Sharing Economy – Solutions for a Sustainable Future

Marta – Christina SUCIU
Bucharest University of Economic Studies, Bucharest, Romania
Romanian Academy, National Institute of Economic Research Costin Kiritescu, Romanian Academy of Scientists, Commission 9 for Economics, Law and Sociology
christina.suciu@economie.ase.ro

Ana – Maria BOCĂNEALĂ*
PhD candidate, Bucharest University of Economic Studies, Bucharest, Romania
**Corresponding author, anamaria.bocaneala@gmail.com*

Elvira-Alexandra GHERASIM
PhD candidate, Bucharest University of Economic Studies, Bucharest, Romania
gherasim.alexandra@gmail.com

Abstract. *The current interlinked crises (covid, war, earthquakes, global warming, dwindling resources), have accentuated the transition towards new forms of the economy that focus on sustainable development and the need for rapid action to counter the effects of crises. Digitization, digital platforms and new collaborative business models have shaped more environmentally and resource responsible behavior. Thus, the collaborative economy can be a solution for future sustainable development. This paper aims to explore the state of the collaborative economy based on quantitative data from four studies. In terms of research methodology, it includes qualitative research and a comparative analysis of global studies, complemented by the analysis of examples of good practice. The paper focuses on the effects of the collaborative economy, effects that will have an impact on sustainable development. The analysis also looks at Romania, where we have identified the proportion of citizens who have used collaborative platforms. The main purpose of the paper is to highlight some examples of best practices that can contribute to a major change among communities. The results of the study illustrate that the collaborative economy is changing the socio-economic model and presents new challenges for public authorities, which need to adapt and create an optimal space for its development and promotion. The collaborative economy creates new opportunities for all actors involved, e.g. it contributes to the creation of new jobs, the reduction of waste, the integration of people with disabilities into the labor market, leading to sustainable development.*

Keywords: sharing economy, collaborative economy, sustainable development, sustainable future

Introduction

The Covid-19 pandemic and all other interconnected crises accentuated the transition to new forms of the economy. Also, the premise was created for a new economic vision that focuses on Sustainable Development and the need to adopt rapid measures to counteract the effects of the current crises. Digitization, digital platforms and new collaborative business models have shaped a new human and consumer behavior, more responsible for the environment and for the resources used. This type of behavior can be a promising start to finding new solutions for future sustainable development.

The European Union through the NextGeneration EU (NGEU) program supports countries after the pandemic has passed. The intention of the development of the programme is to

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help EU countries transform themselves into a more resilient, innovative, digital and sustainable economy (European Union, 2022). The first target of the EU NextGeneration programme that by 2050 the EU will not produce more greenhouse gases than it absorbs. The second objective is to stimulate innovation by promoting the widespread use of digital technologies in European economies, societies and businesses. Therefore, the two main areas of interest are digital transformation and ecological transition. Referring to the current interconnected crises, starting from the covid crisis, we also mention the invasion of Ukraine by Russia in February 2022, invasion that dealt a new blow to the world economy. A Deloitte 2023 report, notes that the conflict in Ukraine disrupted global supply chains, which drove increased market volatility, caused energy price increases and triggered high inflation, which caused financial and economic uncertainty indicators to rise again (Deloitte Insights, 2023).

Another crisis affecting us is the climate crisis. At EU level, various policies have been undertaken, thus member countries must reduce greenhouse gas emissions by at least 55% by 2030, while the EU aims to be climate neutral by 2050 (European Commission, 2021).

Therefore, in the current context, European companies have to face an increasingly complex environment, marked by uncertainties and disruptions. At the same time, inflation is high at an annual rate of 7.1% in the EU (May 2023) (Eurostat, 2023), but the EU will most likely avoid a recession in 2023 and 2024, as GDP is expected to grow by 1.0% and 1.7% respectively (European Commission, 2023).

In terms of the collaborative economy, this form of economy can respond to the new challenges of The Next Generation program related to digitization and the ecological transition. The collaborative economy, also called the sharing economy, is a peer-to-peer economy and, is based on the sharing or exchange of goods, services or knowledge between individuals. These exchanges can be with money, or without monetary exchange (donations, bartering, volunteering), based on digital platforms. The collaborative economy changes the socio-economic model and presents new challenges for public authorities, which must adapt and create an optimal space for the development and promotion of the collaborative economy. In this regard, the question arises whether the collaborative economy can be a solution for Sustainable Development. To answer these questions, examples of best practices in the field of the collaborative economy have been identified. The research aims to make a comparative analysis of some examples of good collaborative practices and then issue some suggestions for the Romanian business environment. The collaborative economy creates new opportunities for all actors involved, for example, it contributes to the creation of new jobs and the integration of people with disabilities into the labor market, leading to sustainable development.

Literature review

The collaborative/sharing economy covers several sectors, is characterized by a wide variety of business models, each of which has its own market characteristics. However, a common element in most business models is the use of underutilized assets to extract economic benefits (Petropoulos, Georgios (2017)). In the collaborative economy, digital platforms are used to connect people who want to share goods and services. For example, instead of buying an electric screwdriver that you only need for 10 minutes, you can rent one from someone else. Thus, collaborative economy platforms can help identify to those who are willing to offer the electric screwdriver and initiate the transaction. If the consumer has a preference for a service/product with certain technical characteristics, it will be directed by the platform to the most suitable services / products. Therefore, digitization and collaborative platforms facilitate transactions between different users, this contributing to a better allocation of resources and giving the value of underutilized assets. On the other hand, the collaborative economy is seen as a new force within the global economy, the beginning of a broader change in the economy (Stokes, K., Clarence, E. and all, 2014). It's a new kind of economy facilitated by technology. Step-change came from IT technology the Internet has made it much easier for people to do connect with each other and coordinate/sharing their activities. In others, the internet allows people to use resources that would otherwise remain unused. At the heart of the new form of economy is the idea of increasing collaboration between people, learning new ways of consumption, learning from others, sharing experiences with others. Researchers see collaborative economics as the form of economics that promotes exchanges that do not lead to transfer of ownership and rather facilitates access to the property (Curtis, S., Lehner, M., 2019). On the other hand, some studies reveal that the collaborative economy is best thought of as a zoom lens, providing a transformative perspective on the social and economic environment (Stokes, K., Clarence, E. and all, 2014).The application of the principles of collaborative economics is reflected in making smarter use of physical resources, skills and knowledge.

In recent years, in Europe, economic collaboration has experienced rapid growth and development, because this form of economy offers new opportunities for consumers. These opportunities can be marketed in more options, lower prices, and wider range of products/services, which contributes to the creation of the economic economy to the creation of jobs Europe. In the European agenda for Collaborative Economy published since 2016, the European Commission has announced the permanent review of the evolution in Europe collaborative economy (European Commission, 2018). According to Flash Eurobarometer 467, conducted in April 2018, almost one smart Center Europe no used the services offered through collaboration platforms, especially in the accommodation and transport sector. The Flash Eurobarometer shows an increase in the proportion of those who used the services offered through collaborative platforms (respectively 23% in 2018 compared to 17% in 2016) (European commission, 2018.) Basic principles of the collaborative economy (Business Journal, 2018) include: - unused value is lost value, - waste as raw material, - access not property, transparent and free Information, - trust and reciprocity, - urban density favors collaboration.

Rachel Botsman and Roo Rogers in the book What's Mine Is Yours: The Rise of Collaborative Consumption, herald the arrival of this new economic paradigm (Stokes, K., Clarence, E. and all, 2014). As we consume more than ever before, the collaborative economy is reviving traditional behaviors, such as bartering, sharing, through technology allowing exchanges to take place on a large scale. The collaborative economy is an economic model where use replaces ownership; by promoting the use of goods rather than owning them and by raising awareness of the underuse of certain goods and promoting their use. Édouard Dumortier- Co-founder of AlloVoisins mentioned in the year 2021 that the Health Crisis will accelerate the development of the collaborative economy, which will have a considerable impact on the economic, fiscal, social and societal spheres (Dumortier. E., 2021). On the other hand, the collaborative economy is a type of economy that supports sustainable local development (FengSheng Chien, 2022), which can be a solution for global sustainable development. The collaborative economy is also based on the principles of sustainable development, i.e. resource efficiency and environmental care. Thus, at both EU and national level, the implementation of activities on local and regional community development is a priority (European Parliament, 2023). Some authors, mention that collaborative economy holds the potential to contribute to sustainable development (Tetrevova & Kolmasova, 2021). Thus, concluding the results of the above authors' research, the collaborative economy, through its means, can represent an accumulation of solutions for future sustainable development. The collaborative economy is a solution for communities to develop sustainably, to develop trust between people, the desire to help each other, to support each other.

Methodology

To achieve the main goal of this work, we used a qualitative methodology. According to (Jemielniak, Ciesielska, 2018), qualitative research has a long and rich history in thematic analyses, especially for the case of our research, research based on International Studies in the field of Collaborative Economy. Thus, we used qualitative research conducted globally, such as European Union reports (Flash Eurobarometer 467), ING International Survey symbolically entitled What's mine is yours – for a price. Rapid growth tipped for the sharing economy and Sharing Economy Index 2021 and 2022 respectively. We selected these global reports taking into account the quality of the data and the relevance of the samples used.

For this paper we focused on the collaborative economy as a solution for Sustainable Development, analyzing at the end examples of good practices. Our paper first sought the theoretical and methodological context based on an analysis of the specialized literature. Then we investigated the international practical expertise starting from the aforementioned global reports. The next step was to select and analyze examples of best practices in the collaborative economy. These examples have been selected to represent role models for sustainable development through the means of the collaborative economy. Specifically, the analysis unit in this paper considered sustainable good practice models. To this end, we used four international reports, analyzing the situation of the collaborative economy and concluding with examples of good practices.

Results and discussions

In our research we started from the report of the European Unions, Flash Eurobarometer 467- The use of the collaborative economy. This survey was conducted in the 28 member states of the European Union in April 2018. The interviewing method used was by telephone, thus, about 26,544 respondents responded to the survey. The study reveals that regarding the frequency of use of the services offered by collaborative platforms, almost a quarter of Europeans has used the services offered through collaborative platforms (23%). About one in ten used such services once or a few times (9%) or occasionally (i.e. once every few months) (10%), and 4% use such platforms regularly (i.e. once a month or more often).

The average of those who used the services offered through collaboration platforms in all 28 Member States is 23%. As can be seen in Figure 1, there are significant variations between countries, with 40% of respondents in Latvia having used collaborative platforms, followed by 35% in Malta and 34% in Ireland. In Romania the percentage is 23%, as can be seen, our country, by the value recorded, is at the level of the average of EU countries. At the other end, the lowest proportions of users are observed in Bulgaria and Portugal both having the value of 17%.

On the other hand, the study reveals that there are certain socio-demographic differences in the proportions of those who have used collaboration platforms. Thus, it can be seen that the age of respondents who used collaborative platforms is between 15 and 24 years (37%) and between 25 and 39 years (38%), and those aged over 55 years held a percentage of 11%. Thus, it can be concluded, that the use of collaborative platforms is more attractive for respondents aged

15 -39. This may be due to the influence of IT technology in the lives of young people and their desire to be more connected with technology.

The study reveals that over a third of respondents (34%) living in large cities has used collaborative platforms, compared to 19% of those living in rural areas.

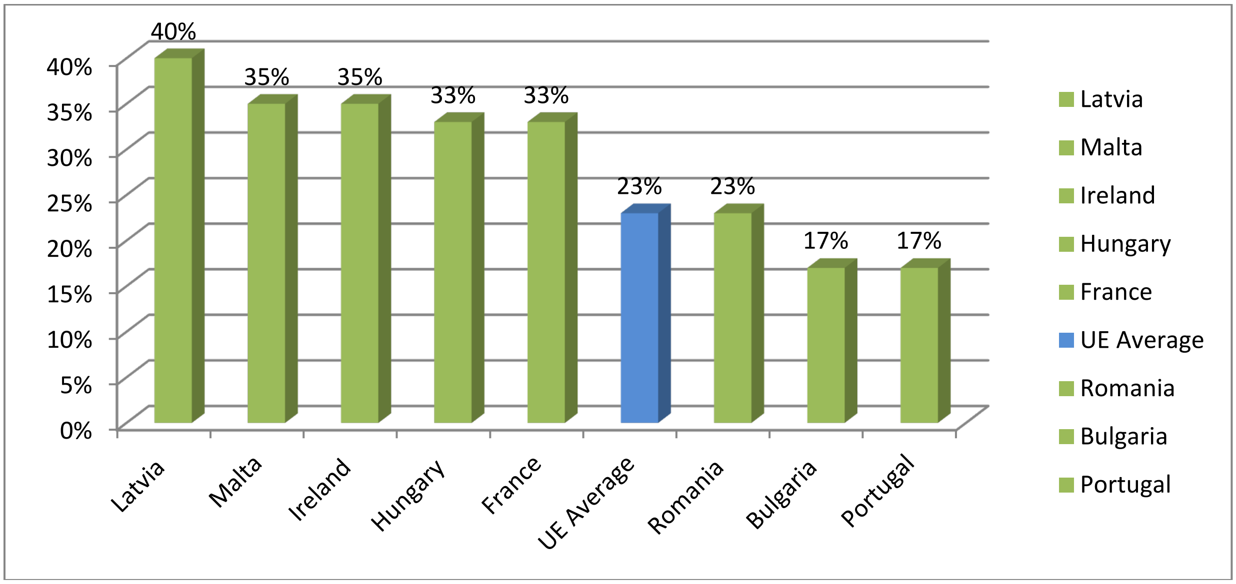

Figure 1. Percentage of those who have used collaborative platforms in EU countries

Source: designed by authors based on data from the Flash Eurobarometer 467.

Regarding the services contacted through collaborative platforms, over half of the services were in the accommodation sectors (57%) and, in second place were transport Services (51%). 33% of respondents used collaborative platforms to access food-related services and 14% did so to access household services. Therefore, the most frequently used services, through collaboration platforms, were represented by the accommodation and transport sectors, Figure 2.

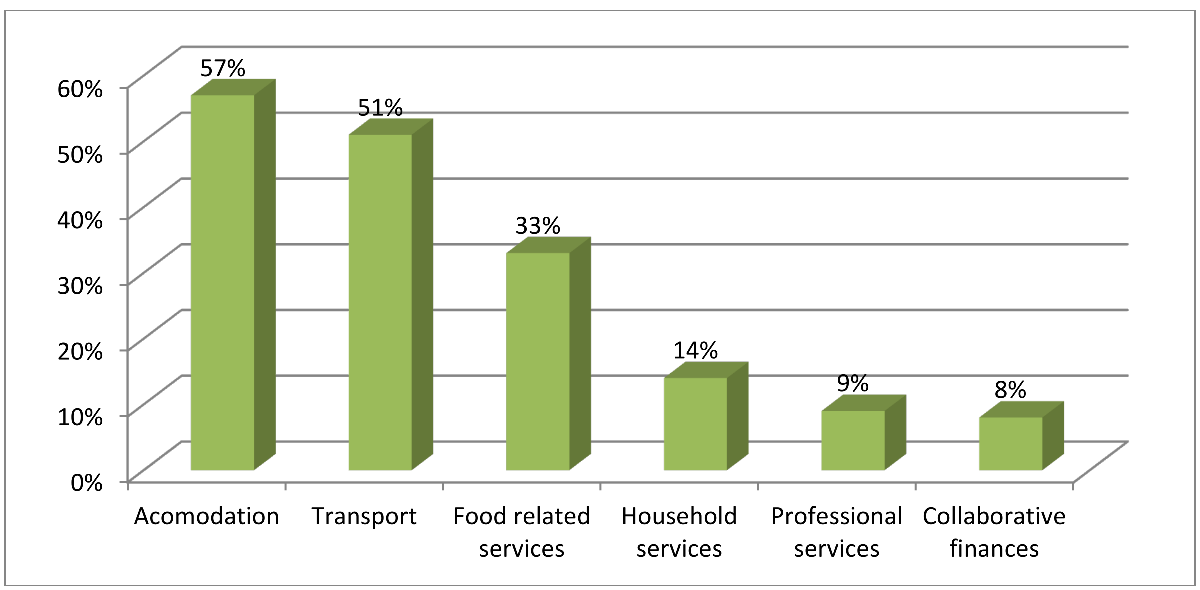

Figure 2. Percentage of those who have used collaborative platforms in EU countries

Source: designed by authors based on data from the Flash Eurobarometer 467.

In terms of socio-demographic differences, men are more likely than women to use services provided through collaborative platforms in the Transport Sector (54% versus 47%), but are less likely to have used services in the accommodation sector (53% versus 60%).

In this study, the advantages/disadvantages of using collaborative platforms were also analyzed. Among the advantages we mention: quick access to services, the possibility of feedback from users, services at lower prices, the existence of services that are not available through traditional channels, the possibility of interacting with various people, the possibility of exchanging services instead of paying for services - bartering.

The second study analyzed is the ING International survey: What's mine is yours – for a price. Rapid growth tipped for the sharing economy. This survey was conducted by Ipsos between January 16 and February 2, 2015, using internet-based surveys. Thus, 15 countries were analyzed, about 1000 respondents from each country except Luxembourg where there were 500 and the total sample size of this being 14,829 respondents. The ING study reveals that the concept of collaborative economy is quite well known. About a third of people in Europe have heard of the collaborative economy. Thus, in Figure 3 we can see a high of 52% in Turkey and the lows of the survey of 17% in Australia and 19% in Austria. In Romania, a quarter of respondents (25%) know the concept of collaborative economy.

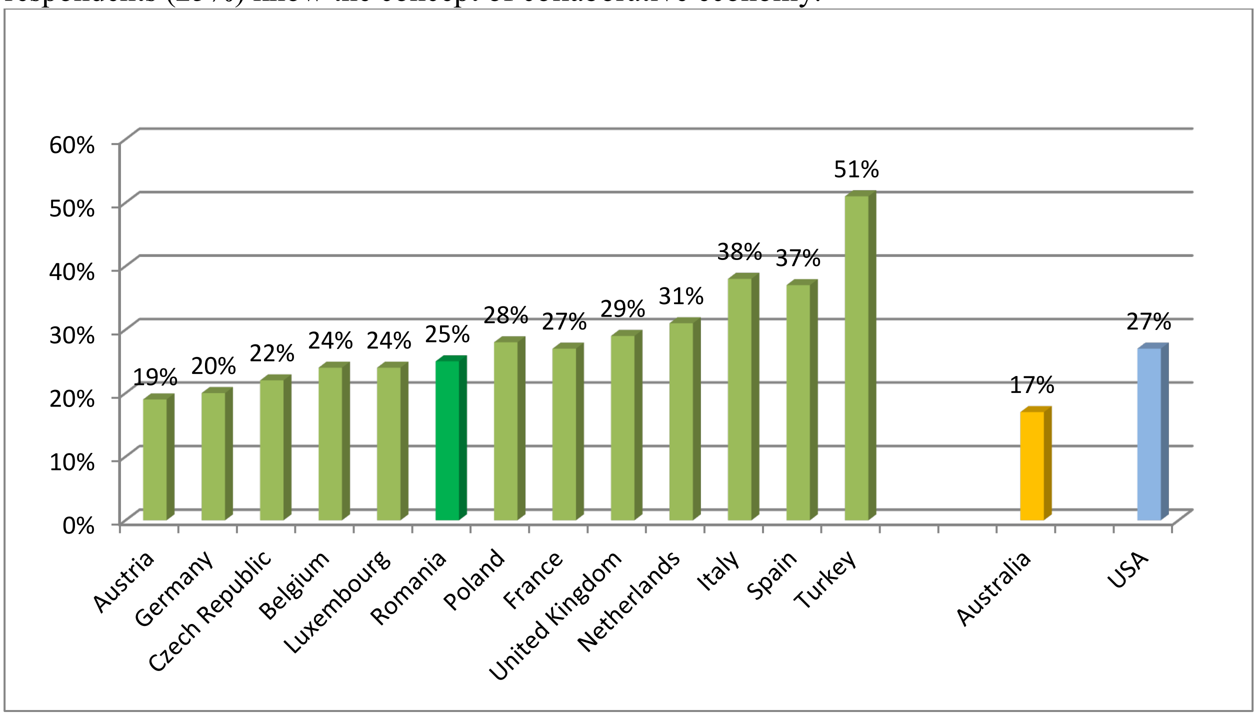

Figure 3. Percentage of those who have heard of the concept of collaborative economy

Source: designed by authors based on data from the ING International survey: What's mine is yours – for a price.

In socio-demographic terms, the ING study reveals that under-35s believe accessing collaborative platform services will increase over the next 12 months. In the age groups over 55 the proportion of those who intend to use the collaborative economy decreases. An important aspect of the ING study is the identification of factors that influence respondents to access collaborative platforms. Among these factors we mention: the possibility of saving money, caring for the environment, an easy way to make extra money, contribute to building communities and relationships. The possibility of saving money strongly influences the participation in the collaborative economy both in Europe (58%) , the USA (55%) and in Australia (45%).in the same way, the opinion that the collaborative economy is beneficial, and Australia 40%. Building communities and relationships – is less attractive in most countries, but occupies an important place in Turkey 65%, Poland 59% and Italy 58%. In Romania, the proportion of those who believe that accessing collaborative platforms can save money is 49%, caring for the environment 42% and building communities 43%.

In addition to ranking some of the world's most vibrant cities, the Sharing Economy Index, 2021–2022 serves as a useful resource for consumers of the services offered by the sharing economy. Ride-hailing services, apartment sharing services, e-scooters, carpooling, vehicle sharing/rental gym sharing applications, and rapid delivery apps are all included in the Sharing Economy Index. The top 10 vibrant cities in 2021 and 2022 in the world are represented in Table1. It can be seen that the top 3 friendliest cities in the world with the collaborative economy were the same in 2021 and 2022: Tallinn, Tbilisi and San Paulo.

Table 1. Top 10 vibrant cities in 2021 and 2022 in the world

No.	Country	City	Country	City
	2022		2021	
1	Estonia	Tallinn	Estonia	Tallinn
2	Georgia	Tbilisi	Georgia	Tbilisi
3	Brazil	Sao Paulo	Brazil	Sao Paulo
4	Argentina	Buenos Aires	Latvia	Riga
5	Poland	Warsaw	Lithuania	Vilnius
6	Ukraine	Kyiv	Poland	Warsaw
7	Mexico	Mexico City	Ukraine	Kyiv
8	Germany	Munich	Mexico	Mexico City
9	Portugal	Lisbon	Norway	Oslo
10	Germany	Hamburg	Sweden	Stockholm

Source: Designed by authors based on Sharing Economy Index 2021-2022.

Tallinn remains the friendliest city in terms of the collaborative economy. What has helped to keep it at the top of the rankings is its openness to e-scooters and outstanding innovation in the digital space. Estonia is already well known around the world for the massive development of the digital space, for example, there is a carpooling app designed exclusively for children. Estonia's high ranking reinforces our argument that the collaborative economy can be a solution for sustainable development through innovation in technology, and consumer freedom of choice and care for the environment. In 2022, Bucharest-Romania ranked 13th, after Hamburg-Germany and Rome-Italy, and in 2021 Bucharest was 20th. The city Sharing Economy Index provides a compelling source of information on the myriad ways your vacation in a particular city can be more enjoyable. So, the index helps consumers see which cities have managed to preserve the collaborative economy during the pandemic and also provides a useful guide to various services globally. The indicators underlying the assessment of cities in the index refer to ride-hailing services (availability, access, taxation). A city can get an additional 5 points if carpooling apps are available. The second indicator followed: Flat-sharing services (availability, availability throughout the year, access to the service and taxation of the service). The third indicator is E-scooters (availability). Another indicator: Car sharing apps (availability). A city gets 15 additional points if a car sharing system is applied between private individuals. Gym sharing: a city gets an additional 10 points if Gym-sharing apps are available. Ultrafast food delivery-the city receives an additional 15 points if ultrafast food delivery is available.

Regarding examples of best practices in the field of collaborative economy, as can be seen in Table 2, we have selected examples from the sharing economy that can represent solutions for sustainable future development. The first step in selecting examples of good practices was to identify examples of good practices in the top 3 cities of the sharing economy Index 2021-2022: Tallinn, Tbilisi and San Paulo. The second step of identifying the best practice examples within " Maximizing the Gains from Sharing: Best Practice Guide for Policy Makers and Other Stakeholders", CSA Group Research, 2019.

Table 2. Exemples of good practices

No.	City	Good practices
1.	Tallinn	MeetnGreetMe-online platform for offline localized concierge services and travel management offered by local people. Through the platform, international tourists get in touch with local people and can ask them to become concierge and personal companions in a visited city.
2.	Tbilisi	www.aicar.ge-AICAR-the first car-sharing service in Georgia with electric cars. AiCar's mission is to provide residents and guests of Georgia with the most environmentally friendly, innovative and comfortable alternative to taxi or personal car. Cars with keys in the lock are parked all over the city waiting for their customers.
3.	San Paulo	Coliiv - is the largest rental platform in Brazil that puts people in touch to live together. Coliving offers intimacy combined with social interaction.
4.	Portland, Oregon	Conducted a pilot project of adaptive bike rental/ bike-sharing. The project had as a starting point a set of interviews with cyclists with disabilities for a good understand their needs
5.	Denver	Car-sharing services must place at least two vehicles in an "opportunity zone". The opportunity zone in this sense is an area where people who have low incomes live, at least 30% of the population lives below the poverty line.
6.	Innisfil	In order to ensure the accessibility of Uber services to residents unable to access the app on smartphones-such as the elderly and those on low incomes, came up with the solution, that these people turn to local government employees, and they help them with the booking of the trip.
7.	San Francisco	In its city development strategy, indicates that newly established residential complexes should provide parking spaces for car-sharing.
8.	Toronto	The online community partners in Green Project. This community allows partners to exchange materials, waste. Through this collaboration, the amount of waste was reduced by diverting materials from landfills and reducing costs.
9.	Singapore	The social network was founded: "Block Pooling" which allows people to offer and/or request services, ask for advice, share experiences.
10.	Göteborg	After a partnership with Smarta Kartana, the smart Map has developed a map (the Smart Map) covering all the collaboration initiatives in the city. Here, citizens can rent, lend, share, exchange and give.
11.	Montreal's Rosemont	Neighborhood allows residents to rent their parking spaces, make their homes and garages available for storage, as well as backyards for gardening.
12.	Montevideo in Uruguay	has made several maps that facilitate bicycle travel

Source: Designed by authors based on date from: CSA Group Research- Best Practice Guide.

Conclusion

We believe that now, more than ever, after the complex and diverse effects of the interconnected crises that affect us now, the business environment and people in general is appropriate to approach with more interest the solutions and advantages that derive from the development of the collaborative economy. It is worth noting the progress that has been made in recent years in terms of the collaborative economy: for example, in Europe, the collaborative economy represented transactions worth 28 billion euros in 2016, a figure that has doubled in a year and, according to estimates, by 2025, it could reach 572 billion euros. Through numerous examples of good practice, it has been demonstrated that the collaborative economy can be a solution for future sustainable development. Research shows that younger employees, and those with higher levels of education and living in urban areas, are more open to accessing collaborative platforms. This suggests that the collaborative economy may be growing as familiarity with this field becomes more widespread and more people of different socio-cultural backgrounds turn their knowledge into action. Among the advantages of collaborative platforms we mention: efficiency of available resources, reduction of pollution and expenses, and the collaborative economy promotes and prioritizes low prices, relationships and collaboration/sharing play an extremely important role, changing the way of consumption and encouraging inclusion, forming communities and caring for the environment. Interested in being prepared for the complex challenges of our turbulent times, which are expected to amplify in the future, we believe that we must anticipate these trends at least for years to come. Thus, we tried to highlight the current situation of the collaborative economy - analyzed on the basis of International Studies and then we analyzed some examples of good practices, examples that would be helpful for those who want to get involved in such activities.

Political implications: the collaborative economy changes the socio-economic model and presents new challenges for public authorities, which must adapt and create an optimal space for the development and promotion of the collaborative economy. In this respect, local authorities are indicated that governments and local authorities, through the means of the collaborative economy to stimulate collaboration between citizens by creating their own platforms, which will allow more efficient use of resources, creating partnerships and encouraging the emergence of the collaborative economy at the local level. Thus, cooperation and collaboration can be useful tools in overcoming current crises, and the collaborative economy represents a solution for communities to develop sustainably, to develop trust between people, the desire to be useful to each other, to support each other.

Further implications and limitations

Our analysis reveals that there is an extensive need for additional academic debates with practical applications in the field of the collaborative economy, especially at the level of our country. We have limited our research to a comparative exploration of international studies presenting the situation of the collaborative economy, but in the future it is necessary to conduct interdisciplinary studies regarding the collaborative economy, access to it, taxation policies. The research questions regarding the existence of cultural, societal or behavioral barriers for the development of the collaborative economy in Romania need to be further explored.

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