

# PLATFORM CULTURE IN THE SHARING ECONOMY: A RENTAL GOALKEEPERS CASE STUDY

CULTURA DA PLATAFORMA NA ECONOMIA COMPARTILHADA:  
UM ESTUDO DE CASO DE ALUGUEL DE GOLEIROS

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## ABSTRACT

The influence of digital platforms can assemble and intermediate connections, relations, and interactions in the sharing economy (SE). However, there is an opportunity to explain the role and agency of digital platforms in consumption and service relations in Brazilian empirical studies. Therefore, this study was designed to analyze how an assemblage of relationships of exchanges happens between consumers and service providers when mediated by digital platforms in SE. Actor-network theory (ANT) was used as a methodology through interviews, observations, and follow-ups of social networks. The results showed that: (1) SE happens to construct through a heterogeneous network between individuals and digital artifacts; (2) the relationships are assembled happen between consumers and service providers through visible and invisible heterogeneous associations, mediated by digital platforms and their features, tools, and algorithms, and (3) This actor-network promotes and disseminates a new digital culture whose main goal is valorization of digital business assemblage.

## KEYWORDS

Sharing Economy. Platform Culture. Mediation. Actor-Network Theory.

## RESUMO

*A influência das plataformas digitais pode montar e intermediar conexões, relações e interações na economia compartilhada (SE). No entanto, existe uma oportunidade de explicar o papel e a agência das plataformas digitais nas relações de consumo e serviço nos estudos empíricos brasileiros. Portanto, este estudo foi desenhado para analisar como ocorre um conjunto de relações de trocas entre consumidores e prestadores de serviços quando mediadas por plataformas digitais no SE. A teoria ator-rede (ANT) foi utilizada como metodologia por meio de entrevistas, observações e acompanhamento de redes sociais. Os resultados mostraram que: (1) EC é construída através de uma rede heterogênea entre indivíduos e artefatos digitais; (2) as relações são montadas entre consumidores e prestadores de serviços por meio de associações heterogêneas visíveis e invisíveis, mediadas por plataformas digitais e seus recursos, ferramentas e algoritmos; e (3) a rede de atores promove e divulga uma nova cultura digital cujo principal objetivo é a valorização do conjunto de negócios digitais.*

## KEYWORDS

*Economia Compartilhada. Cultura de Plataforma. Mediação. Teoria Ator-Rede.*

## INTRODUCTION

The sharing economy (SE) is part of a social movement associated with the diffusion of new technologies, devices, and practices of consumption and collaboration (RAZEGHIAN; WEBER, 2019). At the same time, SE promotes new business models that transcend traditional capitalism into a digital movement disseminated by communities and platforms (RAVENELLE, 2017). The combination and diffusion of informational systems, devices, and digital platforms integrate a new context related to customs and habits of consumption involving new values, practices, socio-technological and economic-social development (BRADLEY; PARGMAN, 2017; RAVENELLE, 2017). For Sundararajan (2016) there is a new institutional situation where the platforms with your features and process develop one

new culture, he calls it that “Platform Culture”. This culture created a new and relevant configuration of how the exchange actions and interactions between consumers and providers with digital platforms where these digital technologies adapt the workforce and consumption (RAVENELLE, 2017; SIGALA, 2019).

However, SE studies still fail to determine in a transparent and didactic way what leads the consumer and the provider to connect, interact, share and engage with digital platform-based businesses (BASILI; ROSSI, 2019). Sharing economy assumes a process occurs that can be characterized by a dynamic of relations of interest and engagement, in which the actions of connections and inductions generated by the digital platforms act before the individuals involved in this transactional experience (BREIDBACH;

BRODIE, 2017; SUTHERLAND; JARRAHI, 2018). Consequently, digital platforms of bicycles, scooters and shared cars have changed our way of getting around. Platforms like Airbnb and doghero have changed our way of booking vacation or weekend stays for ourselves and our pets. In addition, some of these applications influence our behavior of requesting, connecting, booking, paying, renting and experiencing goods and services (FRAIBERGER; SUNDARARAJAN, 2015). Platform culture supports this offers in which consumers and providers based in three fundamental forces: i-Integration with digital information and features; ii-connection and relations decentralized; iii-engagement processes induced by hybrid dynamic power between peer-to-peer actions (SUNDARARAJAN, 2016).

In this way, mediation of digital platform stands out assuming an intermediating and integrating position between human agents. For Lamine (2017) technological artifacts play a mediator role in dynamic relationships and become a generator of meaning and integration, contemplating an associative debate among those involved in the sociotechnical process. These processes can be translated by relations of exchanges and interactions mediated by actions built by a collective dynamic between technological tools and the motivations of individuals, both consumers and providers. This confluence and dynamics designate a network, followed and fabricated by facts and routines generated by the matter of the object or platform, or hour manufactured by the individuals in a collective process (LATOUR, 2005). Therefore, it is necessary to understand how this process and relationship building and structured by the parliament of things, a hybrid of hu-

mans and nonhumans, who together build facts, values and actions (LAW, 2004). This study address the following question: How do happen assemblage of relationships between consumers and providers (humans) when mediated by digital platforms (non-humans) in sharing economy? Thus, this paper aims to analyze how an assemblage of relationships of exchanges happens between consumers and service providers when mediated by digital platforms in SE.

Therefore, one of the main assumptions is based on the attempt to explain that this relationship does not occur and does not exist in isolation from one or another social actor but is generated in conjunction and a network. In this way, things and objects become essential actors in the development of this digital culture instituted by digital technologies. The research seeks to contribute to understanding more the power of platform culture in business, entrepreneurship, and consumption. For this based on a process of following the actors proposed by Latour (2005), was chosen a case study of Brazilian digital platform – “Rental Goalkeepers”, to understand the agency of nonhumans in the assemblage of the relationships of exchanges between consumers and service providers, from the perspective of actor-network theory. The main contribution is to better analyze the assemblage and relations of involvement the actors in the network, exploring the role of digital platforms in connection, induction, engagement, and mediation (HAMARI, SJOKLINTA; UKKONEN, 2016; BREIDBACH; BRODIE, 2017; SUTHERLAND; JARRAHI, 2018). The mediation and translation processes (elements originating from ANT) will be the main theoretical and methodological support for understanding the field and thus,

suggesting new ways to advance the sharing economy and digital platforms studies.

After the introduction, the article will have a brief theoretical review on sharing economy, digital platforms culture, presence of nonhumans in Actor-Network Theory; an explanation of the methodological path chosen, followed by a characterization of the field of research, its practices and the actors involved (human and nonhuman); the stories that emerged from this field and which support (or not) the chosen theory and, finally, the final considerations, the possible contributions, and limitations of this research.

## SHARING ECONOMY

Sharing Economy is a current and ongoing phenomenon in the studies on marketing, consumer behavior, organizations and information system (BRADLEY; PARGMAN, 2017). This phenomenon has also been called collaborative, sharing or on-demand economy, which is altering and influencing the dynamics and traditional paradigms of production, distribution, consumption, and supply of products and services through technology-based 'peer-to-peer' firms that connect people in communities or groups to develop business adapting relationship of market and consumption in a more decentralized way (BASILI; ROSSI, 2019). Such changes, associated with the current market demands and the advancement of technologies through fixed and mobile digital technology platforms, have promoted new actions, reactions, and social, cultural and economic behaviors. These changes are pushing organizations to seek new paths and processes to understand such events (BELK, 2013; SCHOR, 2016). In this context, SE is considered a socioeconomic

system developed and supported by means of new business models and digital technology platforms. Thus, organizations and individuals have the focus on transactions, interactions and peer-to-peer connections, which eliminate intermediaries in the process and encompass sharing of physical and human resources, thus providing a configuration of business models different from the traditional economy for a circular or shared (SCHOR, 2016; BRADLEY; PARGMAN, 2017).

Similarly, several concepts and terms are used in the literature to characterize the practice of sharing. For instance, some researchers worried about delineating the field and explaining the basilar concepts of SE, seeking to structure ontological elements for the phenomenon (BELK, 2013; SCHOR, 2016). On the other hand, Botsman and Rogers (2010) characterized the field as collaborative consumption or "sharing practices" and Bardhi and Eckhardt (2012) simply affirm that consumption and SE are based on the concept of access. In addition, Cohen and Kietzmann (2014), and Hamari, Sjöklinta and Ukkonen (2016) sought to map the drivers of social and technical behaviors, which can be molded and mediated by the environment, social relations and technologies, helping better explain the reasons, advantages, and disadvantages in SE. More specifically, Möhlmann (2015) justifies the need to understand the endogenous interrelationships and inter-dependencies of the consumption behavior mediated by digital platforms. At the same time, Ravenelle (2017) and Sigala (2019) consider SE with a phenomenon that is adapting consumption and entrepreneurship, through the promise that capitalism becomes more balanced

and faired when we have direct access between peers through the digital platforms that assist in this process.

These concepts emphasized through these authors reinforces the idea that the advent of the dissemination of digital platforms supported by internet and mobile devices develop new and varied ways of expressing the identity, relations, and personality of groups of individuals and organizations, even when they do not possess something effective, to share or access (SUNDARARAJAN, 2016). Thus, digital platforms can provide an ongoing process that integrates actions, connections, inductions, and mediations integrating new interactions, relationships and stimuli with the social or behavioral structures between consumers and providers (RAVENELLE, 2017; SUTHERLAND; JARRAHI, 2018). These processes are a high impact in capital, technological and social context open new opportunities for everything market and consumption rather than centralized and decentralized institutions where individuals and digital platforms shape these environmental distributed businesses, services, things, labors, activities, and money of the form peer-to-peer. (RAVENELLE, 2017).

However, these socio-technological experiences are not receiving attention from academia when related to the understanding of nonhuman factors in SE, which can promote these new practices of consumption and production, for the distribution of products and services in the market (BREIDBACH; BRODIE, 2017). Thereby, an alternative to explain the advance SE may be related to understanding the relations of human and nonhuman actors within a context of a decentralized and networked society (SUTHERLAND; JARRAHI, 2018). Therefore, it is necessary to understand the

role of technological artifacts in this tangle of actors, which surround and propagate sharing economy and develop this culture and new institutions.

## **DIGITAL PLATFORMS CULTURE IN SHARING ECONOMY**

Research and studies the relationships and engagements of individuals and digital platforms with SE is an emerging theme (BREIDBACH; BRODIE, 2017). In addition, current technologies are structured to deliver products and services in a more simple and transparent way, intensely and with a focus on experience, personalization, relevance and added value (SUTHERLAND; JARRAHI, 2018). Thus, digital platforms develop and promote one parallel culture which on the side there is consumerization of the digital and the other side the digitalization of the physical (SUNDARARAJAN, 2016). Additionally, SE digital platforms can create mediation and coordination at scale changing or adapting behavior of the traditional consumption through new business models that are structured by the information system and may involve a heterogeneous array of resources, interfaces, functionalities, algorithms, and applications (BREIDBACH; BRODIE, 2017; SUTHERLAND; JARRAHI, 2018).

Furthermore, another issue has related to the nature of SE digital platforms is conceptualizing the tension between control and generativity that these technologies may bring about local market and consumption (SUTHERLAND; JARRAHI, 2018). There are different ways for understanding this point, but few studies explain the real role and functions of the platforms in the connections, business generations with the most varied and different partners

and customers (MOHLMAN, 2015). In this sense, can SE digital platforms manage a huge network of consumers and providers in a set of heterogeneous actions? How can this complex negotiation be carried out between a population of participants and the materialities of platform algorithms and policies? Is this digital culture being promoted only by the nonhuman actor or by the human and nonhuman whole?

Drawing on these questions and paths could provide a developed theoretical vocabulary for the ongoing debates surrounding the SE and technological mediation. For this reason, to understand the assembling, symbiosis and engaging between social consumption and technological components in sharing economy it becomes necessary to better understand the phenomenon and its set (BREIDBACH; BRODIE, 2017; SUTH-

ERLAND; JARRAHI, 2018). As a result, the SE digital platforms develop the value of this common frame create one alternative assemble which the actions occur on a centralized or decentralized form, and vice versa (SUTHERLAND; JARRAHI, 2018; BASILI; ROSSI, 2019).

Therefore, it appears that the role and strategy of organizations, which have invested in the development of digital sharing platforms are combined in generating for individuals a context, where these artifacts can mediate and promote the relationship of a simple and straightforward way. This experience is born from a hybrid dynamic culture where these consumers or providers do not feel the actions and mediations developed by the technological base (SCARABOTO, 2016; BREIDBACH; BRODIE, 2017). Table I presents these concepts.

**TABLE 1 – Definitions related to platforms in sharing economy**

Author(s)	Definition	Main Features
Sutherland and Jarrahi (2018, p. 25)	The agency of digital platform features, functionalities, design, such as algorithms and rating systems, take in conducting transactions or sharing exchanges, versus the amount that is left to participants (consumers and providers).	Platforms concern centralized or decentralized mediation in SE.
Breidbach and Brodie (2017, p. 764)	Platform merely represents an intermediary to orchestrate and facilitate the exchange of resources among other actors in the sharing economy, rather than a distinguished service by itself.	Platforms as engagement actors between consumers and service providers.
De Rivera, Gordo, Cassidy and Apesteguía (2017, p. 15)	Online and sharing social interactions can be mediated, framed, or entangled in technological contexts. Therefore, the structures and contents of the platforms can stimulate the sharing economy.	Platforms as mediators.
Hamari, Sjöklinta and Ukkonen (2016, p. 2047)	The peer-to-peer activity based on obtaining, giving or sharing access to goods and services, coordinated through online services or digital platforms.	Platforms combined with the attitudes of the individuals.
Cusumano (2015, p. 32)	Digital platforms connect individuals who have underutilized assets with people who want these assets in the short term.	Platform's business.
Cannon and Summers (2014, p. 1)	A business model where peers can offer and buy goods and services from each other through a platform [...] That shares economy companies is true intermediaries, providing a platform for consumers instead of providing services directly.	Platforms and SE, from the perspective of intermediary.

Source: Created by author.

Considering these issues, it is necessary to amplify research about “the role and function of digital platforms in the creation of connections, engagement, and orchestration for the generation of the amplest and diversified businesses, with partners and /or varied consumers” (EVANS; SCHMALENSEE, 2016). In addition, current technologies are structured to deliver products and services in a more simple and transparent way, intensely and with a focus on experience, personalization, relevance and added value adapt consumption and relationship between consumers and providers (SUTHERLAND; JARRAHI, 2018). The innovations provided by these technologies are generating behavioral changes in society and business, developing capitalism balancing the triad: capital – work – purpose (SUNDARARAJAN, 2016). A key issue to answer this gap in the mediation of digital platforms on individuals may be in understanding the natures, functions, actions, inductions, and consequences that are delivered and supported by the digital platforms of multiple sides combined with human needs (EVANS; SCHMALENSEE, 2016). This behavior can be considered a hybrid or assemblage action, where “objects and individuals” share and generate new actions, connections, situations, and senses within a social, market, consumption, economic or political phenomenon (SCARABOTO, 2016; BREIDBACH; BROIDE, 2017).

From this perspective, both human (consumers and providers) and nonhuman (digital platforms and organizations) actors have agency in the situations that happen (LAW, 2004; LATOUR, 2005). Therefore, it does not exist in the conception of actor theory outside the network, because the elements are agents acting even nonhuman,

interacting with the environment or with humans inspiring and generating new behaviors and associations (CANNIFORD; BAJDE, 2016). Thus, to a more in-depth understanding of the existing relationships between these actors (human and non-human), it becomes necessary to describe the elements of agency, mediation, and translation proposed by ANT (LAW, 2004; LATOUR, 2005).

## **ACTOR-NETWORK THEORY IN SHARING ECONOMY**

Understanding the evidence of assemblage between consumers, providers, objects, subjects, and technologies can provide and emerge new ways to explain the sharing economy (SCARABOTO, 2016). Thus, it is verified the field can be studied and deepened as a set of practices, which go through a tangle or hybrid movement integrated and interlaced by a set of actions and functions in movement (BAJDE, NOJGAARD; SOMMER, 2018). In this line of reasoning, the collective and ensemble consist of human and nonhuman actors, which are represented by individuals (consumers and providers) and digital platforms (applications and devices), which constantly mold and act in a flow in the motion of a single network (LATOUR, 2005). In this way, there is a symmetry between humans (providers and consumers) and nonhuman actors (digital platforms, applications, and devices) (SHIN, 2016).

For Lamine (2017) “Networks are systems of action, including humans and non-human entities with the same level of importance given to subjects and objects.” However, what can associate, combine or gather ideas, attitudes, and actions of individuals (consumers and providers) with

the objects (digital platforms), are actions aimed at this combination or association of actors-networks or hybrid actors. These actors interconnected by configurations and mediations of material elements with temporary properties and actions leave to open space to individual actions, in a single format through the dynamics established between them, creating engagement between both (CANNIFORD; BAJDE, 2016). The objects or nonhumans assume in this proposal a behavior of “intermediaries”, that is, mediators, which occasionally act sometimes more meaningful than humans themselves. In this sense, nonhumans have an ability to act and interfere, in the general course of events mediating an action or even the behavior of the human (LATOURE, 2015). Thus, can one argue that these elements are in a two-dimensional network, with social and material dimensions, which need to be analyzed in a single and collective way in one assemblage (SCARABOTO, 2016; LAMINE, 2017).

From ANT perspective, actions, relations, and processes are not totally controlled by human consciousness (LATOURE, 2015). Therefore, the agency is defined as a property of associated entities, considering the role played by human and nonhuman actors. Any entity has the potential to act, relate, and action is the result of a continuous two-dimensional process of translation generating hybrid action and mediation between artifacts and people within a single context (LATOURE, 2005; 2015). Thus, “translating interests means, at the same time, offering new interpretations of those interests and channeling people to different directions ... the results of such translations are a slow move from one place to another” (LATOURE, 2005, p. 194). Another

important aspect is to define the mediators of these relationships. Mediators are entities that transform, translate, distort, and modify the meaning or elements that are supposed to carry a fact, process, or relationship, that is, there is no possibility of moving something without itself being transformed (SHIN, 2016; LAMINE, 2017).

However, ANT can also be a search method. Thus, the theory cannot be characterized only as a closed structure of analysis with a unique focus on the elements observed and followed in the empirical field (LAW, 2004). Thus, this assemblage and collective practice in the presence of human and nonhuman actions can represent more reliably what happens in our social environment (CANNIFORD; BAJDE, 2016). Currently, we are impacted indiscriminately by organizational and technological structures that are interested in adapting and shaping our consumer behavior and relationship with new products and services (SIGALA, 2019). In this way, actor-network theory assumes his ontological relativistic purpose to explain and reveal the collective practices between the social and the material, but rather than relativistic, Actor-Network Theory should be considered relational, because it is concerned with the relations established in a heterogeneous network of actors (LATOURE, 2005). For Law and Moll (1995) such explanation is in “when we look at one social behavior, we are also looking at the production of materialities. And when we look at the materials, we are witnessing the production of one social behavior”. This explanation about materiality can be perceived in experiments carried out by scientists or researchers who are involved in laboratories or research institutes with other team members, rules, norms, cloth-

ing, information, objects, equipment and software in which such ensemble action assumes an intermediate position, fixed or temporary (LAW; MOLL, 1995). Thus, this relational materiality assumes its role in this sociotechnical approach, mediate and shape social behavior (LAW; SINGLETON, 2013; LAMINE, 2017).

In this specific case, digital platforms may be mediating and providing connections and engagements from their characteristics by assembling together with consumers and providers these business and consumption behaviors (BREIDBACH; BROIDE, 2017). For, Canniford and Shankar (2016) there is a hybrid relational dynamic supported by the mediation of technological artifacts that generate behavior such as cyborg or hybrid between men and machines. In this way, an interrelationship between humans and nonhumans is assumed, setting a collective character brings to the social symmetry or dynamic. The mediators (nonhuman), even remaining silent, are considered and recognized in many of the analyses as intermediaries in the action, “What enters them never defines exactly what comes out” (LATOURE, 2005). The actant or agent described by the actor-network theory and analyzed in the research methodology is one that alters, transforms, creates conflicts and problems generating differences and producing new relationships and or associations. (SHIN, 2016; LAMINE, 2017).

In this way, materiality gains another definition, since it ceases to be just a given, a thing or a fact allocated in given situation and becomes matters of concern, by its more dynamic and active attributes (LATOURE, 2015). This materiality of the relations between men and machines ceases to

be just an isolated act of one or another and becomes a set assembled from their interactions making a unique behavior (SHIN, 2016; LAMINE, 2017). In other words, this materiality of relationship it is conceptualized that “materials are interactively constituted. Out of their interactions, they have no existence; has no reality. machines, people, the natural world, the divine - are all effects or product” (LAW; MOLL, 1995). Thus, this relationship can be explained through processes and mediations generated by the characteristics, functions, data, colors or information of the artifacts or digital platforms, which provide a strong influence on the human behavior related to consumption and sharing practices (SCARABOTO; FISCHER, 2016; BASILI; ROSSI, 2019).

Considering these reflections appears that digital technology platforms can create meaning and exert a strong influence on the decision to use and spread the share by consumers and providers, from their mediation that induces and connects the actors through its characteristics, features, functionalities, systems, algorithms, and routines (SHIN, 2016; SUTHERLAND; JARRAHI, 2018). For Harvey et al. (2017), there is a ritual where digital technologies and platforms assist in the mediation of individual behavior of the consumer, but this does not explain in detail how the process and the dynamics happen, leaving here a gap to be studied. Thus, it is plausible to consider ANT as theoretical and methodological support to investigate the socio-technical phenomena in processes or relationships developed and which include contradictions and/or maintenance of networks formed by human and nonhuman agents (LATOURE, 2005; LAMINE, 2017).

## RESEARCH METHODOLOGY

The theoretical proposal invites a reflection on the concepts and relations that exist in the sharing economy phenomenon through imperatives of the human agency, represented by consumers and providers and the nonhuman agency of technological artifacts. ANT adds to this proposal, with the objective of assisting in the broader understanding of the collective action of the actors involved and the mediation, which occurs in this relation dynamics. Actor-Network Theory can go beyond providing elements of analysis for the understanding of organizational phenomena, as it provides methodological reflections for researchers in the field (LAW, 2004). In this sense, Latour (2005) proposes that “social scientist needs to closely monitor all the actions and practices of the actors involved and what associations are established.” it is a matter of following the artifacts or things through the networks in which they are transposed and set out to describe them in their entanglements and symmetry (SHIN, 2016). Thus, the exercise performed in this research was to observe and question the associations and relationships developed between humans (consumers and providers) and nonhumans (digital platform), following the actors and preserving, symmetrically, the actions carried out by the social, natural and material in these descriptions.

The research field was conducted from November 2018 to March 2019 through participant and non-participant observation, interviews, and follow-ups of online communities. Data collection through non-participant observation consisted of monitoring the daily life of the group, observing the progress of the actions that occurred there, but not performing the same

activities that the group did. Thus, the two non-participant observations happened in Porto Alegre. While the participant observation consisted of participating in an activity as a debater and mediator at an event in the city of Rio de Janeiro. It was established a system of registering in field notebooks, to do observations that occurred. These notebooks were later transcribed to compose the analysis of this paper to join with the interviews and images from online communities.

This case was chosen because football has one cultural relevance in Brazil. Football involves emotion, pleasure, sports practices, culture, and income generation. The participant observation collection took place through the participation of the researcher as a listener, mediator, and debater in a workshop called “Digital Transformation of Companies. How to stay in the future market!” held as part of the agenda in congress ColaborAmerica occurred in Rio de Janeiro on November 9th, 2018. In this workshop, one rent goalkeeper residing in Rio presented Rental Goalkeeper digital platform, was reporting his own personal and professional experience with the platform and the contracting teams. Then, the other data collections of non-participant observations consisted of following two scheduled games, in Porto Alegre on February and March 2019, in order to better understand the daily life and the development of relationships and activities in this sharing consumption. In this case, the researcher did not become a member of the group of goalkeepers or contracting teams, not entering or participating in the actions and relationships carried out by the respondents. In this field of research, the observations were recorded

in notes, photos and videos, which were later transcribed to compose the analyzes of this study.

Moreover, in order to follow and understand the facts that occurred unstructured interviews were conducted with 18 actors (5 company employees, 8 goalkeepers, and 5 football team contractors) involved with the digital platform. The interviews were carried out with an open script with 8 questions, complementing methodologically the observations. Thus, with support Carioca's rent goalkeeper, obtained the contact information of the founder of Startup. The first contact occurred at the end of February, first by email and then by two video conferences using Skype tool. In these conversations, it was discovered that the founder of the company was the first rental goalkeeper and the second is currently his partner or co-founder who met him in a soccer game scheduled by the social media Facebook 3 years ago. In this direction, the co-founder of the company was interviewed, who indicated a third partner (IT developer), who indicated other product and marketing professionals. Using the technique of snowball was also asked the contact of goalkeepers divided by states and matches made. In addition, 05 online communities of this digital platform have been mapped and analyzed (Facebook, Instagram, Twitter, Linked in and YouTube).

Finally, in attention to the methodological approach ANT to describe the materiality existing in the practices and relations between human and nonhuman actors composed of this collective studied, was given a greater distinction in non-participant observations plus interviews and finally the analysis of online communities. These data were analyzed through the con-

cept of translation (CALLON, 1984) with a proposed understanding of the dynamics between the actors identified in the trajectory in this case. Data collected were all organized and openly coded, by platform, by type of actor, trajectory, and action that set up and stabilized the network. In addition to cataloging and saving images, videos and photos tracked on the social networks of the entrepreneurs and supporters of the platform. Also, were capture images to facilitate these stories from the field through an iconographic view.

## **CASE STUDY: RENTAL GOALKEEPERS**

### ***First half of match***

This study case was chosen due to the relevance of football to Brazilian culture. In this direction, in August 2015 digital platform Rental Goalkeeper was born with a proposal to gather, connect, engage and reward amateur soccer players (goalkeepers) through the provision of their services focusing on culture and passion national - football. Thus, the first initiative of the founder was a creation of a fan page on Facebook where himself offered as a goalkeeper for rent, in the first month were made 13 matches and billed R\$ 390 reais. He created this service because loves this sport and plays as goalkeeper position in indoor soccer or "futsal" with as Brazilians say. Moreover, after some experiences and matches, this founder understood that there really was one demand, and everything was just ball forward, literally. Besides that, generating an extra income for those who enjoy the most popular sport in the country he guaranteed fun and one less concern for who hired goalkeepers because "almost nobody wants to play in that pos-

ition” (in the founder words). For Rental Goalkeeper Founder and Co-Founder, this kind of business creates a unique experience and provides a fun, new friendships, satisfaction and incomes for their and the almost 30,000 goalkeepers registered on the digital platform recently. Bellow the first poster that illustrates how the Rental Goalkeeper started through an advertisement from the founder on his personal Facebook page and communities of futsal teams in Curitiba city.

The platform was designed and developed by the founder himself due to his background in physics, computing and past business experience based on digital technologies. The platform project focused on connecting and bringing goalkeepers (contractors) closer to football teams (consumers). Therefore, the central goal of the Goalkeeper Rental digital platform was to facilitate, engage and reward people through sports relationships across the country. The founder’s speech highlights these goals:

I didn’t know that people were willing to pay to have a goalkeep-

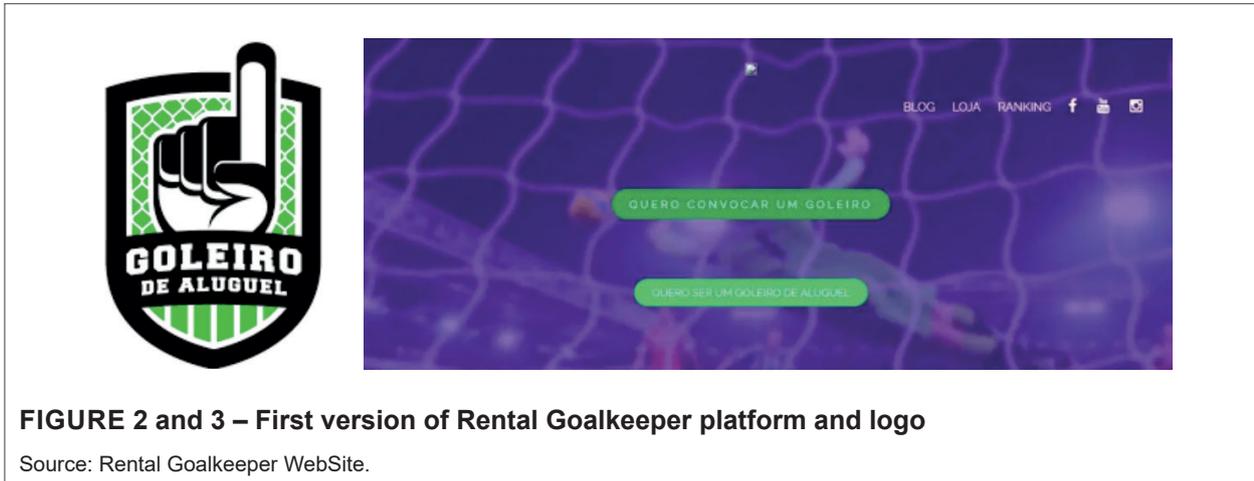
er, and I had no idea how big this market was. After a year and a half of working and doing it all, I found that in our country every month there are over 1 million games going on the court in an amateur way and the goalkeeper’s website and the app can connect and assist all these people through of your service. E2 (ST - Founder).

So, the platform’s early operation was rudimentary, supported by a Google spreadsheet, a Facebook fan page, and some groups of goalkeepers and teams in the WhatsApp messaging app. All calls for goalkeepers were made manually through WhatsApp, where they charged R\$ 30 reais per match passing R\$ 12 reais to the platform. To make the relationship with goalkeepers and football teams aligned with the business proposal, a logo and beta site were developed. The initial strategy was to automate some manual processes resulting in identity and agility without losing the functional simplicity of existing relationships. Figures (2; 3) demonstrate the first version of the digital platform.



**FIGURE 1 – First post on Facebook by personal page of founder.**

Source: Samuel Toaldo Facebook Profile.



**FIGURE 2 and 3 – First version of Rental Goalkeeper platform and logo**

Source: Rental Goalkeeper WebSite.

In addition to developing platform identity, processes were implemented to automate the registration, recruitment and relationship sheets for goalkeepers and teams. The process automated the registration and summoning worksheets to the site and after messages sent by message groups in WhatsApp.

### Half time of match

In the first year of operation, the founder personally managed his platform and online community and his services spreading his idea and interacted with 900 goalkeepers in a single WhatsApp group. For the founder “This growth was only possible due to the interaction and the online tools that supported him to propagate and dis-

seminate the idea, through its functionalities”. At that time due to the WhatsApp group, he met his partner and co-founder of Rental Goalkeepers, who had an operational and administrative experience that added his skills. Together, they developed the first mobile application (Figure 4) demonstrate the first version of the digital platform and participated in a TV show - Shark Tank Brazil 2017, where they were selected by companies Polishop and Topper which they received an investment of 300 thousand reais.

*In this sense, and with technological support from another partner with information system expertise, who joined the team before participating in Shark Tank TV Show, Rental Goalkeep-*



**FIGURE 4 – First version mobile app Rental Goalkeeper platform.**

Source: Rental Goalkeeper mobile app.

er platform began its expansion process. With this financial and technological contribution, functionalities and algorithms for gamification, geolocation, segmentation and rewards have

been developed that have provided the platform to reach 30 thousand registered goalkeepers (service providers) in more than 1.000 games for their customers (contracted soccer teams).



**FIGURE 5 – Video Shark Tank Brazil – May 2017 by YouTube**

Source: Youtube Channel.

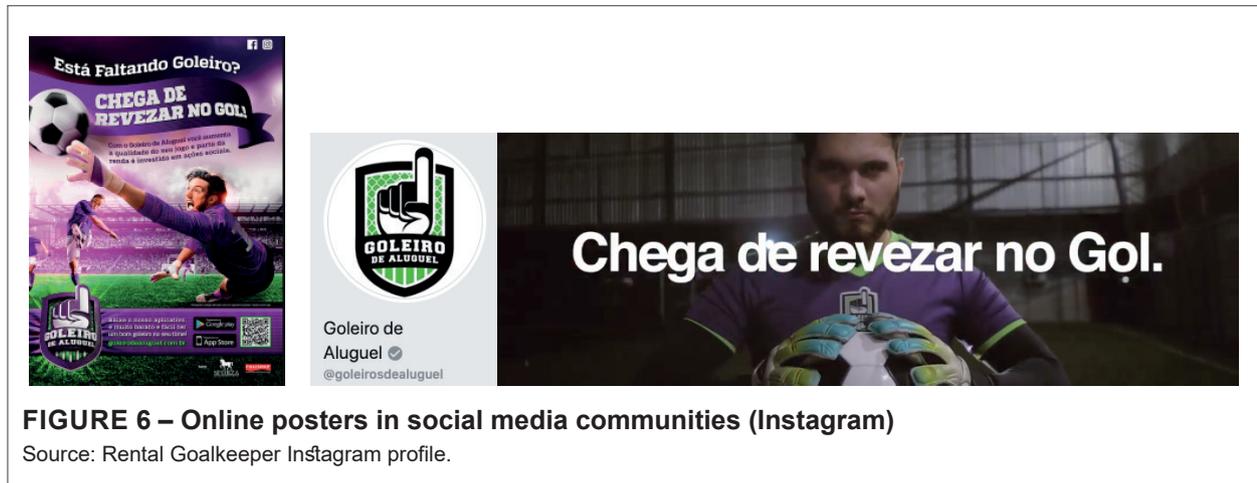
### **Second half of match**

Afterward, the method of following the human and non-human actors (Latour, 2005) involved in the rented goalkeeper startup sought to understand and translate the materiality and mediation present through this collectively brought together relationship. For Latour (2005) and Callon (1984) the construction of these relations and facts do not occur in isolation, but in a joint way with the equipment, materials, clothing, and technology that surrounds us in social and professional daily life. This materiality and mediation are revealed for technological artifacts in service delivery and consumption behaviors. In this way, Rio de Janeiro's goalkeeper explained this assemblage relationship process with actions and communications that involved videos, photos, posters, flyers and interactions among the actors described previously.

The interaction with platform in the beginning was very simple by Facebook and WhatsApp, after with website and mobile application we received more support some as me are ambassadors, which receive uniforms and flyer to spread and engage new customers (teams) and providers (goalkeepers) in my city. El (M – RJ Goalkeeper).

In order to characterize this statement, the following figures demonstrate this imbricated relationship between human and nonhuman actors distributed online by this platform and communities.

In this way, in non-participant observation in Porto Alegre a friendly and professional relationship was perceived among those involved, in the words of a contracting team leader.



**FIGURE 6 – Online posters in social media communities (Instagram)**

Source: Rental Goalkeeper Instagram profile.

For me, the cool thing about this app is the map functions to be able to locate the game and the goalkeepers. The explanations in the app with the date, place and time information of the game and the notifications that warn you, help us plan the day and the moment before with the goalkeeper ... All very simple and fast, you open the app and get it right. the game, and the app you already have information, about the goalkeeper and if he will accept the summons. And the process is intuitive, we receive via an automatic notification on the phone and in less than a minute we can already have the goalkeeper signal and if he goes in the game. E15 (DE– Contracting Team).

This mediation of the platform is also detailed by three goalkeepers interviewed by phone.

In the beginning all was very simple by Facebook and all interactions and communications happened through WhatsApp, then we were invited to register on website and today the mobile application has several tools of evaluation, con-

trol and even a ranking...Everyone wants to be in elite group of goalkeepers to receive more calls, earn more incomes, prizes and benefits. E7 (GU – POA Goalkeeper).

Rental Goalkeeper through their features like chat, geolocation and gamification have improved my life in everything, through its I play football, receive a remuneration and besides I am invited to barbecue or parties after the matches without extra cost for me”. E9 (RN – Curitiba Goalkeeper).

The app helps us met goalkeepers and teams that love to play ball. We do it because we like and improve games always because we take it seriously, is not just a joke, because many wanted to be professional players. We use the community to analyze rankings and create more serious competition. These tools are key players in this intelligence process and make the service experience very quality. E11 (SM – Curitiba Goalkeeper).

So, these relations among consumers and providers seem with an assembled sharing practices and supported by fea-

tures, tools, systems, and functionalities of the digital platform – Rental Goalkeeper.

## DISCUSSION AND IMPLICATIONS

Mediating the artifact and its solutions is crucial to maintaining this collective network, but the involvement is due to the engagement of goalkeepers, teams, supporters, entrepreneurs, and media with the service proposal. This kind of personal initiative combined with social online communities and after with digital platforms may be adapting, modeling, decentralizing and developing markets, consumption, jobs and new business models (RAVENELLE, 2017; SIGALA, 2019). In fact, these digitals movements can be rethink, reshape and mediate consumer behavior and workforce models, besides that create one hybrid or engaged action, where “objects and individuals” share and generate new process and relationship such as in one cultural assemblage (SCARABOTO, 2016; BASILI; ROSSI, 2019).

Consequently, there is a decentralized movement to generate consumption and business, but that does not happen in isolation from the action of another social actor, but rather generated in conjunction with technological artifacts and their functions (SUTHERLAND; JARRAHI, 2018). In doing so, it may be interesting to observe the objects and their interactions, explaining the complexity that surrounds them in the assembly of relations with other social actors, sometimes fluid and mutable (LAMINE, 2017). This process is assembled collectively supported by digital resources, online and offline communications and tools providing a unique experience with entertainment, sports practice, friendship relationships, and extra income supported from digital materiality (BASILI; ROSSI, 2019; RAZEGHIAN;

WEBER, 2019). The production of this sports practice that generates service for consumption and income for goalkeepers might not happen if we did not consider the agency of the social media platforms, online messages tools, mobile application features, posters, flyers and uniforms made available by Rental Goalkeeper.

This assembly only takes place in ongoing practices, being constantly produced and negotiated by both human and nonhuman actors (SHIN, 2016; LAMINE, 2017). Further, this kind of companies based in digital platform culture use their power to connect, engage, mediate and adapt processes and relationships through online communications and actions, which in turn use algorithms and other digital features to assemble this hybrid behavior (BASILI; ROSSI, 2019; RAZEGHIAN; WEBER, 2019). Thus, a mediation assemblage process was noted which features, interfaces, design resources, communication, and data functionalities, and algorithms proposed and disseminated by this digital platform (BREIDBACH; BROIDE, 2017). This mediation occurs through a hybrid flow with the consumption and production behaviors of the businesses, which are inserted in the SE context (SCARABOTO, 2016). Therefore, the ANT as a theoretical contribution presents the existence of a symmetrical and hybrid process between the human and nonhuman actors that is assembled and mediated by their relations. In this relationship between human and nonhuman actors, there is interference assembled by everyone in the network, but the process of mediation is materialized leaving traces when it connects, induces and valorization services through the functionalities, features and technological tools of the digital platforms.

In practical implications, these findings can help managers and entrepreneurs understand how these processes between consumers, service providers, and digital platforms happen and are assembled. The results show evidence and synergy between subjects and objects in this assemblage of relationship. This relationship is assembled collectively supported by digital resources, online and offline communications providing a unique experience and friendly relations between consumers and service providers. This actor-network movement promotes and disseminates a new digital culture whose main goal is valorization of service assemblage through the development of solutions, learning and collective resources that can support the strategy of this kind of business.

## CONCLUDING REMARKS AND FUTURE PERSPECTIVES

This research attempted directly to answer the request of Breidbach and Broide (2017) to advance the knowledge about the interactions and mediations existing among the multiple actors in the sharing economy. Besides that, analyze how digital platforms rethink, reshape and readapt consumption behavior and workforce models (RAVENELLE, 2017; SIGALA, 2019). These hybrid processes of relationships between humans (customers and providers) with nonhumans (digital platforms and their features, tools, and algorithms) may be decentralizing and transforming business models where digital intelligence involvement with actors in network assemble and explore connections, engages and mediations (BREIDBACH; BROIDE, 2017; SUTHERLAND; JARRAHI, 2018). In this perspective, this study sought answers on how do happen assemblage of

relationships between consumers and providers (humans) when mediated by digital platforms (nonhumans) in sharing economy? To answer this question the aim was to analyze how an assemblage of relationships of exchanges happens between consumers and service providers when mediated by digital platforms in SE.

In this sense, one main assumption was an attempt to explain that this relationship does not occur and does not exist in isolation from one or another social actor but is generated and assemblage and in a network, assemble e intermediated per humans and things (LATOURE, 2005; SHIN, 2016). Thus, to translate this existence of materiality was necessary to leave the field to speak to bring subsidies for such an argument. For this, using the premises of ANT following the actors (LATOURE, 2005), which considers the symmetry between human and nonhuman (LAW, 2004) was decided to take an open position to narrate the facts and action of mediation of this materiality in the sports practice of goalkeepers and teams. However, one recognizes the existence of other broader issues that need to be considered in the scope of this work. Specifically, deepen issues related to the limitations of using only one case study with specific business proposals. As a suggestion of future studies, one can expand the discussion with multiple cases seeking to understand and apply the model in different situations and natures comparing the services and motivations generated by both actors (human and nonhuman). Finally, the main argument this research was to contribute to understanding more the power of digital platforms culture in shaping our behavior in business, entrepreneurship, and consumption.

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