SHOWCASING DIGITIZATION AS THE BACKBONE OF KNOWLEDGE AND SHARING ECONOMY IN ROMANIA

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***Abstract**. By means of a case study, we are showcasing how digitization has reshaped the transportation industry concerning renting-like services. The evolution of mobility services starts from taxis, car renting, goes to ride-sharing and, ultimately, arrives at car-sharing services. The present paper will introduce an instance of car-sharing and renting service which is called Pony Car Sharing. Car sharing, house-sharing, equipment-sharing are all instruments of the sharing/network and collaborative economy, which has started to gain academic and practice traction, but all this would not have been possible unless for the existence of the Internet. The Internet is constantly empowering consumers all over the world by making them more knowledgeable and granting them access to make more informed decisions. The second part of the paper uses qualitative research and is dedicated to a case study that analyses Pony Car Sharing company, in the context of sharing and knowledge economy, from the business model canvas perspective: key partners, key activities, value proposition, customer relationship, channels, customer segments, revenue streams and costs. The findings reveal that there is no legislative support for the sharing economy and that implementing such a business model requires substantial efforts from the business owner. Nevertheless, investments in educating the customers are not expendable.*

***Keywords**: digitization; knowledge economy; sharing economy; digital skills; business; impact.*

Introduction and literature review

According to Jansen (2017, p.2), we are dealing with a-yet-to-come Golden Age of Information that is characterized by the cheap (and sometimes, even free) knowledge transfers, need of customers to belong to (virtual) communities (serial networkers) and increased individualization embedded in the high customization demanded by customers. Ultimately, these elements create altogether "a fertile ground for unlimited innovation", an innovation which can ideate economic, social, environmental and political types of value (Paunescu, 2014). On the other hand, in order to ensure there is a corresponding reaction to such requirements, organizations need to assimilate to their business strategies concepts reflecting authenticity, involvement, and innovation. The new emerging business models will reflect the use of non-linear intangibles giving rise to new thinking models and patterns (Bratianu, 2009, 2017a, 2017b, 2018).

Therefore, this tech breakthrough results in the redesign of organizational processes and structures that call for brand-new strategies to exploit other sources of competitive edge a company might possess. This paradigm shift is questioning the way current

businesses are being conducted and advances the adoption of new business models for ensuring sustainability. Empirically speaking, the importance of business models overrides the importance of industry classification indicators providing more reliable financial forecasts (Weill & Ross, 2004). Business models, beyond representing a useful tool for investors, lenders and other stakeholders, can be used by companies to provide insights on the results of IT applications (Hedman & Kalling, 2003) and to leverage technology in order to derive economic value (Chesbrough & Rosenbloom, 2002; Chesbrough, 2010). Hadzimustafa (2011) posits that higher levels of economic development can be attained with the involvement of highly qualified personnel and efficient technology transfers in the context of enhanced knowledge generation in both commercial companies, NGOs and umbrella organizations (Zbuchea et al., 2017, 2018). In the same vein, Johnson et al. (2008) investigate how different industries can be reshaped by new business models and stimulate growth.

We are witnessing a new era in which products and services come to be widely distributed via multiple channels. The network economy, as well as the knowledge economy, resorts to intangible resources such as knowledge and the emotional knowledge (Bratianu & Orzea, 2013) to find solutions to different problems, and transforms them into smart products and processes that require efficient use of resources and therefore increased sustainability.

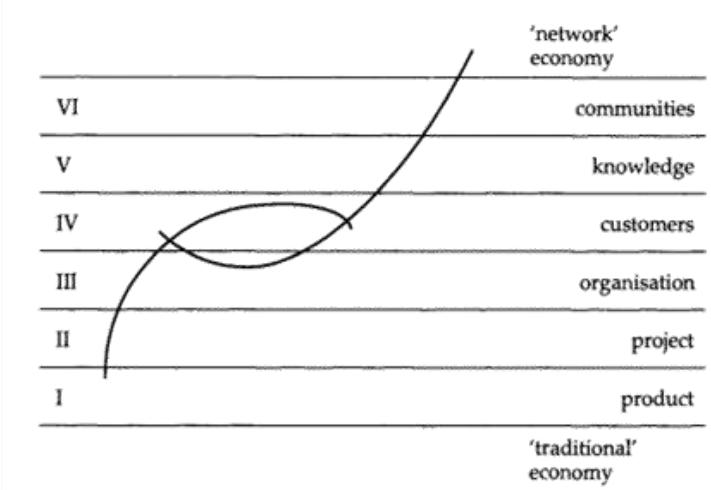

Figure 1. Sigmoid-curve
(Source: Jansen, 2017, p.10)

In order for companies to maintain competitiveness on the local, regional and global market, Jansen (2017) has come up with Sigmoid curve tool (from traditional to "network economy") (Figure 1) to assess the adequateness of companies' current business models that can be found at the interplay of suppliers, customers and network partners.

Knowledge economy consists of the creation, distribution, and use of knowledge and information (OECD, 1996), and it represents one of the leading sources of wealth establishment (Vesela & Klimova, 2014). Powell and Snellman (2004) regard knowledge economy as "production and services based on knowledge-intensive activities that contribute to an accelerated pace of technical and scientific advance, as well as rapid

obsolescence" (p. 199). As opposed to traditional economy, the knowledge economy is characterized by a higher emphasis being placed of the intellectual capabilities than on tangible resources (Bratianu, 2011; Hadad, 2017a, 2017b, 2017c, 2018; Bejinaru & Iordache, 2011). Knowledge is a strategic resource (Bolisani & Bratianu, 2017) that plays an extremely important role in the life of developing countries (such as the case of Romania) and is contributing to the improvement of the local economy (Dima et al., 2018) inasmuch as innovative clusters can be a solution to the economic development of the same category of countries (Dan, 2011, 2012).

There are four components/pillars that underlay the knowledge economy: 1) An economic incentive and institutional regime (EIR) that provides good economic policies and institutions that allow for efficient mobilization and allocation of resources and stimulate creativity and incentives for the efficient creation, dissemination, and use of existing knowledge; 2) Educated and skilled workers who can continuously upgrade and adapt their skills to efficiently create and use knowledge; 3) An effective innovation system of firms, research centers, universities, consultants, and other organizations that can keep up with the knowledge revolution and tap into the growing stock of global knowledge and assimilate and adapt it to local needs; 4) A modern and adequate information infrastructure that can facilitate the effective communication, dissemination, and processing of information and knowledge (ICT) (Chen & Dahlman, 2005; World Bank, 2009, 2012). According to Tapscott (2014), the knowledge economy is a digital economy.

Now, that Digitization has become part of everyone's life and digital technology has altered most fields of activity and industries (Cao et al., 2018) such as transportation (Uber, Taxify), communication (all sorts of messenger applications and social media platforms), accommodation (Airbnb), medicine (telemedicine), production (3D printing), etc., it is clear that the tech disruption/destruction might have started from the very intersection of mobile phones, personal computers, and the Internet (Topol, 2013). One byproduct of digitization is the concept of a shared economy. According to World Economic Forum (2018), sharing economy is inviting economic actors (companies) to reassess and rethink their businesses and revenue models: focus on access rather than on ownership, design and turn products and services into actual experiences, and cater to the hyperpersonalisation need of the customer. As every new concept, sharing economy finds itself at the crossroads from a legal standpoint since very few countries have specially designed laws to foster it (Demailly & Novel, 2014). A crucial role in harnessing the sharing economy is played by the public authorities that, next to practitioners and researchers, can identify the most viable models and design methods to support them through: a) enhanced visibility and communication campaigns; b) fundraising and incubators; c) adapting regulations to embed new models (idem); d) implement best practices.

Research methodology

The present paper employs mainly qualitative research. The first part sets the theoretical ground for the knowledge economy, sharing economy and digitization, whereas the second part showcases how a 21st-century car sharing rental company works. The main objective of the paper was to illustrate how a company works within a newly established framework and which are the challenges it faces. We employed qualitative research since the phenomenon that is being investigated is a very recent

one and there is not enough available data in order to measure its spread and conduct quantitative research. Therefore we opted for an in-depth analysis of a company that acts in the sharing and knowledge economy in order to gain more insight on how such a company works, which are the challenges it faced throughout its existence and illustrate it business model through the lenses of the business model canvas designed by Osterwalder and Pigneur (2010) and we will address the following: key partners, key activities, value proposition, customer relationship, customer segments, key resources, channels, revenue streams, and cost structure. The paper uses both primary and secondary sources of information. The primary sources are represented by the small confirmatory interviews conducted with the kind help of two employees: Ms. Diana Otelea (Brand Manager) and Ms. Mihaela Simionescu (Customer Service Coordinator); whereas the secondary sources of information came from the official website of the company, official company documents, and other press related articles. The main limitation of the paper is that it illustrates only one stance of sharing and knowledge economy and that it does not allow for further inference.

Case study: Pony Car Sharing

Company description

Pony Car Sharing is a 100% Romanian private capital owned company, founded in 2015 as the first and biggest car-sharing service in Romania. Since it activates in the car sharing service, the company represents an actor in the sharing economy.

Pony Car Sharing was set up following the example of the car rental CAR2GO German company headquartered in Ulm, that later extended in Europe and the United States (www.car2go.com). Pony Car Sharing is a business-to-consumer (B2C) car-sharing company in which customers can rent the vehicles the company owns.

The company has 38 employees and a turnover that classifies it as a small business. Since it started, the company has not incurred any profits as it can be inferred from Figure 2. This is a normal consequence of an investment in assets that is to return in several years. The company started its activity in Cluj, and later, in 2017, it began to set up an additional headquarter in Bucharest.

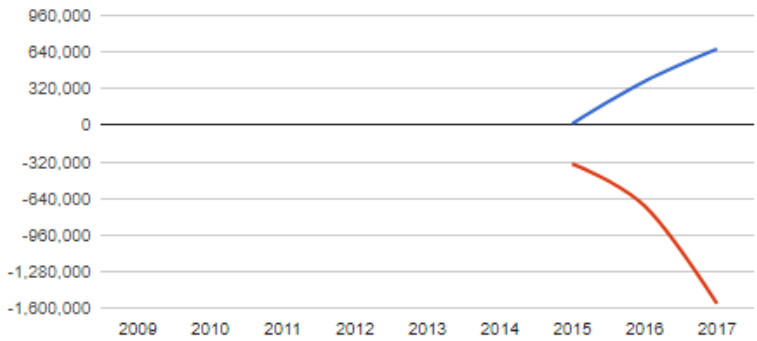

Figure 2. Pony Car Sharing – Turnover (blue) and Net Profit (red) (Source: Lista firme, 2018)

The company owns a fleet of 80 cars in Cluj-Napoca and 40 (going on 80 by the end of 2018) cars in Bucharest (VW, Mercedes, Smart fortwo, Smart forfour, Mini One, BMW i3; both on gas and electric; manual or automatic) and they are uniformly distributed over the surface of the two counties. The rental services of the company are available through the GetPony app (which was improved to services such as book/reserve a car, fuel the car or buy prepaid unit packages to get a different kind of discounts). The fleet of the company is eco-friendly (electric cars and EURO 6 cars).

As we are discussing the need of hyperpersonalisation of the customers, the company insisted on getting customer feedback on how to improve the services, app or how the company works and embedded the feedback in the new offers.

The services of the company can very easily be accessed. The customer needs to download and install the GetPony app which is freely available on GooglePlay and AppleStore, register their ID and driver's license, provide a valid bank account and, then, they can rent whichever vehicle is suited for their own needs. The car gets unlocked with the help of the app, and it can be picked up from a location on the map, driven all around the country and dropped off at a different location within the designated operating area.

Business model canvas

The business model canvas was designed by Osterwalder and Pigneur (2010, 2013) and represents a strategic management planning tool meant for developing and documenting new or existing business models. The present section will develop the main building blocks of the business model canvas by portraying the case of Pony Car Sharing company, with a specific focus on key partners, key activities, value proposition, and customer segments. The elements of the canvas are interconnected and, at times, they might be overlapping.

Key partners. This section describes the network of partners that the company has in order to optimize the business model, reduce the risk or acquire resources. Pony Car Sharing has initiated a significant number of partnerships belonging to entertainment, culture and lifestyle brands in order to attract customers. The key partners or network is one of the most important sections of the business model canvas in the case of knowledge and sharing economy business because it accounts for the need of the customer to belong to a network or community as identified in the literature review.

The first and most important collaboration was the one with the three famous music festivals: UNTOLD, Electric Castle and Mioritmic. The partnership took the shape of a barter in which the company's fleet was branded with the logos of the festivals and a special print, there were organized contests in which the customers could win free entry to the festivals or Pony discounts, and VIP parking spots for the company's fleet (Simionescu, 2018). Additionally, pop-up prizes were placed strategically in the cars for the users to find: portable speakers or picnic blankets. Another marketing move that was taken was to display a Pony car inside the festival operating area and turn it into a photo booth.

Among the various initiated collaborations was the one developed with TedX when Pony Car became the official transportation means for the invited speakers and TedX conference tickets were offered for Pony customers through contests. Moreover, all the

conference participants were offered discount vouchers. A similar collaboration was developed with TIFF (Transylvanian International Film Festival), the difference being that during the breaks, the cinema would run a short Pony Car commercial. The company concluded other valuable partnerships with the fashion industry (V for Vintage), Meron coffee shop (to be associated with a routine people have), and with a yoga studio. All these partnerships could be categorized as strategic alliances between non-competitors which resulted in invaluable increased brand awareness, attracting new customers to try the service of the company, acquire new customers and it fine-tuned the company to the adjacent needs of the customers.

Key activities are the most important things a company does to ensure the functionality of the business model. The main key activity of Pony Car Sharing is renting cars to natural persons (B2C) and they plan to include a Business-2-Business (B2B) service as a reaction to the various requests they got from different corporations requiring such services for their own employees under special terms and conditions. This new activity might prove to have a positive impact on the traffic in Bucharest and on the levels of pollution.

Value proposition has the role to describe the products the company offers that create value for a specific customer segment. The best description of Pony Car Sharing value proposition is their headline: "Rent your car straight from the street, using your phone. Without any contract. Without warranties. Without extra charges", because it underlines the advantages it has as compared to the competitors. Pony Car Sharing is the first car sharing service in Romania and it has the first mover advantage. It satisfies the need for mobility of the customer by helping him/her share, contributes to traffic jam reduction, and pollution. For the company, the Internet of Things innovation allows for the transfer of data through the Internet and Bluetooth technology by means of a device (smartphone or tablet) and the company fleet that has tracking boxes installed on every car which control the main operations. The app receives data from the tracking box constantly updating the map with the location of the cars, fuel levels, kilometers, reviews of last customers, color and type of transmission in order to keep the customer updated in real time. The services are available to customers under two conditions: a) the customer should be at least 21, and b) he/she should have their driver's license for at least 1 year. These two conditions were commonly agreed with the insurance company.

Customer relationship Pony Car Sharing establishes both personal and automated relationships with the customer with the purpose of acquiring and retaining new customers. The Customer-service department is in charge of the relationship with the client that is maintained through e-mail, phone and post office. *Customer segments* The main customer segment of the Pony Car Sharing is represented by Millennials who are permanently up-to-date with any new tech releases, active and curious, with a different attitude regarding the sense of ownership as compared to past generations, keen on urban mobility, not owning a car. Millennials are also the early adopters of the company's services.

Key resources are in this case tangible resources (the fleet of cars in Bucharest and Cluj-Napoca), and intangible resources (the app and data it generates). Other key resources include the human capital that plays a crucial role in interacting with the customer and helping to acquire him/her. *Channels* describe how the company communicates with and reaches its customer segments to deliver the value proposition. The company

reaches its customers through the previously described app by means of user accounts; therefore, Pony Car Sharing does not use any intermediaries in relation to its clients.

Revenue streams are established in tight connection to the key activities and each of them should be able to generate a source of revenue. The company tries to acquire and many as possible recurring clients by means of subscriptions and price discounts and Pony units. For example, the services can be acquired by minute, day, subscription, etc. *Cost structure* The main costs incurred by the company were related to initial investment, the acquisition of the fleet and its maintenance, fuel, salaries, development, and maintenance of the app, insurance, etc.

Conclusions and implications

The present paper has contributed to the existing literature in the field of knowledge, knowledge management, digitization, and business models. In the first part, it has laid the theoretical framework of the business case study to be assessed in the practical part of the research. The purpose of the paper was to showcase an instance of the knowledge economy business model in the context of digitization in Romania. The findings revealed that Pony Car Sharing represents an example of good practices. The present paper could help legislators develop a framework for the knowledge and sharing economy so that this and similar companies could benefit from specialized support consisting in free parking lots or investment in infrastructure for electric cars, and the list may continue. One lesson learned is that partnerships between non-competitors could have a positive influence on increasing brand awareness by associating with different well-established brands. A different challenge from the legislation was to educate the customers and provide them with accurate information in order to understand how the company works, what the service means, which are the benefits of using the service, and which are the major differences between the company services and traditional car rental service.

Disclaimer

Product or corporate names may be trademarks or registered trademarks and are used only for identification and explanation without intent to infringe.

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