, charitable donation and product generation. *Crowdfunder* focuses on social issues, partly organised by geographical location. This is counter-intuitive given the scaling potential of automated platforms, but works to grow audience for local activity. 'Crowdfunder Local' on the platform website features area-specific campaigns to show off campaigns, e.g. '*Crowdfund Somerset showcases the best crowdfunding projects in the county. If you have a community group, business, charity or other great idea then add your project today*'. The platform is very active in scouting for and helping to encourage both new projects and new partnerships. '*The team has taken an entrepreneurial approach to developing new partnerships*'. For instance, *Crowdfunder* works with several UK universities running micro-crowdfunding sites and provides coaching to people starting out on the platform. At time of writing, about £46M (~US\$40M) had been raised for projects across the UK (according to the website on 17/11/2017).

Microlibraries and sites of local exchange: The Lewisham microlibrary is on a main road in a former phone box in South London. It was adapted over the course of a week by a local resident. None of the original books remain, as they are regularly taken out, traded in and replaced by residents. Apart from a sign explaining what to do, the microlibrary just stands there, used and maintained by the neighborhood.

Funding model: Lewisham microlibrary is a one-off, paid for by local resident who did the work to transform it from a disused public phone box.

Digital: FB documentation of phone box transformation and occasional posts from FB page about books.

Men's sheds and shared workspaces: "Men's sheds" started in Australia as a forum to address men's wellbeing concerns, providing shared tools and support at carpentry and repair workshops. The sheds offer space to use craft skills to socially isolated older men. There is also a UK Men's Shed Association, funded by the Sainsbury Trusts.

Funding model: Lewisham's men's sheds were given a grant for set-up and receive modest subscription or pay-per-visit for users to support running costs.

Digital: The link on the *menssheds.org.uk* site goes to a general community page; very low use of digital tools for communication about the shed as (potential) members 'tend not to be reached that way'.

Commercial sharing economy services: *Patchwork* (www.patchworkpresent.com) is a digital business that supports groups of people buying a single collective present. An item, such as a bicycle, or series of elements is divided into small, manageably-priced bundles to buy, shown in a patchwork image on the site.

Funding model: informally crowd-funded £250k to build the business. The company takes 3% of all money passing through. Partners, such as Paypal, guarantee legitimacy.

Digital: The business collects gift money from anywhere through the website, though there is also a *Patchwork* store.

Timebanking: *Rushey Green Timebank* runs alongside a medical practice. People give an hour of time to someone and, in turn, can claim an hour from another person in the scheme. Numbers have grown continuously, so there is now a distributed model, with five hubs. The practice that it set up saw it as a remedy for issues not easily treatable, such as motivation and esteem. It has won awards for its work in community health and influenced the growth of other banks.

Funding model: a charity supported by local authority and other grants and given premises by the surgery. Time is banked and swapped (i.e. there is no voucher system).

Digital: a lively basic website shares news and events and offers a “Donate” button. Brokering between time-swappers is face-to-face, though they are exploring a digital tool.

Co-owned Assets: *The Ivy House community-asset pub* is the first pub in the UK to be listed as an Asset of Community Value and the first building in Britain to be bought for the community under the provisions of the Localism Act 2011, invoked in haste to avoid redevelopment as apartments.

Funding model: loans and government grants secured the building. The pub is a co-operative, run day-to-day by a professional manager, with 371 local shareholders who contributed to refurbishments sitting on its committee.

Digital: the pub used social media to organize its share offer. Its website links to Facebook (>3,000 followers), Twitter (>7,000 followers) and Instagram, with multiple email addresses to manage its celebrity status (‘probably the first Asset of Community Value ever’) for press, bookings and advice to other groups.

Community Gardening: *Breakspears Mews Community Garden* was a run-down fly-tipping area full of car repair businesses. Big houses look over it on one side, while, on the other, are council flats. People from both helped in its transition, led by a passionate local woman who still organizes the work.

Funding model: the local authority cleared the site and local conservation society support enabled it to start up and run.

Digital: a word press blog with information dated 2014 and only 4 followers; an email list alert about opening times.

Short Report on Scotland’s collaborative economy

Since the Scottish Independence Referendum in 2014, there have been various discussions by policy makers and the Scottish Government on how Scotland can become a more sustainable and independent region within UK, but also a key international player in innovation, technology, industry, science, business and economy. The Scottish digital economy, for

example, has already been recognised as the fastest growing outside London. There are more than 2,500 IT companies in Scotland, of which 1,100 are in Glasgow, Edinburgh and Dundee. The latter is been named as the “city of digital economy” in Scotland where in November 2016 the Dundee City Council published its Digital Strategy outlining that their main scope is to create a Digital Council by 2020 to help feed into the wider aim of building a Digital Scotland. Along these lines, the Scottish Government has looked at possible opportunities to develop a strong sharing economy presence in UK by taking advantage on the already successful story of the digital economy and social enterprise business environment in Scotland. It appears though that until very recently the discussion was limited to Airbnb and Uber sharing economy type of examples disregarding and/or excluding a more diverse collaborative economy where the user is in the forefront. In the Unusual Suspects Festival in 2015 in Glasgow, an event on social enterprise and innovation organised by Six (Social Innovation Exchange), it was evident that firstly, there was no much reference and/or information on collaborative economy (with the only exception of OuiShare London giving a short workshop on the subject) and secondly, there was a growing need and interest in finding a more sustainable and peer-to-peer economic model for bottom-up initiatives, as well as start-ups. The event demonstrated that there is still a lack of in-depth information on the collaborative economy and there were a limited number of best practices in Scotland. However, a year later, in the ShareLab day-event organised by Nesta (innovation foundation) in Dundee, that brought together over 200 policy makers, entrepreneurs, innovators and researchers to better understand how public services, civil society and the private sector can engage with, develop and harness collaborative platforms for good, there was also a great focus on collaborative economy. One of the key conclusions of the event was that the collaborative economy should go hand-in-hand with social innovation, and that Dundee as a small city is the perfect place to experiment and spark new forms of collaboration. According to the participants, Dundee offers the right environment to develop collaborative economy initiatives. For instance, Fabric Dundee (<http://creativedundee.com/fabric-dundee/>) and Creative Dundee Amps (<http://creativedundee.com/amps/>) are examples of how people can experiment together (and link-up things together) in the city. Fabric Dundee invited individuals in Dundee’s creative community to explore the city’s creative sector and feed into the city’s new creative strategy, whilst Amps kick-started a Community Ideas fund, where members can bid for collaborative projects and vote on who receives the funding. Nesta has also opened a Share Lab Fund to support ideas and initiatives that can show how collaborative platforms and models can support public services and deliver social impact – offering funds of between £10,000 and £40,000, plus non-financial support to stimulate experimentation and collaboration.

Following the massive growth – worldwide - of sharing economy platforms, in May 2017 the Scottish Government has appointed a specialist panel to review particularly the effects of short-term lets (e.g. Airbnb) on the Scottish housing market. This independent advisory panel, chaired by Helen Goulden, Executive Director of Nesta, got the task to report back to Ministers on collaborative platforms and the gig economy by the end of 2017. The Government has identified a number of key considerations for the panel to review, such as:

- How to ensure regulation is fit for purpose.
- How to protect and empower consumers and identify clear routes to redress.
- How to support Scotland's business base to compete in the evolving market.
- How to ensure the wider economic, social and community impacts are understood.

The purpose of the review is to provide advice, expertise and experience to on-going policy development on the collaborative economy. The review will also make recommendations to Scottish ministers on how Scotland can position itself to take advantage of the many opportunities of the collaborative economy and overcome any regulatory, economic and social challenges.

For the drafting of the review, the independent advisory panel asked the opinion of the public via an online questionnaire (<https://consult.scotland.gov.uk/digital-communications/collaborative-economy/>) on: regulation, peer-to-peer accommodation, taxation and workers' rights. More specifically, the questionnaire which was due on 29 May 2017, consisted of the following questions:

- What are the key opportunities that you see for the collaborative economy in Scotland?
- What are the key challenges that you see arising for the collaborative economy in Scotland?
- Are contributors (consumers, providers and businesses) to the collaborative economy suitably protected by existing legislation?
- Do you think that the collaborative economy is suitably regulated whilst still allowing competition and innovation to flourish? If not, what are the gaps?
- What do you think are the barriers which are constraining growth of the collaborative economy in Scotland?
- What role do you think government should play?
- Do you have any general comments about the collaborative economy?

To conclude, as the focus currently shifts to what a post-Brexit Scotland would be, the collaborative economy has been considered as an asset for Scottish economic growth. It is a matter to see what will come out from the questionnaire and subsequently the review of the Scottish Government's Independent Advisory Panel in late 2017.

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