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# TRUSTFUL AND TRUSTWORTHY

MANUFACTURING TRUST IN THE DIGITAL ERA

ANTENNA OF SOCIAL INNOVATION

MAY 2017

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## CREDITS

### **Trustful and trustworthy**

Manufacturing trust in the digital era

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# EXECUTIVE SUMMARY

At the beginning of the so-called Fourth Industrial Revolution, speaking about social innovation means looking at the Digital Economy. This is a new economic paradigm, which not only makes the Internet an infrastructure and a communication channel but also a way of creating value. The disruption this causes places us in a digital world that is ever more connected, flexible and swifter, changing the social relationships we have known hitherto out of all recognition. We are shifting from Business-to-Consumer (B2C)<sup>1</sup> models to bilateral or Peer-to-Peer (P2P) models, where we can both buy and sell and link to other users through platforms that set the economic heartbeat of our societies.

As will be seen, platforms constitute a new kind of economic and social actor. They act as middlemen between individuals, in which value creation depends on the so-called 'network effect', the ability to reach 'critical mass', the management of the virtual community, and the know-how to scale the highest rankings in Internet search engines. However, it is not only a matter of form or context when it comes to interaction but also is a fundamental transformation. Platforms, in the new digital framework, become log books of unlimited size. In this context we take it for granted that data is the new gold. Knowing what we do and with whom we do it is a source of riches beyond the dreams of Croesus. If information is power, platforms that can generate business intelligence from billions of cumulative records create a new business model that turns this data into a source of revenue. Users become necessary collaborators in these platforms, which now no longer create value by themselves but are valuable to the extent that they can both boost supply and demand and match the two.

All key sectors of the economy are already being affected by digital disruption. When we talk about demand, immediacy, flexibility and personalisation of the relationship, we are speaking of consumers' needs in the new digital sphere. These needs are becoming a mandate for companies and platforms. Emerging start-ups will answer the technological challenge and provide the swift, dynamic responses demanded by this new setting. In the financial and insurance fields, these start-ups are the nascent FinTech and InsurTech firms.

If trust is basic to social functioning and economic growth, what happens to trust when we move from a face-to-face model to a digital and global model? The premises change, traditional trust mechanisms such as familiarity or visual contact are ruled out. We find that there are big hurdles to be surmounted when it comes to validating and evaluating digital identity. The impersonal nature of the Internet triggers our psychological defences when facing the unknown. This means that users' initial response will be to distrust others. Trust, both in the physical world and in the digital one is vital for forging any kind of link between two agents (whether individuals, institutions

or countries). Trust oils relationships and is based on the likelihood that the ‘other’ party will act as expected. It is fairly easy to forge trust in a small, known circle but is much harder to create in the vast, virtual sphere of the Internet.

Taking part in the Digital Economy is an ongoing act of trust, which is necessarily bound up with the image we have of the ‘other’ as an abstract, general entity. We are faced with what has been called ‘inter-personal trust’, which stems from our previous experiences and on our willingness (or otherwise) to enter into a relationship or transaction in the digital setting. Anyone seeing photos of rooms or flats for rent over the Internet needs some way of checking that the whole thing is not a ‘scam’. If I buy a product, it is because I understand that the right party will receive the money and that behind that portal there is someone who will pack my purchase and send it to me.

Since the advent of eBay, platforms are a field for experiments in finding shortcuts to forging trust. Ratings, opinions, and stars are, as it were, the ‘traffic lights’ governing these new intersections at all levels. One can think of the highways and byways of Internet ‘reputation’ (that is to say, what others think about something or someone) forging links between the online world and the offline world. At the end of the process, what is virtual becomes ‘real’ in terms of its consequences. It has been widely stated that trust is the new ‘currency’ but what we really see is that the Digital Economy (orchestrated by platforms) is pushing online reputation as a direct substitute for trust. The distinction between reputation and trust seem to blur in the digital setting. The cumulative opinions of other users about us in effect can be thought of as a letter of presentation that is unique, public and beyond our control. It directly bears on the right to privacy and, depending on how highly our reputation is rated, affects our future opportunities.

Beyond the theoretical framework on digital trust, we look at recent initiatives in this field. Traity shows us how one can capture online reputation and add to it, turning it into a kind of ‘digital passport’ that proves that we are who we say we are and gives an inkling of our reliability. This has many applications, for example micro-insurance solutions so that people who are financially solvent but who do not get a regular salary, can get loans or rent a house. Such a ‘digital passport’ can also be used to create new gateways to achieve a world-wide digital version of trust between neighbours. The purpose here is to foster more inclusive and secure markets.

**PlayGround** reveals the dimension of community and social action through the dissemination of content, nested in Facebook as a platform. This is a young digital medium that combines careful selection of universal challenges, such as climate change and inequalities. It uses a readily accessible audio-visual language to get on the same wavelength as Spanish-

speaking ‘Millennials’. PlayGround awakens emotions and fosters a sense of belonging and community among young people to get them on board in building our future. The 21st-Century social activism platform seeks to achieve a shift from “Like” and “Share” (in Facebook terms) to “Do”.

Finally, at a time of crisis and transformation in the public sector, **Comoodle** shows how cities and local governments have an important role to play in the agenda of change. This social experiment turned an impoverished industrial county in Northern England into a large urban social laboratory. Here, the local Council sought to see the city as a collaborative platform by setting up a digital portal in which citizens, the Council, and associations could pool resources, ideas and spaces. This is a way to take advantage of the digital world to make local government more effective, restore citizens’ trust in the public sector, and to mend a society scarred by years of public spending cuts.

Building trust is the thread running through all these initiatives and is the cornerstone of the new Digital Economy. Observing the new forms that trust takes at this moment of change is key to understanding the future of our society.

<sup>1</sup> We can speak of ‘bilateral markets’ when a platform has two (or more) groups of users who create externalities for another group of users. These ‘sides’ of the market stem from the platform that connects users.

# INTRODUCTION

*“Trust is what makes contracts, plans and everyday transactions possible; it facilitates the democratic process, from voting to law creation, and is necessary for social stability. It is essential for our lives. It is trust, more than money, that makes the world go round.”*

(Stiglitz, 2013)

## Trust in the new digital environment

Most of our everyday actions and choices are based on trust: from what and where we buy to how we interact and who with. It is a fundamental element of societies that takes different forms in different contexts. Technological disruption, especially thanks to the internet and the popularisation of smartphones, drives the digital economy and comes to alter the role played by trust in our societies. This new context alters the patterns of buyers and sellers, supply and demand, cost scales and business models. As the economy becomes digitised, trust evolves because new ways of building, receiving and showing it become necessary. One of the core innovations in this new digital space will be how trust is transformed into online reputation.

The collaborative economy, to which we dedicated last year's Antenna<sup>1</sup>, is perhaps the clearest example of the transformation we are undergoing. This new economy hinges on platforms the function of which is to generate communities and provide a virtual meeting point between 'prosumers' who make use of the trust built among them to facilitate their interactions. This trust is based on comments or scores reflecting the experience of other members of the community. In a semi-anonymous environment where traditional see-and-touch codes are of no use, reputation based on collective experience fills this information gap. This sort of digital word of mouth makes up for information asymmetry and allays the perception of risk when the reputation is favourable.

All these changes have given rise to a new *reputation economy*. Trust becomes an asset, a demonstrable and accumulable form of capital. It can be aggregated with other information from the digital footprint (e.g., participation in social networks) and at the same time becomes a credential. This digital identity, which is constructed through each action but does not depend only on one's own actions, can be considered as a new currency.

In terms of social innovation this is an unprecedented scenario for designing a socio-technical architecture that can help to generate a positive social impact in areas like social cohesion and economic inclusion. It allows us, for example, to redefine the border between strangers and acquaintances, between

them and us, by replacing traditional inclusion mechanisms such as those relating to the financial information generated by each of us in the course of our lives. Thus, having a smartphone and participating in the digital economy can, as we will see, make up for a lack of banking history. Furthermore, around this phenomenon major transformations are brought about that affect our understanding of social capital. Collective intelligence is now used as a new way of generating consensus. A consensus that at the same time influences the feeling of belonging to the global community of those who participate in this new digital environment.

## The digital domain: A new field for social innovation

The opportunities afforded by online reputation and the creation of digital communities are therefore huge and encouraging, although the study of its social impact and the potential adverse effects of these new forms of social credit is still very limited. It is for these reasons that this year the Antenna for Social Innovation is dedicated to analysing trust as the cornerstone of the digital economy. Our purpose is threefold:

- To understand the phenomenon of trust, online reputation and community creation in the context of the digital economy;
- To examine examples of good practices through in-depth analysis of three initiatives and ten microcases;
- To enhance our understanding of the five defining parameters of social innovation used in previous Antennas on the basis of the most recent transformations in the digital domain.

Consequently, the publication is divided into three parts. The first describes the state of play, providing a brief definition of the digital economy and going on to present the transformation of the concept of trust and the nature of this new reputation economy. Here we examine the potential advantages and disadvantages of the proliferation of trust as a marketable good.

The central part includes three in-depth case studies, selected because they represent examples of recent practices of interest in the insurtech sector (Traity); because they afford an understanding of reputation and trust as a form of community creation and embryonic social change (PlayGround); and lastly because they exemplify the conception of the city as a platform (Comoodle and the sharing city). The empirical part concludes with datasheets on ten microcases that develop other initiatives of interest from an academic point of view and for their transformational scope. All the initiatives are examined from the perspective of the five variables of social

innovation already developed in previous editions of the Antenna for Social Innovation<sup>2</sup>.

Thus, with this new edition, the fifth in seven years, we strengthen academic analysis on social innovation in the digital domain and at the same time take perspective of the changes observed in many of the initiatives studied in the past and that today are going to survive alongside radically new forms of organisation. Cyber-activism projects such as Avaaz (2013 Antenna) are starting to converge with the more recent PlayGround that we analyse in this Antenna. The case study on the cooperative town of Alston Moor (2015 Antenna) today finds its counterpart in the digital collaborative initiative of the likewise British town of Kirklees: Comoodle. Similarly, the neighbourhood Exchange Networks and the case of the Food Bank in Barcelona (2013 Antenna) find their digital equivalents in this new edition in the Fairmondo and Foodcloud platforms, both of which are analysed as microcases at the end of this text.

What differentiates analogue initiatives from digital ones? Basically their scope, the opportunity to achieve a greater social impact and, inevitably, the possibilities that the digital environment offers to upscale and replicate these initiatives. If we associate digital disruption with social change and scale transformation, the challenge of the present Antenna is to offer a vision of the *chiaroscuro* and above all the possibilities that the digital environment provides for social innovation and the effective solving of shared social problems.

We would like to thank all the people we've interviewed for their invaluable contribution in time and knowledge about the case studies. Thanks also to Jean Claude Rodríguez, Ana Manzaneda, Lucía Hernández, Sara Rodríguez and Genís Roca for allowing us to share with them the preliminary versions of this Antenna and to exchange the first impressions about the study.

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**Sant Cugat del Vallès,  
March 2017**

<sup>1</sup> Buckland, H., Val, E., & Murillo, D. (2016). *We Share. Who Wins? Unravelling the controversies of the collaborative economy*. Antenna for Social Innovation. ESADE.

<sup>2</sup> Particularly in Buckland & Murillo (2013). *Social Innovation: Pathways to Systemic Change*. GreenLeaf; and in Buckland & Murillo (2015). *Antenna for Social Innovation. The quest for precision*. Institute of Social Innovation. ESADE. Both are available on the Institute for Social Innovation website: [http://www.esade.edu/research-webs/eng/socialinnovation/publicaciones/Social\\_innovation\\_models](http://www.esade.edu/research-webs/eng/socialinnovation/publicaciones/Social_innovation_models)

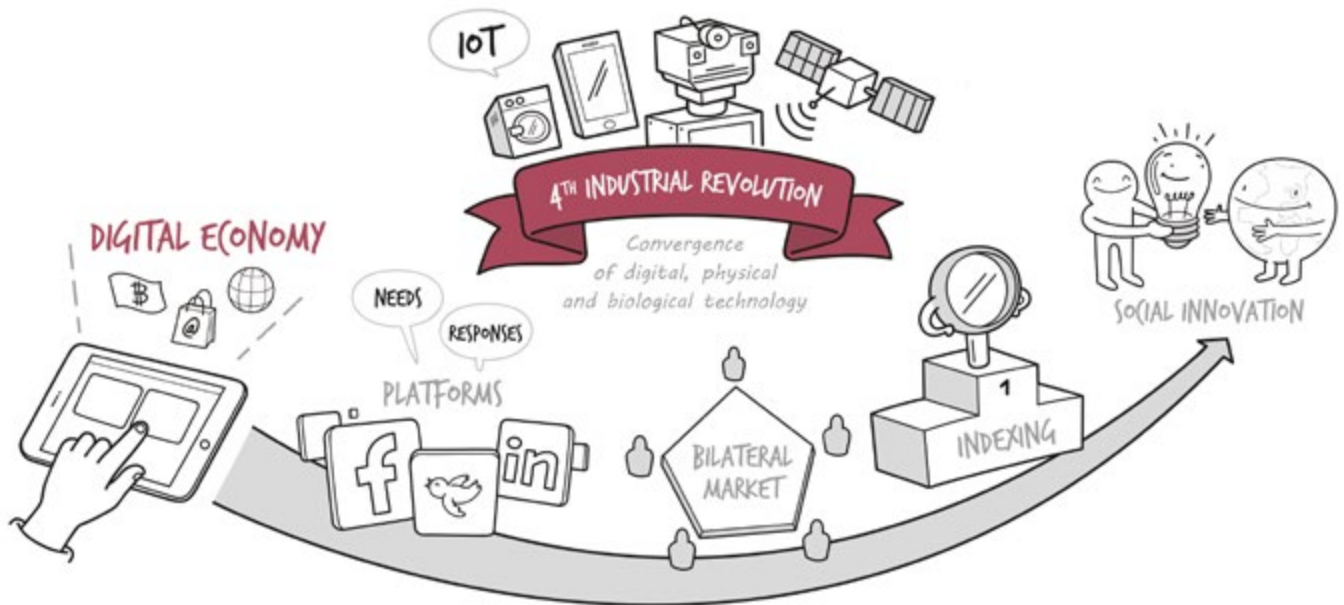
A close-up photograph of a person's hands holding a white smartphone. The person is wearing a blue and grey patterned sweater and blue denim jeans. A red arrow graphic points from the left towards the phone. The text 'PART 1' is overlaid on the left side of the image.

# PART 1



# 1. THE DIGITAL ECONOMY IN CONTEXT

The transformation of the economy towards a digital model is one of the consequences of the Third Industrial Revolution that began with the advent of electronic devices as of the 1970s and the popularisation of computers (Schwab, 2016). The popularisation of the internet at the end of the 20<sup>th</sup> century accelerated the revolution of the ‘information and communication technologies’, making the world a much more connected place where the circulation of information and communications became massive, immediate, ubiquitous and relieved of physical barriers.



## 1.1. WHAT IS THE DIGITAL ECONOMY?

The concept of the ‘digital economy’ was coined in the mid 1990s by Don Tapscott<sup>1</sup>, who highlighted the promises and challenges posed by the appearance of the internet on an economic, social, political and educational level (Tapscott, 1994). The term describes a net-based economy as a medium for communication and value creation. It referred to the internet as a new infrastructure, a medium for conducting transactions, although its scope, as we will see, reaches beyond the birth of the online version of conventional commerce (B2B, B2C).

The digital switchover brings with it different rules that transform everything from business models to consumer-supplier relationships (OECD, 2014), including production capacity, the lowering of costs and barriers to entry, and the appearance of new forms of consumption (Hagel, Seely-Brown, Wooll, & de Maar, 2016).

### 1.1.1. Digital finance

Electronic commerce or e-commerce was one of its first manifestations. It took time to overcome the frictions and fears felt by consumers in the face of this new scenario which involved revealing bank details over the net. It was the first indication of how important it was to build trust online (Hoffman, Novak, & Peralta, 1999). To overcome these barriers, monetary options multiplied and there was a proliferation of wallets<sup>2</sup>, payment gateways, disbursement solutions through mobile

devices and more recently virtual currencies. We witnessed the birth of electronic commerce between companies (B2B), between companies and consumers (B2C) and more recently between private individuals or peers (peer-to-peer: P2P), which hides behind the boom of the collaborative economy<sup>3</sup> and in turn feeds off the rise of the so-called *platform economy*.

<sup>1</sup> Who entitled his book *The Digital Economy: Promise and Peril in the Age of Networked Intelligence*, (Tapscott, 1994). That was the time of the birth of eBay. Google was founded in 1998. Twenty years later, in 2014, he reissued the book, examining to what extent the promises it formulated had come true.

<sup>2</sup> E-wallets and digital wallets.

<sup>3</sup> Today the term “collaborative economy” carries many connotations and appears to be rather unfunctional insofar as it lumps together very different business models. For further detail on the controversies and the limits of the concept, see the previous *Antenna for Social Innovation*: Buckland et al. (2016).

### 1.1.2. The platform revolution

Corporations native to the digital economy are structured in digital platforms (Parker, van Alstyne, & Choudary, 2016). Also known as ‘bilateral markets’ (Sundararajan, 2016), the function of these platforms is to orchestrate, to facilitate a direct connection between supply and demand often provided by the users themselves, at the same time opening up new formats, as the expansion of the collaborative economy shows.

Thus, platforms act as intermediaries that provide a common space in which to store tangible or intangible assets and enable connections that otherwise would not be possible (van Alstyne & Schrage, 2016). They are flexible, specific models, the success of which depends on the creation of a community that makes it possible to cover users’ specific needs at the precise moment they arise. We will often find these platforms taking advantage of information supplied by social networks, aggregating demand appearing in other digital sites, and obviously developing specific applications (apps) to guarantee their ubiquity and portability and to maximise their use.

In this new type of intermediation, as a structure and a business opportunity, *“...in a networked world, scale comes from cultivating an external network built on top of your business”* (Moazed & Johnson, 2016). Value creation is inverted, since the greatest asset no longer belongs to the company but is the result of interaction within the community of members or users. The real value does not come from the platforms themselves, but from those who present their work or their goods independently, now converted into suppliers, together with those who demand their services or resources, established as consumers (TrueBridge Capital, 2016). A technological and social change that is to be seen in the context of the access economy as opposed to the ownership economy, the value of use coming to oust the value of possession (Rifkin, 2000).

These platforms maximise the benefits of managing the so-called *network effect*, where value and business opportunities increase with the arrival of each new member (Schrage, 2016). In short, the larger the platform the more attractive it will be, due to a matter of sheer critical mass: *“In the internet economy, firms that achieve higher ‘volume’ than competitors (that is, attract more platform participants) offer a higher average value per transaction. That’s because the larger the network, the better the matches between supply and demand and the richer the data that can be used to find matches”* (van Alstyne, Parker, & Choudary, 2016). For the same reason, the collaborative economy is much more successful in urban areas than in rural ones, as the intensity of exchanges and the diversity of needs and solutions make them more efficient.

When platforms have the capacity to structure interactions, to define who takes part and who does not, the perspective appears of the platform as an ‘ecosystem’ (Cicero, 2016). The central idea is that different types of players coexist or participate in each platform: platform owners (company or organisation), producers, and consumers. On a second level there are collaborators (who generate value in the platform at an intense rate, for example as investors). And lastly there are external agents who, without participating actively, are directly or indirectly affected by the activity of the platform. Several authors highlight the importance, when designing a platform, of taking into account not only the infrastructure but also the ‘governance structure’ it entails (see Hagel, 2015)<sup>4</sup>. In this reference the author identifies three main types of platforms depending on the type of interaction they promote:

**Table 1:** Three platform models according to their goals and how their work

	AGGREGATION PLATFORMS	SOCIAL PLATFORMS	MOBILISATION PLATFORMS
FACILITATE	Transactions	Social interactions	Joint action
GOALS	To connect users to resources	To connect individuals to communities	To mobilise common interests and turn them into actions
MECHANISMS	All actions are mediated and tend to be ad hoc (hub-and-spoke model)	Foster relatively stable mesh relationship networks	Foster relationships to achieve shared goals
EXAMPLES	Databases for investors, collaborative economy platforms	Social networks	Supply networks, open source software platforms, social movements

Source: Authors’ compilation based on Hagel, 2015

<sup>4</sup> The Power of Platforms: Part of the “Business ecosystems come of age” report (2015). Deloitte University Press. Available at: <https://dupress.deloitte.com/dup-us-en/focus/business-trends/2015/platform-strategy-new-level-business-trends.html#endnote-sup-5>

The Matthew effect in platforms<sup>5</sup> generates new forms of monopoly or oligopoly. This is shown by the fact that it is mostly the big platforms that drive internet traffic. Facebook, for example, generates 25% of total visits (Moazed & Johnson, 2016). In 2013, Google crashed for just a few minutes, but caused a 40% drop in web traffic. The week that Amazon's activity was interrupted for 30 minutes, there was an estimated loss of business of \$2 million (Clay, 2013). These figures help us to imagine the magnitude of their impact in a context marked by the constant growth of these platforms. In 2016 the Center for Global Enterprise made an inventory of platforms in existence. The count came to 176 platforms, located primarily in Asia (46%) and North America (36%), and their total value was \$4.3 billion<sup>6</sup>.

On a different note, a study has shown that the issue of trust is more critical in collaborative economy platforms than in platforms such as Amazon. One of the most influential elements in creating trust is whether the platform has many offers worldwide (Möhlmann, 2016). This is probably an indirect way of measuring the acceptance of the platform: the greater its presence in different countries, the more acceptable and trustworthy it will appear.

### Cities as a platform

Cities are the catalysts of the changes of the 21<sup>st</sup> century. The digital economy and the expansion of new technologies have given rise to the phenomenon of smart cities: *"Smart cities exist on the intersection of digital technology, disruptive innovation and urban environments. They are an exciting place to work and live and the breeding ground for new ideas"* (Deloitte, 2015). These are urban environments equipped with multiple sensors to take the city's pulse. The amount of data generated per minute is huge. The initial challenge was to turn this flood of information into a management model based on the data collected.

The circular economy has found a niche in smart cities (Cañigueral, 2016). Cohen holds that the smart city 3.0 is the sharing city (Cohen, 2016)<sup>7</sup>. Local action is gaining importance, for example in regulatory terms, due to the agility of this administrative level, being closer to the citizen in comparison with national structures and policies. The present is marked by the rise of the concept of the city as a platform, linked to the notion of a more participatory city (Anttiroiko, 2016). For the concrete case of the sustainable agenda and the fight against climate change, cities present their specific leadership as veritable innovation poles:

By way of example, the C40 initiative brings together more than 80 megacities with the aim of articulating a global network of cities to strengthen their leadership, together with other administrations, in the fight against climate change<sup>8</sup>.

Examples of cities that are already putting this agenda into practice include San Francisco, Seoul, Copenhagen, Medellín, Amsterdam and Bangalore. These experiments help to enhance the design of the challenge of sharing (physically and virtually), social impact and how to get collaboration onto the agenda at local governance level (McLaren & Agyeman, 2015).

<sup>5</sup> In sociology, the Matthew effect (or accumulated advantage) is the phenomenon where 'the rich get richer and the poor get poorer.' In both its original and typical usage it is meant metaphorically to refer to issues of fame or status, but it may also be used literally to refer to cumulative advantage of economic capital." (Wikipedia, accessed 13 February 2017).

<sup>6</sup> Evans, P; Gawer, A. (2016): The Rise of Global Enterprise. A Global Survey. The Center for Global Enterprise. [http://www.thecge.net/wp-content/uploads/2016/01/PDF-WEB-Platform-Survey\\_01\\_12.pdf](http://www.thecge.net/wp-content/uploads/2016/01/PDF-WEB-Platform-Survey_01_12.pdf)

<sup>7</sup> During his address he mentioned two examples that are advancing in that direction. The first was Boston, where the city council has created the Mayor's Office of New Urban Mechanics to invite entrepreneurs and citizens to participate or propose actions to improve the city. The second was Amsterdam, which, through the Amsterdam Institute for Advanced Metropolitan Solutions, is promoting the definition of future challenges for the city and the co-creation of answers to these challenges.

<sup>8</sup> This alliance has been in force for a decade. It is estimated that 75% of the cities make more innovative, better or more efficient decisions due to their participation in the C40 network. Further information at: <http://www.c40.org/>

### 1.1.3. Data as the new gold

*“Data fuels intermediation corporations the way crude oil fuels the traditional industry.”*

(Faravelon, Frénot, & Grumbach, 2016)

As we have seen, the digital environment makes it possible to record each action automatically and permanently, generating enormous amounts of information. This gave rise to cloud computing and subsequently big data. The next goal to pursue, then, is going to be the ability to process all this information and turn it into business intelligence. Data is already “the new oil of the 21<sup>st</sup> century” (Varian, 2016), and consequently corporations and administrations in both the private and the public sectors are aiming to implement data-driven decision making.

With the digital economy on the rise, there are more and more electronic interactions, so more and more data is recorded. If we think of platforms as ‘hyperscale’ businesses, they handle thousands of millions of users, customers, devices and interactions, making them a big data ecosystem in their own right (Chui & Manyika, 2015). One simple example of their omnipresence is the difference between paying in cash and by card. If we pay in cash, the record generated is a receipt with the amount, date, time and recipient, but it is not associated with the customer. If we pay by card, records are generated with all the above but also specifying the card used. Isolated data on one payment might be merely informative, but if instead of looking at one purchase we look at the purchase history, the capacity to detect consumption habits grows. And if we add the information from several purchase histories, for example for a whole city, we can establish patterns and segmentation analyses. The business opportunities involved in analysing a large quantity of data are therefore obvious.

The marketing sector in particular has benefited from the low cost of gathering large quantities of information today. The business model of personalised marketing is based precisely on the mass collection of personal data (whether or not that person is identified) on habits, tastes, preferences, consumption patterns, recent searches and so on, to analyse it and offer the most suitable advertisements. The general acceptance seems to be good: 61% of consumers prefer to buy brands that provide personalised content (McKinsey Q3). Social networks are the scenario for these new marketing strategies: from the creation of ‘native’ content<sup>9</sup> to the word-of-mouth revolution with the new version of ‘influencers’ (Bearne, 2015).

Big data inevitably comes hand in hand with algorithms. These are mathematical formulas that assign specific cases to categories in such a way that a concrete solution is generated for each category (P Frank, 2015; O’Neil, 2016). In the field of marketing, for example, a married woman of childbearing age can be targeted with advertisements for pregnancy tests. But algorithms are present in many aspects of our everyday life beyond advertising: everything from Google searches and their result indexing criteria (Schneier, 2015) to the latest posts we see appear on our social networks (Carrie, Levin, & Solon, 2016) are the outcome of decisions made by algorithms. Public administration too automates decisions using algorithms. Already algorithms are starting to decide the frequency of refuse collection, patrol routes in our neighbourhood, or the annual budget for a school<sup>10</sup>.

This is about the discretionary management of digitally collected information, legitimated by the use of enormous amounts of data and built on two points of trust: a) trust in the *quantity* of the information (without regard to its quality, whether it is reliable or whether it has been obtained ethically); b) trust in the supposed *neutrality* of the algorithms. Recently it has been shown that this discretionary management of online information has had worrying effects, to say the least, on such fundamental issues for social trust as public opinion and politics. To what extent does this algorithmic governance of our digital world limit our window on the real world? After the election of Donald Trump in November 2016, the British newspaper *The Guardian* (Carrie et al., 2016) did an experiment with avatars and showed that these filters generate redundant, homogeneous bubbles, a far cry from the diversity that surrounds us (Pariser, 2011b)<sup>11</sup>. Trust in this new management by algorithms must not make us lose sight of the multiple questions and adverse effects that we are now starting to discover.

<sup>9</sup> The original term is ‘native advertising’ and refers to sponsored content that is integrated into and matches the format of the platform itself, to stop the advertising from interrupting the user’s browsing experience.

<sup>10</sup> In view of the huge amount of data available, they have to be processed using algorithms and complex computing systems. Algorithms are formulas for detecting patterns. In the digital society they serve to group together, classify and label patterns of behaviour and often provide a different tailor-made solution for each segment. One of the advantages of the inescapable digital footprint is that algorithms can be developed to detect discriminatory behaviour, for example systematic discrimination against certain groups in a service, which is impossible using analogue methods. Sundararajan recommends promoting this type of control over algorithms from the companies themselves (Sundararajan, 2016)..

<sup>11</sup> Pariser called this phenomenon the filter bubble. We highly recommend his talk on TED Talks (Pariser, 2011a), available at: [https://www.ted.com/talks/eli\\_pariser\\_beware\\_online\\_filter\\_bubbles](https://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles).

## 1.2. VALUE CREATION AND GROWTH

The digital economy is calculated to be worth US\$3 billion (Gada, 2016) and is expected to grow exponentially. There is a mismatch between the development of the digital economy and job creation. In the UK, for example, while the annual growth rate of digital business has been 30% for the last five years, growth in jobs in the digital economy is no higher than 5% for the same period (*The Economist*, 2016). For the first time, economic growth does not entail proportional job creation, resulting in large pockets of unemployment (Brynjolfsson & McAfee, 2012; Tapscott, 2014). Globally, more wealth is generated than ever and it is concentrated in fewer hands, resulting in an unprecedented increase in inequalities (The World Bank, 2016).

Investors tip the balance and the role of venture capital is now beginning to become decisive, even if the old industrial model is still predominant. Taking the example of the UK again, the digital economy contributed 7% to the GDP in 2015 (a figure similar to that of the USA)<sup>12</sup>. For the same year, the European Commission calculated that the average for the G20 countries was as much as 8% of the GDP (European Commission, 2015). According to some calculations South Korea is in the lead on this count, with 11% a year (*The Economist*, 2016)<sup>13</sup>.

The parameters of value creation and growth are constantly evolving. And the dynamics, rhythms and social consequences of that growth are changing. As an example of this ongoing transformation, in this section we will examine the fintech sector, as one of the most revolutionised in terms of supply, with new business models seeking to squeeze out traditional banks, now from the digital economy. In terms of demand, we will focus here on changes in the type of customer and their expectations. Finally, we will discuss how these new models are going to have important implications for the world of employment which at present we can hardly glimpse.

### 1.2.1. Start-ups and sector revolution: Fintech and insurtech

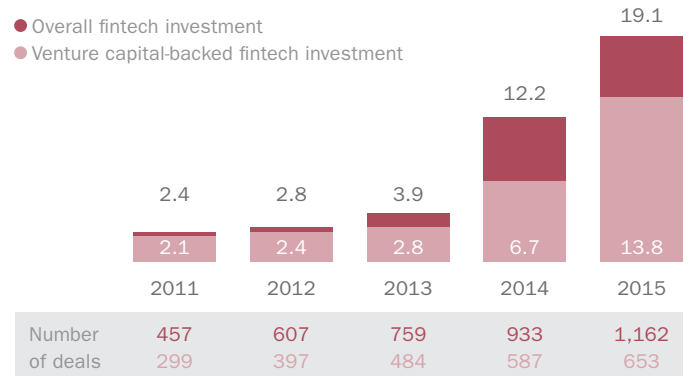
As we mentioned above, banking is one of the sectors that has suffered the impact of disruption most noisily. First there was the financial crisis that broke out in 2008, accompanied by an institutional trust crisis that is still ongoing. On top of this comes the technological challenge and changes in consumer profiles, which are destined to introduce much deeper changes in their traditional business model. To start with, one important point is that the social profiles most critical of banks are precisely those that are most sensitive to service charges: millennials, small businesses and the unbanked (Dietz, Härle, & Khanna, 2016). Financial start-ups, known as fintech, propose new business models (McKinsey & Company, 2016) and are characterised by being cheaper, more agile and more focused on user experience. As a result they are more in tune with the distrustful and the unbanked, thus challenging the existing model and ushering in 'the invisible bank of the future' (Marous, 2016).

Since 2014, investment in fintech has grown at an increasingly rapid pace, thanks above all to the commitment of investors. The figure below shows the growth in investment in fintech since 2011. In 2014 and 2015 more than half of funding came from venture capital (Rohner, 2016):

**Graph 1: Investment in fintech companies (values in \$ billion)**

Venture capital-backed fintech companies accounted for nearly three-fourths of overall fintech funding in 2015.

**Investment in fintech companies, \$ billion**



Source: CB Insights (2015): The Pulse of FinTech

<sup>12</sup>According to data supplied by the Office for National Statistics. Available at: <https://www.ons.gov.uk/economy>

<sup>13</sup>Measuring GDP in the digital economy is highly problematical, as some experts point out (Brynjolfsson & McAfee, 2014, chapter 8; Sheehy, 2016).

The big banks are going to rise to the challenge in two ways: through alliances and through technology. Alliances happen when there is found to be little margin for establishing scenarios of competition between new and old business models. Thus, it is increasingly frequent to find partnerships of traditional firms with start-ups (and even investments) with a view to generating symbiosis between knowledge of the sector on the one hand and technological capacity and knowledge of new customer profiles on the other. Digital technologies, combined with the application of artificial intelligence and big data, are the pillars for facing this future. One clear example has to do with access to financial information for purposes of risk prevention. In the wake of the 2008 financial crisis, regulatory frameworks are more demanding in terms of monitoring information in order to guarantee market stability, and these frameworks often change (Arner, Barberis, & Buckley, 2016). Traditional financial institutions devote great efforts to monitoring, presenting reports, which makes regulatory compliance an important challenge<sup>14</sup>. Some start-ups within fintech are focusing on offering efficient technological solutions for data digitisation and process automation. These are known as regtech and seek to narrow the gap between institutions and regulators<sup>15</sup>. The most thoroughly explored field is precisely that of data management: collection, processing, analysis and identification based on biometrics<sup>16</sup>.

One of the most widespread technical innovations is the blockchain or distributed ledger. Eighty percent of the major global financial institutions plan to switch to this system in the mid term and 15% of them expect to do so during 2017 (del Puerto, 2016). Again, development is based on alliances. To this end, large consortiums have already been created, including R3 CEV<sup>17</sup> and the HyperLedger project hosted by the Linux Foundation<sup>18</sup>. The main aspirations are to revamp the image of the big banks, restore customers' trust, cut costs (Lipton, 2016) and transform traditional operations of financial institutions such as cross-border transactions and settlements. Virtual currencies are another major issue, and some estimate that in ten years 10% of the world's GDP will be stored on blockchain technology (World Economic Forum, 2015, p. 20).

At the public opinion level, blockchain technology appears primarily in the financial press and corporate reports, although still shrouded in an excess of technicalities. It is still an obscure, incomprehensible technology, far removed from the general public. It has applications both inside and outside the financial world and generates a great deal of interest, but is expected to be used alongside existing ledgers for another five or ten years yet (EPAM & Finextra, 2016)<sup>19</sup>.



<sup>14</sup>An article in the *Financial Times* called it "the age of the compliance officer" (Fleming, 2014).

<sup>15</sup>BBVA Research (2016). "RegTech, la nueva palabra en FinTech". Situación. *Economía Digital*, February 2016. Available at: [https://www.bbvaesearch.com/wp-content/uploads/2016/02/Situacion\\_ED\\_feb16\\_Cap1.pdf](https://www.bbvaesearch.com/wp-content/uploads/2016/02/Situacion_ED_feb16_Cap1.pdf)

<sup>16</sup>Biometric identification is based on measuring biological data. It includes facial recognition, voice recognition, iris scanning, fingerprints and DNA.

<sup>17</sup>This is the result of a partnership between more than 70 firms, and its objective is to create a blockchain-based platform designed to facilitate operations between regulated financial institutions. It is scheduled to be launched in mid 2017. For further information: <http://www.r3cev.com/>

<sup>18</sup>This is an open source collaborative project created to facilitate global collaboration between different actors in the value chain: finance sector firms, technology firms, and producers of goods and services. Its various ambitions include connecting in the short term with the internet of things (i.e., autonomous digital communication between objects). For further information: <https://www.hyperledger.org/>

<sup>19</sup>Finextra & EPAM (2016). "From hype to reality: Developing a pragmatic approach to blockchain in financial services". Available online (registration required): <https://www.finextra.com/surveys/survey.aspx?surveyguid=4cfdafdab-4e5d-49a1-901b-3050ca4d4b8d>

## What is blockchain technology?

The blockchain is a database, a digital ledger that records goods, transactions or any other type of information. What sets it apart is that it is based on a distributed network, and that makes it an “immutable and public” format (Grossman, 2015). *The Economist* defined the blockchain as “the trust machine” (‘The trust machine. How technology behind bitcoin could change the world’, 2015) precisely for its transparency and its immutability.

### A distributed network...

In this network all points or nodes have the same importance, there are no hierarchies, and they are all equivalent to each other. How does the network gain robustness thanks to the blockchain? Imagine a node is down or temporarily disconnected. In centralised networks, part of the network could be disconnected due to just one node. In distributed networks this element is of no importance; it does not affect the structure of the whole that keeps the information intact. It is also said to be immutable because any change in the chain requires a majority consensus (51% of the network to pass it). Hence the public part. These conditions make fraud economically unviable and render it a robust and safe alternative (Vivas, 2016).

### ... with no need for intermediaries

The big attraction for all sectors is that it makes it possible to dispense with intermediaries: *“The blockchain is presented as an algorithmic tool to foster trust in the absence of things like social capital, physical collocation or trusted third-party management”* (O’Dwyer, 2015).

This technology was born in the late 1990s but its first application arrived with the bitcoin – the cryptocurrency based on the blockchain. Nakamoto devised this currency and conceived of the blockchain as a ‘wallet’ (Nakamoto, 2008). Their aim was to design a system to separate money from state control. *“It was intended to be the lingua franca of the internet—a currency born of, designed for and using the attributes of the World Wide Web”* (Owen, 2016).

## How does it work?

It is based on blocks organised in chains (hence the name). A digital element (a block of information) is used to generate a 256-bit ‘hash’. The blockchain records not the content but the hash, the encrypted information. That means that a particular hash is recorded as being in existence at a particular time. Blocks are grouped into a unique structure linked to: i) the period (the chain), ii) an address (linked to the hash of the previous block) and iii) a unique identifier (in the form of a randomly assigned number).

### Advantages and disadvantages

The blockchain is surrounded by controversy and debates between supporters and opponents. The table below lists the main potentials and risks discussed in the intense debates amid reports by large corporations and consultancy firms, documents from banking institutions and various research projects:

**Table 2:** Debates on the advantages and disadvantages of using the blockchain

ADVANTAGES	DISADVANTAGES
Distributed network of nodes.	Slow processing.
Elimination of intermediaries.	Lack of agility, redundant processes.
Decentralisation of power and democratising potential.	Concern about possible security breaches <sup>21</sup> .
Possibility of anonymous participation.	Association with the ‘deep web’ and permissiveness with illegal activities.
Traceability of information chains and transactions.	Privacy issues and panoptic system.
Promotion of web neutrality (peer-to-peer inclusion of participating nodes).	Job destruction.
Global ledger.	Complex technology presented with complex terminology <sup>22</sup> .
Possibility of transforming the world of employment (combined with the circular economy, for the common good)	
Possibility of storing identities and speeding up formalities using the necessary personal information in each case <sup>20</sup> .	
Easier fraud detection.	

Source: Authors’ compilation based on several sources<sup>23</sup>

<sup>20</sup>Tapscott, D. (2016). “How Blockchains could change the world”, interview by McKinsey High Tech. Available at: <http://www.mckinsey.com/industries/high-tech/our-insights/how-blockchains-could-change-the-world>

<sup>21</sup>In August 2016 Bitfinex, an exchange based on blockchain technology, suffered a security breach and the financial press followed reactions very closely. According to Levine, *“The responses to bitcoin hacks provide a fascinating laboratory for the future of finance”* (Levine, 2016). This case was particularly controversial because the exchange company (iFinex) decided to make the users themselves answerable for the loss, by contributing 36% of the value they had stored in Bitfinex in cryptocurrencies (Price, 2016).

<sup>22</sup>Martin Arnold wrote in a Financial Times bulletin that for the blockchain to have a real impact it is essential to stop talking about it using complex technical terminology that makes it incomprehensible and distances it from those who might be interested in it. “Stop this blockchain babble”, available at: <http://email.permalink.ft.com/editorial/580e470ea6ffec0300c61a79?emailid=575988c90b860d0300a2bcea&ftcamp=crm/email//nbe/fintechFT/product> (24.10.2016).

<sup>23</sup>Aitken, 2016; IBM, 2016; Kaminska, 2016; Tapscott & Tapscott, 2016. <http://email.permalink.ft.com/editorial/580e470ea6ffec0300c61a79?emailid=575988c90b860d0300a2bcea&ftcamp=crm/email//nbe/fintechFT/product> (24.10.2016)

To date, only one alternative to the blockchain has reached public debate: Enigma (Zyskind, Nathan, & Pentland, 2016). A team of researchers at MIT are seeking to improve it in terms of speed and privacy. According to the post on their research blog, it is a decentralised network, like the one discussed earlier for the blockchain, but places strong emphasis on privacy: *“A decentralized computation network with guaranteed privacy. Personal data is stored, shared and analyzed without ever being fully revealed to any party.”*

Beyond financial transactions, the potential impact of blockchain technology lies in its use for recording, verifying and certifying all sorts of information. It is also the harbinger of what are known as smart contracts, and of the incipient decentralised autonomous organisations or DAOs (Swan, 2015). A smart contract is based on conditional clauses and specifies what action is to be taken for each specific condition (of the *if-then* type). Imagine the case of a flight insurance policy: the plane ticket costs €60 and contracting travel insurance with a traditional company costs another €20. Using smart contracts the price of the insurance could be reduced to €1, by streamlining transaction and verification processes and ultimately dispensing with human supervision. Obviously, all this lowers the costs of this policy.

In connection with bank disruption, 2016 was the year of the boom in insurtech (insurance technologies), which has arrived to revolutionise the insurance sector. Although the first start-ups appeared earlier on, 60% of investments were made in spring of that year, with the epicentre in the UK (BBVA, 2016). Insurtech firms opt for a more flexible, use-based approach to insurance, tend towards peer-to-peer models, and prefer platforms as distribution channels. In this ecosystem we are also starting to see various forms of collaboration between start-ups and big institutions: the former contribute agility and technological capacity, while the latter provide long-term accumulated know-how<sup>24</sup>.

Other sectors that have undergone huge transformations are tourism (especially in the P2P economy), mobility (Uber), health (e-health), education (e-learning and MOOCs) and energy (Parker et al., 2016). We cannot ignore the fact that in this context the first two sectors, through the expansion of the sphere of activity of their main companies, have witnessed an exponential rise in tension generated around the issues of application of rules<sup>25</sup> and workers' rights<sup>26</sup>. The matter of how and to what extent this new type of activity should be regulated is on the table and will take the form of the introduction of new regional, national and European legislation in years to come.

## 1.2.2. From customers to consumers of experiences

With the revolution of platforms and online access round the clock and round the globe, the economy is veering away from supply and towards an 'on-demand economy'. The role of consumers has evolved accordingly, as have their expectations, their preferences and their brand loyalty. Customers are becoming consumers who want the experience of online purchase to extend to all other spheres. Demand becomes specific and generally they decide what they want, how they want it and when (Dawson, Hirt, & Scanlan, 2016). To retain these customers, companies now put the consumer centre stage, personalise products and services, render the purchasing process easier and more comfortable, and make it an agreeable and positive experience (Duncan, 2016). Among the data available on the profile of consumers of these platforms, we find that 19% of consumers switch provider after just one bad experience and 45% abandon their shopping cart if it requires two interactions (Thunderhead, 2015).

<sup>24</sup>AXA is a good example: they signed a partnership with BlaBlaCar and an alliance with Alibaba. Other options are risk capital investment (e.g., Munich Re with SliceLabs) and investment in incubators, such as Allianz X for insurtech (BBVA, 2016).

<sup>25</sup>Barcelona City Council imposed a €600,000 fine on two tourist accommodation platforms. *La Vanguardia*, 24 November 2016. “Barcelona multa a Airbnb y Homestay con 600.000 euros por seguir anunciando pisos sin licencia”. Available at: <http://www.lavanguardia.com/local/barcelona/20161124/412132887490/barcelona-multa-airbnb-homestay-pisos-sin-licencia.html>

<sup>26</sup>In the UK a first judgement obligates Uber to recognise its users as workers and therefore to comply with employment legislation. “UK tribunal rules Uber drivers deserve workers' rights”, Reuters, 28 October 2016. Available at: <http://www.reuters.com/article/us-uber-britain-tribunal-idUSKCN12S1MY>



### 1.2.3. Labour market transformation

On a different note, the digital economy favours the flexibilisation of labour and blurs the physical boundaries and timetables of professional activity. Platforms offer de facto new patterns of employment characterised by short time limits, often linked to specific tasks or skills and based on a relationship of independence between the platform and its workers. This is known as the gig economy (O'Connor, 2016). It is a relationship of *para-labour* which starts as a way of earning some spare cash, but is gaining an increasing strong foothold as a specific new work profile. A study by McKinsey defines these workers as 'independent agents' and calculates that between 20% and 30% of the population of the USA and the EU-15 participate in this new gig economy (Manyika et al., 2016).

This new form of labour is surrounded by many controversies, being considered by some to be a sort of self-slavery imposed by badly applied flexibility (Malin & Chandler, 2016) and by others the advent of a new cyber-proletariat (Dyer-Witheford, 2015). Most conflicts arise out of vulnerability due to the lack of welfare cover obtained by the worker or 'independent agent' (Sundararajan, 2016), although the issue of the impact on existing labour sectors poses additional challenges.

According to the Online Labour Index, the commonest occupational profiles in this type of economy fall into the following categories (Kässi & Lehdonvirta, 2016):

- a) Professional services: e.g., accounting, legal services, human resources;
- b) Clerical and data entry: customer service, transcription, virtual assistant;
- c) Creative and multimedia: animation, web architecture, design, production;
- d) Sales and marketing: optimisation, telemarketing;
- e) Software development and technology: data science, game development, web development, software development, testing;
- f) Writing and translation: article writing, academic writing, translation.

In reaction to this platform economy and labour liberalisation, in recent years we have witnessed the birth of platform cooperativism (Scholz, 2016). This is a movement for the empowerment of users and workers that encourages the creation of commons-based platforms. According to Janelle Orsi, it is a matter of reproducing the model of existing platforms but in the form of fair, inclusive and democratic versions (Orsi, 2015).



## 1.3. ACCESS AND LIMITATIONS OF THE DIGITAL ECONOMY

The digital economy is undergoing expansion and growth, although the pace of expansion and adoption varies widely from country to country, and from population group to population group within the same country. It is out of reach for large sectors of the world population, as a result of a number of factors: internet access, social and economic characteristics, and lastly lack of digital identity.

The first condition to be able to participate in the digital economy is to be able to access the internet. According to the World Bank, 60% of the world's population is without access (The World Bank, 2016). The statistics of the ITU are rather more optimistic, indicating that 84% have the possibility of accessing the internet, although only 48% connect regularly (ITU, 2016). In any event, the disconnected population still exceeds the connected. The Oxford Internet Institute took the available World Bank data for 2013 and depicted it on a map, marking the 'archipelago of disconnection' in order to call attention to the inequalities and the digital divide. Part of this archipelago lies in sub-Saharan Africa, with 28 countries showing internet penetration below 10% (Straumann & Graham, 2015).

The second barrier is sociodemographic. In addition to geographical differences, there are social and economic aspects that condition when we connect and what use we make of it. According to a 2016 study by the Pew Research Center (Pew Research Center, 2016), in the USA the most active users of online services and platforms tend to be under 30 years of age, especially women (62%), with higher education (57% to university level), and live in an urban environment. It is also closely linked to the use of smart phones (95% of users have one).

In Europe the available data focuses on collaborative economy platforms: 52% of respondents claim to know what they are, but only 17% have ever used them. Those with the highest probabilities of having used them are the population group aged 25 to 39, with a university education, living in an urban area and professionally active (TNS Political & Social Network, 2016)<sup>27</sup>. The most significant difference with regard to the USA is that there are no gender differences among users. Both studies provide an insight into who uses the digital economy. The patterns are similar: those with most access to technology and those who are most connected are those who have the highest probabilities of forming part of the market created by platforms on the web.

The third condition to participate in the digital economy is to possess some element that identifies oneself as a customer, user or 'prosumer' (consumer-producer). An identity is an indispensable element for day-to-day operations, and with the shift of the economy to the digital plane, the digital environment

generates the need to create identities – both individual and organisational – that are reliable, verifiable and functional in order to make timely transactions. This is an important issue and we will develop it presently. The World Economic Forum puts financial institutions – rather than states – at the forefront of the configuration of digital identities (World Economic Forum & Deloitte, 2016a).

Digital identity is regarded as a central element of this type of economy, closely linked to the data revolution. Some proposals for these new forms of digital identity arrive hand in hand with technologies like the blockchain<sup>28</sup>. The World Economic Forum for its part is exploring the options and the pioneering role that can be played by financial institutions in their development. One of the paths they are considering is to create *"a fully digital system for storing and transferring identity attributes [that] could be directly integrated into distributed financial infrastructure"* (World Economic Forum & Deloitte, 2016b).

The democratisation of online identity is expected to be a step forward in terms of social and labour market inclusion (The World Bank, 2016). As a measure of its potential we should bear in mind that there are countries where it is easier to access a mobile phone than to access basic services like water or electricity (ITU, 2016).

### Final considerations

For all the above, the global potential of the digital economy in terms of economic growth and wealth creation is huge. This removes numerous frictions and puts the issue of trust at the centre of the model. In the words of OECD Science, Technology and Innovation Director Andrew W. Wyckoff: *"The digital economy has enormous potential for economic growth and well-being—but only if people trust it enough to fully engage"* (OECD, 2015a).

The section below and the rest of this document focus precisely on examining the phenomenon of trust in the framework of the digital economy as a space with potential for value creation, innovation and social impact.

<sup>27</sup>This thematic Eurobarometer is part of the strategy to create the digital single market: [https://ec.europa.eu/priorities/digital-single-market\\_en](https://ec.europa.eu/priorities/digital-single-market_en). The European Commission calculates that only 2% of companies are taking advantage of the opportunities of the digital economy (European Commission, 2015).

<sup>28</sup>Thus, in the mid term blockchain technology would provide a potential to establish an immutable record of our digital identity (World Economic Forum and Deloitte, 2016b).



## 2. TRUST AS A SOCIAL MECHANISM

*“Trust is one of the most important synthetic forces within society.”*

(Simmel, 1950, p. 326)

### 2.1. WHAT IS TRUST?

Trust can be defined in many ways owing to its complex, multidimensional nature, depending on the context (Gefen, 2000). Sociologist James Coleman defined it as follows: *“Trust is a willingness to commit to a collaborative effort before you know how the other person will behave”* (Coleman, 1990). In any event, it is clear that an atmosphere of trust is vital for communal life (Bok, 1999). Trust arises when we perceive that the benefits of collaborating, participating or getting involved are greater than the risks (Botsman, 2012; Coleman, 1990; Mazzella & Sundararajan, 2016; Rinne, 2013)<sup>29</sup>. In other words, when we trust in something or somebody we assume that the outcome of its implementation will be positive for us. Applied to the most basic economics, the act of purchasing, we trust that the purchase will be a good one, that we won't be cheated or hurt, and that we'll gain more than we might lose.

So the level of trust in a particular society helps us to understand economic, social and political behaviour (Müller, 2015). As well as enabling us to collaborate on a one-off basis, it is the building block of our social capital (Putnam, 2001), our criterion for deciding whether or not to participate in politics (Stolle, 2002), and an essential element for the democratic stability of any country (Inglehart, 1997). On the economic side of things, trust and growth are closely linked (Fukuyama, 1995), (Zak & Knack, 2001). Just as trust encourages economic growth, in economically oppressed environments there is a tendency towards mistrust. A good example of this is the 2008 financial crisis and its devastating effect on trust levels, especially in southern Europe (Bowles, 2014).

Being a matter of expectations, trust is linked to what can be expected socially. It is comprised of social norms that are shared, generated and maintained by a particular social group and therefore connects with our sense of community. Fukuyama poses the issue in these terms: *“trust is the expectation that arises within a community of regular, honest, and cooperative behavior, based on commonly shared norms, on the part of other members of that community”* (Fukuyama, 1995, p. 26). Thus, trust and mutual re-cognition in the form of a cohesive community is an essential way of maintaining social harmony. Likewise, gossip or rumour is a form of societal pressure, of social control that serves to keep the peace within a group that follow the rules and makes its functioning predictable. It is a mechanism for finding out about other people's reputation and it allows us to assess to what extent they are trustworthy

(Schneier, 2012). Familiarity is the most powerful ingredient of trust: it is easy for us to generate expectations on the basis of what we already know or looks similar to something we already know. This is why it is simpler for us to interact with friends, or even with friends of friends, than with strangers.

#### 2.1.1 Types of trust

Trust is interactive: it is always placed in something or somebody. In any act of trust there must be at least an entity A who trusts in another entity B. It can be trust from person to person (interpersonal), from person to group, from group to person, or lastly between groups. It is important to distinguish these different types because they have different applications and outcomes. The table below presents the different types of trust, how they are defined and what they are based on:

<sup>29</sup>The more rational version of calculating the risks and benefits of collaborating with 'the other' is addressed in game theory (Tadelis, 2016). Sztompka is the most extreme example of rational calculation, understanding trust as a bet (Sztompka, 1999).

**Table 3:** Types of trust according to origin or source

TYPE	SUBTYPE	DEFINITION	ORIGIN OR SOURCE (Ba y Pavlou, 2002)	CONSEQUENCES
Interpersonal (Freitag & Traunmüller, 2009)	Particularised or thick trust (Putnam, 2001)	Refers to the close circle of trust, frequent face-to-face interactions with acquaintances (Putnam, 2001)	<b>Familiarity:</b> direct interpersonal contact and previous experiences (Alesina & La Ferrara, 2002)	Creation of capital social within the direct circle of trust in the immediate environment. It is what we know as relationships or strong ties.
	Generalised	Generalised attitude towards people in general, with 'strangers', with the abstract 'other' (Finley, 2013)	<b>Cultural dialogue:</b> Calculated subjective assessment; Calculation of the costs and benefits of the other party cheating	It is the 'bridging' mechanism that enables interaction with 'strangers', anonymous people who do not know each other directly. It opens the door to the usefulness of connecting with different 'others'; in social network theory it is identified with weak ties (Granovetter, 1978).  Enables connections to 'weak ties' and thus connects us with available resources (K. Müller, 2015).  In a context of information asymmetry, trust is a simplifying mechanism (Luhmann, 1982) and an enabler of interactions (Heimstädt, 2016).
	Transitive (Jøsang, Ažderska, & Marsh, 2012)	Derived trust based on the trust of someone we trust	Reputation through a trusted third-party network, or through other people's experience (advice, WoM, etc.)	Strong ties and potentially also weak (bridging) ties. A complete stranger is not the same as a friend of a friend. A type of trust that combines particularised with generalised.
Institutional (Nannestad, 2008)	Trust in corporations, institutions, organisations, administration or governments	B2C, institutions, governments - citizens	Values, institutional rules, brand credibility, contracts, third-party certification (Sundararajan, 2016)	Called into question, especially since the crisis (Pirson, Martin, & Parmar, 2016). A shift is occurring away from trust in institutions and towards trust in 'equals' (Botsman, 2015).  Among institutions it is defined as the expectation that the other institution is honest, considerate, transparent and responsible (Tapscott & Ticoll, 2012).

Source: own elaboration from the cited sources.

Each type of trust is associated with a particular level of relationship or outcome:

- a) **Particularised** trust enables us to create social capital and strong ties. This is the trust that is established in our immediate circle of family, friends, companions or colleagues. Often they are people who are relatively similar to us, people with whom we have something in common.
- b) **Generalised** trust is the bridging mechanism that enables us to interact with strangers, people we do not know. We form what is called weak ties (Granovetter, 1978) with these people, with whom we may have little in common, but it is precisely this diversity that gives us access to other worlds and other resources (K. Müller, 2015). To take a very simple example, imagine we are in a group of friends whose musical tastes coincide and we always listen to certain particular styles of music. Strong ties reinforce our existing tastes. Weak ties enable us to become acquainted with other musical influences that otherwise would not reach our immediate circle or would do so later on. This type of trust reduces complexity in social relationships (Luhmann, 1982).
- c) **Transitive** trust combines the first two: meeting a complete stranger is not the same as meeting someone with whom we have a contact in common (a friend of a friend).
- d) Lastly, **institutional** trust, defined as trust that we establish towards a group or organisation as opposed to an individual, is the sort that at present would appear to be called into question (Pirson et al., 2016; Edelman, 2017) or undergoing transformation. Some authors claim that we are witnessing a shift of trust from institutions to individuals, led by the collaborative economy (Botsman 2015b). When the link is established between two institutions, institutional trust is defined as the expectation that the other institution is honest, considerate, transparent and responsible (Tapscott and Ticoll, 2012).

In the context of the digital economy the environment itself facilitates transactions between strangers, so generalised trust and especially transitive trust gain a great deal of importance. Presently we will come back to the subject of how familiarity is built in these contexts of information asymmetry and how all this gives rise to a reputation economy.



## 2.1.2. What makes us trust

As we have seen, trust is always interactive and is in accordance with each person's expectations; it is measured at an individual level but is also a characteristic of societies and organisations (Klijn et al., 2016). However, we also know that trust is not distributed evenly, as there are individual and social factors that influence it. The table below summarises the main approaches to the determining factors of trust, organised by level (individual or social) and the aspects influencing it:

In the social sphere, it is important to note that major inequalities have a bearing on all levels (micro, meso and macro) and are a strong determining factor of generalised trust (Jordahl, 2007). The reasoning is simple: trust is generated through familiarity. If A and B do not know each other directly, it can be a help towards establishing trust if they detect common attributes, such as gender or origin; or similar characteristics or behaviour, such as musical tastes. The social impact of inequalities is to give rise to distance within any group and so reduce familiarity between any two individuals in that group. Offsetting this, in close circles levels of internal cohesion are higher, at the cost of weakening bonds among the social groups of the community at a greater distance from the individual.

However, in more homogeneous, less unequal societies levels of trust are generally higher. As they are more similar, fewer tensions are generated: common feelings and a shared imagination allay uncertainty about the other person's reaction (Delhey & Newton, 2003), even if they have never met before. This has to do with the existence and the subjective perception of a certain order or social control. When this control operates, there is the certainty that behaviour within the norm can be expected. On the other hand, societies in which social control is used as a substitute for trust may have significant consequences with regard to rights and civil liberties (Solove, 2007).

**Table 4:** Different theoretical approaches to important factors in trust generation

LEVEL	THEORIES	SALIENT FEATURES
Individual	Psychological, personality-based	Optimism, perception of control over one's own life
	Living conditions and comfort	Income level, social status, satisfaction, happiness, low levels of anxiety
Social	Micro-societal	Social participation (e.g., associative movement), membership of informal social networks, having strong ties and a sense of belonging
	Meso-societal	Characteristics of community of residence: city size, satisfaction, safety
	Macro-societal	Satisfaction with democratic institutions, situation re freedoms and civil rights, social atmosphere without conflicts, perception of safety

### 3. DISRUPTION OF TRUST IN THE DIGITAL ECONOMY



Just as the scenario of the digital economy is constructed, we need a digitised version of trust (Sundararajan, 2016). The transition from offline to online trust is a disruptive change (Mazzella & Sundararajan, 2016). Trust not only moves into the digital context (this alone introduces new variables into the risk-benefit equation), but goes beyond trust in analogue and face-to-face environments (Keymolen, 2013). The origin, the form and the implications of trust change. We have more opportunities than ever to interact and trade with strangers. The virtual environment facilitates situations in which information asymmetry with respect to 'the other' increases. Transparency and the amount of available information are the key ingredients for lubricating the digital system and fostering participation, collaboration and consumption. This boom in transparency encourages detailed, public or easily accessible information from any user. All this information feeds data records and increasingly forms opinions, modulates preferences and sets trends.

It is important to emphasise that in the digital economy trust and reputation tend to be used as if they were synonyms. Whereas trust is a judgement of subjective perception, reputation involves what others think about you (Botsman, 2015; Ert, Fleischer, & Magen, 2016). The reputation economy is the aggregation of other people's previous experiences. Reputation itself and the definition of identity rest on something that is highly susceptible to other people's opinions and judgements (Rinne, 2013).





## 3.1. WHAT'S NEW ABOUT THE DIGITAL ECONOMY IN TERMS OF TRUST

From its beginnings, the internet was understood as an **impersonal** medium, characterised by mutual ignorance of users' identity and personal traits (Nissenbaum, 1999). In this context, the familiarity mechanisms described above are completely curtailed. The first barrier in the shift from analogue to digital was therefore centred on resolving lack of trust, insofar as it paralysed the adoption of electronic commerce (Chang, Cheung, & Tang, 2013). One of the most critical elements initially was the anonymity of 'who's on the other side' and therefore uncertainty and the perceived risk inherent in providing bank information over the net.

In the digital environment, the framework of trust between A and B is no longer only between individuals or with institutions, but is identified on a new scale: **'many-to-many'** trust (Mazzella & Sundararajan, 2016), now identified as 'digital trust networks' (Mazzella, Sundararajan, Butt, & Möhlmann, 2016). Platform user communities are a good example of this. They consist of interpersonal links between strangers, brought together and mediated by a digital platform. In short, the trust potential rises not only because of the possibility of contacting other internet users, but also because platforms become the new meeting place where certain trusted sources are designed.

Another novel element that shows the complexity of digital trust is that it affects not only the virtual plane but also encapsulates **different types and levels of trust in one act** (Dambrine, Jerome, & Ambrose, 2015). By way of example, a consumer's intention to consume will be affected by trust in whoever offers the product or service (the provider), in the product or service itself (measured in quality, reliability or good condition) and also whether the platform is truly trustworthy. Trust in the platform becomes so relevant that, de facto, it determines the degree of trust that will be conferred on everything that happens through it (Möhlmann, 2016).

There is yet another level, namely the interaction of physical and virtual trust. Imagine a platform for collaborative accommodation: guests and hosts trust each other at the time of making a reservation. This first state of virtual trust is also going to imply that when physical interaction occurs the experience of trust will be positive. A paradigmatic and widely studied case in this regard is that of the hospitality network Couchsurfing<sup>30</sup> (Zhu, 2010). Precisely because the digital economy a priori implies trusting in an abstract 'other', trust will be strongly influenced by this generalised attitude, the willingness to trust (Finley, 2013; Friedman, Kahn, & Howe, 2000).

A recent study conducted by NYU Stern on BlaBlaCar<sup>31</sup> shows that trust generated through online mechanisms can put a stranger on the same trust level as a friend or relation, and higher than neighbours. That is to say, the experience of trust generated online may lead us to place significantly more trust in the digital profile of an unknown user (88%) than in someone we are relatively familiar with, such as a workmate (58%) or a neighbour (42%) (Mazzella & Sundararajan, 2016). The same study also measures what impact is exerted by the fact of having shared a ride on users' intention of participating in other collaborative economy services. In all cases, the factor of propensity to consume other collaborative economy services is multiplied by 1.5, and its effects are even greater among the millennial generation (Mazzella et al., 2016).

The impact on generalised trust also appears to be confirmed by another study conducted on the Couchsurfing platform. However, as the service is free, the incentive to participate in it is difficult to separate from the specific profile of the participants. In other words, participants' levels of trust and tolerance may increase as a result of their participation, or it may be that the sort of people who participate in it are more trustful (Ronzhyn, 2015)<sup>32</sup>.

Critical voices contend that trust mechanisms are an important premise, but it is important to bear in mind the value of experience. Harford rightly points out that digital trust could not be maintained if it were not for the fact that most interactions go smoothly: *'The reason eBay and Airbnb work is not because of brilliant online reputation systems but because most people aren't crooks'* (Harford, 2016). That is, a bad experience is not easy to offset with just a good platform design.

<sup>30</sup>A social network with the motto 'Stay with locals and meet travellers'. It provides a link between travellers and locals who offer free lodging.

<sup>31</sup>For the case study see the previous edition of the Antenna for Social Innovation (Buckland et al., 2016).

<sup>32</sup>In this case it is difficult to separate the effects on trust after participation in Couchsurfing from what has been called self-selection bias. A benchmark example of this is the debate on whether or not studying economics reinforces individualistic behaviour (R. H. Frank, Gilovich, & Regan, 1993).

## 3.2. BUILDING DIGITAL TRUST

Digital trust seldom occurs spontaneously: it is a phenomenon that requires proactivity, and it has to be facilitated, encouraged and built. Grossman calls this architecting trust (Grossman, 2013). A growing part of the literature and corporate research has been dedicated precisely to developing frameworks for designing and creating a socio-technical structure that facilitates trust and allows participation, at the same time taking into account technical and social elements (Sousa, Lamas, & Dias, 2016).

Just as it was detected at the beginning of e-mail that anonymity discouraged purchase intent, in the digital world identification and transparency go back to square one (Grossman, 2013). Information makes a stranger less strange, and generates familiarity with the unfamiliar (Dubois, Bonezzi, & De Angelis, 2016). Having information in order to make decisions is therefore paramount for allaying the perception of uncertainty that could affect or even discourage exchange. The more elements are provided to fill in the unknowns in the equation, the more 'safety' or less uncertainty the user or organisation will perceive<sup>33</sup>. Traceability, feedback mechanisms and public reviews provide a specific solution to fill this information gap, this asymmetry regarding the 'stranger', in both directions (Botsman, 2016).

Cases like eBay and Craigslist are always taken as the pioneers and yardsticks in this type of economy. The case of eBay is very significant as initially no one thought it could work, precisely because of the trust frictions surrounding online commerce. Tadelis explains that the keys to its success were transparency in auctions and the system of reviews and public comments by users (Tadelis, 2016). eBay is therefore a pioneering example in the sphere of the reputation economy (Allen & Appelcline, 2005; Finley, 2013; Resnick & Zeckhauser, 2002).

The mechanisms for generating digital trust are detailed below. According to Sundararajan (2016) there are basically four innovations: i) creation of a virtual identity which includes personal information and individual features; ii) digitisation of other people's experience in the form of comments or ratings; iii) creation of digital communities (or as he calls it, digitisation of social capital); and iv) the transfer of this to the establishing of trust in organisations (Sundararajan, 2016). We analyse them in the following.

### 3.2.1. Identification of users

In order to alleviate the uncertainty resulting from anonymity, user identification is encouraged. Identities are built on user profiles, by providing features and characteristics that make it possible to assess their potential trustworthiness. They generally include personal information of various types, together with basic sociodemographic data such as name, sex, age, educational attainment and profession. They will also include specific aspects related to the common interest of the platform (for example, BlaBlaCar includes whether users want to talk during the ride). Images are particularly crucial for judging the trustworthiness of 'the other' or 'the product'. An experiment based on Airbnb showed the importance of trust acquired through photos: the more trust generated by the photos (of the user and the accommodation alike), the better the prices obtained and the greater the chances of being chosen (Ert et al., 2016). In fact, in this case photos are a stronger reference than other people's reviews, because the potential 'prosumer' can judge them directly according to his or her own criteria.

Even more trust is generated when the user profile is connected to a social network, as it serves first as an authentication mechanism and then as a verification mechanism (Kwan & Ramachandran, 2009). Essentially, platforms provide users with more points of information enabling them to verify that the identity presented coincides with the offline identity (Finley, 2013). Lastly, the social distance between users is also important, because some decisions are based on the degrees of separation and make up for the lack of robust information (Freedman & Jin, 2008). Users' connection to social networks makes it easy to find common bonds of friendship that allow the establishing of online trust.

<sup>33</sup>We have mentioned some examples of online trust building through the example of eBay above.

### 3.2.2. Opinions and ratings

The digitising of other people's experience is another tool for building trust in the digital environment. Ratings are the whole range of systems that include ways of evaluating any aspect of the experience, product or service, the process of communicating with the other person, etc. (Allen & Appelcline, 2005). They can be free-format comments, rating systems (with stars, scores) or preferential rankings<sup>34</sup>.

They are based partly on transitive trust and make up for lack of information about 'the other' with a quantity of opinions given by 'others'. In a way, this quantity compensates for the lack of familiarity, because those who post opinions or ratings are also strangers. This aggregate opinion functions as a proxy for deciding where to place our trust (Dambrine et al., 2015), on the basis of comments expressed by a third-party network (Ba & Pavlou, 2002). The advantage is that these comments provide a form of direct and instant credibility: *"Ratings and reviews give providers (those who're selling goods, services, or offering items for swap) with instant credibility to partakers (those who're buying the resources) with an instant level of trust and credibility"* (Owyang, 2015). Logically, the value of these opinions increases when they come from someone we know (Finley, 2013, p. 51).

The average user places a surprising amount of importance on opinions and ratings: 75% of them state that they trust other people's opinions (Massum & Tovey, 2012) and most of them attach practically the same value to them as to personal recommendations (Duncan, 2016). Beyond platforms, seeking opinions before acquiring a product is becoming more widespread, and applications or portals that make comparisons between products are proliferating. Most users (75%) claim to have used them at least once (Duncan, 2016). However, although there is plenty of research on use, there are still few

studies that analyse the real impact on the economic value of the different types of reputation (Teubner, Saade, Hawlitschek, & Weinhardt, 2016).

It is important to bear in mind that opinions and ratings are not neutral. They reflect subjective criteria, and these forms of reputation are sensitive to bias. Furthermore, some patterns have been detected in this regard: for example, people tend to tone down negative reviews or directly omit them (Zhou, Dresner, & Windle, 2009)<sup>35</sup>. At the other extreme, there are also reports of unfounded complaints (Malhotra, 2014). For all these reasons, trustworthiness has been called seriously into doubt from academe. Another matter to be taken into account is that a market is generated in fake reviews. Fraud is generally due to comments being manipulated, promoted (Zervas, 2015) or moderated by brands (Emery, 2016). It is calculated that up to 30% of ratings are faked, and an added problem is the difficulty in detecting them (Luca & Zervas, 2015).

One piece of research from Cornell University started to experiment with Review Skeptic<sup>36</sup>, a cognitive computing project for identifying fake reviews, and managed to apply it successfully in 90% of cases<sup>37</sup>. In any event, further research is needed on the social implications of the phenomenon of fake reviews and how they affect trust building. That is, when somebody discovers that they have based a decision on fake, moderated or promoted reviews, do they continue to use them on future occasions? Will they continue to provide information and leave reviews for others?



<sup>34</sup>In this section we will not distinguish between the different types, as we are interested in the function of trust mechanisms rather than in assessing each of the systems.

<sup>35</sup>They found that one of the reasons for not making unfavourable ratings is the negative impact it has on prices: negative assessments force prices down in order to as a way of retaining some form of competitiveness.

<sup>36</sup><http://reviewskeptic.com/>

<sup>37</sup>For more information on the project consult: <http://www.news.cornell.edu/stories/2011/07/cornell-computers-spot-opinion-spam-online-reviews>

### 3.2.3. Digital communities

The third leg of the stool of digital trust is the digitising of relationships and the creation of digital communities. As we have already observed, interactions are basic for building trust. In this respect, the information available in the user's profile plus other people's opinions are important for generating trust at an early stage. Reputation is useful as a point of entry, but once we get beyond this stage the best guarantee for building trust is to be able to interact and increase good relational experiences that can pave the way towards generating a deeper, sturdier trust.

Therefore, in digital platforms, having a space similar to a social network is conducive to interactions and makes it possible to build communities around exchanges, experiences, interests and other common elements of value to users. The sense of community grows with the interactions that are generated, especially when that 'market', that 'community' or platform, becomes a relational space where contacts are not just made on specific issues but form a smooth flow of communication and users contribute towards generating network movement<sup>38</sup> (Tonteri, Kosonen, Ellonen, & Tarkiainen, 2011). This also makes it possible to create identification with the issues, values and points of view that circulate within that space. It is what is identified in marketing as user engagement (Gangi & Wasko, 2016).

These spaces provide bridging social capital (Albinsson & Perera, 2012; Bialski & Batorski, 2010; Coleman, 1990; McArthur, 2015; Putnam, 2001; Rea, 2015; Rosen, Lafontaine, & Hendrickson, 2011), affording the opportunity to transcend ties with our close circle and connect with strangers far removed from our immediate social world. The sense of belonging in virtual communities is therefore a complex and little known issue, particularly with regard to the elements of voluntary belonging (freedom to choose whether to engage or not) and most of all the emotional bond that is formed between the members of the community and with the network itself (Blanchard, 2008, Blanchard and Markus, 2004, Ellonen et al., 2007 and Koh and Kim, 2003).

In any event, it seems clear that once a digital community has been defined and structured it is possible to build **community responsibility**, with a shared common sense and a set of operating rules that lay down what behaviour is right and what is wrong. The same mechanisms that operate in physical space operate similarly in virtual space. Then a new layer of trust is established. This was one of the main facilitators for the spreading of electronic commerce in its infancy (Ba, 2001).



<sup>38</sup>Movement here refers to interactions between users, beyond consuming and sharing content. It has to do with engagement, forging collective ideas, generating debate and sharing opinions. Community and belonging are woven precisely through exchange and interaction. And it is the capacity to generate community that attracts new users and amplifies the effects of the network.

### 3.2.4. Creating trust towards an organisation

Mechanisms for building trust between individuals and organisations have some points of similarity with the creation of person-to-person trust. Thus, the basic elements can be extrapolated to the construction of the reputation of brands, corporations or institutions. Reputation is the opinion of the group; it is not what the actual organisation communicates and conveys about itself. It goes beyond a one-way relationship. Virtual environments such as social networks are an indispensable space for nurturing a good image in the digital age. In this new virtual environment, reputation is based on the number of followers, the ability to engage them, and especially the opinions and comments they share with others about the brand or organisation. All these elements convey popularity and acceptance, and furthermore are verifiable and public. This new dynamic is identified as ‘social proof’ (Burrus, 2015).

We have seen that, in the case of platforms, trust in the intermediary determines the trust levels that will be generated between peers. That is, the perception of the opinions and ratings of others is mediated by the user’s opinion of the platform they share. No matter how good the opinions on another user might be, we will probably take only partial notice of these references if trust in the platform is weak (Möhlmann, 2016).

There are some common elements to platforms that afford great acceptance and credibility. The top priority is to achieve a sufficient critical mass of users and to manage the effects of their interaction in the network. Secondly, the platform’s competitive advantage is enhanced through transparency, respect for privacy and good communication with users. We can develop these three elements as follows:

— **Transparency as a value:** This is particularly effective in those cases in which trust in the institution needs to be restored (Botsman, 2014). One form of transparency is for the organisation to show itself as being open and unobscure. Transparency thus appears as a cross-cutting and perceptible value in each of the actions mediated by the platform: transparency can encompass everything from accountability with regard to its functioning to decision making, including the possibility of auditing algorithms if they exist. However, Kirby warns that investing in transparency means exposing the business model both to users/consumers and to other similar companies or initiatives. So although it offers an important competitive advantage it must go hand in hand with constant innovation to keep ahead of the competition (Kirby, 2012).

— **Respect for privacy:** More and more users are concerned about what happens to the information circulating on them online and the use made of it by corporations or other institutions. For the most part this loss of privacy seems

to be accepted as a necessary evil to obtain services without economic outlay (e-mail accounts, applications, access to music, etc.). Trust can be built by showing respect for privacy as a fundamental right. This includes protecting users’ data in terms of how data is collected, the nature of the information collected, how it is stored and how it is processed. The aim should be to prevent the sale or transfer of data to third parties and invasive personalised advertising (Tang, Hu, & Smith, 2007).

Privacy policies are one channel, then, but it has been shown that they are neither operational nor realistic when they are extensive and difficult to understand. As a result, users end up accepting abusive clauses without realising, by failing to make a detailed reading of often lengthy and unintelligible privacy policies. Multiple examples of fanciful clauses demonstrate this, among them GameStation’s policy containing a clause instructing users to uncheck the option if they did not want to surrender their “immortal soul”<sup>39</sup>. Other clauses offer a reward for reading the small print, and months pass before they are claimed (Duffy, 2014). The important thing is to give users reason to believe that their data is in good hands, as regards both the uses of the information and prevention of security breaches. In 2013 a study found that 45% of customers are willing to pay more for an online product or service if the company or organisation keep their data private (IPSOS, 2014).

— **Good communication:** The fact of a brand producing relatable and accessible communication is decisive when it comes to opting for one service or another. Precisely because the digital medium is impersonal, showing that ‘there’s someone on the other side’ reduces frictions and increases trust in the platform. The more this communication resembles the format of a conversation between people the better. One way of doing this is to have community managers or live chats, for example (Kim & Park, 2012). This element is particularly crucial when something fails to work as expected or the user’s experience of the platform is unsatisfactory. Good, agile, responsive communication can restore the trust of the affected user and sends a reassuring message to the rest.

Lastly, together with these three aspects, the **technical part** is important because it is the visible face, the relational space and the meeting point between the user and other users and the brand or institution itself. The commonest technical recommendations are to make platform interfaces easy to use, intuitive, agile and friendly (Kim & Park, 2012).

<sup>39</sup>The clause read literally as follows: “By placing an order via this Web site on the first day of the fourth month of the year 2010 Anno Domini, you agree to grant Us a non transferable option to claim, for now and for ever more, your immortal soul. Should We wish to exercise this option, you agree to surrender your immortal soul, and any claim you may have on it, within 5 (five) working days of receiving written notification from gamestation.co.uk or one of its duly authorised minions. We reserve the right to serve such notice in 6 (six) foot high letters of fire, however we can accept no liability for any loss or damage caused by such an act. If you a) do not believe you have an immortal soul, b) have already given it to another party, or c) do not wish to grant Us such a license, please click the link below to nullify this sub-clause and proceed with your transaction”.

### 3.3. ONLINE REPUTATION AS AN ASSET

The digital footprint created as a result of our online participation, i.e., the trail we leave on the internet, together with today's computing capacity, makes it possible to track and aggregate all the reactions, opinions and scores on any given user or supplier and generate an individualised reputational profile. One of the most important innovations focuses on the capacity to generate aggregate profiles: to gather together this fragmented record of identities and interactions in the digital economy and fuse it into a single block of information. The aspiration is to generate a score or a particular position and make it visible to others.

As of the moment that individual reputation is aggregable, it begins to be considered as a form of capital in itself (Mazzella & Sundararajan, 2016). This is a form of capital about oneself that depends on others, and this makes it more trustworthy in the digital environment. The debate that is now ensuing is whether 'trust capital' is a new form of social capital like that observed in the physical world or is something altogether different (Gandini, 2016).

The progress made in the parametering of online reputation opens the door to putting values and behaviours before possessions or financial capacity as central elements of an individual's reputation. Consequently, having a good or bad score may determine future professional, personal and social opportunities. Probably as much as not having one. The main promise of using reputation as an asset is therefore to offer the possibility of people who are excluded from the financial system to access credit if their online reputation demonstrates trustworthiness. A ground-breaking social innovation.

Emphasis has also been placed on the empowering aspect of online reputation (Hearn, 2010), on the understanding that each person can act in a certain way to improve his or her digital reputation and then use it and activate it to the extent that he or she sees fit. However, while handbooks appear for curating, generating and optimising one's own reputation – closely linked

to the creation of a personal brand – the instrumental side of building a digital reputation also receives attention. Notably here we find tips to get better reviews, to position oneself better or to maximise individual competitive advantage over other digital users (Fertik, Thompson, & Cummings, 2015). Also offered are ways of minimising the impact of negative information, for example by making noise or 'digital smokescreens' to divert attention. Therefore, it depends on our capacity, resources and personal skills how we manage, nurture and repair our own reputation and also the possibility of influencing that of other people. This manifestation brings us back to the problem of the digital divide, the effective inequality of individuals when it comes to acting in this new virtual framework, together with the impact of social forces exerted by more powerful agents (corporations, governments, etc.) who in practice feed an unequal distribution of those capacities in society. The central idea would be that neither are we all equal nor do we all have the same capacity to generate, influence or create a good digital reputation.

Some authors alert that it is necessary to reflect on the social implications of reputation systems (Resnick, Zeckhauser, Friedman, & Kuwabara, 2014), especially in the sphere of the collaborative economy (Malhotra & van Alstyne, 2014). Below we offer some reflections on these impacts through the discussion on i) the new forms of collective responsibility (reputation and social control); ii) transparency as a social norm and its tensions in relation to privacy; iii) the emergence of new forms of discrimination and iv) the potential perverse effects of social credit systems.



### 3.3.1. Online reputation and social control

Online reputation can be regarded as a societal pressure insofar as, to follow Schneier, societies are considered to ‘induce’ trust (or at least the meeting of behavioural expectations) through systems consisting of a set of ‘societal pressures’ to encourage and/or guarantee cooperation (Schneier, 2012). At this point we are particularly interested in the *instructive* dimension of trust, where it meets individual decisions and behaviour. The social and instructive dimension therefore ceases to be an enabler of interaction and becomes a reminder of the limits between normal expectable behaviour and deviant behaviour. Social harmony, in short, depends on it: on all the members of the community behaving as they are expected to. In this context, Malhotra (2014) identifies situations of horizontal (i.e., peer-to-peer) community surveillance, in which it is the users themselves who are quickest to identify suspicious behaviour and even point to it directly, and usually do so in their own interests.

In this type of horizontal surveillance traditionally there are two basic ingredients for trust building that give rise to two different moments in time: a) first, situations are generated in which reputation is important; b) then communities of shared interest are created that connect reputation to one’s own economic interest<sup>40</sup>. That is, mechanisms of societal pressure are clearly generated that induce or stimulate collective responsibility. This is the mechanism already used by some of the most novel initiatives in the insurtech sector (e.g., Lemonade<sup>41</sup>).

However, linking individual behaviours to collective repercussions can lead to potential situations of ostracism or the perception of the community as an element of social asphyxia, paradoxically fomenting mistrust and overwatchfulness among members instead of generating cohesion and collaboration. It is therefore important to explore which factors promote a balanced interplay in order to disengage the potential negative effect of the collectivisation of collective responsibility.

### 3.3.2. Transparency as a value and privacy as a right

As mentioned above, the fact of building trust depends on the information available. In the words of Christian Fuchs, “*Building trust requires knowing certain data about other persons*” (Fuchs, 2011, p. 144). Access to other people’s personal information is the basis of the mechanisms used to lubricate transactions, although this brings about an unprecedented state of informational transparency made possible by the scope and omnipresence the internet already has in our lives. All this leads to a scenario of overexposure (Jøsang, Ismail, & Boyd, 2007) with far-reaching implications for privacy (Golbeck, 2009).

Given this supremacy of transparency as a value, multiple forms of violation of privacy can occur (Solove, 2008) at various levels (Lutz, Hoffman, Fieseler, & Bucher, 2016). We are faced with a new environment, in which society is still negotiating the “social contract of privacy” (Martin, 2016), even though we already know that this is a matter of concern for users (OECD, 2015b). By way of example, 60% of internet users in the USA report feelings of concern about privacy in online transactions (Chui & Manyika, 2015), especially due to potential misuse of personal information and the problems of cyber-security.

In the same way, the constant data breaches, amplified by media coverage, cause a feeling of insecurity and erode trust (OECD, 2016). The most recent example is that of Yahoo!, who in December 2016 recognised having suffered the most important data breach of its history, jeopardising the accounts of 1,000 million users. The news caused major reputation problems and share value fell 6% the next day. At the same time, Verizon, who at the time were in the process of purchasing the internet company, demanded a renegotiation of the price of the company on the basis of the losses incurred by the security breach<sup>42</sup>.

Over and above unwanted exposure, 80% of respondents recognise that their personal information is of economic value to companies. It seems to be tacitly assumed by society that part of the business models of the digital economy consists in following the trail we leave digitally, analysing our patterns and preferences and delivering segmented and personalised advertising. In the commercial sphere there are approaches that go beyond the adaptation of advertising and also personalise rates, customising prices to match each of the profiles found and classified depending on its trustworthiness or riskiness.

Although privacy is a fundamental right, we are beginning to see examples of its problematisation and instrumentalisation in this new digital dimension. Some users disclose their data

<sup>40</sup>One paradigmatic case of this two-stage process is the evolution of the system of microcredits developed by Muhammad Yunus in Grameen Bank. More information on his story at <http://www.muhammadyunus.org/>

<sup>41</sup>The system they have launched can be consulted on their website: <https://www.lemonade.com/>. At present it is operative in New York State and they plan to extend it to the rest of the US over the coming months. The growth rate is exponential, as their transparency portal shows: <https://blog.lemonade.com/2017/01/18/lemonades-first-quarter-in-market-exposed/>

<sup>42</sup>“Verizon exige renegociar el precio de Yahoo tras el robo de datos”, published in *Cinco Días*, 15/12/2016. Available at: [http://cincodias.com/cincodias/2016/12/15/tecnologia/1481834934\\_762593.html](http://cincodias.com/cincodias/2016/12/15/tecnologia/1481834934_762593.html)

altruistically (especially in contexts such as health care or as a contribution to scientific research), activated by the ideal of the common good. Others see the new digital framework as an opportunity to assert their ownership of their data and commercialise it to their own benefit (Arroyo Moliner, 2015).

Along these lines, Orange conducted a study in the UK in which participants quantified how much money they would expect to receive in exchange for providing different types of information such as their full name, postal address or purchase history (Loudhouse, 2014). The average amount quoted was £12.77. Once again familiarity plays an important role, as users aimed too high (quoting practically £3 more on average) if they knew the brand but had never bought or shared information with them before. Marital status appears as the least sensitive information and therefore the cheapest (£9.63), while providing information on annual income was quoted at £14.61 on average. Other items included revealing information on other people, giving details of the preferences of members of the family, for instance, which was worth compensation to the tune of £14.07; and disclosing the e-mail addresses of five people close to them, which was quantified at £14.46.

Some solutions can be proposed for this tension between overexposure and privacy that go beyond regulations and data protection laws. As Boyd contended a decade ago, right now we are “public by default, private through effort” (Boyd, 2007). Among the possibilities for going against this trend are the development of ‘opt-in’ privacy policies, whereby users can decide what type of privacy they want and which they do not, the provision of added control mechanisms over digital platforms, and the use of respectful platforms by the administration (Fuchs, 2011, p. 160).

In relation to information security, encryption as a way of storing and transferring information between parties is receiving more and more attention. In fact, in 2015 the United Nations issued a statement recommending the adoption of encryption measures as a way of guaranteeing freedom of opinion and expression (Kaye, 2015). The social debate continues and ethical and moral dilemmas are exacerbated by cases like the struggle between the FBI and the company Apple over the unlocking of the telephone of one of the defendants regarding the San Bernardino shooting<sup>43</sup>.

In this respect, technical initiatives are appearing with the mission to empower users and restore the subject’s sovereignty over his or her own digital information. Some authors predict that the next technological boom in the field of the economy should occur by combining mobile devices in the framework of the platform economy with the reproduction of optimal security and privacy conditions (Zhuang, Hancke, & Wong, 2016).

### 3.3.3. New breaches of trust

The criteria established in virtual spaces to build trust draw the borders of communities of belonging, feeling, practice and transaction. All these elements have an impact on how we define ‘the other’, how we relate to the unknown and what assessable elements serve to determine whether someone is trustworthy or not. Most importantly, these transformations are being used as the foundation for building the right of access to opportunities of the future (Sundararajan, 2016).

Over and above the digital divide, as internet access is the main premise to be part of this new economy, it is of paramount importance to bear in mind that trust as a basis for interaction and *reputation* as currency are destined to be key elements that will condition, if not determine, a person’s capacity to access resources in both the digital and the physical sphere.

On the positive side, online reputation can afford flexibility, generating positive impact as a form of economic dynamisation in sectors affected by unemployment, for example among young people and immigrants. Thus, lack of regulation and flexibility can be seen as a gateway to alternative economies for people who are unable to access the conventional productive system (Rogers, 2015). This is no doubt an ultimately positive novelty that results in the creation of opportunities for demographic profiles up to now excluded by the market.

The negative side is that the digital economy also reproduces and magnifies traditional prejudices. In Hearn’s terms, reputation is a cultural product, the result of the consensus of ‘others’ on oneself, which together with the creation of that ‘self-brand’ is always subject to the relations of power that structure forms of identity such as gender, origin and social class (Hearn, 2010). In other words, if a large proportion of users in the reputation economy are white, middle-class and have higher education, they can be expected to project greater trust towards people who have a similar profile (Schor et al., 2016).

Controversial cases abound. On social networks, especially Twitter, the hashtag #Airbnbwhileblack became popular in the USA to lay bare and denounce discriminatory situations surrounding the accommodation platform Airbnb. At the beginning of 2016 two Harvard researchers quantified the discrimination practised in the United States on the basis of preferences when hosting or staying in apartments through Airbnb. Even controlling for factors such as perceived quality and location, profiles with Caucasian American names got 12% more rental than those with a clearly Afro-American name. The same research paper showed that Afro-American guests had 16% less probability of being chosen than whites (Edelman & Luca, 2016).

With regard to gender, problems have arisen more in the area of car sharing and ride sharing, with incidents that are often related to various forms of harassment or assault. The

<sup>43</sup>In February 2016 the FBI urged Apple to create software to unlock the iPhone 5C belonging to one of the defendants, in order to be able to access the encrypted information contained in the telephone. The company refused to collaborate and the FBI contacted an Israeli forensic software company which hacked the defendant’s phone. This case caused a great stir regarding brands’ responsibility in the protection of users’ data in the face of requests for access from states or security forces. “Israel’s Cellebrite linked to FBI’s iPhone hack attempt”, published in BBC News, 23 March 2016 (Kelson, 2016).



immediate response to this has been to create initiatives suitable for women only, with the intention of “making them feel safer”. SheRides, SheTaxis and Chariot for Women are some examples of this.

Both racial discrimination and sexual violence show how the effects of social differentiations can multiply exponentially in the online environment. And it is not just a matter of scale, but rather to what extent the design, the selection of items included in or excluded from a platform, become the assessable aspects for trustworthiness, as well as increasing the distance caused by the social differentiation and the gap that they reproduce. It seems clear that if one of the most direct mechanisms for trust is to endow platforms with familiarity, transparency and reputation mechanisms do not always work in favour of inclusion and the creation of that “interconnected global village” that some envisage.

### 3.3.4. The instrumentalisation of online reputation

Other different implications may arise when this aggregate evaluation of the digital reputation is put to political ends. If citizens can be classified according to a series of elements linked to their digital footprint, and states and governments can make decisions on that basis, these systems need to be very transparent and auditable. Otherwise, the probabilities of undermining the democratic foundations may lead to a strong impact on civil rights and liberties. Once again, the outcome would not imply greater trust, either among citizens or in institutions.

The existing case that comes closest to the picture described above is that of China, where apparently a system of social credit for corrective purposes is already under development. The Chinese government seems to be testing how to use big data to score trustworthiness and political loyalty to the regime through a system of social credit, in which each citizen will be given a score. Right now there are eight companies testing pilot systems, but the most salient is that of Sesame Credit, the financial credibility certificate of the multinational Alibaba<sup>44</sup>. A document published by the Chinese State Council<sup>45</sup> defined what measures could be expected by those guilty of dishonest behaviour. These measures could be designed to single out and alienate bad citizens, converting them into pariahs and at the same time disciplining the rest<sup>46</sup>. Sanctions include being barred from buying a home, staying in star-rated hotels, and pursuing a military career.

The world of science fiction has depicted some dystopian scenarios on the subject of social reputation as a mechanism for access to resources. One pioneering example is the novel *Down and Out in the Magic Kingdom* (Doctorow, 2003). In it, reputation is considered as a currency, known as Whuffie. This consists of a form of social reputation that replaces money; it is updated constantly with each act and measures the level of esteem and respect each individual deserves. This system not only defines the code of relationships but also marks who can access precious or scarce resources such as a home or who can get a table in a busy restaurant.

A more recent example is the episode ‘Nosedive’ of the TV series *Black Mirror*, which revolves around people’s reputation according to how they are rated on social networks. The episode presents a series of ridiculous situations in which the main character tries to increase her score in order to rent a home, with consequences that show her inability to manage her own reputation to get something in exchange.

<sup>44</sup><http://www.bbc.com/news/world-asia-china-34592186>

<sup>45</sup><https://chinacopyrightandmedia.wordpress.com/2016/09/25/opinions-concerning-accelerating-the-construction-of-credit-supervision-warning-and-punishment-mechanisms-for-persons-subject-to-enforcement-for-trust-breaking/>

<sup>46</sup>[http://internacional.elpais.com/internacional/2016/10/20/actualidad/1476970091\\_757096.html](http://internacional.elpais.com/internacional/2016/10/20/actualidad/1476970091_757096.html)

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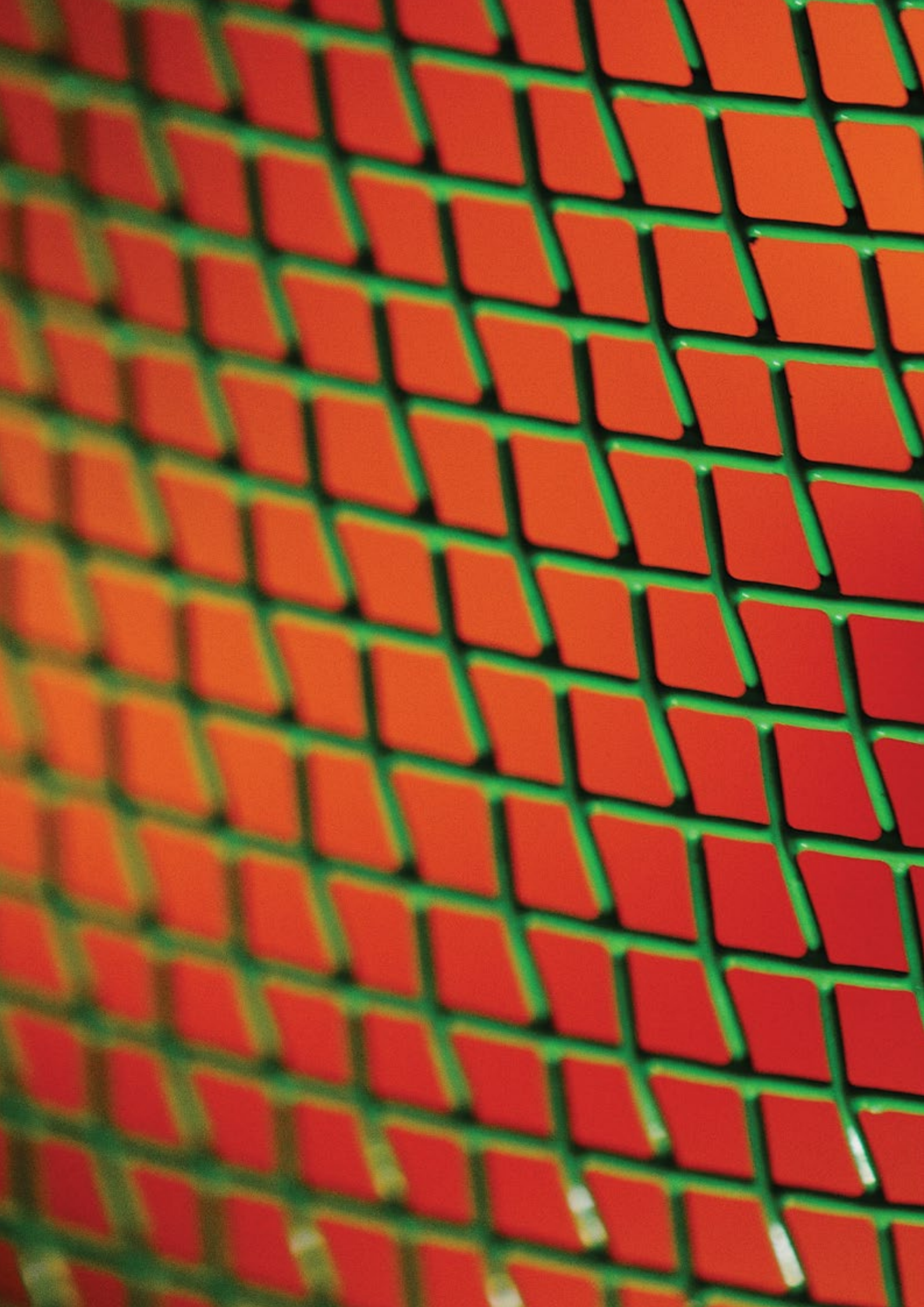


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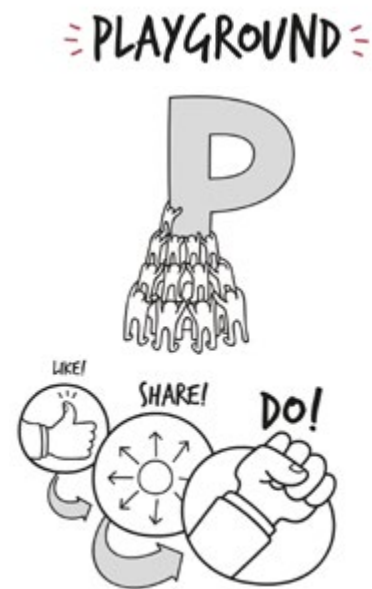
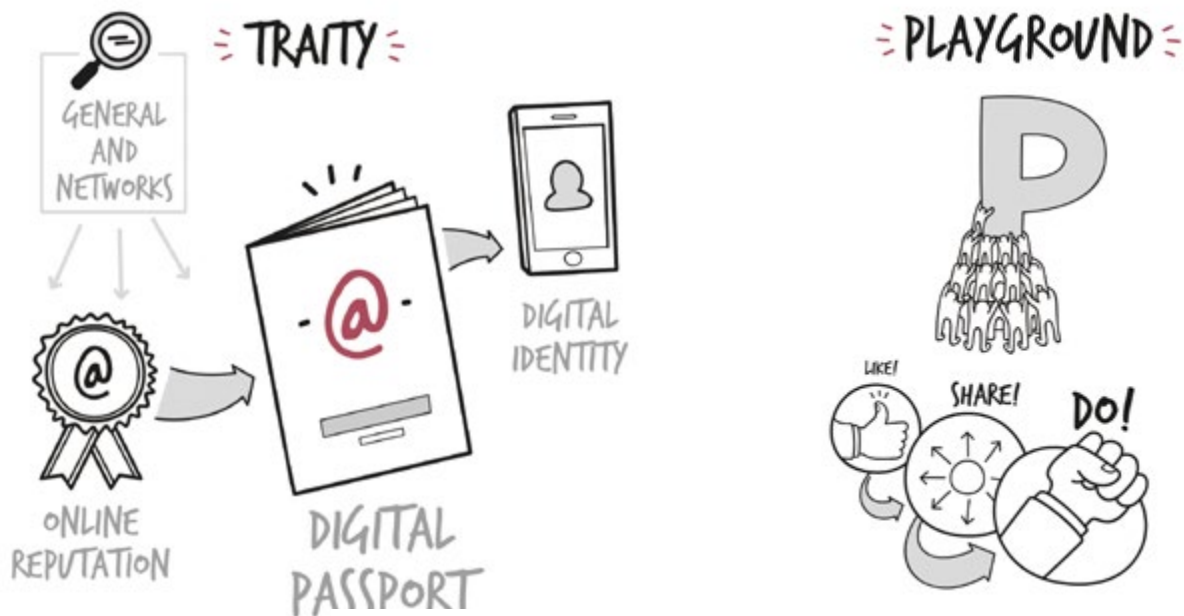


# PART 2

# 1. THREE INSPIRING EXAMPLES OF DIGITAL TRUST

In this chapter, we have analysed three cases of social innovation in depth within the framework of the digital economy. They are three different approaches that give us a better grasp of how on-line trust works. The digital economy, as everyone knows, is in a state of constant flux, which makes it hard to do more than take a snapshot of its make-up, options and degree of implementation at any given point in time. Thus in order to ensure a wealth of approaches, we have looked at three digital platforms that have taken very different approaches and that fall within Hagel's classification scheme, presented earlier.

----- (CASES ANALYSED ACCORDING TO THESE VARIABLES) -----



**(COMOODLE)**



VIRTUALISE A LOCAL COMMUNITY



Bureaucracy



Economic efficiency

**Table 1:** Three platform models, classified by their aims and workings

	AGGREGATING ENTITIES	SOCIAL ENTITIES	MOBILISING ENTITIES
FACILITATE	Transactions	Social interactions	Joint action
THEIR AIM IS	To link users to resources	To link individuals with communities	To mobilise interests and turn them into actions
MECHANISMS	All actions are mediated and tend to be one-offs	Foster fairly stable networks and relationships	Foster relationships to achieve shared aims
EXAMPLES	Databases for investors, Collaborative Economy platforms	Social networks	Networks of suppliers, Free Software platforms or social movements

Source: authors, based on Hagel 2015

The selection of these cases combines: (a) social innovation criteria based on the five variables set out in previous surveys and the originality of their approach to trust; (b) multi-faceted, pragmatic criteria that include the availability of information and access to it, the degree of the initiative’s maturity, the fit with Hagel’s classification criteria (set out earlier).

As a result, the final selection analyses: (1) Traity, a start-up that positioning itself as the gold standard for on-line trust; (2) PlayGround, an on-line information medium currently shifting towards cyber activism; (3) Comoodle, an example of a collaborative city in Northern England, which has discovered a digital platform to be the most efficient way of using its resources.

The following table summarises the initiatives in terms of Hagel’s matrix:

**Table 2:** The three cases and their respective platform models

	TRAITY	COMOODLE	PLAYGROUND
	AGGREGATING ENTITIES	SOCIAL ENTITIES	MOBILISING ENTITIES
THEY FACILITATE...	Virtual transactions (between individuals/organisations) that are more secure and in which one can put greater trust	Social interactions, creation of social capital and cohesion	Contents on global challenges, highlights undesirable situations, communicate very effectively through visual language and story-telling
THEIR AIM IS...	To become the ‘gold standard’ for on-line reputation. They act as digital reputation aggregators and vouch for the degree of user’s trustworthiness by displaying a medal	To link local government with citizens’ associations	To inform people, boost public awareness, which in turn leads to various social initiatives
MECHANISMS...	Anyone can create a Traity profile to obtain reputation medals and use them as assets. The system works in certain Collaborative Economy portals in for some web sites in the <i>InsurTech</i> sector	Fosters relational networks in which users share skills, material objects and physical spaces	Offers a meeting point (mainly the firm’s Facebook page) where followers can both consume content and make comments, share and organise

Source: authors, based on Hagel 2015

<sup>1</sup> As mentioned earlier, the five variables drawn up by Buckland / Murillo (2013) - *Social Innovation: Pathways to Systemic Change*. GreenLeaf: Buckland / Murillo (2015). *Antenna for Social Innovation. The quest for precision*. Institute of Social Innovation. ESADE. The reader may like to consult the following sources, available on the web site of the Social Innovation Institute: [http://www.esade.edu/research-webs/eng/socialinnovation/publicaciones/Social\\_innovation\\_models](http://www.esade.edu/research-webs/eng/socialinnovation/publicaciones/Social_innovation_models)



# 1. TRAITY

*“We protect your on-line interactions with others, ranging from purchases to house rentals. Trust in others and they will trust in you”.*  
 (Taken from the “Our Mission” section, [www.traity.com](http://www.traity.com))

DESCRIPTION	A start-up that has developed an on-line reputation system based on users’ ‘digital fingerprints’. Its vision is to create a more inclusive world in which the user can accredit his reputation off-line, giving him opportunities that he would not otherwise have. The firm’s motto is “Traity gives superpowers to people who can be trusted”.
GLOBAL REACH	It operates in Spain and will launch in Australia and the US this year.
FOUNDATION	2012, (Madrid and Mountain View, Silicon Valley, California).
LEGAL FORM	TraitPerception España, S.L.U.
SOCIAL IMPACT	4.5 million registered users.
FINANCIAL SUSTAINABILITY	The firm got seed funding from Seedcamp and was later hosted by 500Startups (Silicon Valley Accelerator). In July 2014 the firm secured nearly US \$5 million in venture capital (10 investors, led by Active VP).
INNOVATION TYPE	<p>Traity is creating an on-line reputation standard based on a personal reliability scale. This is obtained by drawing on information that is available on-line and is verified with off-line information. This means a user can treat his reputation as an asset, giving him opportunities that a traditional risk assessment would deny him.</p> <p>The firm started out with the idea that innovation should be open and transparent. Traity bases its technical development on Open Source and Blockchain, and publishes demos of its advances in Traity.org.</p>
CROSS-SECTOR COLLABORATION	The firm has several agreements with traditional national and international insurance companies developing projects in the InsurTech sector. It also collaborates with various universities in creating knowledge on both the technical and ethical aspects of digital trust.
REPLICABILITY AND SCALABILITY	Its model is presented as an example of successful innovation at many international conferences. Traity is expanding internationally (in Australia, The United States and Hungary) and it is considering entering the Asian market in the future.
AWARDS, CERTIFICATIONS, RECOGNITION	<p>Winner - Digital Insurance Agenda DIAMond</p> <p>Winner - BBVA Open Talent 2013</p> <p>Winner - Spain Internet Startup 2013</p> <p>Winner - LaCaixa Emprendedor XXI [21<sup>st</sup> Century Entrepreneur] Madrid 2013</p> <p>Winner - Bizcamp Tel Aviv 2012</p> <p>Winner - Seedcamp Berlin 2012</p> <p>2nd place - ActuaUPM 2013</p>



In 2011, Juan Cartagena (Co-Founder and CEO) had two experiences that showed him just how key on-line trust is. The first was when he contacted a girl over the Internet and had an uphill battle to date her. He had no way of showing her that he could be trusted and that he was who he said he was. In the second case, he was the victim of a fraud involving a down-payment on a computer that never arrived. In both cases, things would have worked out differently if he had had a tool to measure reputation. This is what inspired him to found Traity in 2012. The company's mission was to cut risks in digital transactions and personal relations, seeking a simple, safe, digital way of showing that someone was trustworthy.

Three friends, Juan, Jose, and Borja were behind the project because they too had their own stories to tell when it came to on-line trust. In digital settings, one can interact with anyone. This setting was a new one and was governed by different relational rules from those found in face-to-face contacts: "We now interact in open networks. It is a social shift away from virtually static communities towards ones that are ever-changing and fleeting. Say that each one of us has between one thousand and ten thousand contacts, between friends and acquaintances. How can we trust our dealings with the 7000 million people in the world if we only know ten thousand people?" (Juan, Co-Founder and CEO)

In May 2012, the company won the Seedcamp Berlin competition and went to the Google Campus in London. Four months later, it joined 500start-ups, and in the October cohort, moved to Mountain View (California). Back then, people began to talk of the Reputation Economy. In mid-2012, Rachel Botsman gave a TED Talk in which she stated that trust is the new currency, especially in the context of the collaboration-based economy<sup>2</sup>. With the rise in social networks and especially within the framework of co-working, various initiatives arose but which had but a single purpose, namely to gather all proof of the trust in someone (but where the evidence was scattered throughout the Internet) and to create trust indexes or scores. Trust Cloud<sup>3</sup> and Karma<sup>4</sup> are probably the most similar to Traity.

Over these four years, Traity has evolved and re-invented the concept of personal on-line reputation and it aims to become the industry standard. It has received risk capital funding and at the moment is testing its idea in the InsurTech sector.

<sup>2</sup> Botsman, 2012: "The currency of the new economy is trust". Available at: [https://www.ted.com/talks/rachel\\_botsman\\_the\\_currency\\_of\\_the\\_new\\_economy\\_is\\_trust](https://www.ted.com/talks/rachel_botsman_the_currency_of_the_new_economy_is_trust).

<sup>3</sup> It arose as an add-on to collaborative economy sites, and also as an incentive to forge trust and strengthen relationships between couples. For more information, see: <http://www.shareable.net/blog/trustcloud-the-path-to-establishing-trust-online>. The institutional web: <https://trustcloud.com/>

<sup>4</sup> Karma was founded in 2013 in Los Angeles and got 800,000 dollars in a Seed Funding round. It measures trust based on a so-called 'Karma Score'. It seemed for its web page was inactive at the beginning of 2017 but the following article from BuzzFeed explains the Karma system in detail: [https://www.buzzfeed.com/johanabhuiyan/karma-wants-to-bring-trust-to-the-peer-to-peer-marketplace?utm\\_term=.ljl6w16Xl#.ii52rJ2q0](https://www.buzzfeed.com/johanabhuiyan/karma-wants-to-bring-trust-to-the-peer-to-peer-marketplace?utm_term=.ljl6w16Xl#.ii52rJ2q0)

## Defining trust

Defining and measuring trust is a complex affair. Indeed, it is so subtle that “trust is something that everyone knows about but cannot define without using the word ‘trust’ itself” (Juan, Co-Founder and CEO).

Traity’s solution uses a reputation score that draws on the digital traces left by Internet users to create an indicator of on-line trust that is comparable to the way things work in the physical world. Although the company’s model is fairly robust, research and development are essential to make the system work. The company always seeks the most advanced ways of defining, measuring and fostering trust. As a result, the project has gone hand-in-hand with the evolution of the concept and its applications. The company’s development has gone through three broad stages:

### First Stage: 360 degree personality and reputation

The first idea that the three founders came up with tried to answer the need to foster digital trust based on reputation. They began talking to experts on trust in order to fully grasp and discuss the concept. For example, they contacted Matthew Brothner, a sociologist at Chicago University, where Juan had taken his MBA. They reached the conclusion that reputation was measurable and stemmed from trust, which they defined as “something that others think about you” (Carlos, Data Scientist). The first step was to use the Big Five<sup>5</sup> questionnaire. The difference was that instead of gathering answers from individuals on themselves, people close to these people would be the ones providing the information. Applying a 360-degree approach, they managed to come up with the first “purely psychometric measure of reputation” (Borja, Co-Founder and Chief Data Officer). There are two advantages to this approach: (1) assessments of others tended to be more positive and truthful than those in which people assessed themselves: (2) by involving various people in the setting, one linked up collective experience and got a 360-degree vision of trustworthiness and the traits of the individual concerned.

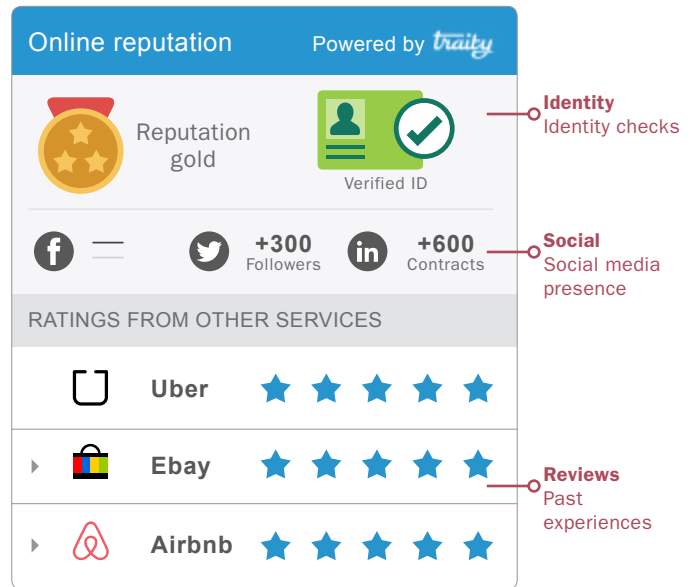
The company’s name reflects this first approximation to these personality traits: ‘Traity’ is based on the words “Personality Traits” in English. Nevertheless, the discussion moved on and they realised that what they were really measuring was the popularity or status of the person concerned rather than trust in him. At that point in time, each user could create his profile in Traity, obtain his score and take part in a kind of social network. The main limitation during this stage was that the score could not be applied to anything in particular and was therefore pointless. Satisfying one’s curiosity was the only reason for having one’s reputation scored.

The following step taken was to ensure that this Traity score allowed the user to do something. This step led the company on to the next stage.

### The second stage: transferring reputation between platforms

The rise of the Collaborative Economy and its web platforms meant users were leaving ever greater traces of their activities. Each user got evaluations of his behaviour patterns through the comments made and scores given by, say, sellers, buyers, drivers, hosts and guests, to give just a few examples. Traity saw an opportunity here and created a ‘reputation passport’. It consisted of a widget that allowed identification and verification of users to give an instant score of reputation (See Picture 1). That is why the widget was put over as a ‘reputation passport’ because it was personal and could be used in many situations.

**Diagram 1:** Widget of ‘the ‘Reputation Passport’ designed for Collaborative Economy platforms



Assuming that each user had his reputation validated on-line by Traity, he could take his reputation with him and use it as he saw fit. This allowed the user to exploit the reputation obtained on ‘Platform A’ on ‘Platform B’ so that he did not have to start from zero (Jose, Co-Founder and Chief Technology Officer). This allowed collaborators to compare information from diverse sources and decide accordingly.

Nevertheless during this stage, there were problems in transferring reputation among platforms. The first reason for this is that reputation is contextual since specific behaviour patterns stem from given situations. In other words, a good host is not necessarily a good driver (and vice versa). “One always has to measure what is being measured and why, and to avoid the Halo Effect” (Carlos, Data Scientist). This effect refers to the tendency to rate someone positively if that individual already has a good reputation in a given field”.

<sup>5</sup> This is a questionnaire with 100 questions and covers five broad kinds of traits: outgoingness, openness to change, responsibility, cordiality, and emotional instability (Goldberg 1990). The questionnaire is often considered a benchmark in this field.



To this, one must add limitations of a business and corporate nature. This is because the measurement of reputation is key, defining aspect of each platform and a transferable reputation would remove a platform's competitive advantage at one fell swoop. To a lesser extent, the lack of agreements between companies operating in the Collaborative Economy means that reputation management is not one of their priorities. Most start-ups focus on capturing users so that they can reach critical mass and to be efficient when it comes to linking needs, supply and demand.

This led to another leap towards a real-life application that was useful. Seeking a viable, sustainable business model led the firm to explore sectors in which financial reputation was of critical importance. This took the business into the *FinTech* and *InsurTech* sphere.

### **The Third Stage - The leap to *InsurTech***

In the search for business opportunities, it was realised that finance was one of the spheres where there was most mistrust. This was so because all those who did not have a credit score were unable to show that they were untrustworthy and were thus unable to access certain goods and services. Such people included groups that did not fit into traditional categories (Jose, Co-Founder and Chief Technology Officer) such as students, immigrants, and the self-employed (Borja, Co-Founder and Chief Data Officer).

The same happened in the housing rental market: this was a fairly broad market in which there was great mistrust and there were difficulties in checking would-be renters' creditworthiness. Such risks meant that high deposits were demanded from prospective tenants.

Although *FinTech*<sup>6</sup> had made some progress in this direction, it was the *InsurTech*<sup>7</sup> sector where a revolution was in the offing and the real potential lay. The firm therefore decided to focus on the latter. It was planned to use Traity reputation to foster trust among people with a view to facilitating Peer-to-Peer insurance (P2P). Traity focused on trust as a way to create more efficient, safer markets among peers. At this stage, the company not only measured reputation but also put a sum to users' trustworthiness in their dealings with banks and insurance companies.

From then on, the company designed an insurance policy for landlords. This model benefited both parties. The landlord had more guarantees that his tenant would pay the monthly rent and gained an insight into the three key aspects of would-be renters. Tenants also gained because they could use their reputation to get lodging despite having no credit rating. Thus reputation could lead to an inclusion strategy and even discounts based on the user's trustworthiness rating.

An additional strength worth noting is the way in which one can establish trust in users through a simple straightforward verification, making for lower costs. This opens the door to more specific, flexible, better-matched insurance, doing away with the friction involved in providing all the information that would otherwise be required and the management costs that would be incurred as a result.

<sup>6</sup> The term is a contraction of 'Financial Technologies' and refers to start-ups meeting new challenges in the Finance sector using a combination of technology and innovative business models.

<sup>7</sup> The term is a contraction of 'Insurance Technologies' and is the application of technology and new business models, led by start-ups.

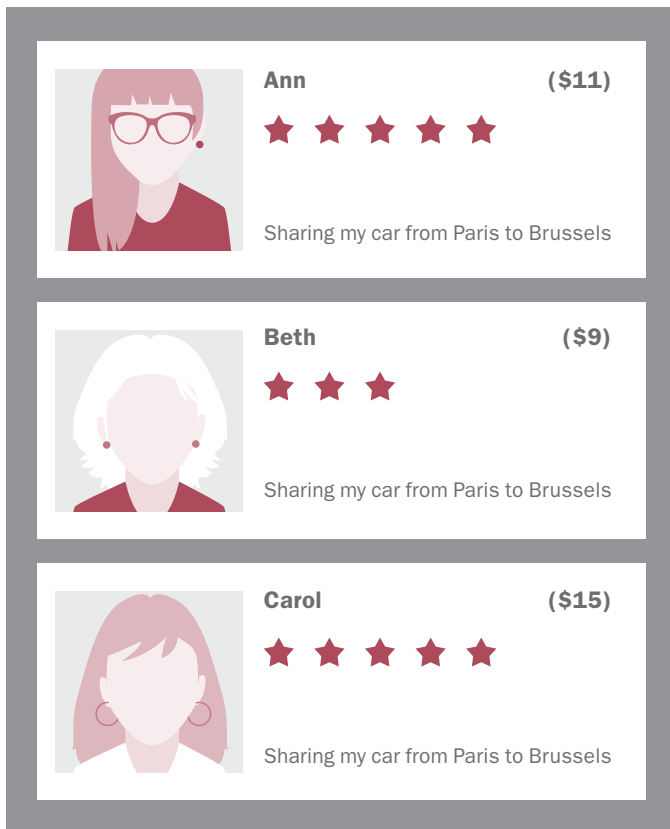
## On-line reputation

Traity has spent a great deal of effort in setting certain principles regarding what does and does not constitute trust when it comes to measurement. In addition, it has clarified similarities and differences between trust and reputation. This section sets out the basis of on-line reputation as understood by Traity.

**First of all, reputation is seen as a derivative of trust and is measured in terms of the elasticity of demand.** Traity's founders conclude that one cannot measure reputation directly but they have found a way to value reputation in terms of the price that someone is willing to pay for additional reputation. While this yields objective measurement, the monetary sum ascribed to this reputation is subjective.

An example that tends to be used in the firm's presentations simulates an app on a platform for trip-sharing. Let us imagine that we want to go from Paris to Brussels and we find three choices. The information we have for each route is price and the score given by other users in the form of stars (see Diagram 2). The preferred option is Anne because she has 5 stars — the same as Carol — but is US \$4 cheaper . With respect to Beth, her higher reputation results in a US \$2 premium (roughly US \$1 per star).

**Screenshot 2:** Example of elasticity of demand to quantify reputation



From here on, there are three basic concepts in the firm's definition of reputation:

1. It is **dynamic**, being won or lost depending on one's behaviour patterns in interacting with others.
2. **Reputation is not a currency.** This is mainly so for two reasons:
  - a. **Its use does not mean that it is spent.** Rather, using one's reputation puts it at risk. This is what is called a Risk Premium (Juan, Co-Founder and CEO). For example, an Airbnb hostess lodges someone and by doing so, puts her home at risk for a given period of time. At the end of the transaction, reputation is transferred if everything has gone well.
  - b. **The reputation in circulation is not a zero sum affair.** Everyone can have a five-star reputation if they deserve it.
3. **Reputation is an asset** that we can activate to gain access to services that would otherwise be inaccessible (for example, getting a job, getting credit or housing).

In addition, Traity considers that reputation is a personal asset even through it is a kind of collective guarantee. However, the "right to delete and the right to forget" reputation (in the words of Juan) is exercised by the individual.

<sup>8</sup> Example taken from Juan's present2 at Crowdsourcing Week Global 2015: <http://crowdsourcingweek.com/csw-global-2015/agenda/>

## Reputation medals

Traity's model of reputation works on a ranking that is represented by medals<sup>9</sup>. Anyone can create a profile in Traity (this being similar to a social network) and to which one can add any information one considers relevant. To begin, the platform asks users for their names, telephone numbers, ID or passport numbers, and e-mail addresses to verify their identity. From then on, users have the option of letting Traity: (1) gather information from their digital footprints; (2) add information from social networks; (3) draw on support, reputation and ratings from collaborating platforms (where applicable); (4) use different kinds of analysis (for example, analysis of networks and semantics)<sup>10</sup>.

The foregoing was used to obtain an overall score to place someone in a reputation category. These categories were Gold, Silver, Bronze, Seed. After a great deal of internal discussion, the medals were agreed as an easily-grasped, intuitive way of conveying a person's reputation. Furthermore, the indicator is a dynamic one and can be reviewed each time the user gives permission to update it.

Lara (Content Manager) explained that "The lower medals are usually awarded when we lack information rather than because the user has a bad reputation". Users are given various cues and reminders to give more information to boost their reputation. Browsing through the web page, one can readily see this wish to help users, with messages fostering transparency and for boosting trust (see Diagram 4).

Traity believes in using a design that forges trust, that strikes the right balance of transparency and honesty. This is accompanied by stimuli fostering good behaviour patterns. They prize the collective dimension (through groups or networks) rather than just focusing on specific individuals. The group pressure exerted through reputation makes social networks the spheres in which more trusting societies are forged, breaking down barriers and the fear of dealing with strangers.

### Screenshot 3: Examples of Traity medals



#### GOLD

These users have proven their reputation across many networks and a history of successful transactions, and are proven to be good online citizens that you can trust.



#### SILVER

These users have identified themselves in a wide variety of networks and proven their reputation through social networks. These users are generally safe to meet and transact.



#### BRONZE

These users have identified themselves in a number of social networks and proven their identity, however we still don't have sufficient data to prove their reputation across the web.






#### SEED

This user has identified himself or herself with a few social networks. Not much information is available yet to make an assessment, but the user is on the way.

### Screenshot 4: Message to foster transparency and the provision of more information

### A few steps to increase your online reputation

Be transparent and get endorsed to build a stronger profile

	<p><b>Verify your identity by connecting more accounts</b></p> <p>Connecting 10 accounts will increase your transparency and help you gain more badges.</p>	<b>4/10</b>
	<p><b>Verify your phone email and passport</b></p> <p>They are great ways to connect your online and offline identity and prove who you are, in a secure and private manner.</p>	<b>0/3</b>
	<p><b>Take the personality test</b></p> <p>Showing your personality to other people makes you more transparent and trustworthy.</p>	<b>0/1</b>

[Check my reputation level](#)

<sup>9</sup> Traity opted for this system after a lot of measurement testing and using first percentages and then scales and stars (Borja).

<sup>10</sup> The semantic analysis is more complex because it deals with poorly-structured information and there are because cultural patterns are to be found in users' comments. For example, they discovered that calling sometimes a "nice guest" meant that something had gone badly, even though the phrase sounded positive. "Wonderful guest" was generally used to describe a positive experience, without necessarily referring to something special.

## Users' trust in Traity

The first kind of trust that needs to be forged is that between Traity and its users. For this, the company founders say that one needs to be very professional, do things well and agree with users on where the focus should lie (Jose, Co-Founder and Chief Technology Officer). Here, the firm needs to be pioneering when it comes to both technical and ethical issues.

With regard to privacy, personal data are managed very carefully. Data is not given to Third Parties or monetised. "We try to apply non-intrusive practices that do not affect the user's privacy" (Borja, Co-Founder and Chief Data Technology Officer). This is made clear in the company's privacy policy: "With Traity you are always the one using your data pro-actively for the benefits you want. Just like you show your library card to the librarian when you want a book, it should be you who shows your trust score only to the people who need to see it when you need to get access to a service" (extract from the firm's web page)<sup>11</sup>.

In addition, the firm works to give the user some sovereignty back, considering that the data do not belong to the company but to the individual. The firm wants users to take the initiative regarding these data. "Sometimes people do not understand what we tell them. That is why Traity does everything in a pro-active way. So, for example, if you connect to Airbnb, you do so pro-actively. We download and analyse the data but we do not scan Airbnb to store the data. Then whenever you want to delete the data, you can and we wipe it from our records. We only link to the user's marketplaces if the user he gives us permission to do so. Third Parties wishing to see a user's global scores see nothing of the reviews or the other data" (Carlos, Data Scientist).

The firm said that building one's own brand is a complex task because users have not necessarily thought about reputation in these terms and because the concept of 'personal brand' is still a new one. Lara is the closest person to users and found that: "A lot of guidance is still needed. In the beginning, nobody understood what we were talking about. Yet little by little, more is being heard about reputation and privacy". Profile is also important. Here, Juan said that "People tend to trust you more when you appear in the media".

The data are stored in encrypted form and are not shared with Third Parties: Everything is written in a **blockchain** as a fingerprint. This is a way of telling the user that this may carry his fingerprint, which must be auditable" (CTO). The firm realises a user may wish to take this information with him at a given moment. The firm considers the blockchain to be a safe, unchangeable log — an approach that may become common in the future.

All in all, users view this very positively. They set great store by privacy and less by freedom of action. One should note the steepish learning curve. Given that the project is a very new one, there is an initial stage that involves forging trust by understanding the project and terms of use. In the beginning, the platform may seem a little daunting but once users have grasped how it works, strong bonds of trust are forged with Traity and users do not question either the credibility of the brand or the uses to which the firm might put the data.

<sup>11</sup>This is one of the points highlighted in the firm's mission statement: <https://traity.com/our-mission>.

## Impact and degree of transformation

Traity currently employs twelve staff. The development team is based in Spain but the company also has a presence in The United States, Hungary, and The United Kingdom. It will soon launch its product in Australia. The firm has three departments:

- Product Department, which is where the developers work.
- The business or ‘go-to-market’: with three staff undertaking ‘business development’. In other words, these deal with collaboration and alliances with companies of all kinds. Furthermore, the staff include a couple of people specialising in communication. Market research and studies are carried out in the same department.
- Last, there is the Labs section, where a couple of staff deal with data matters and innovate in the on-line reputation field.

The firm made a big impact in the first stage after launching its reputation calculation. Without having applied it to any service or product, the company chalked up no fewer than seven and a half million users. This was put down in part to users’ curiosity as to the results (Lara, Content Manager). Although Traity is of a virtual nature (and is thus a global business) most of the users were from Spain (Juan, Co-Founder and CEO).

The project was based on the idea that reputation is an asset and that the use of digital reputation will become ever more common to judge a person’s trustworthiness. They focused on traditional risk scores, based on things such as job track records, financial solvency based on salary and the like. Traity places great store by the fact that the world of work is changing at an ever faster rate and that the share of the population with a single employer and job is set to shrink in the future<sup>12</sup>.

The kind of users targeted are self-employed workers who do not receive a salary, immigrants and ex-patriates who do not arrive in the country with a credit history, and even students. As Juan explained, it would be extremely useful for those with a social identity but no financial track record to be able to show they are trustworthy. The firm always gives India as an example, where only 200 million people have a ‘financial identity’ but where no fewer than 600 million people have an account in a social network. Thus there are some 400 million people who are excluded from financial services but whose social identities could be their passport for accessing those services.

With regard to the social impact achieved, Traity considers there is still scope for progress. “Here, a sign of our success is the fact that on-line reputation is now being talked about and Traity is positioning itself as the standard in this field” (Juan, Co-Founder and CEO). In fact, they are present in most debates and mention leading experts in the trust field with whom they work, such as Rachel Botsman<sup>13</sup> and Arun Sundararajan<sup>14</sup>. Traity founders are keynote speakers in the field and have taken part in professional gatherings and conferences. Juan has been a speaker at big events such as: the Skoll World Forum, the Oxford MBA, GE Global Insights Network, Emerge Oxford, IxDA, OUIShare Fest, The University of Chicago, UPM, Google, Ernst/Young Foundation, TheConference, TechCracker, and CSW.

There have been signs of greater social awareness of reputation over the last year: In the beginning, nobody understood what we did. Now we are beginning to reap the results of all the work we have done” (Carlos, Data Scientist). In part, the issue has become important because Uber and Airbnb have made it so for the general public” (Lara, Content Manager).

Thus the firm is ‘training’ its users. On the one hand, it answers their queries, on the other, it focuses web design focuses on users. By adopting this approach, Traity seeks to detect users’ preferences and to get early warning of any hurdles to using a new product or service.

<sup>12</sup>The firm states that in 2020, 40% of the working population will be self-employed in a globalised job market that is wholly digitalised (taken from <https://traity.com/our-mission>)

<sup>13</sup>As an example, they mentioned a talk they gave at SkollWorld Forum 2016. The talk can be seen on YouTube: <https://www.youtube.com/watch?v=h6D4IbnivVc&feature=youtu.be>

<sup>14</sup>A section of Sundararajan’s latest book was on the firm (Sundararajan 2016)

## Reputation as an endorsement for obtaining housing

Probably the most important milestone in Traity's foray into the world of *InsurTech* is the pilot test it is developing with DAS España, a legal protection insurance company belonging to the ERGO group, whose main shareholder is Munich RE.

We interviewed Marta, who is in charge of the digital transformation. She leads the collaboration between start-ups and the company. The aim is to come up with innovative solutions for legal services that meet on-line customers' needs. DAS España contacted Traity at the Digital Insurance Agenda<sup>15</sup> (DIA) event in Barcelona (April 2016) and from September onwards, the two firms launched the first joint 'proof of concept'<sup>16</sup>. The common ground for the companies is that both see reputation as an asset. Marta noted that data protection is a stumbling block: "Data is the new asset in the 21st Century. It will be a great leap forward when users grasp both the need to protect data and choose when and how it is used. This will help ensure that data use benefits and empowers users".

For DAS, one of the main challenges is to transform the corporate culture so that customers are put at the heart of the business. This means shifting from product design (the approach hitherto taken in the insurance industry) to creating experiences and services that meet customers' real needs. "New lifestyles need new solutions. The old way is to weigh up someone's financial solvency by looking at factors such as salary, seniority and so on. Such an approach rules a lot of people out in today's heterogeneous society". DAS' goal is to streamline the score-based validation of would-be tenants and to make the whole process transparent.

After several months of working with Traity, DAS agreed to apply social scoring of tenants for owners wishing to take out Rent Default insurance. In Spain, such insurance cover has helped owners overcome their unwillingness to rent out their homes to strangers. "By analysing financial solvency we try to overcome the owner's fear that his tenants will default on their rent. Yet we know that being solvent is no guarantee of good behaviour. By letting tenants demonstrate they are reliable through their on-line reputations, we give them the chance to show their true worth. Here, *one's digital identity weighs more than what one owns. Users are given a vested interest in protecting their reputations.*"

This Rent Default insurance is paid by the owner. In the pilot study, the two firms sought to show that on-line reputation is a better way of weighing up the risks than the old way of underwriting policies. Furthermore, on-line reputation may correlate better to good tenant behaviour than salary. The insurance policy gives the owner a guarantee, allowing him to rent out to those in his network. Marta thinks adopting the model will help strike a better balance, showing tenants that a good reputation will make it easier to sign future hire contracts."

"The model's advantages are that it gives more flexible access to the rental housing market for those who might otherwise be excluded (the elderly, students, the self-employed, foreigners, and so on). It allows more precise assessment of risk and allows one to adjust the price in an individualised fashion".

At the time of writing, the pilot project has been working for over six months and to the satisfaction of its users. Traity, in addition to creating and setting a standard for reputation, also takes the lead in direct, frequent contact with clients. Marta put it this way: "Feedback from Traity means the end-customer is key in seeking constant improvement and new solutions that exceed users' expectations".

This approach is typical of start-ups in the *InsurTech* sector. In the product approach of the insurers, contact with the client is when the policy is signed and when the claim is filed. With digital customers, we have to constantly capture their needs and be quick on the ball in coming up with solutions that meet them. *InsurTech* has managed to create an experience around the insurance concept that traditional insurers must learn. "The principles of insurance remain unchanged but *InsurTech* boosts community trust and transparency. It also uses new technologies to excite and engage digital customers."

### Collaboration that pays off:

For DAS, trial and error is the key to successful transformation of the business. "Learning by doing at the sector level is going very well." One of the medium-term goals is to change the way the company does things. Marta said that instead of trying to change things from within the company, the collaboration format with start-ups got faster results. "It's a way of outsourcing the test field", she added. Collaboration with Traity helped DAS learn and get closer to its customers while it weighed up costs and benefits before deciding which parts of the process to innovate in.

This collaboration also benefited Traity, showing the firm that its solution was a workable one. The alliance gave Traity real users and a real-life setting to run a pilot project. The aim was to confirm that on-line reputation is a viable alternative and that it paves the way for new opportunities.

"They [Traity] are digital natives, these hybrid worlds are where we have to go. The insurance sector is very strictly regulated, which on the other hand gives us credibility." The *InsurTech* considers that the hybrid approach speeds things up and gives greater flexibility (by *InsurTech*). "The matching is very enriching, the alliance of both worlds facilitates the search for solutions because each contributes what it knows best" (Marta). "We are interested in the real application, and DAS offered proof-of-concept trials for start-ups" (Juan, Co-founder and CEO).

<sup>15</sup>See the conference web site: <http://www.dia-barcelona.com/es/>

<sup>16</sup>'Proof of concept' is the term used for pilot projects in the technology field.

**Change of focus:**

This pilot study made them realise that apart from validating solvency, the system prevents problems later on: “The moment you are identify with users, you are giving them an incentive to behave better. A user has a stake in his reputation and seeks to show he is trustworthy and to keep his good name”.

This is actually revolutionary because it allows them to make the leap from ‘reactive’ insurance to ‘preventive’ insurance. At the same time, Marta considers treating reputation as a valuable asset empowers the individual: “It is like being given a shield or Superman’s cape — we give users the power to foresee or avoid clashes. This underlines the incentives for good behaviour”. The approach is one of rewarding the trustworthy rather than seeking out and punishing those who break the rules.

Traity, as well as pushing for a shift in focus, also stresses the drop in costs: “If insurers could trust their clients, they would not treat them like criminals every time they make a claim (demanding what happened and how it happened, sending in a claims adjuster, and so on), despite the fact that policyholders pay up front for their insurance coverage. No less than 30% of an insurance company’s costs stem from ‘customer service’. So if we can eliminate that, the savings would be huge.”

**The limitations found:**

Two major barriers were mentioned. The first one (for DAS) is insurance industry regulations and the way these can slow things down. The second (for Traity) is landlords’ worry about the sheer amount of personal information demanded from tenants. “Landlords are not used to this because it is new. Yet this does not bother tenants, who realise their good reputation is the key to getting lodging.”



## Financial sustainability and long-term viability

So far, Traity is basically funded by investors and venture capital. Initially, it had Seed investment and in 2014, it got US \$4.7 million in a Series A round. The investment was led by Active Venture Partners. Christopher Pommering, founder of Active VP, stated that “Traity is setting the worldwide standard and we are very excited in supporting the team in their inspiring mission. It is our belief that there is increasing demand for accurate and safe on-line transactions between people and that Traity’s disruptive and ground-breaking reputation will be of great value for its community and the whole collaborative economy.”

Lisa Gansky, a pioneer and a leading figure in the field of collaborative economics, also invested in the funding round. She has great faith in Traity’s trust-building model and its ability to unlock the potential of on-line reputation as a passport. She stresses its empowering effects: “We are in the midst of a fundamental shift in our global economy — from one based on ownership and debt to one where access to goods, services and talent trumps ownership. In this hyper-connected world, the coin of the realm is reputation. Traity has created a platform for all of us to track, manage, transact and protect our increasingly public and inherently valuable reputation”.

Today, they are working on new business model formats. One of the next launches will be the sale of financial services in the micro-insurance field (for example, providing low-cost insurance). Micro-insurance will be highly specific, flexible term insurance. This will enable fees to be cut. That is why they argue that the future of micro-insurance will be based on flexible formats, but that will be more accessible and better satisfy demand.

Something that is not part of the business model now and will not be in the future is the sale of data on users (whether personal or not), despite the fact they have received several offers. According to Carlos, this is a key principle they want to stick to.

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<sup>17</sup>Statements from an Active VP press note. The whole text can be found here: <http://active-vp.com/traity-secures-4-7m-investment-from-top-international-investors-led-by-active-venture-partners/>

<sup>18</sup>*Idem*



## Type of innovation

Traity is a clear example of Open Innovation and a bet on transparency: “We believe that it helps us strategically differentiate the company and boost its credibility. We accept the risk of someone copying us” (John, Co-founder and CEO). Traity works actively with universities, companies and other entities, proffering its expertise, taking part in debates and openly discussing its results on its blog site.

What makes Traity different is that it fosters the idea of a business and society that is based on trust rather than mistrust. It does so by using reputation to encourage and empower desirable behaviour rather than acting on risk. Traity is convinced it is on the right track besides certifying whether someone is reliable or not, it gives a financial guarantee to back those it rates as trustworthy. There are other elements that set them apart from other on-line reputation aggregators. Much brand building concerns ‘how a company does things’, not just what it does. The following are the five most prominent axes:

**The user is always at the heart of the business:** Traity starts from a user-centred design approach. Putting the user at the heart of the business means taking him into account. It also requires fluid communication, which allows the firm to detect the user’s needs and tweak products. A major part of its project involves design, testing and validation. “First we carry out ‘ethnographic interviews’ with would-be users to find out how we can help them. Then we think of a product that is useful, desirable and usable for them. Then and only then do we ponder whether that product is viable or feasible for Traity as a business model. Many of our products have sprung up in this way.” (Carlos, Data Scientist).

**Storing encrypted information and the Blockchain:** Traity uses Blockchain to generate a ‘fingerprint’ of people’s reputation to certify that ‘Person X’ has earned ‘Reputation Y’ at a given point in time. The person and the assigned medal are stored in Blockchain. The firm chose Blockchain as the most neutral and least centralised form of a digital log currently in existence. The use of Blockchain ensures both data security and the validity of the information: “Since this information is in the form of an incorruptible log [Blockchain], it fosters transparency given that no third party can make changes (Carlos, Data Scientist).

**The data belongs to users:** In line with the firm’s vision of empowerment, it is considered that it is the individual who provides the data and that Traity provides new information in return, namely the level of the user’s reputation. This on-line reputation is owned by users and not by Traity: “It seems unfair that you cannot use your reputation on Airbnb and transfer it to BlaBlaCar, for example. This makes no sense if we merely store data rather than own it.” The firm thus considers that a user should be able to put his on-line reputation on another on-line platform whenever he pleases: “If a user wants to give us the shove, he has his data at his fingertips and can download it and put it on another platform if he wants to. We know that

not everyone is going to take advantage of this technology but we have to be consistent with our philosophy. Hence the importance of storing the information in Blockchain.” This clearly establishes Traity as an intermediary but does not tie users into the firm’s services.

**Respect for users’ privacy:** Traity realises that it processes and aggregates personal information that may be highly sensitive. It therefore does its utmost to respect users’ privacy. For example: “We do not save the evaluations themselves but rather a Hash [an identifier linked to the content]. That avoids dependence on the server on which the information is stored, which might be one’s Dropbox” (Borja, Co-Founder and Chief Data Officer).

**User empowerment.** Traity gives the user control over his own information and mainly does so in two ways: (1) by always asking for the user’s consent for any action — “It is important that the user always knows why he is being asked for certain data, what is done with the data, why and how. “ (John, Co-founder and CEO); (2) giving the user himself the power to decide what is done with his data and even to decide what information is shown and what is not. The firm works hard to educate users on the positive aspects of on-line reputation, its power as an enabling asset, and to minimise its unwanted side-effects: “We tell them that choosing to display less information will make it harder to get a good reputation. We also stress that one’s reputation is not an arbitrary thing that you have to put up with but is rather the result of one’s decisions” (Jose, Co-Founder and Chief Technology Officer).

The combination of these five axes reveals personal sensitivity and is the fruit of collaboration on the ethical aspects of the project. As mentioned above, research and product improvement is another hallmark of Traity. At the moment, the firm is developing two new concepts: “rate the rater” and “network of trust”.

## Rate the rater

The goal is to take into account each user's scoring of the reputation of others. The reason is because scoring is highly subjective and each user does it differently. The firm is working on ways to identify each user's scoring pattern in order to weight results. If one takes the hypothetical example of a user who almost always awards others a '5' [the top score], a '3' awarded by the same person would be pretty bad. By the same token, someone who usually scores others with a '2' or '3' must be truly delighted to award a '5'. Hence the need to 'calibrate' the scores given by each user.

## The network of trust

The second concept consists of a formula for computing the trust network when a user does not have a sufficiently rich digital fingerprint. One of the main challenges here is how to translate off-line reputation into on-line reputation when the fingerprint is poor or non-existent. "If we lack information, we cannot invent it. One may not have taken part in marketplaces but you can ask one's friends for reviews. For example, if my mother does not have a reputation but I want her to have a Traity profile, I can check the box saying that I trust her, following the logic of PageRank"<sup>20</sup> (Juan, Co-founder and CEO).

Various sources of inspiration have been used to compute reputation based on trust networks and interactions. They include Mohammed Yunus'<sup>21</sup> leading micro-credit bank and "authors who have attempted to extract personality or reputation from the analysis of social networks." Here, they have been inspired by the work of Michael Kosinsky<sup>22</sup>, they have worked with Arun Sundararajan in developing this concept and also have also learnt from Airbnb's design for trust, the power of empathy and emotional connection espoused by RelayRides (Carlos, Data Scientist). In June 2015, Traity patented the concept of the "Network of Trust"<sup>23</sup>. The basic idea starts with the concept of cliques: "If I am gold and I click on you, you would probably become gold. But if you go to an Airbnb apartment tomorrow and wreck it, your rating will go down but it will also lower mine" (Carlos, Data Scientist).

Traity's profile is like a social network that weaves trust, indicating which users are trustworthy instead of merely linking members. "When you trust someone, you give him some reputation 'juice' so that he loses his fear of forming part of the network. If the people you trust behave badly, that will harm your reputation. In other words, one should only click on 'trust' for those people you do. There is little to gain and much to lose by saying you trust someone when you do not"<sup>24</sup>. Unlike other networks that seek to boost user numbers by any means, Traity is aware that such an approach leads to abuses: "We do not want speculators, we are the only social network in the world that discourages the creation of links" (Juan, Co-founder and CEO).

<sup>20</sup>This refers to an algorithm used by the Google search engine to rank web pages.

<sup>21</sup>Based on the idea of social pressure as a trust mechanism. In Yunus' Grameen Bank, if someone defaults on a loan, the interest rate is raised for the whole community.

<sup>22</sup>For further information on Kosinsky's work, see here: <http://www.pnas.org/content/110/15/5802.full>

<sup>23</sup>The patent is registered at The US Patent Office — see here:

<http://patft.uspto.gov/netacgi/nph-Parser?Sect1=PTO1&Sect2=HITOFF&d=PALL&p=1&u=%2Fnetahtml%2FPTO%2Fsrchnum.htm&r=1&f=G&l=50&s1=9363283.PN.&OS=PN/9363283&RS=PN/9363283>

<sup>24</sup>Taken from Juan Cartagena's blog article: "Black Mirror on Reputation: Hit and Miss", (1st December 2016). Available at: <https://blog.traity.com/black-mirror-on-reputation-hit-and-miss-abe48e453f2c#.s1zc5i1jc>

## Cross-sector collaboration

Along the way, Traity has worked with commercial platforms — especially in the Collaborative Economy. There is a set of partner brands that use Traity's reputation system to build trust among users<sup>25</sup>. The system also allows the use of a 'reputation passport', so that users can take advantage of the reputation gained on one platform and transfer it to other platforms.

During the second stage, Traity forged alliances with some of these firms, such as Social Car<sup>26</sup>. However, the alliance was a tricky one because trust measurement is a differentiating feature and each firm wanted to develop its own. Traity only sent the encrypted data and the user's overall reputation (a gold, silver or bronze medal), together with Traity's decision on whether or not it endorsed the user.

On the R&D front, the firm keeps in touch with leading international universities. This is especially true with regard to: (a) developing concepts; (b) academic discussion defining what reputation is; (c) writing algorithms to accurately measure reputation. Traity works with ESMT Berlin, NYU, UPM and the Digital Ethnographic Research Centre of Australia. The firm focuses on the technical side but also takes ethical considerations into account. Traity is not only product-oriented it also turns out scientific and academic papers and makes presentations on its research<sup>27</sup>.

The most important collaborations are in the InsurTech field with large traditional companies that are leaders in the industry. Traity works with DAS (on the pilot study mentioned above) and is about to launch a product in Australia. Juan thinks the InsurTech sector is on a roll and that further collaboration is likely — especially when big companies see the need and it is they that make the approach. "To work with a big company, it is important that the enterprise is already thinking about collaboration. It makes a world of difference when the company already has collaboration in mind. No partnerships have come about when we made the initial approach. Traity has been providing the know-how for 3 years but now the subject is on everyone's agenda" (Juan, Co-founder and CEO).

So far, Traity has not worked with the public sector but the firm may do so in the longer term: "The public sector is another kettle of fish but it will soon need a reliable measure of identification, just as there are ID cards today" (Juan, Co-founder and CEO).

## Scalability and replicability

The project is scalable to other countries and sectors — indeed, wherever verification of identity and a 'history' of reputation or reliability is needed. In particular, the medal of on-line reputation is an easily-recognised and reliable seal of approval for the parties involved. Traity's strategy is to focus first on those problems that affect most people (such as access to housing) and then to become the standard for any context. One of the firm's aims is to become the gateway to all financial services.

Although the basic mechanisms of trust may seem universal, cultural differences pose difficulties when it comes to scalability. Therefore, the formula must be adapted to meet local conditions and enable comparisons. Here, Traity puts a lot of effort into research to ensure that development work takes into account implementation in both present and future settings. In the InsurTech sector for example, local regulatory frameworks pose challenges in replicating default insurance in other countries. Each country sets its own special requirements regarding the provision of a given financial service. That is why insurance companies need to have a subsidiary in each country to provide sufficient legal coverage. These factors, together with cultural variations on what constitutes trust, affect both product design and implementation.

Traity is still a small, young company. It has created industry-strength reputation tools outside the high-tech field (for example, for doctors and lawyers) but it has also turned down other proposals. It has preferred to concentrate on developing digital reputation for individuals precisely because the company realises that a good host does not necessarily make a good surgeon and vice versa.

The next markets to conquer in the near future are Australia and The United States. Germany and India are probably medium-term objectives. Traity is interested in India because it is a country with a great deal of social information but very little in the way of financial data. It is a perfect place to check the extent to which one can use social information as a proxy to determine how reliable people are without having to resort to financial profiles.

One of the company's future aims is to help create societies based on people's trustworthiness. Traity considers that achieving this aim will transform the FinTech industry through a radically new approach. Systematic mistrust and penalties will become a thing of the past as the industry shifts to a trust-based approach. Under Traity's system, the most trustworthy clients will get the biggest discounts. Reputation medals could replace the present arduous verification processes used by the industry, lowering costs and giving greater flexibility. Traity see a future in which trust is king in more secure, efficient markets. On-line reputation will constitute an individual asset, empowering users and giving them new opportunities.

<sup>25</sup>The collaborating brands include: myhostpality.com, beetripper.com, areavan.com, es.letmespace.com, trampolinn.com, swapsee.com, truecalia.com, mytrip4real.com, homefans.net, piggybee.com, bydays.com, room4exchange.com.

<sup>26</sup>Social Car is a collaborative platform for renting cars between private individuals: <https://www.socialcar.com/>. This link shows how Social Car is integrated in the 'markets' app developed by Traity: <http://blog.socialcar.com/post/109869017760/markets-by-traity-la-app>.

<sup>27</sup>For example, a joint publication with Matt Bothner on the cultural differences in interactions in the Collaborative Economy (Bothner, Truong, Prada, & Herrera-Yagüe, 2015)

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## 2. PLAYGROUND

*"Today it is a means of communication for the inquisitive minds that speak to our generation. Our mission is to convey what is going on right now from an unashamedly modern viewpoint"*

(presentation text at <http://www.playgroundmag.net/contacto>)

MISSION	Digital communication platform that seeks to generate social change through empathic story-telling. It is a 'Wake Up' call and it targets Millennials.
GLOBAL REACH	Offices in Barcelona and Madrid and soon in Miami. Global reach.
FOUNDATION	2008, Spain
LEGAL FORM	PlayGround Comunicación, S.L.
SOCIAL IMPACT	It has over 11 million followers on Facebook and this number is steadily growing. Playground also has 86,000 followers on Twitter. In July 2016, it became one of the top 6 'video publishers' Facebook and stays among the top 10.
FINANCIAL SUSTAINABILITY	Its main source of revenue is 'PlayGround Studio', a third-party content creation agency. It is currently selling a small part of the company but so far it has not attracted any external investors.
INNOVATION TYPE	It is an information and action platform ("Like, Share & Do"). The firm's mission is to inform the community and give members the tools they need to change things.
CROSS-SECTOR COLLABORATION	The firm began by collaborating with music festivals and with PlayGround, having engaged in story-telling for Greenpeace and UNICEF.
SCALABILITY AND REPLICABILITY	Playground has a channel in Spanish and another in English. It plans to translate its content into up to 8 languages. It is forecast the firm's workforce will increase five-fold over the next year.
AWARDS AND RECOGNITION	Award for the Best On-line Publication, El País newspaper (2009) Notodo Prize 2009 – the best Internet project.

PlayGround is an ambitious, no-holds-barred, project with a universal vision. When you go into its Barcelona office, the first thing you notice is a spiral staircase on your left. Looking straight ahead, there is a poster on the back wall of a huge room. It reads: "The Sky is the fucking limit, baby", giving an inkling of what lies in store.



**Play  
Ground**

## Origins

PlayGround reflects the restless spirit of its founder, Isaac Marcet. The firm sprang up in 2008, the same year that Lehman Brothers went bust, sparking the world financial crisis. He felt that the world he had known up to then was falling apart, leaving young people with a bleak future. The traditional media do not appeal to these young people so he decided to create a music blog, written by and for young people: “In a context of crisis and lack of reference point, there was a need to find new ways of living. PlayGround accompanies young people in that quest”. (Emilio Guerra, Director of Creative Lab).

From a floor opposite *El País* newspaper’s newsroom, Marcet decided to take the plunge into music journalism. He quickly stumbled on the fact that music is a form of escape for the younger generation. He was inspired by Pitchfork<sup>28</sup> and strove to offer top-quality content, reviews and reports to make the magazine a leader on the musical scene. He soon forged collaboration with leading music festivals in Spain such as Sónar, Primavera Sound and IBF. From the outset, the firm was convinced that Millennials are the ones who have to change the course the world is taking. This was a generation the firm’s founder defined as “one with broken dreams, that does not trust politicians, governments or the powers that be” (Isaac Marcet, Founder and Director). PlayGround’s mission is to wake them up (hence the motto, “Wake up”) and empower them to lead change of their own spheres. The firm believes that ‘stories’ are key to this end and so it uses its story-telling tools to thrill and mobilise users: “You can only make things move through the stories. Stories rule the world. What’s more, the new Cold War is based on stories over the internet. “(Isaac Marcet, Founder and Director).

PlayGround is a child of The Digital Age. The firm would not have been able to achieve global reach without the Internet. For the company, Internet is a kind of giant playground (hence the name, PlayGround). The firm’s growth has gone through various stages, all of them imbued with PlayGround’s flair for experiment and creativity. The company started out as a music blog but over its short eight-year life, PlayGround has renewed itself and changed whenever it needed to. Its team has grown from a handful of friends to a hundred employees. Its output ranges from articles on music to awareness campaigns with UNICEF. The following table gives a brief review of the firm’s evolution:

## PlayGround’s evolution 2008 - 2016

2008	Foundation of PlayGround as a blog on music.
2009	The firm starts working with leading music festivals in Spain such as Sónar and Primavera Sound, and experiments with short articles/‘sound bites’. The company has up to 10 collaborators.
2010	PlayGround begins working with sponsors and revenue is invested in hiring more personnel. The firm undergoes modest growth.
2011	Improvement of the content for social networks. The firm no longer seeks to boost its web traffic but instead directly creates native content and focuses on Facebook <sup>29</sup> . User numbers soar to 15,000 visits in May and the firm realises that it needs to capture the Internet’s heartbeat to drive further growth (PlayGround discovers that people are willing to consume serious content and that its target audience is also willing to consume content on ‘deep’ subjects).
2012	The firm broadens its coverage of subjects and starts to become a more generalist publication with a cultural angle.
2013	The focus is widened from cultural subjects to a vision of current affairs. A small 5-man editing team is set up.
2014	The Business Department is set up at the start of the year, giving rise to the content agency. The firm begins to experiment with audio-visual content. The company sets up a documentary team to work with its first client and main partner. The challenge is to satisfy clients’ needs without sacrificing the spirit of PlayGround.
2015	The company launches its ‘short video’ format and undergoes exponential growth (especially in number of ‘views’ and followers in Facebook). The firm discovers that this approach creates ‘dialogue’ with the audience. The firm experiments with several social mobilisation and action programmes.
2016	The firm creates the PlayGround Do Department in order to channel a sensitised audience’s willingness to change things.

<sup>28</sup>Leading on-line music magazine that is famed for discovering talented musicians. It was founded in Chicago in the mid-90s (further informa2 at: <http://pitchfork.com/>). It connected with and won over a generation that used music as an escape from a hostile world.

<sup>29</sup>The first turning point was when the firm realised web sites were a dead end and that the future lay in social networks. The idea was to create special, native content for each network. PlayGround bet on Facebook because it is accessible and is the network with the most users (1.18 thousand million connect each day — data for September 2016). See the Facebook Press Note for investors: [https://s21.q4cdn.com/399680738/files/doc\\_financials/2016/Q3/3.-Facebook-Reports-Third-Quarter-2016-Results.pdf](https://s21.q4cdn.com/399680738/files/doc_financials/2016/Q3/3.-Facebook-Reports-Third-Quarter-2016-Results.pdf)

## Who they are

This is the story of a project that relies on the vision and mission of Isaac, its main founder. As he explains, “This is a family business, it’s basically Family & Friends” (Isaac Marcet, founder and Director). Currently, there are about 100 employees and the firm is expected to grow exponentially over the next year. Over 90% of the workers are at the firm’s Barcelona headquarters. There are 6 people in the Business Team in Madrid, and PlayGround will shortly open offices in Miami.

The team is young (average age 27) and reflects people who are sensitive to the world around them, who are politically committed and want to ‘wake up’ a whole generation. PlayGround is an attitude to the world: “We need people who believe in this. We do not look at candidates’ CVs, we look at how they see the world. You soon pick this up after talking with someone for a short while” (Isaac Marcet, founder and Director).

## What PlayGround talks about: content and editorial line

PlayGround stopped being a blog focusing on music in 2012. From then on, the firm began creating native content for Facebook and became a more generalist digital publication. At the moment, PlayGround has six ‘verticals’ or sections of text: News, Culture, Sports, Future, Food, and Fire (humour), as well as reports (longer, more in-depth articles).

The editorial team meets each morning to select topics and to co-ordinate the magazine’s text and video teams. It tries to come up with a varied, balanced selection and keep an open mind. The magazine may include anything from art to political current events, future bionics, the environment, and human rights. There are many issues that seem important to them but that are ignored by the general media.

The evolving nature of the medium and the magazine’s openness means its readers are proposing ever more topics for inclusion. The ones chosen are those “that are relevant to understanding the society of our time, new ways of understanding, working, loving and living together as a society. We are not so much interested in party politics as in what the parties do or what is being cooked up in parliament. Our aim is to reflect on the events of daily life, “(Antonio J. Rodriguez, Editor-in-Chief). He mentions the mag’s column on food as an example of this: “This is a section where we reflect on something as down-to-earth as food and its connection with politics. It also looks at how laws affect the world’s food”. The criterion is that the article must contain a universal message.

**PlayGround** 13.047.301 92K

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 Hartas de la pasividad de su Gobierno, 150 mujeres de Veracruz han

**Suerte que el fútbol es más grande que las chorradas de Ramos y Piqué**  
 Messi se la sacó y se la enseñó al Bernabéu y al planeta. Esa camiseta ya es histórica

**Publicidad**  
**NESCAFÉ AZERA**

**"A los seis años ya tenía muy claro que no"**



## Video as Playground's star product

They not only set great store by the message but also by how it is put across. "Everything is relevant to the story but the difference lies in how you tell it. Our approach to video often produces interesting, unusual shots that are full of creativity and that are cleverly scripted and conceptualised to make the maximum audio-visual and musical impact. That is what we put our hearts and souls into. It gives us energy on the one hand but on the other, it is terribly demanding" (Josune Imizcoz, News Director).

In 2015, the firm made a strong commitment to audio-visual content. It chose to concentrate on Facebook because "On Facebook we could be the first and we were a little late for YouTube" (Guillermo Carreras-Candi, Video Director). It was just then that Facebook began to incorporate videos in its 'walls' and to promote the publication of 'native videos' (that is, videos that execute automatically without having to go to another page).

Using these native videos yielded a wealth of data (provided by Facebook Insights analytics, which give a lot of detail on one's audience). The firm could not only count the number of views but also realised that mobile phones are a great query device and had displaced computers in this respect. From there on, the firm began to research global trends in video formats within Facebook. It found a French web site with the square format, suitable for smartphone screens. It added subtitles because many of these videos are watched with the sound switched off. Playground was a pioneer in combining these two aspects and format, which proved key in achieving viral content.

**Figure 1:** Screenshot of a video (30/12/2016)



In the beginning, making videos was something that was done by a few employees when they were at a loose end. As the firm saw growing user interest in Playground's videos, the whole activity became more professional and a network of external co-workers was set up to source video content<sup>30</sup>.

## The Video Boom

The shift to video marked a watershed in the company's fortunes. They started making one video a day: Playground had a million followers. In the first year using 'native videos', the number of followers grew ten-fold. By the end of 2016, the firm was churning out between 10 and 12 videos daily. Guillermo Carreras-Candi, Video Director, said "There is clearly a law of cause and effect between videos shown and soaring follower numbers." He says that it was a big personal challenge because he came from the world of TV documentaries. He suddenly found himself having to jump from making 1-hour documentaries to making ones lasting just 50 seconds.

One of the hurdles was to strike the right balance between depth, quality of information, and brevity: "Sometimes there were four of us arguing the toss about whether to put a comma here or there" (Josune Imizcoz, News Director).

The reach and impact of the videos made visits soar to millions a day, setting new records. Three paradigmatic examples are given below to show the trend in the firm's videos.

### Three records set by videos:

1. *The first video that made a big splash (10 million views) followed the death of Cecil The Lion<sup>31</sup>.*
2. *In September 2015, there were over 50 million views of a video on unsustainable tourism: "La puesta de huevos de las tortugas en Costa Rica, arruinada por unos selfies"<sup>32</sup>. [Turtles' egg-laying in Costa Rica ruined by a few selfies]*
3. *In November 2016: The video announcing the victory of Donald Trump chalked up 91 thousand views in just one day<sup>33</sup>.*

<sup>30</sup>Guillermo explained that video editing uses the firm's own content and sometimes pictures from traditional news agencies. Given growing involvement by Playground's followers, the firm is increasingly accepting content provided by its own audience.

<sup>31</sup>Published 23/09/2016: <https://www.facebook.com/PlaygroundMag/videos/1001529856553557/>

<sup>33</sup>The video was linked to the article "Ganó Trump" [Trump Won] which can be found here: <http://content.jwplatform.com/previews/DryLTX5t-YQEXVm10>

## Social impact

PlayGround's reach is global, it attracts the Spanish-speaking community from all over the world. The web site has between 20 and 22 million unique users. Yet the most impressive figures are the followers it has on Facebook (75% of all their traffic comes from that social network). Facebook accounts for over 11 million followers from Spain, Latin America and The United States:

**Table 2:** The ten countries with most PlayGround followers in Spanish

COUNTRY	MILLIONS OF USERS IN FACEBOOK	% OF TOTAL
MEXICO	6.0	28%
SPAIN	4.2	20.1%
ARGENTINA	2.5	11.8%
COLOMBIA	2.4	11.3%
CHILE	1.3	6.2%
VENEZUELA	0.9	4.2%
PERU	0.6	2.7%
ECUADOR	0.6	2.7%
THE UNITED STATES	0.5	2.5%
COSTA RICA	0.3	1.5%
OTHER COUNTRIES	1.9	9%

Most of PlayGround's users come from Mexico. Spain ranks second, trailing some way behind. The firm identifies Mexico City as the most important city in the Spanish-speaking world for the platform. The firm puts this down to the trials and tribulations of young Mexicans. They live in a country steeped in corruption and mistrust of politics. "They have already gone to the polls and they believe that small daily deeds will change things" (Isaac Marcet, Founder and Director). The fact that the Spanish media do not cover subjects found in English-language media is another reason for the platform's popularity. PlayGround is a place where the two points of view meet, creating new points of view, overcoming the language gap (Antonio J. Rodríguez, Editor-in-Chief).

During 2016, PlayGround was ranked in the Top 10 video publications in Facebook, and in July 2016 it took sixth place<sup>34</sup>.

**Table 3:** Ranking of the 10 most watched Video Publishers on Facebook

Rank	Name	Views (MM)	VSP (MM)	WSP (%)	Genre
1	UNILAD	2,882,891	5,228	1.8%	Entertainment
2	The Last Mile	2,295,674	4,908	0.7%	Entertainment
3	BuzzFeed	1,798,524	28,754	1.6%	Food
4	NewsFeed	1,279,534	1,867	0.8%	News
5	Red Dots	988,974	5,412	1.3%	Style & Beauty
6	PlayGround	794,204	1,478	1.3%	Entertainment
7	AJ	794,173	1,336	0.7%	News
8	Willy	763,360	34,346	0.7%	Home & DIY
9	Newsweek	698,442	4,383	0.7%	Food
10	ABC - NEWS	545,812	190	1.3%	News

The firm says that any video can chalk up 5 million views a day and have an impact on 445 million people a month. PlayGround's videos are seen by 1000 million people a month. "They are straightforward sent on a daily basis to mass audiences. Much of the thanks for this is due to Facebook (David Pérez, Director of 'Digital')"

The company is aware of its influence and tries to combine a fresh treatment of stories with journalistic rigour. Its readers and followers are Millennials — mostly young people in their mid-twenties and this profile is clearly reflected in the firm's workforce. "What is more, PlayGround has become these Millennials' 'window on the world'<sup>35</sup> — they no longer go to other sources. Let's have a look at our competitors — NowThis shows 70 a day and gets 2 million views. We show 12 a day and get 1000 million views a month" (Founder and Director).

Another of PlayGround's aims is to show that Internet does not have to be the realm of bitty, superficial information. "Young people are young, not stupid. They may be prone to 'memes' (ideas that spread like wildfire among a given cultural group) but they can also get fired up about climate change." (Cristian Palazzi, Director of PlayGround DO). Taking young people seriously as sensitive, involved beings is undoubtedly one of the reasons for PlayGround's success. In fact, user levels of satisfaction with the platform are exceptionally high. The firm carried out some surveys to discover user satisfaction and the perception of the videos on a scale of one to five (five high). No less than 97% said that the content was very good. "The company in charge did the survey up to three times because those rates are unheard of. We put it down to the fact that we are very consistent in the line we take" (David Pérez, Head of 'Digital').

<sup>34</sup>According to the company Tubular Labs — see here: <https://tubularlabs.com/rank/july-2016/facebook-publishers/>

<sup>35</sup>A third of the population gets its information from the social networks, a figure that rises to 50% among the under-35s, according to Digital News Report (Negredo, Vara, & Amoedo, 2016)

## A community of agents of change

“The employees are proud to make an impact. There is an enormous sense of constant achievement. Change begins within (David Pérez, Head of ‘Digital’).”

PlayGround both recognises and adopts the social role that the media have always played. The firm is strongly aware that the Internet has vastly boosted the potential for influencing large numbers of people and that it can do so much more cheaply. At the same time, this demands greater media responsibility. Within the Millennial ‘universe’, PlayGround wants to cover issues it considers important and that are absent in other media: “We know some subjects turn people off but new generations have to learn about what is happening in the world. We have to shape their views because people need to be well-informed. Our readers can do what they like but they need to know things and to discuss them.” (Josune Imizcoz, Director of News).

In shouldering this duty to inform, PlayGround uses creativity to make its news and articles more interesting. Here, it tries hard not to fall into the trap of merely churning out video clips and sound bites: “Nowadays, we can see what works and what doesn’t on a minute-by-minute basis but we still have a duty to inform users. That is why we have to find ways of being more creative and to make our story-telling more spellbinding. Suddenly, readers start taking more interest and sharing items more. That kind of thing changes opinions” (Antonio J. Rodríguez, Editorial Director).

## “Tío PlayGround”

*“Everyone knows what PlayGround is. People can identify it but not define it. That is because it is very subtle”*

(users)

PlayGround is an example of a communication medium that breaks with the idea of one-way information. “Digital technology has let us establish dialogue. In the past, media communication was always one-way. That is no longer true — now we get constant feedback from users. The stats also tell us which videos got most ‘likes’. This makes PlayGround very attractive. Furthermore, in an age when everyone has a mobile phone, anyone can become an occasional journalist.” (Josune Imizcoz, Director of News).

The most striking thing about PlayGround is the active participation of its users. These send the magazine thousands of messages a day, providing support, information and their reactions. Isaac said: “Right now, we are probably the medium with the most user engagement in the world. People want to interact with us.” One should note that many of those messages also include calls for help. The management team puts this down to the strong empathy PlayGround forges with its users, dispelling the idea that it is a cold, heartless publishing company. “Users hope that by knocking at PlayGround’s door, others will learn about their problems. No matter how small the subject, if we think it is of universal relevance, we put it forward.” (Josune Imizcoz, News Director).

In other words, “users see PlayGround as a real person. They have a personal relationship with us.” (Emilio Guerra, Director of Creative Lab). It is complete personalisation of the abstract” (Guillermo Carreras-Candi, Director of Video). The most surprising thing is that it is spontaneous given that the firm has not taken any strategic steps to create explicit communities. The strength of users’ identification with the digital medium stems from PlayGround’s sensitive treatment and language in its output. This personalisation can clearly be seen in Latin America, where users affectionately call the mag. ‘Tío PlayGround’ [literally, “Uncle PlayGround”].

Users say they do not see PlayGround as a company but rather as an intelligent entity that passes information on to them. “That differentiating nuance makes PlayGround a mould-breaker and it creates a corporate identity. We have even come across video editors that offer so-called PlayGround-style videos” (David Perez, Head of ‘Digital’).

Isaac explains that PlayGround does not currently have the resources to respond to and stimulate this dialogue. Even so, the firm has seen the growing need to get its audience on board. At the same time, there are many users who are aware of the issues and are willing to help.

“We were getting flooded with messages from our audience saying they have woken up to the world’s problems but that they needed tools from us to change things. They told us they have no job or money but had lots of time on their hands. They were keen to put their intelligence, talent and effort into making change happen. That was when we saw that information is not enough. Our resources were not up to the job and there are lots of tools out there for driving change. We realised the next step was to equip ourselves with the technology and tools that would help us make the leap from bits to atoms [i.e. from the virtual world to the physical one]. It was a wholly practical decision” (Isaac Marcet, Founder and Director).

The response to this concern was to move from information to action in mid-2016. This shift took the form of PlayGround DO<sup>36</sup>.

## PlayGround Do



“Activism is the future”

(Cristian Palazzi, Director of PlayGround DO)

It is the firm’s most recent initiative and the aim is to make the leap from Story-telling to Story-doing. At the moment, it is a pilot project but the plan is to turn it into the company’s heart and soul. After achieving massive reach and becoming a leader in public awareness campaigns, PlayGround realises the huge responsibility this entails. “We want to move from ‘like’ and ‘share’ to ‘do’. Might this be the lever to do things and change the world? (Cristian Palazzi, Director of PlayGround DO).

The project dovetails with this dialogue between medium and audience. Its purpose is to smooth the transition from discourse to action. In spring 2016, there were a couple of initiatives that showed PlayGround’s ability to liven up and boost campaigns. In both cases it covered the publication of an article linked to crowd-funding, in which the targets were quickly reached:

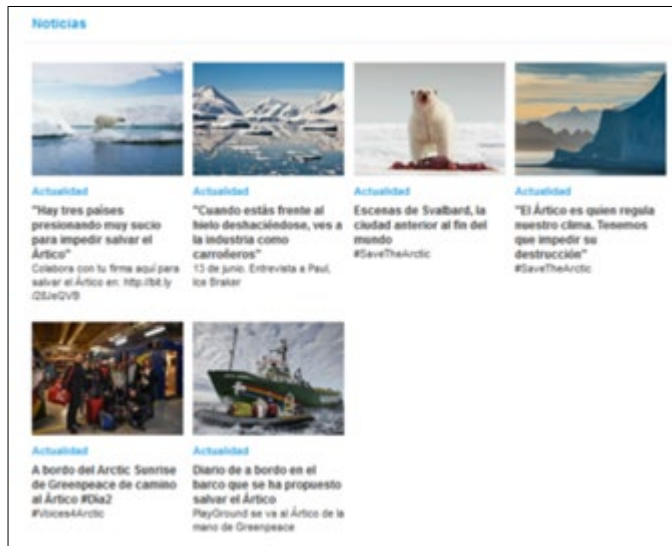
ISSUE	WHEN	ACTION	RESULT
‘Retired’ greyhounds	4th March 2016	The campaign covered the issue of what happens to greyhounds when their working lives come to an end. It was linked to the Verkami campaign to make a documentary.	Most of the support for Verkami came from the publication of a PlayGround [PG] video.
Musical recording studio for local artists in Kenya	5th May 2016	PG released a video showing a township in Kenya that wanted to build a recording studio. The idea was to offer youngsters’ a way out of poverty. The video was linked to a KickStarter campaign.	The funding target of €6000 was reached within 48 hours of publishing the video. The studio is now being built and will be finished in early 2017.

Cristian Palazzi joined as Head of PlayGround DO in mid-2016. At the end of the year, the firm also had a design thinker, a copywriter, and a video editor. It is planned to build the team up to fifteen employees. It can be thought of as a Think Tank and over the medium term it will become a cross-cutting team rather than a single department. Three major triumphs in the first six months were:

<sup>36</sup>It was initially called PlayGround Change but the name was finally changed to PlayGround Do.

## #SavetheArctic, June 2016

15 days after the launch of the DO branch, Greenpeace took the team to the Arctic as part of a campaign to raise awareness about melting sea ice and climate change. During the 15-day trip, the petition grew from 7.7 to 8 million signatories. It was the first time that Playground had left its offices and had begun to make sense of its commitment to the real world. Its initiative was an inspiration for others to follow. Various articles and videos were produced during the trip:



## Techno-censorship and fanbots. The case of Alberto Escorcía, September 2016

The case of Alberto Escorcía came to the editorial team's attention in the summer. Escorcía was a Mexican activist who had developed fanbots to create trending topics in the Internet<sup>37</sup>. Escorcía discovered that the government was using spambots to hinder communication between dissidents and even to issue death threats [English material on the case here]. Barcelona lent Escorcía moral support, the City Council making a public statement to this effect<sup>38</sup>. While Escorcía was in the city, he took part in the 2016 Free Culture Forum, organised by XNET<sup>39</sup>. When his visa expired and it was time for him to return to Mexico, Playground proposed protecting him. Inspired by the cases of Julian Assange and Edward Snowden (both whistle-blowers who were forced to seek asylum) Playground reached the conclusion that the best way of stopping the Mexican government bumping Escorcía off was to make the case a cause célèbre. The magazine created a series of articles on what spambots are and how they work. It then launched a petition through change.org<sup>40</sup>.



During his flight home, Playground published various contents setting out Alberto's case. Five million users saw the content and almost 25,000 people signed the petition at Change.org. Shortly after Escorcía's return to Mexico in mid-September 2016, the Citizen Movement Parliamentary Group issued the following statement: "We exhort the Secretary of The Interior and the Mexico City Government to guarantee the safety of the activist and journalist José Alberto Escorcía Gordiano"<sup>41</sup>. The Chamber passed the matter on to the Human Rights Committee for debate. While Playground takes no credit for this, it does believe that it helped by publicising the case.

Alberto is currently working as an analyst in the Playground DO and is working on the detection of spambots based on citizens' reports. At the same time, he is working on a simple way to display what is happening on social networks in real time.

<sup>37</sup>According to Playground, Alberto Escorcía was uniquely well placed to scan activity in social networks. We were told that he landed in Barcelona three days before the 15th March 2011 [the start of a wave of mass protests and occupations in Spanish city squares]. Apparently he had friends in the city who had tipped him off that something big was about to happen.

<sup>38</sup>See news: <http://www.lavanguardia.com/politica/20160709/403075511555/barcelona-muestra-su-apoyo-al-activista-mexicano-amenazado-alberto-escorcía.html>, 9th July 2016

<sup>39</sup>For more information on the event and his presentation, see: <https://2015.fcforum.net/participantes/>

<sup>40</sup>For more information on the campaign, see: <https://www.change.org/p/eptwitterlatam-bastadeamenazas>

<sup>41</sup>Text taken from Mexico's Parliamentary Gazette. For the complete text [in Spanish], see the Parliamentary Gazette for the 13th of September 2016: [gaceta.diputados.gob.mx/Gaceta/63/2016/sep/20160913-V.html](http://gaceta.diputados.gob.mx/Gaceta/63/2016/sep/20160913-V.html)

### Child soldiers in Southern Sudan, December 2016

In December 2016, a PlayGround team went to Southern Sudan with UNICEF España [UNICEF Spain]. It visited the refugee camp at Bentiu to find out more about the case of the country's child soldiers:



“Up to 16,000 children have been forced to fight in a war that is not theirs, a war where rape is commonplace and families live in fear of their lives” (from the article by Cristian Palazzi)<sup>42</sup>.

In addition to other video content, there was a 360° video (immersive reality) showing what life is like in a refugee camp school. It has been viewed over a million times<sup>43</sup>. “The idea is that ever more users can actively participate in the content. We think that virtual reality will be consumed in huge quantities in the near future” (Cristian Palazzi). Between January and February 2017, PlayGround created more content on the subject<sup>44</sup>.

### Business model

From the outset, PlayGround sought to be profitable but wanted to keep full control over editing and content. The first few years were tough ones, financially speaking. However, the company is now on an even keel and can grow. Digital advertising is part of its business model but is very poorly paid. There came a point when revenue from adverts was not enough to cover costs.

In 2014, the firm set up PlayGround Studio, a content creation agency for third parties. It capitalises on PlayGround's hard-won know-how. David Miro used the company's monetisation model, inspired by big brands such as Apple and Amazon. Here, “one must not only master story-telling but also make content available on various platforms. “We have a flair for this and brands love that. We are a studio for brands and we develop brands for them. We have the know-how in social networks and we put this at brands' service” (David Miró, Business Director). Our model is highly flexible and cutting-edge in business terms.

The Studio works with many brands, including San Miguel, Beefeater, Inditex, Cambridge University, BMW and Volkswagen. Not only does it create content but it also acts as a bridge: “We try to help all brands to move towards people sharing their content because they honestly want to improve step by step.” In that process, they also try to keep the PlayGround value seal. David Miró says that his contribution is always positive and constructive: “We try to make these brands grasp that values have changed. Millennials have another way of seeing the world. It's difficult because the brands want to sell but they have to understand that one needs to seduce consumers before one can sell to them. Brands need to be more relevant and less invasive.”

It is also important to PlayGround to link the business model with the kind of content it creates. Genuineness, honesty and strong identification in its dealings with users may be put at risk if they forge alliances with companies that do not practice what they preach. That is why it is also important to separate the editorial part of the company from the Studio: “We have two dimensions: one is the medium and the one is the company. It is tricky to strike a balance between the two. We must realise that we are not an NGO. We have to make a profit, we have shareholders, an infrastructure — all of this requires money. That is why we need brands and advertisers. One day, we are giving one brand stick, the next we are helping another one. That is why we need to keep things in separate boxes” (David Miró, Business Director).

This has led to a lot of internal debate and the setting of limits. For example, it was decided not to work with political parties: “This was one of the ‘red lines’. New media, unlike traditional media, do not necessarily align with a given party. You have to knock Trump when he does something wrong and reward him when he does something right” (Isaac Marcet, Founder and Director).

<sup>42</sup>The article can be found here. [http://www.playgroundmag.net/do/Sudan\\_del\\_Sur-Africa-UNICEF\\_5\\_1888661116.html](http://www.playgroundmag.net/do/Sudan_del_Sur-Africa-UNICEF_5_1888661116.html)

<sup>43</sup><https://www.facebook.com/PlayGroundMag/videos/1384548408251698/>

<sup>44</sup>See for example “La vida de una familia desplazada” [The Life of a Refugee Family]: <https://www.facebook.com/PlayGroundMag/videos/1383733368333202/>; “Ojos que sólo han visto la guerra”: <https://www.facebook.com/PlayGroundMag/videos/1373120736061132/>; o “Niños soldado”: <https://www.facebook.com/PlayGroundMag/videos/1429045543801984/> (all content only in Spanish)

Guillermo, the Video Director, says such decisions are critical if PlayGround's audience is to keep trusting the platform: "People are strongly attached to PlayGround and that is why it is important not to let them down. There is no way we can preach ethical behaviour and environmental sustainability and work with a company that goes against those principles. That happened to us once and we had to let the client go. Luckily, that does not happen too often."

Going beyond the business model, PlayGround believes that it has to get brands and companies on its side to make change possible. David considers the firm takes an educational, constructive approach to the brands that approach PG: "The real change will happen when we align our aims. One can always find some point that unites us" (David Miró, Business Director).

### Sales process

PlayGround is becoming a leading player in the communication field and in connection with 'Millennial' language. Big names are knocking on the firm's door to learn from their model and at the same time, they have made huge offers. By the end of 2016, PlayGround decided to sell off part of the company (under 15%), which gave it the liquidity it needed to grow but that did not threaten its editorial independence.

## Type of innovation

PlayGround is a digital medium that seeks to raise awareness by presenting stories, cases, and experiences. What makes PG unique is its ability to connect, communicate and thrill. From there onwards, innovation, experiment and reinvention mark PlayGround's course. The firm's priority is content and it constantly adapts means and ends. What sets the firm apart is the fact that "We use a common, identifiable language that mimics that of our users. This differentiates us from other media" (David Perez, Head of 'Digital'). With clear ideas on both its message and its audience, it seeks a natural channel and the right stimuli: "The rising generations respond to new stimuli. The question is how one gets to push the right buttons" (Josune Imizcoz, Director of News).

### Genuineness and emotion

One of the keys to PlayGround's success is that it has a young team (Millennials) that is deeply convinced of the need for change. They speak for themselves and other Millennials like them. As the company web site puts it, "It is a means of communication for sharp, 'awake' minds that speak of our generation. Our mission is to convey what is happening in our world from a creative, modern standpoint in a free and frank manner. We like our world and want to tell you about it<sup>45</sup>".

Part of the secret of its success is the creation of content that has strong emotional appeal that reaches beyond borders. PlayGround advocates and defends universal values that resonate with the Millennial generation. Furthermore, it has found the right combination of audio-visual language and text that "touches the hearts of this generation in the Spanish-speaking world" (Isaac Marcet, Founder and Director).

Honesty and genuineness were the threads that ran through all our interviews with PG team members. They think it vital to believe in what they do and say. PlayGround's content requires strong emotional commitment but also a clear head so that one can strike the right balance and avoid mere sensationalism. The emotional component is one of the main planks of the firm's content management. "We seek to create emotion. Indignation helps a lot but we try not to over-simplify things and to use nuances. A story that arouses strong emotions spurs people to share it" (Guillermo Carreras-Candi, Video Director). According to Josune, "We always try to make our voice relevant, without sacrificing content for a few more mouse clicks."

Genuineness is a way of establishing credibility and appealing to emotions is the most direct way to mobilise people. Combine both factors and throw in the language of universal values for good measure (something that is shared by a whole generation) and the potential for making content 'go viral' is huge.

<sup>45</sup>For more details, see the 'Contact' section of the web page: <http://www.playgroundmag.net/contacto>

## Digital strategy

Digital Strategy was a fairly haphazard affair in the firm until fairly recently. Someone was only recruited to take charge of Digital Strategy in late 2015. Starting from content as the foundation, the approach in this field sought to make the biggest impact with the resources available. Web stats and especially *Facebook Insights* were used to this end, exploiting the ability to monitor reactions in real time to discover what things interest users, which content is most shared, and what creates the most 'buzz'. The Head of Digital Strategy stressed that "Content is what is important — the fact that you have something to say. Digital tools allow you to optimise certain things and to take them a little further but the really important thing is that you have something to contribute" (David Pérez, Head of 'Digital').

## A busy lab

The firm is always researching what works and what does not, throwing up new ideas and discarding the 'dead ducks'. Change is the norm and the ability to adapt and to question oneself from within are organisational traits. "For an idea or a project to evolve, one needs to shake things up a bit. You have to question things and sometimes lack of resources means you reach the end of road", says Antonio, adding: "That's when the idea dies and we start afresh".

All of these twists and turns — with ideas that 'fly' and others that die — can also be seen in Studio<sup>46</sup>, the firm's content agency. In this respect, part of PlayGround's inner evolution stems from collaboration with outside firms. That is because clients' needs and demands pose new challenges that PG has to rise to.

## Revolutionising the Internet at the touch of a button

The most important innovation the firm is working on right now is the creation of what it calls the "Do Button". In pursuing the aim of turning PlayGround into more than just a platform where users click 'like' and 'share', the firm wants to add a third button — 'Do'. The 'Do' button is a widget that will act as a meeting point for like-minded people wanting to join the cause. It will not only allow them to discuss things but will also provide tools to organise and energise the community in three directions:

- Contact with groups, lobbies, associations and NGOs that support the cause.
- Offer information and know-how, creating a knowledge base, experts on the subject and create profiles of those seeking solutions to a given issue.
- A purely creative option in which the user can mix and interpret PlayGround contents with complete freedom from the artistic standpoint.

This approach is based on the team's firm belief that this is the future of Internet and that the web must advance towards something that goes beyond mere consumption and sharing of content. This project sprang up to go beyond PlayGround. It shows the firm's wish to create the world's largest database of actions and thus to both shape and reflect society in social networks: "We not only want PG to be a button in Facebook but also one in The New York Times and so on. In other words, we want to be present throughout the Internet" (Cristian Palazzi, Director of PlayGround DO).

<sup>46</sup>Some of the adverts and content created for brands can be seen on PlayGround Studio's Facebook page: <https://www.facebook.com/PlayGroundStudioForBrands/?fref=ts>



## Collaboration

PlayGround's projection and evolution has largely been driven by collaboration. The firm grasps the fact that its experience with sponsors and clients has given it chances to try things out, learn, make mistakes and grow. The link between PlayGround and its audience is evident and will result in ever-closer collaboration with others.

We have already mentioned the company's collaboration with festivals such as Sónar and Primavera Sound when PlayGround was still just a music blog. The firm created 'pills' to pep up these brands' social networks (especially on YouTube). It also worked on a documentary promoted by Primavera Sound and San Miguel. Nevertheless, the firm stresses that San Miguel is more than just another client: "San Miguel has become more of a travelling companion than a customer. There is a bond of trust and mutual growth" (Guillermo Carreras-Candi, Video Director).

It is worth noting that when the firm created 'native content' within Facebook, it also set up a 'Formats Lab'. Native content is much less intrusive than traditional advertising given that it does not disrupt the user experience. Often, PlayGround's task involved helping a client communicate more effectively. This meant teaching and hand-holding on PG's part to introduce and explain the new codes of digital marketing.

PG's acquired positioning and visibility have led to other digital media (such as BuzzFeed) contacting the firm — usually for one of two reasons: (1) to learn about PlayGround's approach; (2) ask for PG's help in reaching Millennials.

More recently, PlayGround has been involved in the aforementioned campaigns by Greenpeace and UNICEF, and has publicised petitions and sign-ups through Change.org and crowd-fundings with Verkami and Kickstarter. In this field, PlayGround has drawn the attention of international bodies such as The United Nations.

## Embedded teams

In addition, the firm wants to build a wider network of story-tellers around the world. PlayGround calls them 'story-hunters', who are a cross between active users and a new breed of journalist who directly relates his experience. It is another step towards creating authentic content based on first-hand knowledge. To this end, the firm has set up embedded teams, which undergo immersive training for several days or weeks at PlayGround's headquarters. This approach brings together people with different perspectives and lets trainees get a thorough grounding in PG's workings.

"During the interviews held for this publication, we ran into students on a pilot annual exchange programme who happened to be on a 'story-telling' course." (Emilio Guerra, Director of Creative Lab). The six Cuban students spent a week learning and pooling experience at PG's Barcelona office. This collaboration was made possible through Barcelona University (UB) (which

dealt with the Cuban and Spanish red tape) and a Miami-based NGO which provided the students with material (computers, recording equipment, etc.). After receiving this basic training, the cub reporters were let loose on Cuba.

## Scalability and replicability

The PlayGround team has grown by leaps and bounds. It had just 10 people in 2009 and it now has over 100. The number of PlayGround followers is also growing day by day, especially since the firm launched video in 2015. PlayGround's workforce is forecast to grow five-fold by 2018.

### Worldwide audience

PlayGround targets the world's Millennials and the fact that the firm's headquarters are in Barcelona does not affect the worldwide nature of PG's content. "Nobody can tell where we are from. Here and in Latin America, they think we are Americans. In the USA they think we are Latin Americans. Someone even asked me if we are British" (David Perez, Head of 'Digital'). PlayGround now has a Spanish version and an English version. At the moment, the Portuguese version is being tested and the firm hopes to translate its content into 8 languages.

Another sign that PlayGround's language is universal is the impact of its English Facebook page. In just 5 months, it has chalked up over one and half million fans and some videos have already reached 150 million views. "All this was achieved without creating new, special content. It was simply translated and it worked like a charm" (Guillermo Carreras-Candi, Director of Video). This is further proof that the company 'connects' well with Millennials, wherever they may be.

### Towards a creative company

PlayGround is doggedly pursuing the path to becoming a creative company. It has always been nimble and eager to experiment and its management team believes that a traditional corporate model would fail. That is why the firm is in the throes of redesigning itself. PlayGround is looking at new ways of running the firm, and of adapting its architecture and organisation charts to meet its mission. The challenge is to strike the right balance between organisational and business needs without falling for the kind of top-heavy, bureaucratic structures that would stifle creativity.

Some members of the team are tasked with looking for inspiration to help the firm re-invent itself. As a company with a transcendental mission, it identifies with *Teal-type*<sup>47</sup> organisations and the culture of 'Agile' methodologies. The management team says that PlayGround seeks to become a creative company in which creativity is a cross-cutting corporate trait. In other words, creativity must not be confined to a special department or be allowed to become an end in itself. Rather, the aim is to inspire the target audience to change the world for themselves. The firm's managers see the company as a living being, an interconnected, interdependent system for boosting collective intelligence. The person in charge of organisational change notes that "The great questions of Mankind were answered by individuals but we are evolving towards groups that will spur the great advances of the future" (Emilio Guerra, Director of Creative Lab).

Adopting new forms involves a raft of changes: new corporate dynamics; watering down hierarchies; building a strong, connected community whose work is based on autonomy and well-being. The aim is to create an atmosphere that allows the free flow of new ideas and that nurtures constant questioning and experiment.

### Changing the world from a hub

This process will be reflected in the firm's new headquarters. In Spring 2017, PlayGround plans to move from its present premises in a three-storey building in Barcelona's Mediaeval Quarter to a 6,800m<sup>2</sup> [7,3195 square feet] building in the city's 22@ District [a kind of local 'Silicon Alley' scheme]. The new headquarters are in a former car dealership, with all-glass walls that let one see inside. The goal is to turn the place into a hub of creativity and a meeting point for people who want to tell 'stories'. The management team has already begun the process of designing the place to ensure it is aligned with the firm's will to change.

What they have in mind is a highly versatile, open-plan space featuring everything from a rotating gallery to a neighbourhood meeting area. They also want to welcome interesting people who are passing through the city and offer them space to hold talks or workshops to pool ideas. As a way of fostering synergy, the firm will also offer a co-working space as a way to discover talent and spur new collaboration. The building will also feature a rest area and even an urban vegetable garden.

PlayGround seeks to grow as a transparent, accessible space and thus offer an interesting model in terms of scalability and replicability.

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<sup>47</sup>They are inspired by Frederic Laloux's book, *Reinventing organisations* (2014).



## 3. COMOODLE

*“Comoodle is a huge social experiment carried out by a bold and brave Local Authority”*

(Nicola Mayer, Yoomee Director)

OVERVIEW	Sharing economy platform that allows the local authority, community groups and business sectors to share assets in the area of “stuff, space and skills”. Comoodle will encourage citizens and community groups to offer, lend and borrow space, skills and assets such as vehicles, tools or buildings, to provide community support services that increasingly lie beyond government’s resources. The role of local authority shifts in this way from the traditional provider of services to one of facilitation.
LOCATION	Kirklees, West Yorkshire (England)
POPULATION	434,321 (2015)
IMPACTO SOCIAL	Promotes relationship building, collaboration and sharing among community groups and the business community to deliver social outcomes which the Council can no longer deliver. Ultimately, the data generated seeks to demonstrate that it delivers measurable savings, adds social value and supports locally-defined social priorities.
INNOVATION	Bold and unique Council-driven initiative to transform the way local authority interacts with the community sector to deliver public services.
FINANCIAL SUSTAINABILITY	In 2014, the Bloomberg Philanthropies awarded Comoodle a grant of £795,700 to deliver the project over 3 years (2015-2017). The grant provides the main source of funding for the project and is being matched by Council funds and wider contributions. A Sustainability Plan will be produced in 2017.
CROSS SECTOR COLLABORATION	Strong engagement with internal stakeholders within the Council and externally with the Community sector. Starting to engage with the business sector and cities within the West Yorkshire Combined Authority as well as other interested cities in the UK and Europe. Regular communication with international Mayors City Network.
REPLICABILITY & SCALABILITY	The concept is highly scalable as well as the platform technologies, which are Open Source. Ready for roll-out to other cities by December 2017. It is a moot point whether the project will bring about a strong enough sharing community with real impact which other cities will want to replicate.



**comoodle**

We believe in sharing...Do you?

## Kirklees

The Metropolitan Borough of Kirklees is located in West Yorkshire, England. The borough was named after Kirklees Priory, legendary burial place of Robin Hood. The 2014 census counted 431,020 people living in Kirklees with a GDP per capita of €23,160 (2013). Huddersfield is the largest settlement in the district, and the business, administrative and retail centre of Kirklees.

Kirklees has one of the oldest industrial heritages in the world, with a long history of skilled working that pre-dates the Industrial Revolution. The area's reputation was built on the woollen and worsted textile trade. Due to the wealth of the mill owners, Huddersfield was credited with having the largest concentration of Rolls-Royces in the world by the late 1940s. Kirklees also developed world-class engineering and chemical enterprises to support the manufacture of textiles. This heritage still shapes the local economy today, which in 2013 was valued at around £7.2bn per year<sup>48</sup>. Like many former textile areas, Kirklees has a higher than average number of residents from ethnic minorities. In Huddersfield, Whites make up 81% of the population compared to 91.3% for England as a whole.

## Comoodle

By 2013, the Policy Department at Kirklees Council had developed a new idea that promised to transform the way in which communities share and access resources. Originally styled as 'Kirklees Shares', the project was set to create a new culture of wide-scale sharing, re-defined through social technology and peer communities. Kirklees imagined a region that shared its resources with the community for the benefit of creating social value by promoting a mindset shift from "How much will this cost?" to "What can we do with what we've already got?".

Comoodle is a digital platform that builds on the principles of the sharing economy to re-imagine the way local government and the public sector support community projects by sharing under-used or idle public resources (and, increasingly, community-held resources). Comoodle is a made up word that merges the words 'community' and 'caboodle' (It's "the community caboodle"! ). As described in the Final Bid to the Mayors Competition: "Comoodle is *"a caboodle of city and community stuff, space and skills. We connect people who have a passion to make their city better, to get the resources they need, building connections and forging trust through sharing"*. The platform therefore aims to enhance community resilience by unlocking municipal and community assets in the areas of stuff, space and skills. Indeed, lack of access to these assets is often cited by community groups and organisations as the biggest barrier to them making a greater impact on their neighbourhoods. *"Comoodle will help free the resources that are locked away and build communities of trust where people share everything they can for the greater good. We cannot afford not to use the passions and great ideas within our communities, and we who work for the public have no right to be possessive about the things we are custodians of"* (Duggs Carre, Comoodle Programme Lead). It is important to note that the lending of Council assets was an early part of the Project aimed at kick-starting activity and understanding the lending process but the Project has now shifted its focus to group sharing (i.e. among NGOs). In its new role, the Council acts as an enabler for groups to build relationships, collaborate and share (instead of buying) whilst increasing their capacity to deliver social outcomes previously administered by the Local Authority. The ultimate goal is to build an active, self-sustaining, on-line/off-line sharing community which is replicable in other areas and by other Local Authorities.

<sup>48</sup>Geographic Research and Information Team (2015), "Kirklees Fact Sheets 2015". Available from: <http://www.kirklees.gov.uk/beta/information-and-data/pdf/fact-2015.pdf>

In 2013 Michael Bloomberg, the former Mayor of New York, launched the Mayors' Challenge, an international ideas competition that encourages cities to generate big, bold, innovative and transferable ideas that solve major challenges and improve people's lives. In 2013, the programme looked for 5 ideas in the US and in 2014 it was expanded to 5 European cities. Comoodle won one of the 5 awards and received a €1 million funding grant to implement the idea over a 3-year period (2015 - 2017).

### Table: Proposal Pitch (Final Bid)

#### The Problem

The core problem we are trying to solve is that the combined talent and resources of the city and our communities are massively under-used.

All city governments need communities to be able to do more for themselves and one another. We also need to be able to better align the city's efforts with contributions that local communities can make. Lack of access to *stuff*, space and *skills* is the biggest barrier to community groups and organisations that want to make a real difference in their neighbourhoods.

#### The Solution

Kirklees will be the first region to apply the sharing economy concept to the resources of the State, making assets available for community projects that benefit the local area; encouraging interaction between community organisations and leveraging contributions from local businesses. This is a significant, strategic shift for cities and will build trust between the city and communities through collaboration and sharing.

## Timeline Table<sup>49</sup>

### 2014 – 'Idea and mayors' Challenge Award

Unos presupuestos cada vez más restrictivos llevaron al ayuntamiento a realizar un proceso de planificación estratégica para identificar nuevas formas de hacer más con menos. La dirección política veía la economía colaborativa como una oportunidad y una forma de efectuar este cambio. El concepto fue desarrollado y perfeccionado a través del Mayors Challenge y finalmente ganó uno de los 5 premios.

### 2015 – Convened Stakeholders

El equipo empezó a contactar con stakeholders internos y externos para construir una comunidad de apoyo. El equipo organizó una jornada entera con una gran variedad de stakeholders, que se reunieron para pensar colaborativamente sobre qué cosas, espacios y habilidades podían compartir.

### 2015 – Launched early prototypes and outreach efforts

Fase importante de aprendizaje sobre el proceso de préstamo. El equipo lanzó sus primeros prototipos y obtuvo unos resultados positivos. En particular, el equipo tuvo éxito prestando furgonetas de la flota municipal. Los prototipos fueron evaluados por la Universidad de Huddersfield que informó sobre su ulterior despliegue. Tras obtener el feedback de una encuesta a los usuarios, se desarrolló una campaña de comunicación para incrementar el interés e identificar nuevas oportunidades para someter a prueba el concepto.

### 2016 – Launching of more prototypes

Big learning phase on the lending process. The team launched early prototypes with positive results. In particular, the team had success in lending vans from the Council's fleet. The prototypes were evaluated by the University of Huddersfield to shape further roll-out. Following feedback from a user survey, a communications campaign was developed to boost interest and identify new opportunities to test the concept.

### 2017 – Official Launch of the new platform

<sup>49</sup>Bloomberg Philanthropies (2016), "Bringing Bold Ideas to Life: Insights from innovators taking part in Bloomberg Philanthropies' Mayor's challenge".

## The UK Sharing Economy

The global sharing economy is worth \$15 billion<sup>50</sup> (2014) and is expected to reach \$335 billion by 2025, worth \$15 billion in revenues to the UK alone. In 2014, the UK sharing economy was worth \$0.5 billion with 25% of UK adults sharing on-line<sup>51</sup>. In 2014, the UK Government launched an independent review of the sharing economy. The review assessed the opportunity for the sharing economy to create a nation of micro-entrepreneurs and radically transform the way it uses assets and resources. Building on the recommendations of the independent review, the then Chancellor, George Osborne, stated in March 2015 that the government wanted “Britain to be the global centre for the sharing economy, enabling individuals and businesses to make the most of their assets, resources, time and skills through a range of on-line platforms”. It also announced a comprehensive package of measures to unlock the potential of this dynamic and growing area, including encouraging Local Authorities to use their discretionary powers to support the sharing economy.

## The New Council Agenda

*Mission: Our mission is to be a modern, flexible and emotionally intelligent organisation able to work with our diverse communities to sustain the services they need, the outcomes we choose, the opportunities they want<sup>52</sup>.*

(Adrian Lythgo, Kirklees Council Chief Executive)

Governments at all levels across the UK are facing the effects of public spending cuts. Councils are being asked to deliver more resources to their citizens, while central grants are being slashed. The bulk of the Council budget is earmarked for education, social care for adults and family/child support. Between 2011 and 2016 Kirklees Council has made savings totalling £106 million and still needs to find a further £59 million over the 2016-20 period. The funding is also changing radically. Up to now, 64% of funding has come from Central Government in the form of grants. By 2020, all the income will be generated locally. To put this into context, the annual Council spend on services in 2010 was about £950 million. The equivalent spend by 2019 will be nearer £800 million.

*The New Council agenda* adopted in 2015 is Kirklees Council's response to this challenge. Some measures which are being implemented include the closing down of some Council buildings and contact point services and collaboration with Community groups and volunteers to maintain public services such as libraries.

<sup>50</sup>The short-scale [échelle courte] billion is used throughout (10<sup>9</sup>) rather than the long-scale [échelle longue] billion (10<sup>12</sup>).

<sup>51</sup>Woskow, D. (2014). Unlocking the Sharing Economy: an independent review. Available from: [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/378291/bis-14-1227-unlocking-the-sharing-economy-an-independent-review.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/378291/bis-14-1227-unlocking-the-sharing-economy-an-independent-review.pdf)

<sup>52</sup>Kirklees Council Corporate Plan 2016-2017 (2016). See: <https://www.kirklees.gov.uk/beta/delivering-services/pdf/corporate-Plan-201617.pdf>.

## Table: Socio-Demographics<sup>53</sup>

- 60,000 households live in poverty (1 in 3)
- 25% of growth in population of 85+ since 2001.
- 1 out of 5 of all older people are classed as poor (16,700 people)
- 18% of children are poverty-stricken (18,020 children)
- 5.6% of unemployment (16-64) of which 23% of youth unemployment (16-24)
- 23% of population is black and of minority ethnic background. This is higher than the UK average.
- £33,121 average household income.
- Out of 326 local authorities in England, Kirklees ranked 77<sup>th</sup> in 2010 compared to 94<sup>th</sup> in 2015.

Meanwhile, there is a strong community group network in Kirklees. 1,154 registered charities operate in Kirklees (most are small or medium-sized). There are also 104 unregistered charities for every 100 registered charities<sup>54</sup>. Kirklees is a diverse area socially and geographically and includes some relatively wealthy rural towns and villages as well as some affluent suburbs. However, the operating environment for many community organisations is shaped by high levels of urban deprivation, with poverty and low standards of living. Community organisations are willing to do more in their neighbourhoods but lack resources such as space, equipment and even specific skill sets. These resources are often present in the community but not readily accessible to those who need them.

Against this backdrop, Kirklees is currently undertaking an ambitious transformation of the Council with a new vision and operating model; a shift to a more enabling Council which focuses on empowering communities to do more for themselves and one another while creating synergies between the efforts of the Council, institutions, businesses and citizens. Comoodle is a flagship project that supports the Council's strategic agenda, and the wider agenda for local/city governments in the UK and internationally.

## TABLE: New Council strategic objectives<sup>55</sup>:

1. Enabling individuals and communities to do more for themselves (e.g. through Comoodle)
2. Keeping vulnerable people safe and in control of their own lives
3. Focussing resources on things that only the Council can do and its statutory obligations

### Two key overarching themes:

1. Early intervention and prevention
2. Economic resilience

<sup>53</sup>Our New Council Council presentation (2016). Breakfast event, 25 April 2016 (Presentation shared by Comoodle Team).

<sup>54</sup>Chapman, T. & Robinson, J. (2015). Research briefing paper on the size, structure, operation and attitudes of the voluntary, community and social enterprise sector in Kirklees. Durham University and of Involve Yorkshire & Humber.

<sup>55</sup>Our New Council Council presentation (2016). Breakfast event, 25 April 2016 (Presentation shared by Comoodle Team).



## Social impact

*“It’s about changing hearts and minds. The Council is bureaucratic, we looked at things in a structured way and this is about making sure we look at things in another way.”*

*(Duggs Carre, Comoodle Programme Lead)*

*“The Council needs to go beyond its patriarchal role. Comoodle is the visible sign of the Council as an equal partner”*

*(Mark White, Comoodle Project Manager)*

Comoodle is a Council-driven platform which represents a great social experiment aiming at supporting community groups to do common good. As Duggs Carre puts it *“We were not sure how we were going to solve the problem but we pitched the problem at the Mayors Challenge and won”*. He adds: *“The advantage of Bloomberg is that they appreciate innovation but they accept there are going to be difficulties and sometimes things go wrong.”* Unsurprisingly due to the uniqueness of the project, a common theme in the implementation of the project has been one of on-going learning and openness to co-creation and community feedback. Over the last year, the team has focused on learning on the process of lending stuff. As Mark White, Comoodle Project Manager, argues: *“When we launched Comoodle we wanted to understand how to share things effectively, so we thought about what the Council could lend out”*. This has helped the team understand what works and what does not and on that basis to engage with community groups to encourage them to share. Therefore, as Ben Bryant (Project Manager at ISOS) states, *Comoodle successes to date have more to do with process than impact*. The team has created a workable process for offering skills, lending and borrowing as well as for stock-taking and learning. The Comoodle team has tested the model on a small scale and wants to see a richer picture of people/activities/organisations. In the midst of the ongoing debate about the precise role of the Council at a time of public belt-tightening, the Council is transitioning from Comoodle Principal Lender to Group to Group lending facilitator in order to build community capacity and decrease dependency.

### TABLE: COMOODLE SNAPSHOT (as of January 2017)

- Conducted 10 pilots so far to test the lending process
- 1,180 assets (30 Council vehicles have been unlocked, 70 sets of sports equipment and events equipment )
- 390 requests
- 181 trades. Most trades have involved Council equipment
- In 9 instances, something got damaged or lost along the way
- 12 Custodians: Schools, Community Organisations, Sports Clubs which offer spaces to keep stuff and share it within the community
- 131 groups benefited from successful trades and 19,700 residents have benefited
- 11 blog stories published
- Over 150 engagement/events/activities
- 960 people on the email list
- 100 story-tellers
- ‘Fixers’: Champions within the Council.
- Savings amounting to £15,307
- On one weekend in July 16, 90 individual items were in transit around the district and 13 different community groups were benefiting at the same time.

Based on the interviews conducted, we can list a number of barriers Comoodle is facing and will have to address to maximise Social Impact:

- 1) Kirklees is a hotchpotch of areas. There are lots of inequality gaps and social groups which rely on social care at a time where funding to prevent social problems is dropping. Education and social care services are the Council’s biggest expenditure items and where it needs to find savings. According to Ben Bryant, Comoodle may struggle to emerge as an answer to the problem of specialised social care provision for children under 16, vulnerable adults and the elderly and thus come up with a sound proposition for the New Council Agenda. In other words, the challenge is to make the leap from 150 trades to convincing senior management in other cities that the project is not ‘a nice to have’ but a ‘must’ for delivering ‘essential services’.
- 2) People in Kirklees are unfamiliar with the sharing economy. There is no Uber and Airbnb is not widespread. In addition, the community groups are poorly digitalised. Many users do not have access to a laptop but have a smart phone which they do not use for sharing purposes. Generally, Kirklees ranks within the UK average on digital literacy. Connectivity and affordability are not a widespread barrier and the smart phone is all-pervasive. According to Steve Langrick (Head of Digital Transformation at Kirklees Council), there may need

to be a big financial motivator (i.e. not being able to access a public resource otherwise) for them to shift to requesting things on-line on a laptop or through a mobile app. Another issue is how to make sharing appealing to the most deprived classes in Northern England. Lower income classes tend to value ownership over sharing.

- 3) Access to free space has proved tricky from the outset. The team is able to provide trust through its experience in lending 'stuff' but experience on space is more limited. In order to address the issue of access to space, a communication campaign targeting businesses and community groups has been planned for 2017. MARKER
- 4) Lack of assets to meet demand. To address this the next communication campaign will focus on encouraging groups to start lending. Further work is planned within the Council and with local businesses to expand these offers further. Experience has shown the team that people only request what they can see. This is relatively easy for stuff and spaces but the biggest challenge is to unlock the great potential of skills (10% of the overall offer).
- 5) Rebound effect: By taking cash out of the equation, dependence may arise if groups come to rely on resources to which they have free access. Indeed, the team is facing a challenge to communicate the concept as they see an emerging pattern in 'gifts' requests. Key messages and promotional material will emphasise 'sharing' and 'trading' with the Council rather than 'giving'. Additionally, there may be some concerns among community centres etc., which might lose some revenue through room hire if space is freely available through Comoodle. Local hire shops may also suffer as peer-to-peer lending schemes grow<sup>56</sup>.
- 6) Cross-learning from and best practice sharing with other Mayors Challenge winners has been limited by the uniqueness of each project but also because of different sets of political pressures, financial settings, the demographics faced by each city as well as various degrees of buy-in from senior management and the political elite. They also looked at other kindred platforms such as Streetbank/Freecycle/Freecycle but the lessons learnt were hard to transfer as Comoodle is unique in that it facilitates community sharing at no charge.

### Measuring social impact: learning curve

One of the key successes of Comoodle so far is the development of its own bespoke strategy to capture social value. The team looked at SROI and WVA models and found that they are not suitable as social value models for Comoodle. As a result, the team had to design a 'system' that works for Comoodle and its stakeholders rather than worrying about the perfect model for the intractable task of measuring social value. When the Comoodle project was proposed, it was envisaged that trades conducted via the platform would generate 'Comoodle Credits', an on-line currency that users would earn by lending and spend by borrowing. The purpose of the 'Comoodle Credit' was two-fold; to encourage fairness and balance between lending and borrowing and to offer a measure of the volume and value of trading activity.

At an early stage, it became clear that applying such a 'currency' to trading activities was neither workable nor desirable as using this currency to reflect the comparative value of different exchanges leads to quantifying these assets in monetary terms. Even if this could be done accurately and consistently, using a monetary value runs counter to the sharing ethos of Comoodle and by itself, offers little insight into the social value of the activity. In addition, the time bank-style scheme could put off smaller entities that would not be able to lend as much as bigger organisations but which, on the other hand, might be able to reach vulnerable groups with a stronger need for Comoodle resources than a larger entity.

The Cabinet Office report *Social Value Act: Implementation and Measurement*, which focuses on practical implementation of social value measures by three local authorities, states<sup>57</sup>:

*'...it is impossible to have a standard measurement framework to apply across all contracts for social value, but that there needs to be a loose strategic framework with the flexibility to adapt measurement techniques and approaches to each contract.'*

Comoodle is currently working on a model of social value measurement<sup>57</sup> that understands that impact can be legitimately conveyed through a blend of numerical evidence and narrative content. The team aims to build a 'social value picture', a conglomerate of values to show savings, people involved, impact on their lives etc. These insights were drawn

<sup>56</sup>Kirklees Final Bid to Mayors' Challenge (2014). (Document shared by Comoodle Team)

<sup>57</sup>Available from:  
[http://www.socialenterprise.org.uk/uploads/editor/files/SVimpactmeasurement\\_eval3contracts\\_final.pdf](http://www.socialenterprise.org.uk/uploads/editor/files/SVimpactmeasurement_eval3contracts_final.pdf)

from an event organised by the Football Foundation, *Seven Steps to Measuring and Communicating Impact* and also by fellow Mayors' Challenge city, Santa Monica, where Kirklees found that it is feasible to integrate different data sources for different audiences. The team is particularly inspired by the National Children's Centre Social Impact Report 2016, which uses a blend of statistics, stories and infographics to convey the impact. To make this system credible, it is vital to collect the data systematically while substantiating the type of data collected and how that data is used. The team has drafted a Terms & Conditions of Use, Privacy Policy and Cookie Policy for the platform, which is being reviewed by its Legal Services and was not public at the time of writing. Likewise, the team has come to realise that it needs to provide insights into *social value* to "justify and demonstrate to internal and external funders and adopters that Comoodle supports local priorities and can impact in a positive, measurable way on residents". Indeed, some insights are necessary on *monetary value* to demonstrate that by borrowing instead of buying, groups can save money; that where funding applicants can be diverted to Comoodle assets grant funding can be reduced; and that when Council assets are released to the community savings can be realised in terms of storage<sup>58</sup>.

In order to build the "social value picture", the information requested from Comoodle borrowers will be clear-cut, unambiguous and easy to analyse. A series of simple questions will be put to the users to generate invisible 'scores' in the 'Back Office' system. However, as far as the borrower is concerned, the answers will not affect the likelihood of being granted or refused the request. The requester is therefore less likely to overstate the benefits or scope of his/its activity. Once the Council shifts to facilitator, it will still capture the social and monetary value of the trade but the Community Group/Business lender will draft its own borrowing Terms & Conditions and the granting of the asset will be based on the requester's description of the proposed activity. The team aims to provide templates for groups to customise their own terms and lending conditions.

Critically, as described above, when justifying the value of Comoodle with the Council leadership, the team needs to show that it supports the Council's priorities. The user will be asked to choose from a drop-down list of descriptors which are directly linked to the Council's objectives. Another authority

implementing Comoodle will therefore be able to tailor the descriptors, the weighting and back-office grouping of these activities to reflect their own local priorities.

**TABLE: Questions to requesters:**

1. What's your activity mainly about?
2. How many people will benefit?
3. How much difference will it make to people's lives?
4. How important is the thing you want to borrow for the success of the activity?

<sup>58</sup>Kirklees Council Position Statement (2016). "Money, Trust and Impact: Social Value and the Comoodle Project". October 2016.

## Innovation

*“We will be the first city to apply the concept to city-to-citizen sharing and demonstrate how this can take the co-production of services to the next level<sup>59</sup>.”*

*“It’s not all about resources, it’s about how resourceful you can be. Local governments tend not to trust people. They tend to be very bureaucratic, very risk-averse and procedural. We have all the worst traits for entering into that more human way in which you might treat your neighbours and friends”*

(Duggs Carre, Comoodle Programme Lead)

As stated in Comoodle’s Final Bid to the Mayors Competition, major challenges faced by cities cannot be solved by the State alone and therefore big ideas are needed to enable communities to work together in partnership. There is compelling evidence that active communities are much more resilient and make fewer costly demands on the State. In the current financial climate, all cities acknowledge the need for ‘co-production’ and are applying it to varying degrees. Kirklees displays a forward looking and resourceful outlook: “Instead of focusing on what we can’t do because of reducing budgets, we can focus on what more we can do through sharing”. Delivering public services in an equal relationship between professionals, service users, their families and neighbours is a ground-breaking idea whose capacity to deliver better outcomes and tackle social problems is going to be put to the test thanks to the Comoodle platform. In a nutshell, the project has made a bold commitment to provide a happier, healthier and more productive future for the community by creating opportunities to build relationships, better allocate budgets and discover new ways of pulling together.

The sharing economy is disrupting the old economic model and re-inventing how we buy, consume and connect with one another. Comoodle applies this idea to cities to build a strong culture of sharing and to transform the way that people relate to the Local Authority and work together for community benefit. Critically, the project has kick-started a rethink of the way Kirklees Council

interacts with the public while challenging the current paradigm of public service delivery. It has done so by entering into a new relationship with community groups, businesses and other stakeholders. Persuading public departments to take part in an asset exchange scheme calls for a radical cultural shift. The Council has made a brave move to pioneer a paradigm-shifting project that has not been tried out anywhere else in the world. Therefore the Council is taking risks by entering into a “big social experiment”. Kirklees already relies on the buy-in of a number of trusted community groups that are acting as Custodians to help store and share out public assets. In addition, it hopes that this trail-blazing approach will win over reluctant users and join in, as the “Council and trusted community groups are also doing it”. As Duggs Carre puts it, an apparently modest project such as Comoodle becomes a way of rebuilding links with the general public. Once the project is fully operational, it should not only offer streamlined public services but also lead to a better ‘contract’ between the city, volunteer organisations, and the public.

For the project to reach its full potential, it needs to further develop comoodle.com’s functionality and design to allow the Council and local groups to lend and borrow, forge links, build an on-line/off-line community, and complete transactions on-line. Comoodle has commissioned the new platform from a company called Yoomee, which specialises in creating platforms for non-profit organisations. An iterative ‘sprint’ approach has been decided upon, which will culminate with the building of the first beta version of the Comoodle platform by the end of 2016, which will be made public around February 2017.

TABLE: Examples of innovative features/products developed by the Comoodle project

- 1) A new insurance product: Access to cheap insurance had been identified as a major barrier for local groups. Indeed, they need to cover all their public liabilities before any activity



<sup>59</sup>Kirklees Council (2014): Kirklees Final Bid to Mayors Challenge.

is undertaken. The Council, working with a local insurance broker, has developed a new product called “People Helping People” which is now available for local groups. It is an insurance product specifically designed for non-profit groups running community-based activities in Kirklees. The product is very flexible as applicants do not have to be formally constituted provided their activity benefits the community.

- 2) Part of the grant-funding process: Comoodle has put forward a creative initiative to make better use of public resources that involves scanning grant applications regularly to see whether resources can be lent by the Council, or sourced from another community group, before public funding is awarded. Where community groups are awarded a grant, they are required by the grant agreements to make them available on the platform.
- 3) Persona verification: Yoomee has worked with Council officers and other local stakeholders to create up to 11 detailed ‘profiles’ on virtual users, understood as target audiences<sup>60</sup>. This project sheds light on the needs, capacity, motivators and inhibitors of each group and how Comoodle can cater to each of them.
- 4) Branding: The Comoodle brand won the Design Effectiveness Award in 2016. Comoodle is a word that aims to conjure up anything and everything. As Duggs Carre explains: “The general public has already adopted the new brand name and is using it as a verb: ‘Let’s comoodle it!’ We were specifically informed by the judges that the Comoodle brand and the communication of the concept played a more than significant part in our submission, making it stand head and shoulders above the rest.”
- 5) Share ownership with partners by opening up the decision-making process. The team hosted an initial collaborative vision-setting session and has been pro-active in its outreach to community groups for the purpose of testing Comoodle. This is the same approach followed with the Sponsor Group (senior governance group), where problems are pitched to them rather than presenting well-developed solutions. As the team admits: “We don’t have all the answers”.
- 6) Cataloguing of assets has been a big ‘pivot’ for the project. In 2016, the team experimented with identified assets i.e. games/sports and events equipment as a focus for communication campaigns and promotions. This led to a marked rise in trades.
- 7) Logistics and geographic reach of sharing activity. Comoodle is free and does not follow the Amazon model whereby the seller ships the item to the buyer. Comoodle has trialled the use of libraries as hubs, which enable groups to collect small items locally instead of going to a central depot. In addition, they have introduced the innovative figure of Custodians of public assets (9 in total) based all over Kirklees — something that facilitates local trades.
- 8) Promoting sharing: This capability, which aims to drive stock, was recently inspired by community platform Peerby. As part of the on-boarding process, the system will encourage new users to make a wish should the item sought not be available on the platform. Conversely, they might receive a notification where there is a community need: “The community needs a certain item, can you help”?

<sup>60</sup>These are the 11 personas or profile: enabler, event organiser, individual lender, medium or large business lender, medium or large VCSE lender (Voluntary Community and Social Enterprise), one-off borrower, regular borrower, small business lender, small VCSE lender, supported borrower, wanting to connect.

## Trust and Innovation

*“We’re trying to build a new relationship model, where we trust first and ask questions second. We know that people aren’t really going to share things unless we find a way to connect them to each other and unless we deal with this issue of trust.”*

(Duggs Carre, Comoodle Programme Lead)

As Duggs Carre acknowledges, trust is a critical part of the equation in making Comoodle a successful platform as well as the main pillar upon which the other project objectives rest, namely: connecting people; promoting sharing; boosting community activity. Comoodle has made a conscious decision to move away from the commercial sharing platform model. As such, in the absence of a financial transaction and associated contractual obligations, users need to have enhanced trust in other users for the system to work. Trust stems from social connections and from identified common ground (e.g. geographical proximity, sharing similar values, even supporting the same football team etc.). In this sense, the concept of trust is quite parochial “I trust you because I know you and we live in the same village”. As Nicola Meyer points out, traditionally “For an Englishman, his home is his castle and his possessions his crown jewels” and thus, as part of the trust-building process, it is critical that trust is acknowledged: “I need to be able to trust they use it as if it were their own”. In many ways, Comoodle needs to facilitate ‘the leap to the next village’ by encouraging positive behaviours on the platform, thereby boosting sharing activity while raising Comoodle’s profile as a trustworthy, desirable product that can attract investment and replication. In this context, the team is working towards embedding the notion of “We are all part of the same community” and “We can trust each other” into the platform.

Comoodle seeks to place people’s stories at the heart of the project in order to make it relatable and trustworthy. The engagement strategy is designed around enabling partners to tell those stories, positioning them as ‘ambassadors’ while drawing more people into the movement. Out of 165 trades so far, there have been fewer than 10 cases where something has got damaged or lost along the way. In most of those instances, the damage was something very minor and easy to repair (and caused by people not knowing how to use the equipment). According to the team, these figures are a clear sign that people take care of what they borrow. It believes that this is a message worth spreading to encourage further sharing.

**Table: Lessons and challenges to trust:**

**Lessons:**

- 1) Community groups are very trusted among the community. It is therefore important for Comoodle to link up with them. Some of these organisations have become Custodians of public assets.
- 2) Use of a conversational communication style. Comoodle: “Don’t want to become just another e-commerce platform” (sic) and instead the stated aim is to help connect with the people they are sharing with. As Diane Sims (Comoodle Communications Manager) puts it, they need to communicate “as if you were talking to your neighbours”. Language has been adjusted to convey more familiarity and thus enhance trust: Instead of ‘lending’ use ‘sharing’; instead of ‘Project’, use ‘activity’; instead of ‘Community Group’, use ‘organisation’ and so forth.
- 3) More personal and human approaches for feedback mechanisms to encourage reluctant potential new users (i.e. ‘thank you’ notes, photos, story-telling about outcomes). As Diane points out, this process needs to be nimble and avoid past feedback such as “I just want the stuff”. Also, the lender will be encouraged to include helpful information about their items to avoid mishaps.
- 4) ‘Digital illiterates’ are key to wider adoption and need to be supported. Library hubs provide assistance. There is also a phone line available to make requests to facilitate the sharing activity with those groups.

**Challenges to Trust:**

- 1) The level of trust forged must come up to the expectations of community groups /business community. Internet users have grown used to clicking a button and to having their order delivered on the doorstep the next day. The team will need to manage expectations as Comoodle is not Amazon and borrowers have to find ways to pick stuff up from lenders.
- 2) Comoodle has to cater for very different groups. As Nicola Meyer explains: “Some feel it is going too slowly, others feel it is too fast. Some people are very happy to share on their doorstep, wards, villages etc. but sharing with someone at a distance or from a different socio-economic group can become a barrier”. Indeed, there is a mix of: middle class retirees driven by an altruistic mindset, others who say “We do it anyway and don’t need a platform for it”, working class and nostalgic for a past where we all “mined together” [there were mining communities in the area].
- 3) To transform the public perception of the Council as an organisation who can also say ‘yes’.

It is a big leap of faith for the public at a time when the Council is closing down other community services such as libraries and museums.

## Cross-sector collaboration

*“We’ve got a lot of people interested, enthusiastic and able to get involved in their communities but the Council needs to make sure it can happen”*

(Duggs Carre, Comoodle Programme Lead).

The Comoodle project has been carefully crafted following a large-scale engagement programme on the impact of budget cuts and the need for shared responsibility between city and residents. This resulted in 8,000 residents and community groups in the city sharing their feedback. Engagement efforts included public events, facilitated workshops, outreach to community groups and on-street activity. Residents expressed their enthusiasm to do more in their neighbourhoods but said that community access to stuff, space and skills was the challenge they faced. Additional market research and testing was carried out to test the initial assumption that creating a sharing economy would overcome this barrier. Results from our on-line survey showed that 84% thought an on-line platform would be useful to find resources. The capacity of unused city assets has been tested through engaging with key service departments in the city, which confirmed that much of their stuff, space and skills are rarely used to their maximum capacity. Using the concept of the minimum viable product, the team created small-scale prototypes to prove the viability of the project.

From the outset, the rationale behind Comoodle was identified as a core project which could support other Council change programmes and promote the emergence of the New Council. Over time, Comoodle’s potential to enhance local services and support the Council in enabling community activity have become clearer. Comoodle is embedded in the Target Operating Model for New Council and is therefore strongly aligned to the Council vision. This alignment is critical to get the buy-in from other Council Services and ultimately for the success of the project. In the context of dire economic and political uncertainties, the ability to engage with and persuade senior Council leadership of the long term social impact and financial savings of the project is vital to its long-term survival. However, Kirklees found that while it is important to have the support of political and

senior leaders, the buy-in of middle managers and front-line staff is just as important to the success of an innovation. As Duggs Carre notes: “Around 60% of the people invited to the launch event were Council staff, because we’re beginning with projects that share skills, stuff and space and a lot of those resources are Council ones”.

They also recognised that their success often relied on the discretionary effort of their colleagues above and beyond their day jobs. In Kirklees, middle managers have freed up the resources and permits necessary to share Council assets and front-line staff have developed practical processes and overcome barriers to trading. Their time, energy and commitment have been critical to the successful delivery of prototypes. Councillor Graham Turner acknowledges that role: “Comoodle has already been able to help our communities in lots of ways by encouraging people to share stuff, space and skills. The Transport Services team at Kirklees Council has been a real trail-blazer in this task. I’d like to thank our staff who have really embraced the idea of Comoodle and are working hard to find new ways of working with community organisations. For example, when the Fusion charity’s Mirfield warehouse was hit by the Boxing Day floods last year, our Transport Services team was incredibly helpful, not only in finding the right kind of vehicle but also in organising special terms for an extended loan “.



**Table: Collaboration so far**

**On-line Platforms:** The concept was tested by posting a small number of resources on an existing, national sharing platform, [www.streetbank.com](http://www.streetbank.com). In addition, Comoodle has partnered with an existing local time-banking scheme, iShare, to test whether the platform could integrate with time-banking schemes. A new on-line prototype has now been developed with iShare to enable community groups to post 'offers' and 'wishes' for both skills and stuff, which is still generating feedback.

**Sponsor Group:** Cabinet Lead Councillor, Assistant Director of Finance, Senior Head of Service and a Third Sector partner.

**Project Board:** Heads of Service from Policy, Transformation & Transport. Senior officers from IT, Research and Comms, the project team and Yoomee.

**Business sector:** In time, Comoodle are looking to partner with large businesses, including Cummins Turbo Technologies and Syngenta. Working with the support of Business In the Community (a national organisation supporting business to drive change and more actively link to their local communities through Corporate Social Responsibility), Comoodle will explore collaboration with large-scale corporate volunteering schemes.

**National stakeholders:** e.g. UK Innovation body NESTA (National Endowment for Science, Technology and the Arts) and RSA (The Royal Society for the Encouragement of Arts, Manufactures and Commerce). Kirklees is part of the NESTA Cities of Service Programme and has worked with the RSA on developing our corporate approach to delivering social value.

**Mayors Challenge network:** European winning cities have met 3 times, along with competition finalists and US winning cities.

As stated above, Comoodle has so far been acting as the Principal Lender and is set to transition to a role of mere facilitator of Group-to-Group lending. The next phase will therefore see a concerted campaign to motivate groups to add assets owned by the community to the list of things available for others to use on the current web site. A significant amount of work has been done on outreach efforts with a detailed engagement plan worked up over summer 2016. The team has created a guide for engagement based on 5 key steps and started to recruit Comoodle story-tellers to spread the word. Work is also ongoing with local businesses and Council services to identify incentives for making assets available to support communities to do more for themselves. As under the Comoodle model, the business sector can only lend (not borrow). Most companies do not understand how Comoodle can benefit them as a commercial entity. The corporate outreach focus will therefore be on businesses active in CSR which are looking at creative ways to make an impact on their local community.

**Table: Next engagement Phases:**

- 1) Engagement with 15-20 Community Groups Comoodle has a long-standing relationship with. They will be the BETA users which will test the first public platform to iron out any technical wrinkles. They are located across Kirklees also and will act as Custodians to spread out the assets.
- 2) Engagement with 270 existing Comoodlers in the database which will test the BETA web site in spring 2017.
- 3) The Platform will be widely available to the public in February 2017.

## Financial sustainability

In 2014, the Bloomberg Philanthropies awarded Comoodle a grant of £795,700 to deliver the project over 3 years (2015-2017). The grant provides the main source of funding for the Comoodle project and will be matched by Council funds and wider contributions; the added value of social capital and volunteer equity will also contribute to the overall sustainability of the project.

### Contributions to Project Funding

Over £800,000 of the overall project cash funding was planned to come through Council budgets and other contributions; most of this matched funding was expected in Year 2 and was accounted for by: (a) grants to support pilots; and (b) commissioning budgets to underpin activities creating social value. The project relies on extensive collaboration within the Council and around £200,000 in kind was planned to come through staff time from the Council. The total value of assets and resources given out to the community over the three years is projected to exceed £275,000.

**Table: Comoodle — Approximate budget**

SOURCES	
Mayors Challenge Grant	€1,000,000
Grant schemes from City to kick-start A city	€567,000
Commissioning for Social Value match	€120,000
Contribution to operational costs from City	€50,000
Legal support (from City and private partners)	€30,000
Matched funding for design and marketing	€58,500
Matched funding for conference	€19,000
Total cash	€1,844,500
VALUE OF COLLABORATIVE CONTRIBUTIONS	
City contributions of Stuff, skills and space	€217,500
Community contributions of stuff, skills and space	€65,000
Private / Business contributions of stuff, skill and space	€65,000
Professional services (insurance)- <i>Pro bono</i> advice	€30,000
Total cash & comoodles	€2,222,000

Comoodle activity does not aim to generate additional revenue for the Council although it may support groups' fund-raising activities. However, Comoodle is expected to generate savings on the basis of its current relationship with the community as it is hoped that local groups will do more with less direct funding. That said, there is no known model whereby Comoodle activity, even when it is assigned a social value score and the value of lent assets is known, can directly quantify savings to the Council and to Community Groups. Here, small-scale schemes reveal that when grant-funding priority is given to applicants willing to borrow instead of buy, they withdraw their requests for money. In addition, a caveat has been made in a few Council grant-funding agreements that assets purchased with grant money are to be made available for other groups to borrow through Comoodle. Despite this savings evidence, the team foresees that the social and monetary data generated by the platform will support its replicability rather than constituting the central selling point.

Indeed, the Comoodle project has not been conceived "as a product to sell" but the team is fully aware that to reach Comoodle's full potential and to replicate it in other areas, it needs to identify income streams to cover service running costs. Running a platform cannot be passed off as a Council statutory function and the Council has not found yet a sustainable model to maintain the services. In the midst of a complex web of political/financial uncertainties, the Leader of the Council broadly supports the project but with tight budgetary constraints, Comoodle may prove to be a soft target. The team therefore needs to demonstrate the impact of Comoodle on the local community and the equivalent savings for the Council. The Delivery Plan for 2017 (slated for publication in early 2017) and will include cost estimates for running the platform. In addition, a Sustainability Plan will be drawn up in July 2017 to ensure the project continues once the current funding dries up.

Some of the issues this document will need to consider include:

- 1) At the end of the day, Comoodle needs to make an investment to develop an APP if it is to reach critical mass.
- 2) The phone line has to continue as the success of Comoodle relies on groups that are digitally illiterate.
- 3) Regular upgrades will be necessary to make the platform sleeker and relevant to users.
- 4) Availability of resources to manage the platform if successful. Given its uniqueness, it is difficult to make any estimates as to how big the team would need to be.
- 5) Revenue options:
  - Share costs among 4-5 Councils within the Combined West Yorkshire Authority
  - Advertising
  - Let users buy on the platform
  - Charging for the code etc.

Options and business models to be reviewed as part of the option appraisal will be gathered in early 2017.

## Scalability and replicability

*“My hope for Comoodle is that we find a way to support communities across the world to access the resources and assets to make their lives better”*

(Duggs Carre, Comoodle Programme Lead)

### Transferable by Design

We're convinced of the transformative potential of 'collaborative creation' - that it will enable cities to completely reframe their current resource constraints - so, our ambition for transferability is now much bolder. Comoodle.com will be designed to scale to a multitude of cities and our implementation plan now incorporates a non-UK prototype to demonstrate its global potential.

Challenges will vary from city to city, depending on local cultural issues. Some cities will have different cultural expectations of what should be provided by the State, what they should do for themselves and what can be done in partnership. Comoodle is project-focused, so cities are free to adapt their idea to suit their local context.

Cities will be challenged on their business case and will need to be able to justify the need for Comoodle implementation to their local politicians and decision-makers. Our strong project reasoning will allow us to quantify the transformation and social gains produced by Kirklees.

We have canvassed the opinions of other cities through our international twinning links and networks to understand the cultural, legislative and regulatory issues that could impact on transferability. Encouraged by the strong support and high interest from other cities at Ideas Camp, we intend to prototype our approach in non-UK cities.

Source: Kirklees Final Bid to Mayors' Challenge (2014)

In the final analysis, Comoodle is a test case that will prove whether a public services sharing platform can promote active communities that can be replicated in different geographies. The concept is highly scalable as well as the platform technologies which are Open Source. Initially, Comoodle had planned testing the platform in other countries during 2017. Following internal discussions with Bloomberg Philanthropies focused on realistic targets for year 3 of the pilot programme, work is now geared to roll-out to other cities by December 2017. The tight deadline was a big task for the small team and it has become clear that the main focus needs to be on validating the initial hypothesis and developing an active community in Kirklees.

The Comoodle team is pro-actively engaging in wider thinking, research and work on how the sharing economy can help achieve strategic priorities in both Kirklees and West Yorkshire as a whole. They intend to position themselves as thought leaders on how governments leverage and shape the Sharing

Economy's potential. The team is fully aware that some of the ambitions of the programme will quickly run into 'barriers' in the form of rules, regulations, risks, logistical and cultural issues. It is tackling them through a specific Addressing Barriers Work-team. By scaling the sharing economy, Kirklees will pick its way through many of the issues (such as liability, trust, logistics) facing local leaders seeking to realise the benefits of resource-sharing. This know-how will be a valuable project output for cities in the UK and around the world.

Following attendance of events and dissemination efforts, interest has arisen in various quarters and there are ongoing discussions on the scope for project replication. Internationally, there is strong interest from the City of Amsterdam following contacts made via the Mayor's Challenge network. Comoodle was invited at the 'Sharing City' event hosted by the Mayor of Amsterdam in April 2016 with ten other global cities including Seoul, New York, Milan, and Toronto. Equally, a Research Institute in Norway has expressed interest, as has the municipality of Brittany in France.

At a more local level, Sheffield, a Yorkshire neighbouring city, has approached Kirklees to learn from its sports equipment lending process and its potential transferability to Sheffield Council-run sports and fitness projects. Equally, the nearby city of Bradford has approached Kirklees to express interest. Comoodle sees scalability to the cities belonging to the West Yorkshire Combined Authority as the most viable route in the near future. The senior body of the project governance model (Sponsor Group) was shaped to achieve the strategic goals of scalability and financial sustainability with the region through the involvement of senior political and management leadership. In a context of fiscal devolution, the West Yorkshire Combined Authority is negotiating directly with Central Government over money devolution and initial replicability is no doubt more straightforward when the city is next-door, shares a similar culture and where there is already a trusting relationship.

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## Methodology

In drawing up the three cases, we opted for a combination of documentary analysis and qualitative methodology through semi-structured, in-depth interviews. Most of interviews were conducted face-to-face or — failing that — through video conferences. For each initiative, 7 to 9 relevant people were interviewed at different levels and in different ways to obtain a 360-degree vision.

Fieldwork was carried out in October and November 2016 (in Barcelona, Madrid and Kirklees). All reports and results included in this report are validated by the participants themselves. Their names are listed below::

### TRAITY

- **Juan Cartagena:** Co-Founder and CEO
- **José Ignacio Fernández:** Co-Founder and CTO (Chief Technology Officer)
- **Borja Martín:** Co-Founder and CDO (Chief Data Officer)
- **Carlos Herrera:** Data Scientist
- **Lara Fernández:** Content Manager
- **Marta Figueras:** Director for Digital Transformation, DAS Seguros
- **F. Carmona:** a user of Traity who took part in the pilot study carried out in collaboration with DAS

### PLAYGROUND

- **Isaac Marcet:** Founder and Director
- **Cristian Palazzi:** Director of PlayGround DO
- **David Miró:** Business Director (PlayGround Studio)
- **David Pérez:** Head of Digital Content
- **Josune Imizcoz:** News Director
- **Emilio Guerra:** Director of Creative Lab
- **Antonio J. Rodríguez:** Chief Editor
- **Guillermo Carreras-Candi:** Video Director

### COMOODLE

- **Duggs Carre:** Comoodle Programme Lead
- **Esta Innes:** Comoodle Research Lead
- **Gemma Sheering, Diane Sims, Mark White:** Comoodle team members
- **Steve Langrick:** Head of Digital Transformation at Kirklees Council
- **Tim Brazier/Nicola Mayer:** Yoomee Comoodle Project Manager and Partner.
- **John Lever/Fiona Cheetham:** University of Huddersfield
- **Vicki Stratford:** Made in Clayton West (Community Organisations)
- **Ian Lawson:** former CSR lead at Cummins (Business community)
- **Ben Bryant:** Director at ISOS working for Bloomberg Philanthropies

### SOCIAL INNOVATION VARIABLES







# PART 3



# 1. TEN EXAMPLES OF SOCIAL INNOVATION AND TRUST IN THE DIGITAL ECONOMY

In this section, we have chosen 10 Digital Economy platforms, each with its own approach to forging trust, digital reputation and community bonds. The purpose of this collection of mini-cases is to explore initiatives that may inspire those interested in forging trust in the Internet. While trust (as we have seen above) is vital for any digital platform, the choice of cases here includes initiatives that are either part of the collaborative economy or are based on users' active contributions.

All the examples we deal with are interesting initiatives when seen in the light of the variables of social innovation (social impact; economic viability; cross-sector collaboration; type of innovation and scalability; replicability). The initiatives are therefore examined in terms of these variables, which are discussed in alphabetical order.

Under these premises, our methodology involved taking 70 cases. These were then whittled down to 20. We then chose the 10 most relevant cases from these. The following criteria were used in making the final selection:

- Diversity of Platforms in the Digital Economy (bilateral markets and with good practices on forging trust)
- Diversity of forms of governance
- Sectoral diversity
- Geographic diversity (while trying to include examples from Spain and neighbouring countries)
- Different degrees of maturity but with information on their social impact (here, we discarded cases that were at pilot stages, beta or where there were no objective data on the scope or social benefits generated)
- The final selection was made based on the originality of the digital solutions found.

The main sources of information were the platforms themselves (their websites and profiles in social networks), as well as press releases added by the respective companies (co-ops/associations etc.). Wherever possible, information on funding rounds, investors and foundational data were compared with the Crunchbase website<sup>1</sup>.

## 10 MINICASES



<sup>1</sup> See <https://www.crunchbase.com/#/home/index>

## CONFIANZA ONLINE

### GENERAL INFORMATION

DESCRIPTION	Association created in 2003 by Autocontrol and Adigital in order to boost the trust of users when shopping and browsing on-line. The Seal of On-line Trust is the logo that shows that companies comply with the Code of Ethics of Confiianza Online. This Code covers 4 broad heads: Protection of personal data; Electronic Commerce; Digital Advertising and Protection of children and teenagers. Affiliated companies display the seal on their website as show their ethical commitment to good practices on the Internet.
FOUNDED	2003
LEGAL FORM	Non-profit association
CLIENT BASE	2,000 corporate members
NUMBER OF EMPLOYEES/ WORKERS	9
GEOGRAPHICAL REACH	Spain
AWARDS, CERTIFICATIONS AND RECOGNITION	<p>All the official acknowledgments for Self-Regulation Codes on the Internet.</p> <ul style="list-style-type: none"> <li>• The Code of Ethics was submitted in 2002 to Spain's: Secretary of State for Telecommunications and The Information Society (SETSI); Data Protection Agency (AEPD); Agency for Consumer Affairs, Food Safety and Nutrition (AECOSAN).</li> <li>• The arbitration systems used to deal with complaints are the only two recognised in Spain by the European Commission.</li> <li>• The Spanish Data Protection Agency registered the Code as a Type Code in 2002. The Code was updated in 2005 and 2009.</li> <li>• In 2005, the Ethical Code was recognised by the Spanish Agency of Consumption, Food Security and Nutrition (AECOSAN)</li> <li>• Madrid's Directorate-General of Consumer Affairs recognised the revised Code of Ethics in November 2011.</li> </ul>

### SOCIAL INNOVATION VARIABLES

POSITIVE SOCIAL IMPACT	<ul style="list-style-type: none"> <li>• Seal of Confidence in Internet with the greatest coverage in Spain and the first of its type in Europe ("Ecommerce Europe Trustmark")</li> <li>• Over 2,700 Spanish and foreign websites (Germany, France, Portugal, The Netherlands, Finland, Switzerland, The United Kingdom, Belgium, Poland, Andorra, Colombia, Chile and the USA) are affiliated.</li> <li>• Over 33,000 claims processed since 2003.</li> <li>• Over 60% of the claims processed are resolved amicably between the parties.</li> <li>• The average term for handling a claim is 12 calendar days.</li> </ul>
FINANCIAL SUSTAINABILITY	<ul style="list-style-type: none"> <li>• Annual fee and other fees for managed claims once a given quota of claims has been exceeded.</li> </ul>
CROSS-SECTOR COLLABORATION	<ul style="list-style-type: none"> <li>• Four collaboration agreements with official bodies: <ul style="list-style-type: none"> <li>• Spain's Agency of Consumption, Food Security and Nutrition (AECOSAN) (2003)</li> <li>• Madrid Regional Government (2012)</li> <li>• Madrid City Council (2014)</li> <li>• The Regional Government of Castilla La Mancha (2016)</li> </ul> </li> <li>• Collaboration with Caixabank's training platform: "Mi Comercio On-line" [My On-line Commerce]</li> <li>• Agreements with Electronic Commerce Associations such as the Association of Virtual Stores of Aragon (ATVA) and the León Electronic Commerce Association (ALECE).</li> </ul>
SCALABILITY AND REPLICABILITY	<ul style="list-style-type: none"> <li>• Ethical code, which sets out commitments in the main areas of dispute</li> <li>• Evaluation of websites subscribing to the 30-plus points covered by the Code of Ethics</li> <li>• System for mediation in and arbitration of disputes.</li> </ul> <p>Launched in 2003, it put on a growth spurt in 2009. From 2009 to 2010, its membership grew from 355 to over 800. In 2012, there were 1,802 corporate members. In 2017, there are 2,000.</p>
WEB SITE AND REFERENCES	<p><a href="https://www.confianzaonline.es">https://www.confianzaonline.es</a></p> <p>@confianzaonline</p> <p><a href="https://www.facebook.com/Confiianza-Online-211889625557262/">https://www.facebook.com/Confiianza-Online-211889625557262/</a></p>

## DOCTORALIA

### GENERAL INFORMATION

DESCRIPTION	<p>This is an on-line eHealth or digital health sector platform. The base is a network that links health professionals and patients opting for private medicine. Users can find the best professional for their needs, see the assessments of each professional and arrange visits on-line.</p> <p>It was founded by three Spaniards (two doctors and one technologist), after they realised that millions of patients used the network to solve health-related issues, and that health professionals lacked tools to reach patients.</p>
FOUNDED	2007, Spain
LEGAL FORM	Doctoralia Internet S.L. [Spanish Limited Liability Company]
NUMBER OF USERS	120 million users a year
NUMBER OF EMPLOYEES/ WORKERS	Over thirty, mainly in the Barcelona office
GEOGRAPHICAL REACH	Present in 20 countries around the world (in all continents barring Africa and the Antarctic)
AWARDS, CERTIFICATIONS AND RECOGNITION	<ul style="list-style-type: none"> <li>• Nominated for the 2016 European Business Awards</li> <li>• Prize for “entrepreneurial web site” in 2015, awarded by Spain’s Ministry of Industry, Energy and Tourism</li> </ul>

### SOCIAL INNOVATION VARIABLES

POSITIVE SOCIAL IMPACT	<ul style="list-style-type: none"> <li>• The firm has 11 million patient-users a month worldwide, and has a database with 3.5 million health users (professionals and private health centres).</li> <li>• It is present in 20 countries, each with its local version. The firm covers Europe, almost all of North and South America, as well as The United Arab Emirates, India and Australia.</li> <li>• It has software to help healthcare professionals manage patients and private visits. It offers tools to boost one’s on-line profile, provide daily management of visits, and answer users’ queries and comments.</li> <li>• Patients can access a full directory of professionals. One can contact medical employees/workers, rate them, and share opinions. In the ‘Ask the expert’ section, patients can send their questions or queries to medical professionals.</li> <li>• To ensure trust, all the profiles of health professionals are carefully verified and compared. The firm has a team that moderates both the opinions and information on professionals.</li> <li>• Health advice is given through social networks.</li> <li>• This fosters patient participation and comments and reviews from practitioners seeking to build their on-line reputation.</li> </ul>
FINANCIAL SUSTAINABILITY	<ul style="list-style-type: none"> <li>• The business model is based on health professionals’ subscriptions, who pay for verified profiles and premium profiles. Patient accounts are free.</li> <li>• In 2015, the firm billed over US \$3.3 million.</li> <li>• The firm develops special APIs to incorporate the directory in other platforms or web sites.</li> </ul>
CROSS-SECTOR COLLABORATION	<ul style="list-style-type: none"> <li>• The firm has collaboration agreements with other health platforms (for example with InitHealth and with Health 2.0 in Colombia).</li> <li>• It has merged with DocPlanner (another global eHealth platform).</li> <li>• It often works with universities on research projects and gives talks on its business experience.</li> <li>• It works with health departments on projects to improve health management (for example, The Observatory of Innovation in Health Management, run by the Catalan Government).</li> </ul>
INNOVATION TYPE	<ul style="list-style-type: none"> <li>• The platform has a directory of professionals and also has a forum for patients to comment and rate medical employees/workers, and to ask experts questions.</li> <li>• The firm empowers patients and gives general health advice, and makes it easier for patients to find answers to their questions — all within a verified, secure context.</li> <li>• The firm promotes tools for boosting one’s visibility and on-line reputation through a specific part of the web site, called Doctoralia Academy.</li> <li>• Since 2014, the firm has held The Doctoralia Awards in recognition of the most highly-reputed professionals. Those professionals who are rated best by patients are chosen and confirmed by Doctoralia as meeting the highest professional standards in treatment and in answering “questions for the expert”.</li> <li>• The company’s platform has been in both web format and as a mobile app since 2012. The app is a natural continuation of the web site and adds geo-location to facilitate local health care.</li> </ul>
SCALABILITY AND REPLICABILITY	<ul style="list-style-type: none"> <li>• The project is scalable for health professionals and patients opting for private medicine.</li> <li>• The technology used by Doctoralia provides customisable design, thus facilitating local versions that better fit each country’s regulatory framework.</li> <li>• The company’s growth in 2016 was estimated at 20%.</li> <li>• Following the merger with the Polish platform DocPlanner, it is hoped that the platform will become the world’s largest medical appointment management system. Doctoralia forecasts that it will soon be present in 25 countries, managing some 200,000 appointments a month.</li> </ul>
WEB SITE AND REFERENCES	<p><a href="https://www.linkedin.com/company/doctoralia">https://www.linkedin.com/company/doctoralia</a></p> <p><a href="https://twitter.com/doctoralia">https://twitter.com/doctoralia</a></p> <p><a href="https://www.facebook.com/Doctoralia">https://www.facebook.com/Doctoralia</a></p> <p><a href="http://www.doctoralia.com">http://www.doctoralia.com</a></p>

## DUCKDUCKGO

## GENERAL INFORMATION

DESCRIPTION	<p>This is an Internet search engine that was launched as an alternative to Google, offering a service that respects users' on-line privacy. It was a reaction to 'personalised' content and a way of avoiding the so-called 'filter bubble'. The name stems from a children's game ("Duck, Duck, Goose").</p> <p>The firm's mission is to provide useful answers without being intrusive, offering anonymous searches.</p>
FOUNDED	2008, The United States
LEGAL FORM	US Limited Liability Company (Inc.)
NUMBER OF USERS	14 million searches daily (a new record was chalked up in January 2017)
NUMBER OF EMPLOYEES/ WORKERS	Over 50, working in the network and remotely
LOCATION	The company is headquartered in Paoli, Pennsylvania
GEOGRAPHICAL REACH	Global
AWARDS, CERTIFICATIONS AND RECOGNITION	<ul style="list-style-type: none"> <li>Nominated by TIME Magazine as one of the "Top 50 apps of 2013"</li> </ul>

## SOCIAL INNOVATION VARIABLES

POSITIVE SOCIAL IMPACT	<ul style="list-style-type: none"> <li>The firm has no figures for the number of users because it does not collect personal information. That said, it has counted up to 14 million searches daily.</li> <li>Respect for privacy lies at the heart of all its development. Following Snowden's revelations in 2013 on the NSA's mass spying activities, DuckDuckGo (DDG) has become established as an option fostering privacy on the Internet.</li> <li>The firm helps generate an ecosystem of alternative tools and makes annual donations to Free Code projects that share DDG's philosophy. In 2016 alone, US \$225,000 was spent on nine organisations promoting the right to privacy.</li> <li>DDG fosters participation by creating a highly permeable community. There are various ways for users to take part: improving the answers offered, making suggestions or translating content. Collaboration is centralised in the web Duck.co web site.</li> </ul>
FINANCIAL SUSTAINABILITY	<ul style="list-style-type: none"> <li>In 2011, DDG secured an investment of US \$3 million from Union Square Ventures.</li> <li>The business model is currently based on displaying ads related to specific search words.</li> <li>The firm has a commission contract with Amazon and eBay, receiving a small percentage for every purchase that comes from a DuckDuckGo search.</li> </ul>
CROSS-SECTOR COLLABORATION	<ul style="list-style-type: none"> <li>DDG works closely with Mozilla Foundation (the organisation behind the Firefox web browser).</li> <li>Since mid-2016 it is the default search engine for the Tor Project (free software that allows anonymous communication over the Internet).</li> <li>It is based on other collaborative projects to find the most relevant information rather than merely what advertisers want users to see. Other instances of such projects are Wikipedia, Reddit, and GitHub (collaborative platform for the development of Free Code)</li> <li>DDG is part of the Yahoo-Bing! Commercial alliance when it comes to displaying ads.</li> <li>Apple offers DDG as one of the search engines listed in the Safari web browser.</li> </ul>
INNOVATION TYPE	<ul style="list-style-type: none"> <li>DDG gives instant answers instead of a list of indexed links. It directly shows content on the results sheet.</li> <li>It has a simple and understandable privacy policy: DDG does not log the search history, does not use cookies to track a user's on-line activity or to register his IP</li> <li>DDG shows that one can create a profitable, advertising-driven business without infringing users' privacy.</li> <li>Much of the software is Open Source, although the core code is proprietary.</li> <li>It has an ad hoc platform (DuckDuckHack), in which each developer can create their own instant answers. They encourage users themselves to improve search results, especially on highly specialised topics.</li> </ul>
SCALABILITY AND REPLICABILITY	<ul style="list-style-type: none"> <li>DuckDuckGo is replicable and scalable to the extent that users value privacy more than convenience or personalisation of their searches.</li> <li>Although Google takes the lion's share (80%) of search engine traffic, DuckDuckGo is consolidating its position as the fourth largest in the field, after Yahoo and Bing!</li> <li>Since 2014, the growth rate is exponential: the average number of daily searches is doubling each year.</li> </ul>
WEB SITE AND REFERENCES	<p><a href="https://duckduckgo.com/about">https://duckduckgo.com/about</a></p> <p><a href="https://duck.co">https://duck.co</a></p> <p><a href="https://twitter.com/duckduckgo">https://twitter.com/duckduckgo</a></p> <p><a href="https://www.reddit.com/r/duckduckgo">https://www.reddit.com/r/duckduckgo</a></p> <p><a href="https://github.com/duckduckgo">https://github.com/duckduckgo</a></p>

## FAIRMONDO

### GENERAL INFORMATION

DESCRIPTION	A digital platform for buying and selling on-line between individuals or companies. It sprang up as an ethical alternative to eBay and Amazon, with the mission to show that there are profitable ways to put social values first. The co-op promotes products that build a more socially and environmentally responsible world economy. Fairmondo employs a co-operative platform, whose users and also its owners. The co-op is committed to democratic governance and transparency as key values. One of the founders has a strong track record in anti-corruption activism and Fairmondo is one more dimension of that cause. In fact, at the outset the co-op was Fairnopoly and the logo emulated that used in the game of Monopoly. From 2015 onwards, the co-op adopted a more global vision and was renamed Fairmondo.
FOUNDED	2012, Germany
LEGAL FORM	Co-operative
NUMBER OF USERS	2000 member-users in Germany and another 2000 in The United Kingdom
NUMBER OF EMPLOYEES/ WORKERS	12
GEOGRAPHICAL REACH	Headquarters in Germany and since 2014, a 'Chapter' in The United Kingdom
AWARDS, CERTIFICATIONS AND RECOGNITION	<ul style="list-style-type: none"> <li>Received the 2014 Social Impact Start Award</li> <li>Nominated for the 2013 KarmaKonsum Gründer-Award</li> </ul>

### SOCIAL INNOVATION VARIABLES

POSITIVE SOCIAL IMPACT	<ul style="list-style-type: none"> <li>Fairmondo provides an ethical, transparent alternative to on-line shopping sites such as eBay and Amazon. Both individuals and companies can participate.</li> <li>The co-op fosters the 'circular economy' and encourages the purchase of fair trade products, and organic and/or environmentally responsible products (it does this by giving discounts on and highlighting such products).</li> <li>The co-op fosters transparency on the origin of products, how they are made, working conditions, and so on to raise public awareness of such issues.</li> <li>It has 4000 member-users and some 2 million media products.</li> <li>The co-op gives 25% of its profits to NGOs linked to fair trade and sustainability. The decision on which NGOs get the money lies with users themselves.</li> <li>Fairmondo holds events for members to get to know one another, thus fostering local communities and personal ties.</li> <li>The co-op uses fair salary scales within the organisation, where the highest salary is no more than triple the lowest one.</li> </ul>
FINANCIAL SUSTAINABILITY	<ul style="list-style-type: none"> <li>The co-op initial injection of cash came from crowd-funding campaigns. In the first round, they got €200,000 — twice what had been hoped for. They have carried out 5 crowd-funding campaigns to date, all of which have been successful.</li> <li>Currently, overheads are covered by revenues from user subscriptions and user fees.</li> <li>Each share has a value of €10 and the capital invested up until the end of 2016 came to €600,000.</li> <li>Benefit-sharing follows a model called 4/4: 25% is distributed pro-rata among owners, 25% to pay voluntary hours, 25% for donations to NGOs and 25% for re-investment in the co-op.</li> </ul>
CROSS-SECTOR COLLABORATION	<ul style="list-style-type: none"> <li>The co-op's origins lie in Berlin's Social Impact Lab.</li> <li>The co-op donates part of its revenues (1% per transaction) to Transparency International, an anti-corruption lobby.</li> <li>It publishes all its banking movements through the Open Bank Project.</li> <li>The open source part is hosted and accessible through GitHub (the free software and collaborative code platform).</li> <li>In Germany the co-op has an agreement with Velogista, another Web 2.0 co-op (in this case, a bicycle courier firm).</li> <li>Since 2015, the co-op has worked with Fairphone, a mobile phones initiative based on fair trade.</li> <li>The UK 'Chapter' is hosted by Sharetribe software.</li> </ul>
INNOVATION TYPE	<ul style="list-style-type: none"> <li>The co-op's origins lie in Berlin's Social Impact Lab.</li> <li>The co-op donates part of its revenues (1% per transaction) to Transparency International, an anti-corruption lobby.</li> <li>It publishes all its banking movements through the Open Bank Project.</li> <li>The open source part is hosted and accessible through GitHub (the free software and collaborative code platform).</li> <li>In Germany the co-op has an agreement with Velogista, another Web 2.0 co-op (in this case, a bicycle courier firm).</li> <li>Since 2015, the co-op has worked with Fairphone, a mobile phones initiative based on fair trade.</li> <li>The UK 'Chapter' is hosted by Sharetribe software.</li> </ul>
SCALABILITY AND REPLICABILITY	<ul style="list-style-type: none"> <li>The model can be replicated and this encourages each country to set up its own structure under the 'Co-op 2.0' model.</li> <li>In the United Kingdom, it has grown as much in 2 years as in Germany since the co-op's launch.</li> <li>The Co-op foresees the forging of a federation, with 5 countries running local co-operatives. The idea is to set up a global network of platform co-ops, with each being rooted in local experiences.</li> </ul>
WEB SITE AND REFERENCES	<p> <a href="https://www.facebook.com/fairmondo">https://www.facebook.com/fairmondo</a>  <a href="https://twitter.com/fairmondo">https://twitter.com/fairmondo</a>  <a href="https://fairmondo.uk">https://fairmondo.uk</a>  <a href="https://twitter.com/Fairmondouk">https://twitter.com/Fairmondouk</a> </p>

## FOODCLOUD

## GENERAL INFORMATION

DESCRIPTION	<p>This digital platform was founded to reducing food poverty by using the surplus food thrown out daily by supermarkets and other establishments. FoodCloud wove a network among shops and charities distributing food to the poor.</p> <p>The two founders set up the company when they found out that 1 in 8 people in Ireland are stricken by food poverty and that the country throws away tons of perfectly edible food every year.</p>
FOUNDED	2013, Dublin
LEGAL FORM	Charitable company
NUMBER OF USERS	Over 3000 member beneficiaries. The company has served the equivalent of 8.4 million meals since its foundation.
NUMBER OF EMPLOYEES/ WORKERS	10
GEOGRAPHICAL REACH	It currently operates in The Republic of Ireland and The United Kingdom.
PRIZES AND AWARDS	<ul style="list-style-type: none"> <li>• Nominated for The Financial Times' "Best Tech for Social Impact Company 2016" list</li> <li>• 2014 Social Entrepreneurs Ireland Impact Award Winner and 2014 Minnovation Fund winner</li> <li>• 2014 Green Entrepreneurs Award</li> <li>• 2013 Arthur Guinness Projects winner</li> </ul>

## SOCIAL INNOVATION VARIABLES

POSITIVE SOCIAL IMPACT	<ul style="list-style-type: none"> <li>• The network includes over 1000 food companies and supermarkets, which work with 3000 groups and charity centres.</li> <li>• Since its foundation, the company has shared out 3000 tons of food which would otherwise have been thrown away. This is the equivalent of 8.4 million meals.</li> <li>• It is an initiative with ecological implications given that the distribution network means 7,800 tons less of CO2 emissions.</li> <li>• The firm estimates that €1.50 is saved for each meal sent to the community or to charity groups.</li> <li>• There is a quality control system for surplus food as a way of building trust. The firm keeps a close eye on food storage and distribution after collection. Those in charge also take action in the event of food poisoning.</li> <li>• The firm fosters communication between charities so that they can pool experience and hold joint activities, helping those stricken by food poverty to forge new friendships.</li> </ul>
FINANCIAL SUSTAINABILITY	<ul style="list-style-type: none"> <li>• There was a seed investment round in 2013, led by NDRC, an Irish venture capital company (the sum is unknown).</li> <li>• In the initial stages, the firm received public funding and funds through scholarships and prizes, which amounted to €250,000.</li> <li>• Since 2014, revenues have come mainly from subscription fees paid by businesses and food industries. The cost is charged at a price similar to the rubbish collection tax but with the advantage that it incorporates CSR action.</li> <li>• All revenue is used to cover costs.</li> </ul>
CROSS-SECTOR COLLABORATION	<ul style="list-style-type: none"> <li>• FoodCloud works with the food industry and supermarkets. In Ireland, the firm works with Aldi supermarkets. In The United Kingdom, the firm has tie-ups with the Fareshare, TESCO (over 3000 establishments) and Waitrose supermarket chains (around 25 outlets).</li> <li>• In October 2016, the firm teamed up with the Bia Food Initiative (another charity), and launched 'FoodCloud Hubs'. This gave the company more warehouses and contacts, allowing FoodCloud to broaden the range of products it offers (especially perishables). The result is what the firm calls a 'farm-to-fork' solution.</li> </ul>
INNOVATION TYPE	<ul style="list-style-type: none"> <li>• FoodCloud is an example of a circular economy that matches the food surplus with the demand of those stricken by food poverty.</li> <li>• The charity brings food companies into contact with food distribution points for the poor. It does so using a digital platform. There is a website and a smartphone app.</li> <li>• FoodCloud fosters freedom through swift, easy contact among platform users via a notification system. Through this, users report the surplus generated or the needs to be covered, as the case may be.</li> </ul>
SCALABILITY AND REPLICABILITY	<ul style="list-style-type: none"> <li>• The model is easily to replicate where there are shops with surplus food and a web of non-profit food distribution centres or groups.</li> <li>• It is a scalable project to the extent that establishments are added as donors of food surplus.</li> <li>• In 2016, FoodCloud grew exponentially, soaring from 200 donor organisations to over 1200 in the UK and Ireland.</li> <li>• The founders are very active in spreading the good word and often take part in talks and workshops to publicise the initiative.</li> </ul>
WEB SITE AND REFERENCES	<p><a href="https://www.facebook.com/foodcloudireland">https://www.facebook.com/foodcloudireland</a>  <a href="https://plus.google.com/104586320302600540121/about">https://plus.google.com/104586320302600540121/about</a>  <a href="https://www.linkedin.com/company/foodcloud">https://www.linkedin.com/company/foodcloud</a>  <a href="https://twitter.com/foodcloud">https://twitter.com/foodcloud</a>  <a href="https://www.youtube.com/channel/UCQevxDsQOjtWd-8lxM8XXfA">https://www.youtube.com/channel/UCQevxDsQOjtWd-8lxM8XXfA</a></p>

## FRIENDSURANCE

### GENERAL INFORMATION

DESCRIPTION	This firm pioneered a peer-to-peer insurance concept that rewards small groups of users with a cash-back bonus each year if their group lodges no claims. Based on a share economy approach, policy owners with the same insurance type form small groups and a part of their premiums is paid into a cash-back pool. If no claims are submitted, the members of the group get some of their money back in January of the following year. In the event of claims, the cash-back falls for everyone. Small claims are settled with the money in the pool. In the event of bigger claims, the standard insurance company covers any amount that exceeds the group coverage. Should there not be enough money left in the pool to cover a claim, a stop-loss insurance covers the rest.
FOUNDED	March 2010
LEGAL FORM	Limited company
LOCATION	Berlin (Germany)
NUMBER OF EMPLOYEES/ WORKERS/VOLUNTEERS	About 90 employees/workers
NUMBER OF USERS	Into six digits
PRIZES AND AWARDS	<ul style="list-style-type: none"> <li>• Short-listed for European Fintech Awards (2016)</li> <li>• Won an award as one of best German digital innovations, by Land of Ideas and Deutsche Bank (2015)</li> <li>• Winner of 'UN World Summit Award Germany' (2015)</li> </ul>

### SOCIAL INNOVATION VARIABLES

POSITIVE SOCIAL IMPACT	<ul style="list-style-type: none"> <li>• The claims-free bonus allows policy owners to get back up to 40% of their premiums if no claims are submitted.</li> <li>• Insurance becomes cheaper for the consumer and also provides a clear financial benefit for fair behaviour, which in turn reduces fraud.</li> <li>• The insurance companies profit by cost savings and greater customer satisfaction and loyalty.</li> <li>• Over 80% of the users have received a cash back. In the property insurance line, the average cash back was 33% of the premiums paid.</li> </ul>
FINANCIAL SUSTAINABILITY	<ul style="list-style-type: none"> <li>• In 2016, it raised funds of US \$15.3 million. This was the biggest investment ever in the peer-to-peer insurance segment to date.</li> <li>• The firm also got funding from various institutional and private investors in the internet field, including Otto Group Ventures, the German Start-ups Group and the European Regional Development Fund.</li> </ul>
CROSS-SECTOR COLLABORATION	<ul style="list-style-type: none"> <li>• It took the company just a year to forge the first partnership with an insurance company. Today, Friendsurance has close links with over 100 carriers in Germany, including approximately 70 domestic insurance partners, of which Axa Germany is one.</li> </ul>
INNOVATION TYPE	<ul style="list-style-type: none"> <li>• The peer-to-peer insurance model Friendsurance launched in 2010 was unique. Since then, the business has grown fast.</li> <li>• Friendsurance automatically places on-line policy-holders in small groups (usually with 10 members). Alternatively, customers can form groups themselves. People can change members of their group at any time, the only condition being that every group member has to have the same kind of insurance. However, insurance may be provided by different companies and can cover different services.</li> <li>• The biggest challenge for the company has been to overcome the conservatism of the average customer and to make the process of buying insurance more convenient and user-friendly.</li> <li>• The firm has a strong customer-focused business ethos. There are regular user tests to take customer needs and feelings into account in developing the firm's products.</li> </ul>
SCALABILITY AND REPLICABILITY	<ul style="list-style-type: none"> <li>• "In Germany alone, the car insurance business is bigger than the global music industry. There's great potential for Insurtechs like us." (Tim Kunde, CEO)</li> <li>• There are plans to grow further in the German market and expand internationally. Launched in Australia in 2016.</li> <li>• Worldwide, at least 18 companies have replicated the peer-to-peer insurance model.</li> </ul>
WEB SITE AND REFERENCES	<p><a href="http://www.friendsurance.de">http://www.friendsurance.de</a></p> <p><a href="http://www.friendsurance.com">http://www.friendsurance.com</a></p> <p><a href="https://www.facebook.com/friendsurancedeutschland">@friendsurance</a></p>

## GUIFI.NET

## GENERAL INFORMATION

DESCRIPTION	This is a technological, social and economic project driven by citizens. The aim is to create an open, free, neutral telecommunications network based on a common model, developing the necessary governance tools. The firm fosters the Social Internet, creating an infrastructure that facilitates access to telecommunications in general and connection to quality Internet broadband at a fair price for members.
FOUNDED	2004, Spain
LEGAL FORM	Private Foundation (since 2008)
NUMBER OF USERS, NUMBER OF NODES / NUMBER OF NODES	32,700 operating nodes, representing over 20,000 homes with Internet access through this network (January 2017)
NUMBER OF EMPLOYEES/ WORKERS	11 (6 paid employees/workers, 5 unpaid volunteers)
GEOGRAPHIC SCOPE	Spain (mainly Catalonia but also with a strong presence in Valencia and Cantabria).
AWARDS, CERTIFICATIONS AND RECOGNITION	<ul style="list-style-type: none"> <li>• Finalist for 2016 Wi-Fi Now London.</li> <li>• 2015 European Broadband Award, from the European Commission (in the Business Model and Financing category).</li> <li>• 2007 Catalan Government's National Telecommunications Award.</li> <li>• 2006 Award for Innovation from Catalonia's National Youth Council.</li> <li>• 'Vilaweb' [Catalan on-line newspaper] Award 2004.</li> </ul>

## SOCIAL INNOVATION VARIABLES

POSITIVE SOCIAL IMPACT	<ul style="list-style-type: none"> <li>• It is estimated that over 70,000 people access guifi.net on a regular basis and that over 20,000 homes access the Internet through this network, many of them in areas lacking other options.</li> <li>• It has high levels of loyalty (very low 'churn') and high penetration (over 80% where there are no alternative operators).</li> <li>• An open community is created in which members share knowledge on telecommunication networks and help one another out of altruism.</li> <li>• <b>The firm fosters a collaborative, local economy. It has created over 100 direct jobs</b>, recruiting and retraining qualified workers who found themselves on the dole in the wake of the 2008 financial crisis. It has also created indirect jobs, given that quality Internet bandwidth stimulates local industry.</li> <li>• The firm has a group of mediators to deal with any disputes among community members.</li> </ul>
FINANCIAL SUSTAINABILITY	<ul style="list-style-type: none"> <li>• Revenue based on cost-based charges, which are calculated on the use made of common resources.</li> <li>• Part of the revenue obtained by teleco operators from their clients for services is ploughed back to meet maintenance and operating costs.</li> <li>• The firm fosters investments by sharing costs, which are clearly stated and are clawed back from users.</li> <li>• Micro-sponsorship: to a lesser extent, contributions are levied for carrying out special projects, where needed.</li> </ul>
CROSS-SECTOR COLLABORATION	<ul style="list-style-type: none"> <li>• Guifi.net has created an eco-system for collaboration among the community, private sector, universities and public administration.</li> <li>• The Operator's clients help the firm deploy infrastructure more cheaply.</li> <li>• Universities and research centres get given all kinds of help in carrying out their research and the community knows about the results first-hand.</li> <li>• Volunteers, public administrations and operators work hand-in-hand to expand and operate state-of-the-art infrastructure.</li> <li>• Over 20 collaborating companies provide professional services meeting everyone's needs.</li> </ul>
INNOVATION TYPE	<ul style="list-style-type: none"> <li>• The firm offers a complete socio-economic model for applying 'commons-based' economic collaboration in the teleco sector.</li> <li>• Guifi has created a set of governance tools (licensing, financial offsetting system, conflict resolution system, etc.) to let the community take the lead.</li> <li>• The firm builds an extensive telecommunications network by implementing the tools it developed. It is technically based on an open, iterative, incremental innovation format.</li> <li>• Professional participants (along with volunteers and public administrations) work together in building, operating and maintaining the infrastructure.</li> </ul>
SCALABILITY AND REPLICABILITY	<ul style="list-style-type: none"> <li>• The iterative, incremental methodology has helped the firm solve the challenges of scalability as they crop up, enabling the firm to rise to new challenges.</li> <li>• All production (knowledge, methodologies, code, content, etc. and of course the network) is open, so it can be adopted and adapted by anyone.</li> <li>• The firm is growing at the rate of about 100 new nodes a week.</li> <li>• Initiatives have now been launched in Madrid, The Basque Country and Galicia and are at varying stages of development.</li> </ul>
WEB SITE AND REFERENCES	<p><a href="http://www.guifi.net">http://www.guifi.net</a>  <a href="https://twitter.com/guifinet">https://twitter.com/guifinet</a>  <a href="https://www.facebook.com/guifinet-130989307421">https://www.facebook.com/guifinet-130989307421</a></p>



## GOODREADS

### GENERAL INFORMATION

DESCRIPTION	The world's largest community of readers. It focuses on helping people find, share, and engage in good books. Goodreads makes recommendations through friends, the Goodreads community, and its recommendation engine. Furthermore, Goodreads provides a platform where authors can connect directly with readers and build their own community of fans. It is also a leading book marketing platform, offering advertising, deals, and give-away programmes to publishers and authors. It has over 20,000 groups, in which people forge links through a shared interest.
FOUNDED	2007
LEGAL FORM	Independent subsidiary of Amazon
BASED	The United States
NUMBER OF EMPLOYEES/ WORKERS	150
NUMBER OF USERS	55 thousand

### SOCIAL INNOVATION VARIABLES

SOCIAL IMPACT	<ul style="list-style-type: none"> <li>• Helps solve the book 'discovery' problem by providing a platform for trusted reviews and recommendations.</li> <li>• It gives exclusive insights into what readers like and do not like to read and allows members to find books that they might otherwise miss.</li> <li>• Members have added 1.5 thousand million books to their shelves (including Want to Read, Currently Reading, and Read)</li> <li>• Over 50 million user reviews (April 2016)</li> <li>• The Goodreads Choice Awards, launched in 2009, are the only major book awards decided by readers. In 2016, over 3.5 million votes were cast to decide the winners of 20 book categories. Winning a Goodreads Choice Award can drive more sales (up to 18-fold)</li> </ul>
FINANCIAL SUSTAINABILITY	<ul style="list-style-type: none"> <li>• Goodreads is a book marketing platform and drives revenue through advertising and other marketing programmes.</li> </ul>
CROSS SECTOR COLLABORATION	<ul style="list-style-type: none"> <li>• Works with all the big publishers and authors to help them promote their titles.</li> <li>• It is also the social network for Kindle and is part of the Kindle ecosystem</li> </ul>
INNOVATION TYPE	<ul style="list-style-type: none"> <li>• Goodreads Reading Challenge launched in 2011. Goodreads runs an annual reading challenge, allowing its members to set their own goals and helping them track their progress. This has grown to be one of its most popular programmes, with over 3 million members taking the challenge and collectively reading 37.7 million books in 2016.</li> <li>• Users views are moderated. The general guidelines urge users to be respectful when reviewing books, to be constructive, avoid hate speech, abstain from self promotion, and so on. The firm reserves the right to delete comments that infringe the guidelines.</li> <li>• Launch of the Goodreads Recommendations Engine in 2011. It analyses 20 thousand million data points to give book recommendations tailored to the user's reading tastes. Immediately after launch, Goodreads saw the average daily number of books added to read on the site jump by 60%.</li> <li>• Goodreads integration with Kindle was launched in 2013. It has introduced features focusing on discussion, book discovery and keeping track of reading and has also been expanded to include features within the Kindle iOS and Android apps.</li> <li>• 'Ask the Author' goes live in 2014. It allows readers to ask their favourite authors questions. Over 190,000 authors have joined Goodreads.</li> <li>• Goodreads Deals launched in 2016. It allows publishers and authors to reach both existing fans and introduce a book to new readers</li> <li>• Kindle Ebook Giveaways launched in 2016. This was one of the most popular requests from authors and publishers and is another key feature as Goodreads builds its book marketing platform.</li> </ul>
SCALABILITY AND REPLICABILITY	<ul style="list-style-type: none"> <li>• 55 thousand members (55% of members are in the U.S.)</li> <li>• Social network for Kindle.</li> </ul>
WEB SITE AND REFERENCES	<p>www.goodreads.com</p> <p>@goodreads</p> <p>https://www.facebook.com/goodreadsart/?fref=ts</p>

## SHAREHUB

## GENERAL INFORMATION

DESCRIPTION	Platform launched by C.O.D.E (former Creative Commons Korea), and supported by the Seoul Metropolitan government. It aims to make the collaborative economy mainstream and is part of the 'Sharing City Seoul' initiative. As a hub, it curates global and domestic shared news, introduces Seoul's sharing policy, gives a list of sharing services and connects people who are interested in sharing. Seoul Metropolitan Government launched the Sharing City Seoul initiative in 2012, along with a plan to implement sharing projects bearing on citizens' lives and to establish and broaden the foundation for sharing.
LEGAL FORM	Public-private partnership
FOUNDED	June 2013
NUMBER OF EMPLOYEES/ WORKERS	3
NUMBER OF USERS	2.7 million users
PRIZES AND AWARDS	<ul style="list-style-type: none"> <li>• 2016 Gothenburg Award for sustainable development to Seoul's Mayor, Park Won-soon, for his role in creating Seoul Sharing City.</li> <li>• 2016, Place Marketing Award as an innovative urban policy for public-private partnerships</li> <li>• 2014, Special Mention at the 5th Metropolis Awards for the 'Sharing City' policy</li> </ul>

## SOCIAL INNOVATION VARIABLES

SOCIAL IMPACT	<ul style="list-style-type: none"> <li>• 4 years after launch: 10-fold growth in car-sharing, 80% awareness of car-sharing and bike-sharing, 5-fold growth in sharing transactions.</li> </ul> <p>Key initiatives include: (as of September 2016)</p> <ul style="list-style-type: none"> <li>• 800 public buildings available for public meetings and events. Used over 22,000 times by Seoul citizens.</li> <li>• 82 designated Sharing Services (8 new ones in 2016).</li> <li>• Start-up School: to encourage entrepreneurship.</li> <li>• Housing and Inter-generational Connection: to match young people with empty rooms in seniors' houses. 158 houses (224 people matches in 2016) Total 324 houses (428 people took part in 2016).</li> <li>• Car-Sharing: There are 1,386 car sharing locations with over 4,000 cars that have been shared 282,000 times.</li> <li>• Open Data Plaza: 4,527 data sets for use in business or civil society.</li> <li>• Lending Libraries: 94 lending libraries have been opened for books, tool rental and repair (plus woodworking programmes).</li> <li>• Survey in May 2016: Public awareness of 49.3%; 90% public satisfaction with major projects such as Nanum Car (average satisfaction: 77%).</li> </ul>
FINANCIAL SUSTAINABILITY	<ul style="list-style-type: none"> <li>• Collaboration with private companies to develop public-private partnerships to finance the project (for example, crowd-funding, internships and citizen participatory programmes)</li> <li>• Financial Support: The KRW 1,120 million raised (US \$450,000) has been invested in 75 projects.</li> </ul>
CROSS SECTOR COLLABORATION	<ul style="list-style-type: none"> <li>• The city is acting as a partner in co-ordinating emerging sharing initiatives by businesses, organisations, expert groups, and citizens.</li> <li>• Share Hub is also building a network by engaging with organisations around the world and activists in various cities (for example, Amsterdam, Barcelona, Bologna, San Francisco, and so on)</li> </ul>
INNOVATION TYPE	<ul style="list-style-type: none"> <li>• Share Hub has successfully introduced a new model of public-private partnership and made a sharing culture mainstream for the first time in a major world metropolis.</li> </ul>
SCALABILITY AND REPLICABILITY	<ul style="list-style-type: none"> <li>• The Sharing City is proving to be a model for other cities in South Korea, for instance Jeonju, Busan, Gwangju, Siheung.</li> <li>• Mayor Park Won-soon signed a joint statement with the mayors of 7 Korean cities at the annual Sharing Festival held in 2016.</li> <li>• The city is split into 25 districts and citizens believe in the companies because they are endorsed by the government. Certain sharing initiatives were endorsed in two districts and when they proved viable, they were replicated in other districts.</li> </ul>
WEB SITE AND REFERENCES	<p><a href="http://sharehub.kr">http://sharehub.kr</a> @sharehub_kr</p>

## TRANSFERWISE

### GENERAL INFORMATION

DESCRIPTION	TransferWise is an on-line money transfer service, which allows users to transfer money up to 8 times cheaper than through a bank. The technology is based on a peer-to-peer system. TransferWise avoids international bank-transfer fees by keeping the money transfers inside the country, using domestic accounts to minimise the distance that money has to travel. TransferWise is fully regulated by the UK Financial Conduct Authority (FCA) and just like large banks and financial institutions, verifies its users to protect against fraud and money-laundering.
FOUNDED	January 2011
LEGAL FORM	Private company
BASED	HQ in London and offices in New York, Tampa, Tallinn, Cherkasy, Budapest, Tokyo, Singapore and soon Sydney
NUMBER OF EMPLOYEES/ WORKERS	Over 600
NUMBER OF USERS	Más de 1 millón
PRIZES AND AWARDS	<ul style="list-style-type: none"> <li>• 2001 Seedcamp winners</li> <li>• Best European start-up under 3 years old (2013)</li> <li>• EY UK Entrepreneur of the Year award (2015)</li> <li>• Web Entrepreneur of the Year (2015)</li> <li>• World Economic Forum Tech Pioneer (2015)</li> <li>• “Downright disruptive technology”: Fintech 50 (2016)</li> </ul>

### SOCIAL INNOVATION VARIABLES

SOCIAL IMPACT	<ul style="list-style-type: none"> <li>• Banks and other providers can charge up to 5% in hidden costs when sending money abroad including a sending fee and a receiving fee.</li> <li>• TransferWise customers transfer over €1000 million every month. This represents an overall monthly saving of €45 million.</li> <li>• The service supports over 645 currency ‘routes’ across the world.</li> </ul>
FINANCIAL SUSTAINABILITY	<ul style="list-style-type: none"> <li>• Market value: US \$1.1 thousand million.</li> <li>• In 2012, the company’s charges were €1—in 2015 this was raised to €2, £2, US \$3 etc. (depending on the currency sent)—or 0.5%, whichever is the greater, or an equivalent amount in the customer’s currency.</li> <li>• Revenues for the financial year ending March 2016 reached €35 million, tripling those of the previous financial year. Monthly revenue has doubled in the last 12 months and now stands at €6m and is growing every month.</li> <li>• It raised a total of US \$117 million in funding. In May 2013 it was announced that it had secured a US \$6 million investment round led by Peter Thiel’s Valar Ventures.</li> <li>• It raised a further US \$25 million in June 2014, adding Richard Branson as an investor. In January 2015, it raised US \$58 million in a Series C round, led by investors Andreessen Horowitz. In May 2016, it secured funding of US \$26 million.</li> </ul>
CROSS-SECTOR COLLABORATION	<ul style="list-style-type: none"> <li>• Partnership with Estonian bank LHV and German bank N26, allowing customers to access the service via the banks’ mobile app and website.</li> </ul>
INNOVATION TYPE	<ul style="list-style-type: none"> <li>• TransferWise routes payments in an innovative way. Instead of transferring the sender’s money directly to the recipient, an equivalent tranfer going in the opposite direction is sent to the recipient. It might be thought of as a modern (traceable) version of Hawala — حوالة</li> <li>• Likewise, the recipient of the transfer receives a payment not from the sender initiating the transfer but from a sender of the equivalent transfer.</li> <li>• The system automatically matches the currency flows at the real mid-market exchange rate. This process avoids costly currency conversion and transfers crossing borders.</li> </ul>
SCALABILITY AND REPLICABILITY	<ul style="list-style-type: none"> <li>• In 2015 it went from being a European to a global player with a launch in the US and in Australia. In 2016 it launched in Japan, Singapore, Canada, Brazil and New Zealand.</li> <li>• 60% of revenue growth comes from word-of-mouth — a share that has risen over time.</li> <li>• TransferWise is currently able to send money to 90% of the world’s bank accounts.</li> </ul>
WEB SITE AND REFERENCES	<p>Transferwise.com; @TransferWise <a href="https://www.facebook.com/transferwise/?fref=ts">https://www.facebook.com/transferwise/?fref=ts</a></p>

TABLE SUMMARISING THE FIVE SOCIAL INNOVATION VARIABLES APPLIED TO THE MINI-CASES

CASE	SOCIAL IMPACT	ECONOMIC SUSTAINABILITY	INTERSECTORAL COLLABORATION
CONFIANZA ONLINE	Most common seal in Spain and the first in ECommerce Trust. Most claims processed by them result in an agreement.	Subscriptions	Agreements with official bodies
DOCTORALIA	120M users per year	Subscriptions for professionals and health centres (free for patients).	Collaboration with other eHealth services; APIs to integrate into other platforms.
DUCKDUCKGO	14M searches per day	VC, fees for ads and commissions on Amazon and eBay sales.	Collaboration with affinity groups and projects (Tor, Wikipedia, GitHub); annual donations. + Agreements with large corporations: Yahoo-Bing commercial partnership; Apple includes it as an option in Safari.
FAIRMONDO	Limited; UK chapter works better than Berlin original. Encourages and economically supports international fair trade. Strong focus on anti- corruption	Crowdfunding for start- up + subscriptions and rates + purchase of shares by user-owners. Refuses VC.	Collaborates with other initiatives and projects with the same justice and social economy approach
FOODCLOUD	They have converted 3,000 tonnes of waste into meals + CO <sup>2</sup> saving + saving for community groups	Initial VC and subscriptions paid by the shops and industries that provide the food.	Their asset is basically to put the food industry in contact with community care groups and recently farmers.
FRIENDSURANCE	Lower-cost insurance for users and fewer losses for the company.	Huge VC investment in 2016 of \$15.3M + internet investors.	Insurtech collaborations with international insurance companies.
GUIFI.NET	Nearly 100,000 people access the internet, 80% penetration where there are no alternative operators.	Cost-oriented rates and prices + social pricing + crowdfunding when necessary for a particular project.	Ecosystem of collaboration between community, private sector, universities and public administration.
GOODREADS	Book discoveries, opinions and recommendations, revitalisation of the community of readers.	Advertising and other commercial programmes.	Collaboration with major publishing houses.
SHAREHUB	Connector hub for news, policies, services and people. In 4 years: 10-fold increase in carsharing, 80% awareness of carsharing and bikesharing, 5-fold increase in shared transactions.	Funding through various channels: crowdfunding, grants, citizen engagement programmes, project support.	Public-private partnerships, the city as a 'coordinator' of all these processes (hub). Relations with other sharing cities (Amsterdam, Barcelona, Bologna, San Francisco).
TRANSFERWISE	Money remittances 8 times cheaper than through a bank. 1 billion transfers per year, €45M saved by users.	Commissions per transfer + VC in 2013, 2014, 2015, 2016	Collaborations with banking institutions.

The table continues on the next page ...

TYPE OF INNOVATION	SCALABILITY & REPLICABILITY	TRUST &/OR REPUTATION
Code of ethics + settlement through arbitration and mediation.	Whenever there are companies or brands that wish to demonstrate their alignment with the principles of the code of ethics	Online seal following a code of ethical practices for online commerce. Periodical compliance review. In the event of dispute, they respond and accompany
eHealth platform connecting professionals and patients. Website and app, locally adaptable.	Merger with DocPlanner	Health services are checked, expert responses are moderated. Professionals are encouraged to nurture their reputation through the Doctoralia Awards.
Protects user privacy, searches with instant results (no indexed links). Mostly open innovation.	Replicable y escalable; tras las revelaciones de Snowden, no han parado de crecer.	Offers trust by maintaining user privacy and preventing targeted advertising (no filter bubble). Profitable alternative without contributing to commercial surveillance.
Open innovation, OS and commons. Platform cooperativism and "cooperative 2.0" governance model.	Objetivo: Federación de capítulos locales en cada país bajo unos mismos principios. Creación <i>bottom-up</i> .	Transparency is fundamental (accounts are made public) and control is held by users themselves: they can decide on the direction to be taken and 'audit' any activity.
Circular economy; 2.0 food bank, which uses technology (website/app) to streamline the redistribution process.	Scalable and replicable wherever there are shops willing to collaborate and a welfare network.	Trust is created through interactions and bridge building + a degree of control to guarantee food safety (cold chain maintenance, etc.).
P2P insurance model; online communities of 10 members (or groups of acquaintances) who share a type of policy (with different insurers).	The P2P model is easy to replicate and strong growth is expected.	Links economic incentives with reputation, encouraging group members to behave as they are expected to, thus minimising fraud.
Proposal of socioeconomic model + organisational governance + technical commitment to iterative and incremental open innovation.	Scalable and replicable; combination of openness + adaptability to local needs.	Promotes the development of the collaborative and local economy. Creates jobs, generates community, renders excluded communities autonomous and resilient on a communications level + dispute settlement system in place.
Reading Challenge competition (to encourage reading); readers can choose their favourite book. Social network linked to Kindle.	Replicable and growing, but only available in English.	Opinions are arbitrated, and there is an explicit review policy of freedom but respect (they give advice for avoiding hate speech and reserve the right to delete abusive opinions, self-promotion, etc.).
It has made sharing the city's consumer culture on a large scale.	Pending replication in 7 more cities in South Korea.	The city is divided into 25 districts (gu), and the way citizens create in companies is for the government to endorse them. They started by endorsing certain sharing businesses in two gu, and as they took off they were replicated in other gu.
P2P system, avoiding international transfers. Practices transfer matching, i.e., indirect transfers redirected to a recipient with an equivalent transfer in the opposite direction.	Capable of sending money to 90% of existing bank accounts. The service will be better and cheaper the more transactions they handle.	Their first customers were retired Britons living in Spain; the low cost of TransferWise was a very strong incentive to try it. Once there was a critical mass participating it was easier to 'trust' and initially worked to a large extent by word of mouth.

### SOCIAL INNOVATION VARIABLES



# PART 4



# 1. FINAL CONCLUSIONS

Throughout this publication we have seen how the phenomenon of trust acquires new meanings in the context of the digital economy. Technological disruption allows communication that goes beyond the one-to-one, beyond the close and the habitual, and opens up new forms of interaction. Codes of familiarity – understood as the fact of knowing somebody or recognising some feature that is familiar to us in order to calibrate whether he or she deserves our trust or not – are transformed in an impersonal medium such as the internet. The most direct way of personalising the anonymous is to provide information to fill that gap. A personal profile is trustworthy insofar as it incorporates images, goes into details or contains certifiable and verified information. When this information includes links to personal networks, trustworthiness increases even further: *you will be judged by the company you keep*. And herein lies the pattern for generating this new digitalised trust: the transference and adaptation of the traditional mechanisms of the physical world to the digital plane.

Parallel to this, score-based or comment-based reputation gains importance. What matters is to generate references, in this case based on other people's opinions (which may or may not be well-founded, and may or may not be rigorous) on a person or organisation. Traditionally, reputation has always been linked to social control, which is the social mechanism that drives us to 'stick to the rules' and act in accordance with what others expect of us. In the case of online reputation we can highlight two differential aspects: the first has to do with identity and the second with the persuasion of the 'mass'.

The social sciences have always defined identity as an interactive phenomenon (that is, influence and power are not individual attributes; rather, someone is influential insofar as others are influenced). That said, on the digital plane reputation is amplified and materialises in what other users think, assess and share. The trustworthiness of our digital identity lies in the hands of those with whom we interact, share, buy, sell or swap. The same happens with brands or products: the information we send forth is eclipsed by the reputation that is built for us by others. And the eclipse, when it occurs on the digital plane, becomes public, real-time and permanent. Here digital footprint and reputation are one and the same.

This brings us to talk about the second element: digital trust is based on taking as a reference the information generated and broadcasted by third parties, likewise probably strangers, about that 'other' with whom we want to interact. Somewhat paradoxically, when a certain number of unknown profiles give their opinion, those unknown profiles acquire the condition of forerunners of ours<sup>1</sup>, on the same 'side' of the relationship

as us. That alone gives us something in common. They act as witnesses of an experience of interaction. And it is the quantity that convinces us. This is why we call it *approval or social proof*<sup>2</sup>. Again, we are dealing with the transference of a mechanism from face-to-face relationships to their 2.0 version.

The central part of this text has given us an insight into how trust is addressed on the web through practical examples. In-depth analysis of the case of **Traity** has enabled us to reflect on online reputation and the potential of aggregating all the disjointed and unstructured information to be found on the web. Given the mistrust aroused by internet-mediated relations, the fact of having digital credentials based on a reputation that is generated through behaviour can translate into opportunities. Traity has developed an algorithm that has already started to be used as an alternative to proof of creditworthiness, for example in order to access accommodation. After several phases of improving their definition of 'online reputation', at Traity they are aware that managing an online reputation involves handling sensitive and critical information, as it can jeopardise fundamental rights such as privacy. Traity is an example of how technical capacity must go hand in hand with ethics, and must focus on basic and real needs.

For this reason, Traity opts for transparency as a core value, at the same time encouraging user autonomy: at all times, it is the users who decide what information they give, when, and to what end. This links up with another dimension of users' digital trust towards the brand or company: trust in the brand means understanding that they are putting their personal information (and ultimately their honour and their present and future dignity) in safe hands. Hence Traity has chosen the blockchain as the most robust, unalterable and tamper-proof technical solution available at present. A large part of its activity and contact with its customers also involves educating them, and this strengthens the bond and narrows the gap between users and the company.

Trust, as well as an individual attitude or belief, is a collective value and has an important community dimension. The cases of **PlayGround** and **Comoodle** are proof of this. Comoodle is the story of the rebuilding of social fabric and institutional trust in an English region through the creation of a digital platform for a fragmented community that already existed on the physical plane. In contrast, PlayGround is a purely digital initiative – originally it was a blog – that has now overflowed into the physical world. That blog is now an international community with millions of followers through a magazine embedded in Facebook that puts on the table debates and global challenges that matter to young millennials. At the beginning of 2017 they are

<sup>1</sup> We identify them as forerunners because they are anonymous individuals who have previously gone through the same as we have: they have doubted whether or not to engage in an interaction, purchase, loan or exchange of some sort.

<sup>2</sup> The concept of social proof refers to a type of social influence based on acting according to the information available on others' attitudes towards certain behaviour; in this case of digital trust, the decision to trust or mistrust a user depending on the opinions of others.

extending their model of activity, and in addition to awareness-raising they are preparing to channel social action. In short, while Comoodle seeks to revitalise the physical world through the digital as a more efficient way to bring together resources and needs, PlayGround seeks to influence the physical world by linking ideas and actions originating in the digital plane.

Both cases combine different types of trust: among the members of the platform, towards the platform (or brand), and lastly towards the technical plane itself. In PlayGround again we find that transparency, the fact of communicating through simple, honest, universal language, enables them to connect with their audience directly. They are on the right wavelength to reach the millennial generation of the Spanish-speaking world. They speak the same language, which generates familiarity and empathy. Moreover, they raise issues and concerns from a position of sensitivity and urgency to do something to enable these young people to take control over their future. As a result, they achieve a high identification with the medium and the causes they defend. In addition to generating a sense of belonging to this virtual community they arouse awareness. At present the *'Do button'* is also expected to channel actions aimed at changing the reality they denounce.

Comoodle, on the other hand, can be understood as an effort by the administration to gain efficiency in response to the scarcity of economic resources and the determination to put

public sector representatives at the centre of social links. In a depressed area such as Kirklees, harsh austerity policies had caused the community's trust to shift from institutions to the fabric of associations and third-sector welfare organisations. Thanks to funding from Bloomberg Philanthropies, Kirklees Council has created a platform to gather together and show everything they have at their disposal in the way of available resources, skills and spaces for their use. In spite of the limitations, one of the results that is already evident is the change in attitude towards the administration, which has succeeded in removing several bureaucratic barriers. With Comoodle, people now feel that they do more things with fewer resources, and that the administration bases its management on trust rather than on unpleasant form-filling.





## The five social innovation variables

In this edition we continue to use the five variables that enable us to capture the dimensions of social innovation, as used previously, with the addition that the innovations we have analysed, both in the in-depth cases and in the mini-cases, belong to the sphere of the digital economy. On the basis of the cases analysed in depth, the following elements stand out:

- **Social impact:** Social innovations that fall within the digital economy have a potential impact that grows exponentially thanks to the internet. Traity has over four and a half million users all over the world, and a group of participants in the current pilot scheme are living in rented accommodation thanks to their alternative to proof of creditworthiness. Any of the videos posted daily by PlayGround can easily reach 5 million viewings. On top of this, their audience call for tools enabling them to act, because they want to go further than just being aware. Comoodle succeeds in bringing together and making visible its community and its resources in the platform, and they have adopted the discourse of improving the common good, also reformulating the relationship between the city's various players.
- **Economic sustainability:** External funding and investment are common in the digital economy, often in the form of venture capital. It is the case of Traity; as a start-up it was able to develop its concept and gain muscle thanks to an initial round of nearly \$5 million. Comoodle is funded through the

prize awarded by Bloomberg Philanthropies, and for the next stage they are exploring ways of making it viable. PlayGround is sustained thanks to the communicational know-how they have generated, and is channelled through an associated content agency, where their competencies are placed at the service of brands and international organisations.

- **Intersectoral collaboration:** In the insurtech world in which Traity moves, collaboration between start-ups and traditional companies is mainstream. A symbiosis is created between know-how and sector background and between technological capability and organisational flexibility. Traity in particular embodies the technological debate combined with ethical repercussions and for this reason also participates in discussions on trust and social impact with leading academic figures. In Comoodle, collaboration lies at the very heart of the initiative, as in practice it works as an invitation for public administration, citizens, private sector and third sector to collaborate. For PlayGround, collaboration was not implicit in its inception, but at present we can distinguish two different drivers of collaboration. First, the content agency was set up thanks to its relationship with its first customers, almost in laboratory form. The growing demand from brands and organisations generates a cycle of knowledge that enriches the agency and enhances the exploration of the magazine. The second driver is precisely the collaboration established with the followers of the magazine (in which they too can be suppliers of information and topics of interest) and increasingly also with major NGOs. These collaborations are



in line with the shift towards activism, towards 'doing', and at present the focus is on conducting awareness-raising campaigns to inform on the ground and crowdfunding campaigns.

— **Types of innovation:** All the innovations we have examined have a technological base, due to the approach of the study itself. The most complex case regarding innovation is Traity: first they revolutionise the idea of online reputation aggregation. Then they work to make it applicable and therefore convert it into an asset allowing access to resources or opportunities. Thirdly, they are technically robust and disruptive, insofar as they are already using the blockchain to store information safely and in encrypted form, tamper-proof in practice (which generates trust) and furthermore transferable. This means that the user is not obliged to stay with Traity permanently because the blockchain is a public distributed system, which resolves any possible lack of autonomy or freedom of choice for the user. Traity is also a pioneer in the intense informed debate to keep technical options and social repercussions within a single discussion, thus rejecting ethically questionable decision making. Playground stands out for its ability to generate a sense of belonging, but what makes it unique is the development of the 'Do button'. This button enables the user to move from the information and awareness plane to that of action. Playground is advancing towards connecting causes and responses or potential solutions, which they hope will accelerate the transformation of some of the realities they denounce. Comoodle goes beyond conventional administration by conceiving the city council as a platform, inspired by the phenomenon of sharing cities or cities as platforms. Its innovation lies in digitising interactions and inventorying available resources through the platform at the service of social cohesion.

— **Scalability and replicability:** Just as the ability to generate impact is exponential, so scalability and replicability have a great ally in the digital plane. Traity are becoming a worldwide benchmark in the building of interpersonal trust. Right now they are in the insurtech sector, but their *reputation medals* can work as a trust-enabling passport for many other everyday situations that arise in the framework of the internet. Traity is in an expansion phase and its next stop will be chatbots<sup>3</sup> allowing users to take out microinsurance in order to insure sales between private individuals. Playground generates directly scalable content (viralised thanks to the effect of the web and the distribution actions of its followers) and is showing that its type of communication for millennials is universal and truly replicable. One example they often give is that if they take some content and translate it into English it causes the same reactions, with no more adaptation than a straight translation. The model proposed by Comoodle is that of the sharing city, and the platform is replicable and easily adaptable to the needs of each context.

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<sup>3</sup> Conversational Robots.

## Digital economy and trust: Where are we heading?

The digital economy offers an apparently infinite field in which to grow social innovations. If social innovation consists in providing answers for social needs, digital platforms stand as a crucial player in the digital economy and an important ally for generating creative answers. They allow the creation of bilateral or multilateral markets or organisations, the virtue of which is to gather together under one virtual roof those who have what others want and vice versa. They are also a space for articulating social relationships and generating new forms of belonging, relating and identifying with imagined or digital communities.

In its digitised version, trust continues to be that fundamental element that makes interactions possible on all levels. It is a cornerstone for implementing participation (in its broadest sense), and in the framework of the internet it rests on a derived concept, namely online reputation. Any member of society, for the mere fact of being one, has the need to be and feel part of something collective, and the 360° opinions generated on the internet can be inclusive and kind or exclusive and marginalising. Our behaviour, digital and face to face alike, has a direct translation as a digital footprint made up of stars and comments. The amount of available information depends on our behaviour, our digital self, and what others want to say about us. In other words, if I don't participate in collaborative economy platforms or social networks, either because I can't or because I don't want to, I will generate an information gap around myself. In the digital world this gap translates into a lack of proof regarding my trustworthiness.

Closely linked to trust, there is the phenomenon of shaping the collective consciousness. Platforms, websites, applications

and other formats on which the social innovations of the digital economy are based are defining and measuring directly what elements must be taken into account when deciding whether to trust somebody or something. Choosing between giving stars and posting comments or ratings is no trivial decision. In cultural terms, trust and reputation are similar but have no direct equivalence in different contexts of meaning. What might be taken as a compliment by someone in South Africa might not be by someone in the Middle East or Central Europe. In a way, platforms are conditioning us, and are likely to do so more and more, deciding, dictating and indicating who is trustworthy and why.

Aggregate online reputations will even enable us to rank people according to their scores at any given moment. We can imagine dystopian scenarios in which the big platforms standardise the conception of who is trustworthy and who is not. Constant assessment and potential classifications can lead to the dictatorship of reputation, where we may be reinforcing good behaviour or simply rewarding the ability to look good in the eyes of the establishment. The social repercussions of all this are broad and complex, and is a debate that lies beyond the scope of this publication. However, it is important to emphasise the high degree of responsibility involved in choosing one set of parameters or another to measure the trust a person deserves.

It is critical to improve our understanding of the interaction between online and offline dynamics because, in the hyperconnected world we are concerned with, they cease to be separate entities. The two worlds are already intertwined, and sometimes one is the continuum of the other and vice versa. This also brings us to wonder how patterns of behaviour and



trust translate from the physical to the virtual plane and back again. Earlier we saw how some behavioural patterns based on race are replicated in accommodation platforms between private individuals. Cases like #airbnbwhileblack leads us to suspect that digitally based social innovation actually does no more than spotlight and exponentially increase discriminations that already exist in the analogue world. From a position of awareness of this potential for bias, it is fundamental to raise the issue of platforms being channelled not only towards profit but also towards the common good. Owing to their ability to attract masses, they are already powerful rivals of states in the expansion of certain social values, and are pushing the traditional media aside when it comes to generating currents of opinion. On a more constructive note, the lessons of the cases studied show us that digital trust is fundamental in two directions: as a condition and as a consequence. That is to say, for the digital economy to work and continue to develop, we need to overcome mistrust and encourage participation in the digital environment. What matters is that, as this new economy takes off, we must be capable of seeing how new levels of online and offline trust are created through the interactions facilitated by digital platforms.

The exercise of weighing up the risks and the benefits of digital participation is paramount. Equally, we must bear in mind that digital social innovations include the possibility of continuing to widen the gap between those who participate and those who do not. What advantages does social innovation hold for citizens excluded from the digital world? What happens in those countries or social groups that have been identified as the archipelago of disconnection?

All this calls for high-profile social debates that can give shape to this new paradigm of socialisation. We need to advance towards making explicit definitions and measures of both trust and reputation in the digital environment. It is important to establish a new social consensus on the value of online reputation, by calibrating the value attached to what we reflect about ourselves on the internet versus what others (probably strangers) think and post about us.

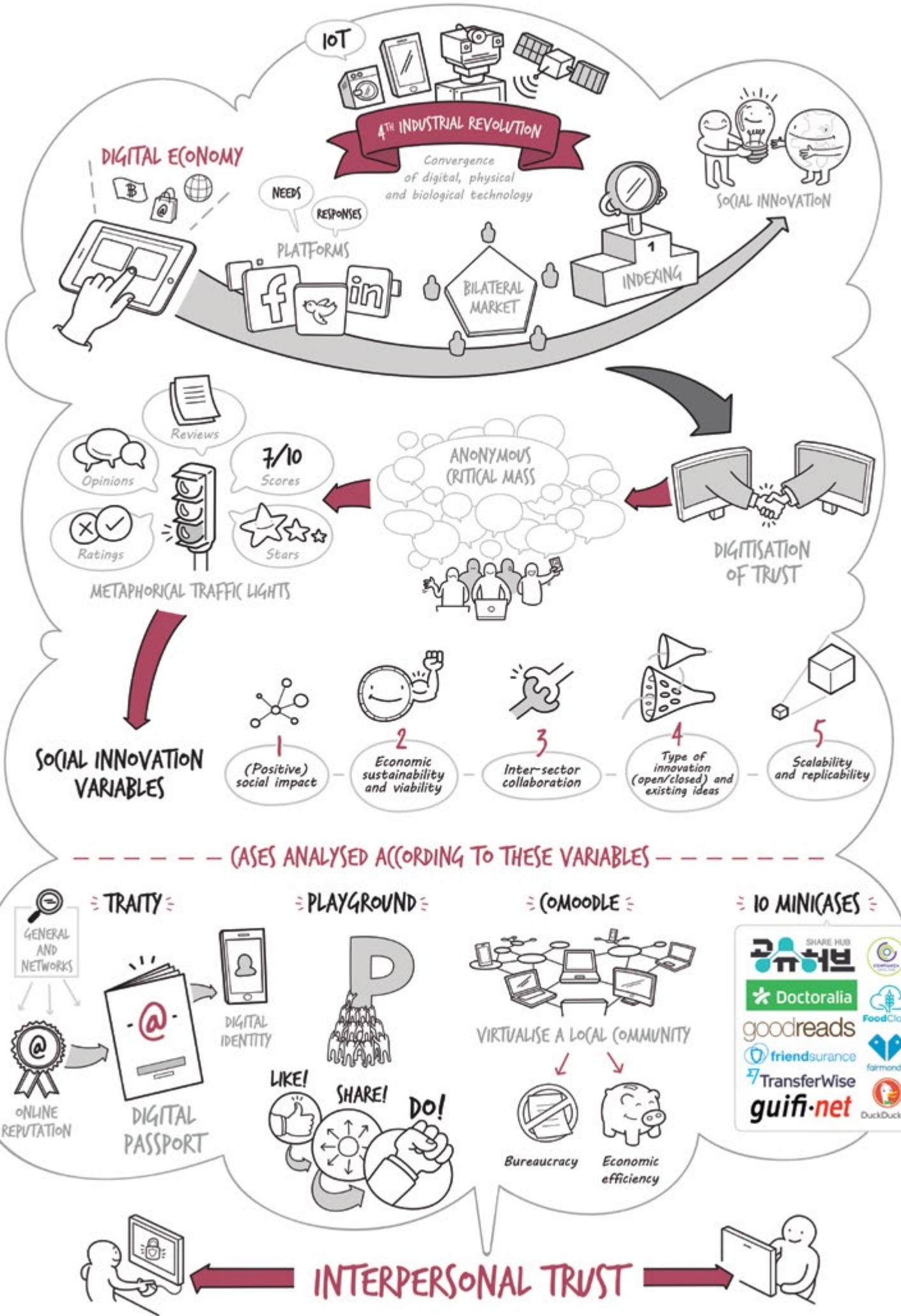
Lastly, returning to the role played by platforms, if they are to be the new voice that structures the visions of how we stand and how we relate to others in the digital world, precisely because of the implications and the responsibility this role entails, it is essential to discuss the part played by venture capital in their funding and the values they uphold. In the context of a winner-takes-all economy, power asymmetries escalate and ultimately the people participating in that network can cease to be users and become servants or victims trapped in a particular vision, possibly representing vested interests, of how a society should meet certain needs. It is imperative for these platforms to contribute to wealth creation and the common good.

Among the mini-cases explored (e.g., Fairmondo and Guifi.net) we have analysed some organisational forms in which the difference from the usual model of platform is their distributed system of governance. Trends such as platform cooperativism, community

interest companies and B-Corps<sup>4</sup> follow this line. These adoption and expansion models are aligned with bottom-up, grass-roots participation patterns, far removed from the classical vertical logic (FoodCloud as an example in Ireland and the UK). Business models also appear in which the use of personal information is minimised, thus limiting the exposure of the user's privacy (see, for example, the search engine DuckDuckGo).

Social innovation initiatives in the context of the digital economy have a low entry threshold in relation to their capacity to have an impact, both direct and indirect. Initiatives with small beginnings have a huge potential for impact. The important thing is to understand what role trust plays and what sort of society we want to build on the virtual plane. What matters is for these new institutional forms, the organisations, the platforms and the connections these provide, to bring us closer to the mission of transforming our societies for the common good.

<sup>4</sup> This nomenclature is based on a study conducted by Nesta, available on the social innovation blog: <http://www.nesta.org.uk/blog/social-innovation-last-and-next-decade>



# INSTITUTE FOR SOCIAL INNOVATION

The mission of ESADE's Institute for Social Innovation **is to develop the capacities of people and organisations in both the business and non-profit sectors, and, through its activities, to help build a fairer and sustainable world.**

In pursuit of these aims, the Institute conducts academic research, generates and disseminates knowledge, and provides training in the following areas:

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- Innovation models to address social and environmental challenges.

The Institute aims to engage in **high-quality academic research** that constitutes a valuable academic contribution and enable an opportune **transfer of knowledge** that will have a major impact on **social transformation**.

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