



ELSEVIER

Contents lists available at ScienceDirect

Technological Forecasting & Social Change

journal homepage: www.elsevier.com/locate/techforeDigital subsistence entrepreneurs on Facebook[☆]Eva Delacroix^{*}, Béatrice Parguel, Florence Benoit-Moreau

Université Paris-Dauphine, 75016 Paris, France

PSL Research University, CNRS, DRM, 75016 Paris, France

ARTICLE INFO

Keywords:

Digital entrepreneurs
 Subsistence entrepreneurship
 Social capital
 Peer-to-peer platforms
 Facebook groups

ABSTRACT

Digital entrepreneurs are usually presented as young, urban, well-educated individuals working for innovative start-ups. In sharp contrast with this “hipster” view, this research identifies digital subsistence entrepreneurs as a new type of entrepreneurs that recently appeared in developed countries. To do so, it investigates buy-and-sell activities on Facebook groups using a multi-method approach involving in-depth interviews, netnography, and participatory observation. The findings indicate that digital subsistence entrepreneurs' activities pertain to survival entrepreneurship rather than transformative entrepreneurship. Nonetheless, they satisfy more than purely financial needs, also providing hedonic (spending time with family, creating), relational (meeting new people) and symbolic benefits (raising self-esteem, redefining roles at home and in society). This research also shows that subsistence entrepreneurs' rebirth in developed countries is founded on the structural, cognitive and relational forms of social capital that are grounded in peer-to-peer platforms digital features. It thus offers interesting contributions and implications for public policy makers engaged in the regulation of the sharing economy.

1. Introduction

Since seminal work initiated by Schumpeter in the 30's, various definitions of entrepreneurs have been discussed, generally involving the common idea of individuals exploiting market opportunities through innovation (e.g. Van Stel et al., 2005; Venkataraman, 1997). Within this rich literature, a specific stream of research on “digital entrepreneurship” has recently emerged to investigate research questions at the intersection of digital technologies and entrepreneurship (Nambisan, 2017). In this perspective, digital entrepreneurs are usually depicted as young, well-educated and urban opportunity-driven entrepreneurs, benefiting from influent social networks and a combination of up-to-date technical and business skills (Zaheer et al., 2018) and launching start-ups with the ambition to become the next Uber, Airbnb, Salesforce or Spotify.

In sharp contrast with this hipster cliché, the present article adopts an original angle about digital entrepreneurs, by identifying digital subsistence entrepreneurs as a new type of entrepreneurs that recently appeared in developed countries. Digital entrepreneurship is defined as a form of entrepreneurship with an emphasis on leveraging new digital technologies, such as digital platforms (Parker et al., 2016) that match among producers and consumers and facilitate the exchange of goods and services. It may seem surprising at first glance to make bridges

between digital and subsistence entrepreneurs as the latter usually trigger the contrasting image of poor micro-entrepreneurs selling rice cakes in India or any other developing country. Still, a recent study commissioned by France's Ministry for the Economy and Financial Affairs shows that for 9% of sellers, the money made from selling on peer-to-peer (P2P) platforms can account for more than half of their income (DGE, 2015). By encouraging informal digital markets that look very much like the subsistence markets that are described in developing countries (see for example Viswanathan et al., 2010, 2012, 2014), P2P platforms have become places where to find subsistence opportunities. The potential of P2P platforms to digitally enable micro-entrepreneurs is thus a legitimate question, and a question of utmost importance considering the growing number of people currently facing financial hardship in developed countries (e.g. students, the unemployed, undocumented migrants).

To contribute to the literature on digital entrepreneurs through the lens of bottom-of-the-pyramid entrepreneurs, this research provides insights into how P2P platforms provide opportunities for digital subsistence entrepreneurs to cope with poverty in developed countries. More specifically, using a multi-method approach involving in-depth interviews, netnography, and participatory observation, it explores how deprived French mothers use the resources offered by Facebook buy-and-sell groups to access the market either as sellers or buyers, and the

[☆] This work was supported by a PICO grant awarded by the French Ministry for the Ecological and Inclusive Transition.

^{*} Corresponding author.

E-mail addresses: eva.delacroix@dauphine.fr (E. Delacroix), beatrice.parguel@dauphine.fr (B. Parguel), florence.benoit-moreau@dauphine.fr (F. Benoit-Moreau).

<https://doi.org/10.1016/j.techfore.2018.06.018>

Received 27 October 2017; Received in revised form 12 April 2018; Accepted 10 June 2018

0040-1625/ © 2018 Elsevier Inc. All rights reserved.

benefits they derive from it.

The article is organised as follows. We first anchor our research work in the literature on entrepreneurship, and specifically on subsistence micro-entrepreneurship. We next argue that P2P platforms are reproducing the conditions of the vibrant subsistence micro-entrepreneurship activities found in most developing countries and contend that deprived consumers' activities on P2P platforms can be analysed through the lens of subsistence entrepreneurship theories, especially regarding the enabling role of social capital. We then describe our study, detailing the method and the findings that emerge from our interpretation of informants' accounts of how they use Facebook for their buy-and-sell activities. We finally conclude with a discussion of our findings and report interesting implications for public policy makers involved in the regulation of the sharing economy.

2. Theoretical foundations of the new figure of the digital subsistence entrepreneur

2.1. Entrepreneurship and digital entrepreneurship

Cantillon first defined entrepreneurship in 1734 (Cantillon, 1734) as “self-employment with an uncertain return”, underlying the risk dimension of entrepreneurship. Many diverse definitions of entrepreneurship followed in the 20th century, with the emergence of modern forms of economy and organization. Schumpeter's (1934) approach of entrepreneurs as “individuals who exploit market opportunity through technical and/or organizational innovation” specifically anchored entrepreneurship in innovation. In line with this, Drucker (1985) described entrepreneurs as searching for change, responding to it, and exploiting it as an opportunity. Contrasting with this vision of entrepreneurship as a process, Gartner (1988) defines it as “the creation of organizations” (p.26). In the end, entrepreneurship is recognized as a multi-dimensional concept that revolves around risk and uncertainty, innovation, or value creation, and that generally involves the common idea of individuals exploiting market opportunity through innovation (e.g. Van Stel et al., 2005; Venkataraman, 1997).

At the crossroads of digital technologies and entrepreneurship, digital entrepreneurship calls for a totally new approach of entrepreneurship theories (Zaheer et al., 2018). As an illustration, digital infrastructure i.e. “digital technology tools and systems (e.g. cloud computing, data analytics, online communities, social media, 3D printing, digital makerspaces, etc.) that offer communication, collaboration, and/or computing capabilities” (Nambisan, 2017, p.4) enables the entrepreneurial process, leading to the democratization of entrepreneurship in the past decade (Aldrich, 2014). Bypassing mature and competitive markets that limit the chances of success for new entrants, digital entrepreneurship benefits from a lower threshold for entrepreneurs wishing to start their own businesses. It implies less bounded entrepreneurial processes and outcomes, and less predefined locus of entrepreneurial agency (Nambisan, 2017). Following, digital entrepreneurship initiatives are more emergent and digital entrepreneurs younger. And as a matter of fact, research on digital entrepreneurship has concentrated so far on young, well-educated and urban opportunity-driven entrepreneurs, benefiting from influent social networks and a combination of up-to-date technical and business skills (Nambisan, 2017; Zaheer et al., 2018) launching start-ups with the ambition to become the next Uber, AirBnb, Salesforce or Spotify. In line with the general literature on entrepreneurship, digital entrepreneurship involves an active choice to exploit an opportunity to start a business, and resources to do so (Acs and Szerb, 2007), even if the threshold is lower.

As opposed to opportunity-driven forms of entrepreneurship, necessity-driven ones, where entrepreneurs are pushed into starting a business due to unfavourable circumstances (e.g. losing a job, juggling work with family responsibilities, living in poverty), do exist, but have been ignored by the general literature on entrepreneurship until

recently (Bruton et al., 2013), and are still ignored by the more specific literature on digital entrepreneurship.

2.2. Importance of social capital in subsistence entrepreneurship

Subsistence entrepreneurship is defined as entrepreneurial actions undertaken by individuals living in poverty (Viswanathan et al., 2014). Contrasting with traditional entrepreneurship research, subsistence entrepreneurship is not about wealth creation for the entrepreneurs, but more about “survival” (Viswanathan et al., 2010). Its dynamics are well described for developing countries, where it represents an active and visible part of the economy (e.g. Mai et al., 2014; Viswanathan et al., 2014). In these countries, billions of poor people are entrepreneurs (Khanna, 2007). For example, 47% to 69% of households living on < 2 dollars a day in Peru, Indonesia, Pakistan and Nicaragua run a non-agricultural “business” (Banerjee and Duflo, 2007). Lacking resources, being financial (e.g. little or no capital, difficulties in getting credit), technological (e.g. low skills), or institutional (Viswanathan et al., 2010), these subsistence entrepreneurs benefit from a dense social network at the local level of their poor neighbourhood or community (Gau et al., 2014; Viswanathan, 2007; Viswanathan et al., 2014). This in turn facilitates their access to informal (physical) P2P markets for small-scale transactions, which has been robustly confirmed as determinant in subsistence strategies in developing countries (Banerjee and Duflo, 2007; Viswanathan, 2007; Yunus, 2003). For these subsistence entrepreneurs, social capital is the primary capital.

Reflecting the old adage that “it's not what you know, it's who you know” that matters for success (Barrios and Blocker, 2015, p.272), social capital has broadly been defined as “a productive resource, facilitating actions” (Tsai and Ghoshal, 1998, p.464). More concretely, it refers to the individual's collection of social ties providing access to resources, information or assistance and from which one can derive utilitarian benefits (better social status, better educational or professional achievement) as well as psychological well-being (Ellison et al., 2007). Social capital has proved useful to understand entrepreneurship in a context of poverty, such as subsistence markets that usually depend on the physical and socio-cultural proximity of their actors and are characterised by the prevalence of face-to-face interactions between buyers and sellers (Narayan and Pritchett, 1999; Viswanathan, 2007; Viswanathan et al., 2014). Subsistence entrepreneurs are resource-poor when it comes to income and literacy, but network-rich, with social ties between people that facilitate information sharing and the running of small businesses (Viswanathan et al., 2009). Concretely, they use their networks to get access to informal markets, often run at local community level, where they act both as sellers and buyers. Thanks to face-to-face interactions, transactions in subsistence markets are fluid, and the quantity, price and conditions of transactions are rapidly agreed (Viswanathan, 2007). As summarised by Viswanathan et al. (2009), in such markets, “social networks constitute social assets that, properly directed, can tangibly impact the well-being of subsistence consumers and entrepreneurs” (p.571).

If social capital is at the core of subsistence entrepreneurship, we understand the insignificance of this form of entrepreneurship in developed countries, and along, the scarcity of research on subsistence entrepreneurship in developed countries. Inhabitants of deprived neighbourhoods in developed countries have actually few opportunities to generate additional revenue by selling their products or services, because their social network is too limited and primarily made up of the long-term unemployed, who have little need for such services (Williams and Windebank, 2000). They face the same obstacles as their counterparts in developing countries, namely weak resources, plus an additional one: they lack the social capital that allows the access to informal (physical) P2P markets for small-scale transactions (Fontaine, 2014). Yet this has not always been the case. Informal transactions used to form the core of working class culture in the old industrial Europe (Fontaine and Weber, 2010), with neighbourhood communities

providing a marketplace for service and mutual aid (Barnes, 2003; Fol, 2010). However, street sellers and informal improvised markets have progressively disappeared from the urban landscape because of policies introduced to discourage informal markets (Murie and Musterd, 2004; Putnam, 2000) and, above all, because of the loss of social and local embeddedness with de-industrialisation, urbanisation and the atomisation of society (e.g. Fol, 2010; Hickman, 2013; Putnam, 2000).

However, the sharing economy, being founded on digital P2P platforms that can connect an almost unlimited community of peers, including local peers, may provide a channel for restoring social capital, and therefore inaugurate a new form of subsistence entrepreneurship in developed countries, namely digital subsistence entrepreneurship.

2.3. P2P platforms as a lever for digital subsistence entrepreneurship

New digital technologies (e.g. powerful mobile devices, GPS technology) in the hands of millions of consumers create the possibility of digitally intermediated P2P exchanges in horizontal social relationships (Barnes and Mattsson, 2016). Helping to reduce costs and mitigate some entry barriers that especially challenge small or micro-entrepreneurial firms (Martin, 2004; Millman et al., 2009), P2P platforms currently host millions of entrepreneurial ventures (Chandna and Salimath, 2018). Regarding technical literacy, starting a business on existing P2P platforms (e.g. Facebook buy-and-sell groups) requires less digital knowledge than the websites fully developed by the start-ups studied by Zaheer et al. (2018). Also, transactions on P2P platforms are not governed by formal contracts or imposed specific norms or standards, but mainly by informal rules that are inspired by non-market logics and “negotiable” for each specific transaction (Laurell and Sandström, 2017). As such, P2P platforms also contribute to mitigate institutional and legal barriers. What is more, by allowing supply and demand to meet at zero marginal cost (Rifkin, 2014), they make it possible to step away from a gift or service logic (Scaraboto, 2015) and create a form of market for skills that are undervalued in the formal job market, and low-value goods, services or crafts. The sharing economy thus facilitates the existence of very small niche markets that would otherwise be unprofitable and unscalable, generating opportunities for subsistence entrepreneurship (e.g. selling fresh eggs from your own hens, offering to fix a broken toilet). Though not investigated by research yet, we can argue that P2P platforms could even more benefit to those who lack sufficient financial, technical, or institutional resources to start a new business.

Going further, P2P platforms contribute to shape a hybrid form of economy, in which trading purposes are interwoven with other, social purposes (Scaraboto, 2015), as observed in the embedded economies described by Polanyi (1944), and also within subsistence market. Allowing seamless connections and relationships between entrepreneurs and users in a horizontal logic (Chandna and Salimath, 2018), they restore forms of social capital. As the best illustration of this, Facebook both strengthens social ties and expands social networks. In a personal perspective, it helps people to maintain long-distance relationships (Bargh and McKenna, 2004; Ellison et al., 2007; Johnston et al., 2013; Young, 2011) and, as such, keeps offline relationships alive, and even amplifies them (Wang and Wellman, 2010; Young, 2011). In a more business perspective, it has the potential to expand users' social capital through the exposure to the activities of an extended network made of more distant acquaintances (e.g. friends of friends, groups members). As such, they may affect the ability to access both support and emotional aid (provided by strong ties), and new ideas or job opportunities (provided by weak ties) (Pénard and Poussing, 2010).

In the end, collaborative P2P platforms theoretically restore conditions conducive to the (re)emergence of subsistence markets in developed countries, and to the emergence of the new figure of the digital subsistence entrepreneurs. Does this hypothesis stand up to field observation? To answer this question, we observed the market initiatives taken by women living in subsistence conditions on P2P platforms

where they sell handmade or second-hand goods, new items and services, which is the most widespread consumer-to-consumer activity.

3. Methodology

This research was conducted in a former industrial region of northern France called Pas-de-Calais, more specifically in the heart of the Hénin-Beaumont-Lens former mining area, which had some of the highest unemployment and poverty rates in France in 2016 (source: INSEE¹). We chose to focus on women because of the role they play in household economics and their central position in subsistence entrepreneurship activities (Duflo, 2012), which has made them the main focus of many previous studies (e.g. Hill and Stephens, 1997; Venugopal et al., 2015).

Since our goal was to understand how poor families made sense of their experience on Facebook buy-and-sell groups, we used an interpretative phenomenological approach (Smith et al., 2009) based on mixed methods (Denzin and Lincoln, 1999). Data collection started with in-depth interviews with low-income women. As it soon became clear, while conducting the interviews, that peer-to-peer buying and selling on Facebook was a frequent strategy to make ends meet, we decided to further explore such activities through observation in relevant Facebook groups. Finally, because we wanted to gain insight into the hidden parts of such activities, we completed 10 transactions in the role of an anonymous buyer. By using three distinct qualitative data collection methods, we increase both the richness of the material thanks to a variety of data sources, contexts and samples (Weick, 2007), and the rigor thanks to more nuanced and complex data (Tracy, 2010). We will now discuss each data collection method in more detail.

3.1. Individual qualitative interviews

In-depth interviews were conducted with 10 women living below the poverty line (set in France at €993 monthly income for a one-person household) who had developed an online business on Facebook buy-and-sell groups and/or bought items from other low-income female Facebook entrepreneurs. Informants were recruited using the snowballing technique (Faugier and Sargeant, 1997), and then by contact requests via Facebook buy-and-sell groups. The small sample size is justified by the sensitive topic of poverty and the difficulty to access deprived populations. This limitation is partly overcome by the richness of the netnographic data. It is also recognized in qualitative approaches that if data are new, unique and rare, valuable contributions can be achieved in spite of small size samples (Scarduzio and Geist-Martin, 2008; Tracy, 2010). Table 1 provides information about the informants. To protect their privacy, names have been changed.

The interviews began with non-directive questions about the informants' living conditions. This grand-tour questioning (McCracken, 1988) included topics such as family background, financial information, everyday life, social life, shopping and resourcefulness. Although we used some guidelines to keep track of central themes (i.e. subsistence strategies, sources of revenues, motivations to use peer-to-peer platforms, difficulties in the processes of peer-to-peer buying and selling, key factors for business success), we conducted our interviews in a nondirective way in order to let participants tell about their experience in their own words, and to favour the emergence of new insights. Nondirective interviews also ensured that only the topics the respondents were comfortable with would be addressed, an important precaution when one deals with vulnerable people (Bashir, 2017). Interviews lasted between 45 and 120 min and took place in the interviewees' homes to ensure a familiar and comfortable environment. In one case, the interviewee's husband was also at home and participated in the conversation. Each interview was transcribed and analysed, in a

¹ <https://www.insee.fr/fr/statistiques/2537441>

Table 1
Characteristics of informants.

Informant	Family situation	Level of education	Work situation	Standard of living of the household ^a
Patricia, 25	Married, 3 children (7, 5, 3)	No degree	At-home-mother, sells hand-sewn goods, unemployed husband	€629
Aurélié, 27	In a relationship, 3 children (6, 4, 1)	No degree	At-home-mother, buys and sells second-hand clothes and children's items, partner works in a bakery	€833
Cécile, 30	Single mother, 3 children (8, 6, 1)	Second-level vocational qualification (BEP)	Unemployed, buys stocks of jewellery for resale	€568
Stéphanie, 28	In a relationship, 4 children (8, 6, 4, 1)	No degree	At-home-mother, sells embroidered items, partner has a part-time job	€629
Samantha, 28	Single mother, 5 children (11, 3, 2, 1 and newborn)	No degree	At-home-mother, sells children's clothes (new and second-hand) and nail care services	€760
Marie, 25	Single mother, 1 child (5)	First-level vocational qualification (CAP)	At-home-mother, buys and sells second-hand clothes and children's items	€86
Flavie, 35	Married, 3 children (7, 5, 3), pregnant	First-level vocational qualification (CAP)	Various activities (nail care, catering, selling second-hand furniture), unemployed husband	€791
Sylvie, 49	Married, 7 children from 30 to 10 years old (the 2 youngest still live with her), also supporting 4 grandchildren financially	No degree	Part-time domestic worker, intense buyer and seller of items on Facebook groups (jewellery, shoes, clothes, etc), husband working as a waste truck driver	€859
Karine, 40	Married, 5 dependent children aged 25 to 6	No degree	Unemployed, sells hand-made party decorations, husband working in a blue-collar job	€555
Cindy, 46	Single mother, 5 children from 23 to 3 years old (4 still financially dependent)	No degree	Unemployed, buys and sells food, clothes, furniture, etc	€518

^a According to the INSEE (French national statistic office), the first adult in the household counts for 1 "Consumption Unit" (CU), other household members aged 14 or more count for 0.5 CU, children under 14 count for 0.3 CU. The "standard of living" of the household is obtained by dividing its disposable income by the number of its CUs. The poverty line is set at 60% of the median household "standard of living", which was 987 euros per month at the time of the field research.

succession of iterations between the overall corpus and the literature.

3.2. Netnography

These long interviews were complemented by netnographic data drawn from observation of four Facebook buy-and-sell groups. Netnography is a "new qualitative research methodology that adapts ethnographic research techniques to study the cultures and communities that are emerging through computer-mediated communications" (Kozinets, 2002, p.2). It is frequently used in social sciences (e.g. Coskuner-Balli and Thompson, 2013; Divakaran, 2017; Scaraboto, 2015; Zeng, 2018). Indeed, social media is a useful source of information on social interactions, providing data that are detailed, authentic, and obtained from a natural context in an unobtrusive way (Kozinets, 2015). Netnography is particularly useful in studying sensitive topics (Langer and Beckman, 2005). Facebook was chosen because our informants had said it was their favorite platform for P2P trading. A large number of buy-and-sell groups have recently been set up on Facebook. These groups tend to identify with a specific geographic area (e.g. *For sale in < area name >* , which had 16,133 members in December 2014 and 38,421 in September 2017, a 138% increase) or town (e.g. *< town > bargains*, which had 15,299 members in June 2015 and 31,896 in September 2017, a 108% increase). All kinds of things are traded (e.g. home-made goods, services for individuals, second-hand items, food, eggs from domestic hens, items bought in bulk and then sold singly).

By following friendships and activity links from our informants' profiles (Whittaker and Gillepsie, 2013), we selected four local Facebook buy-and-sell groups (i.e. *For sale in < area name >* and *< town > bargains*, membership details above; *Cash in the attic in < town >* , with 3455 members in September 2017; *< town > 62*, with 5586 members in September 2017). The names of the towns are withheld to protect the group members' anonymity. In line with Kozinets (2002), the first author of the paper registered herself as a member of these groups and observed the ongoing interactions between participants over an 18-month period. In order to respect the ethics of netnographic research (Kozinets, 2002), the researcher informed the group administrators about the purpose of the study. We collected the activities considered relevant, resulting in a corpus of > 800 screenshots. Netnographic data offer opportunities, but have some limitations (Grabher and Ibert, 2014). They make qualitative investigation possible for a social phenomenon that would have been difficult to approach otherwise, but the researcher lacks information about the contributors' specific circumstances. In our specific case, the groups' geographic location in a declining post-industrial area suggested that their members share homogeneous socio-economic conditions.

3.3. Participant observation

A limitation of netnographic observation is that private messages between community members are not visible to the researcher. We felt we missed insight on how the overall transaction was being completed from the first contact to the post-purchase stage. In order to overcome this lack of information, we completed 10 transactions in the role of an anonymous customer. Disguising our identity to the sellers was the only way to gain non-biased knowledge, but we ensured that the transactions were made with respect (e.g. arrival on time, non-negotiation of prices), could not cause any harm to anyone and avoid any ethical concerns (Ellis, 2007). These transactions were initiated on Facebook and finalised face-to-face, usually at the seller's home. We bought cakes, vegetables, sweets, cushions, a dried flower arrangement, handmade baby booties, a customised cover for a health record booklet, a personalised bedside lamp, a meal platter, and decoration items. This enabled us to collect additional information on the invisible part of the transactions, and receive the messages not publicly displayed on Facebook. When possible, we chatted with the sellers while collecting our

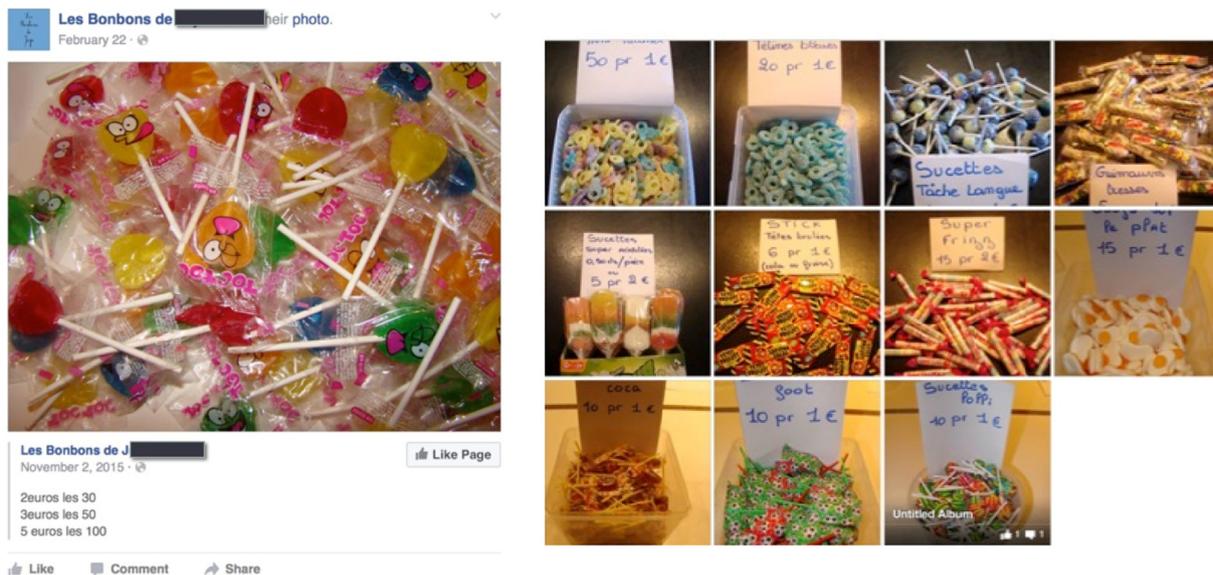


Fig. 1. Example of selling activity from the netnography.

orders, to gain information about the motivations and benefits of their selling activities. We recorded our impressions in a logbook and analysed them in the light of the literature and other field data.

3.4. Data analysis

We conducted a hermeneutic, iterative analysis of the data with the purpose of understanding how low-income individuals give sense to their activities on Facebook buy-and-sell groups. In hermeneutic approaches (Thompson, 1997), “provisional understandings are formed through an iterative movement between individual transcripts and the emerging understanding of the entire set of textual data” (Thompson and Arsel, 2004, p.632). In the first phase of the data analysis, we read each of the individual interview transcripts to identify consumer motivations to participate in peer-to-peer transactions and understand such motivations in light with their specific individual situation. We also tried to understand why Facebook was being used instead of other forms of brick-and-mortar or virtual P2P marketplaces. In the second phase, the emphasis was put on cross-cases and cross-methods analysis with iterative interpretations between interview data, netnographic data, observation data, and the literature.

Different strategies can improve the quality of qualitative researches (Guba and Lincoln, 1989; Patton, 1990; Tracy, 2010). Credibility is reached thanks to thick study descriptions (Geertz, 1973; Tracy, 2010); we used low inference descriptors (participants' sentences) in order to ensure authenticity of the results; and triangulation of data, methods, investigators and theory. By doing this, we ensure that the results are plausible, credible, trustworthy, and defensible (Lancelot-Miltgen and Peyrat-Guillard, 2014).

4. Findings

Our findings are based on the conceptual model proposed by Nahapiet and Ghoshal (1997) for whom three kinds of social capital (structural, cognitive and relational) can improve subsistence entrepreneurship. The findings are presented in three main sections. The first gives a general description of the hardships faced by Facebook subsistence entrepreneurs. The second focuses more specifically on how Facebook's digital features (re)create social capital, the cornerstone of digital subsistence entrepreneurship, helping to mitigate these hardships. The third describes the benefits derived from these entrepreneurial activities.

4.1. The many hardships faced by Facebook subsistence entrepreneurs

Our observations of Facebook buy-and-sell groups reveal significant levels of deprivation among their members, not only economic but also in social and cultural terms. As far as economic hardship is concerned, our informants were quick to express their financial difficulties. They often reach their bank overdraft limit (in most cases €300) around the 15th day of each month and must then somehow “get by” until the 6th of the following month, when their social benefits are paid. Many posts indicate the urgent nature of the offers.

Fanny posted a message with a view to exchanging children's clothes for food: “for a bit of food, all good brands in excellent condition.” She seems to urgently need cash: “I'm lowering previous prices, must sell ASAP.”²

Tiffany, who had a pair of second-hand shoes for sale, added a photo and the following words to her message: “Urgent! For sale. I need money”.

Facebook buy-and-sell groups offer a way to cope with economic hardship, for two reasons: 1- they provide a channel for earning additional revenue, and 2- they do so without requiring investment costs, such as buying into a business, renting a store or owning stocks of goods. The poorest members of society are generally excluded from formal entrepreneurship, and this facilitating role of the sharing economy is remarkable.

Our interviews confirm that extreme financial vulnerability was what drove our informants to start their small “business”, to generate some extra income and make ends meet. Although the amounts earned from their commercial activities remain limited (between €100 and €600 per month), these sums can represent up to a third of the household's income.

With a chronic bank overdraft of €800 and a monthly income of around €1,200, Cécile has to “make ends meet” each month with just €400, barely enough to cover her normal living expenses. During the first few days of each month, she relies on her overdraft and reaches the limit around the 15th. From that point on, her bank card is blocked and she can no longer withdraw money or use it to pay for

² All translations of interviewees' comments and Facebook posts originally in French are the authors' own; any misspellings are deliberate, to reflect misspellings in the original.

items in stores. Cécile has no-one to help her out financially, as all her close family members (parents, brother and sister) are facing the same levels of extreme poverty. To survive, she has no choice but to “make do any way I can” by developing her small businesses. For example, she came up with the idea of investing some of her Christmas bonus in a batch of earrings bought in bulk online for around 10 cents a pair. She sold them off to friends and family and online for 3 euros a pair, generating €400 net which enabled her to buy presents for her children.

These revenues are far from negligible, especially considering that the time devoted to the “business” is compatible with family life, since it is run from home.

Stéphanie explains: “I do embroidery while I'm getting the children's dinner ready. I get interrupted sometimes, but I can do several things at once. I'm very good at working with my hands, so I can do several things, I can embroider and cook at the same time. Anyway, that's what having a large family is like!”

Interestingly, our informants have no ambition to start a business in the sense in which entrepreneurship is usually understood, i.e. with a view to maximising profit. Selling, bartering and, in some cases, gifting are all part of a “get by” economy that enables participants to cope when they are “short of money”, and the situation is more about survival than traditional entrepreneurship.

Although her scheme proved highly profitable, Cécile was not interested in reinvesting any of her profit in another batch of earrings; her objective was not to establish a business or make a profit, but simply to cope with short-term financial difficulties.

In addition to economic hardship, our face-to-face interviews and our observation of the messages (both ads and replies) posted on these groups clearly revealed low levels of education and literacy.

“My handmade hearts” [pseudonym used by someone selling homemade items] wrote: “Hi to aul my frends thank u for ur likes for my handmade items alot of things will change but Ill keep u posted”. Stéphanie posted: “dummy fassener ideal for baby cuz with normal ones they looze them anyway it dos up with a button on neck and dummy also fassens with button get in tuch”.

Many such examples reveal low levels of literacy, which is hardly surprising given the strong correlations between economic poverty and level of education (Venugopal et al., 2015). Our informants are characterised by low economic, social and cultural resources, which is in line with the typical subsistence entrepreneurs described in developing countries (Viswanathan et al., 2009).

Through Facebook buy-and-sell groups, women with poor literacy skills can initiate small businesses without having any Web skills, or even legal knowledge. Facebook provides an easy, user-friendly way to start a personalised trading page: this feature eliminates the need to set up an expensive, complex website and is more appropriate for people with no digital skills.

Joséphine, who sold us sweets, was able to create a personalised page for her brand (see Fig. 1). She designed her own logo and displays her goods in the very same way that sweets are usually merchandised in brick-and-mortar bakeries in France. The professional look of her activity on Facebook contrasted with our meeting with her at her home in a deprived area.

The field study also revealed that our informants' real-life social networks were generally limited to close family members. This can be explained by their personal backgrounds. As young school-leavers with several early pregnancies, they had lost touch with friends from secondary school. Furthermore, the fact that they did not go on to higher education and have rarely, if ever, been in employment deprived them of opportunities to make new friends during adulthood. Finally, as

beneficiaries of social housing, very few of them have been able to choose where they live, and they consider their neighbours as “chavs”. This results in virtually non-existent neighbourly relations.

Stéphanie grew up alone with her mother in Hénin-Beaumont and never knew her father. She became pregnant with her first child, Grégory, at the age of 18 while she was studying for a diploma in secretarial skills. Grégory's father convinced her to leave school and the couple went to live in Péronne, where she had a second son. The years spent in Péronne were extremely difficult as Stéphanie knew no-one there and her mother, who does not drive, was unable to visit. Stéphanie was beaten by Grégory's father and decided to return to live in Hénin-Beaumont, where she no longer knew anyone but could receive support from her mother. Through a dating website she met another man, Jimmy, with whom she has had two more sons. At the age of 28, Stéphanie lives with Jimmy and her four children in social housing and socialises very little with her neighbours. To make ends meet, she sells embroidered items. The transactions often take place at her home, as she finds it difficult to get around with four young children. Her social network is limited to her mother, Jimmy and a childhood friend from Hénin-Beaumont with whom she has renewed contact.

Our informants' isolation is exacerbated by the fact that most of them cannot drive, and this restricts their mobility, as mentioned on Facebook posts.

Lisette: “Looking for someone to pick me up in < town > and drive me to the jumble sale in < town > for 3 pm. I will be carrying several bags. €10”.

Lilou: “I need to find someone who can take me from < town > to Cora [a supermarket] in < town > on Monday morning if necessary I can pay €10 for petrol.”

The presence of young children at home is an additional constraint that limits mobility. It isolates our informants from formal markets, including the labour market, and from social life in general.

Cécile, a single mother of 3 young children, had to quit her job as a chip shop employee because the hours were incompatible with her duties as a mother. She started other jobs (cleaner, house painter), but realised she was not making enough money to compensate for baby-sitting and school meal costs.

The way Facebook buy-and-sell groups help people to cope with poverty is a complex and multi-faceted process that will be discussed further in the next section.

4.2. How Facebook's digital features (re)create social capital

We know from Viswanathan et al. (2010, 2014) that social capital is a necessary condition for subsistence entrepreneurs to operate. Based on the model proposed by Nahapiet and Ghoshal (1997), they explain that subsistence entrepreneurship is supported by social capital of three kinds: structural (i.e. social interaction and bonds), cognitive (i.e. shared vision) and relational (i.e. trust and trustworthiness). Following the same rationale, we contend that Facebook buy-and-sell groups recreate these three forms of social capital that had disappeared in developed countries, and are now underpinning the rebirth of subsistence markets.

4.2.1. Facebook-based structural social capital: The resources of proximity

Structural social capital has been defined as a “specific configuration of ties within a community, which affects access to network resources” (Viswanathan et al., 2014, p.219). It is a set of resources embedded in relationships, which includes social interactions. In developing countries, structural social capital results from physical proximity. It encompasses all the resources of the neighbourhood community, and gives subsistence markets their vitality. Facebook, as a

social network, has intrinsic structural social capital, but this is not enough in itself to renew subsistence markets in developed countries. It is by setting up local buy-and-sell groups on Facebook, often limited to a specific town or city, that people in developed countries have been able to recreate the conditions of subsistence markets.

The group entitled *Cash in the attic of < name of town >*, a very small town with a population of 2980, has > 3000 members selling clothes, small decorative items, cooking equipment and even services (e.g. hairdressing at home, nail extensions). It stresses the local nature of transactions: “*This buy-and-sell group is intended only for buyers and sellers living in < town > and the surrounding area*”. This restriction is repeated: “*Rule to respect: must be living in the area around < town > within the < town1-town2-town3 > triangle*”.

Clearly stating that the members of Facebook buy-and-sell groups must be in the same geographical zone facilitates transactions, as it simplifies face-to-face meetings between buyers and sellers. To complete transactions, the parties arrange to meet in a nearby central location or at the seller's home, which is convenient and limits delivery costs. Geographical proximity is important for people who rarely have access to a car and for whom the cost of sending items by post is significant, especially as the transactions concerned are often very small. Besides, meeting in person provides an opportunity to bargain and pay in cash, a crucial consideration for people who rarely have bank cards and cannot make online payments. Physical proximity enables Facebook entrepreneurs to maximise the economic return on their activities.

“Poire Pomme” swaps a small digital camera with Lila for 3 cartons of milk. Neither of them has a driving licence or is willing to cover postal expenses given the low value of the transaction, so they arrange to meet in front of the town hall: “OK c u tomorrow gud nite Ill be in front of the town hall at 3”, writes Lila. “OK thanks good night to you too”, replies Poire Pomme.

Julie posts a message selling a 25-kg bag of potatoes, which is taken up for 4 euros.

Aurélié: “Well there are buy-and-sell groups where you can sell stuff and create albums. So, anyone who has a Facebook account and is from Pas de Calais will see everything. It's handy when they're living locally, often it's buy-and-sell groups from Lens, Calais, Liévin or Arras. Anywhere around here actually. It's more practical, at least that way we don't have to send anything by post, because now with La Poste [French postal service] it's not worth it any more because parcels now are just as expensive. Let's say in a parcel weighing 7 kg you can put, what... 3 items of clothing, a 7kg parcel will cost you more than 9 euros. So when you're selling each item of clothing for 2 euros, it's not worth it”.

Furthermore, the instant nature of communication via Messenger accelerates both the connections between members and their transactions: this obviously creates value for sellers, but also for buyers who may be in urgent need. In the end, Facebook buy-and-sell groups increase structural social capital, smoothing the path for productive transactions and providing a solution to the poor's exclusion from formal markets. Because of their local nature, Facebook groups give small-scale subsistence sellers access to local markets even though culturally and legally, street selling has become illegal in France and in Europe generally.

4.2.2. Facebook-based cognitive social capital: the resources of similarity

Cognitive social capital refers to the norms and values that are shared by the members of a community. Subsistence markets traditionally exist in communities whose members live in similar conditions and have similar experiences of adversity. As a result the parties to each transaction feel a sense of belonging to the same community and have common expectations, norms, and obligations. The same is true of

Facebook buy-and-sell groups, which delineate and make visible a specific community that clearly shares the same financial hardships and local culture.

The Facebook buy-and-sell groups observed for this study are closed groups dedicated to local transactions. Their members share the same geographic location (a declining post-industrial area) and socio-economic conditions (high levels of unemployment and low levels of literacy). They can see directly from the platform (Facebook page) that they share the same culture, through the posts (style of the messages and pictures) and the items that are for sale. To some extent, Facebook features visually indicate that group members share the same norms and cultures, creating cognitive social capital. In return, cognitive social capital facilitates a common understanding of customers' needs, of what can (or cannot) be relevantly put on sale, and the opportunities resulting from people's dissatisfaction with formal markets. On the buyer's side, it facilitates identification of things they can buy from Facebook sellers that they may not find on formal markets.

As part of her services, Patricia states that she repairs cushions and seats for caravans, a common type of accommodation in the Hauts-de-France region.

As a buyer, Sylvie appreciates the fact that she can find items on these markets which she cannot find in the shops and are more to her taste. “There's a woman who is making me a necklace and a ring with the colours of... ah... what's it called again? ... Enzo's christening, what's the theme again? ... Oh, yeah, the Pirates cartoon [a children's TV show]. So, I asked her to find me colours that reflect that theme for the ring and necklace. She's doing the necklace for 3 euros and the ring for 2 euros. 5 euros in all. So I can buy things that are cheaper but are also my very own, things you can't find anywhere else with colours that I like, things I like that you can't find in the shops”.

Identifying what can be offered for sale to Facebook group members is important, and so is knowing when to time a sale. Facebook has advantages in this respect because, as one of the “hot media”, it is a channel for instant communication, such that ads can be posted with perfect timing, a point of paramount importance in creating value on subsistence markets.

As 1st May approaches, Sylvie sells plastic cones designed to hold bunches of lily of the valley, which sells in huge quantities as a French May Day tradition.

During the fishing season, Chantal sells transportable meal trays with lids which are useful for a day out fishing, a popular leisure activity locally.

As well as a common understanding of collective habits, cognitive social capital also facilitates interactions. The fact that buyers and sellers share the same living conditions and alternate between selling and buying enables buyers to detect any deviant behaviors by sellers.

Cindy, who herself receives food aid, can identify people who are trying to sell items received for free in food packages handed out by charities. “I see people on Facebook selling what they've been given. I see it on buy-and-sell groups like *Sales of 62* [geographical area number], where you see ads and you realise that there are ads posted by people selling jars of baby food, nappies, milk. And you think to yourself... no that's not right. You can resell things but not like that, not things that come from there. All you have to do is go through your cupboards and find something else to sell, things that don't come from there. Given that there really are families who every day, it's like... they're hungry... and they show up and they need some milk and there isn't any left”.

Cognitive social capital also improves ways of communicating, bargaining, and trading. As they share the same cultural background, Facebook buy-and-sell group members do not need to make well-written posts to be understood, so better literacy skills do not confer any

advantage. Understanding the constraints faced by subsistence sellers can also result in better transactions for subsistence buyers, who can use their knowledge to exploit sellers' vulnerable points.

Cindy: "I'm pretty crafty too. You know, when we get right to the end of the month, people need money. It's easier to negotiate or to get them to come over at the end of the month. They're more likely to come over for 30-40 euros. At the start of the month, they have money, "I'll find someone else who'll come to pick it up". But at the end of the month, people don't react the same way. And I make the most of that to negotiate".

The fact that buyers and sellers come from the same socio-economic environment means that Facebook buy-and-sell group members can understand both the buyer's and the seller's perspectives. This generates greater "empathy" and makes transactions more effective. In the end, Facebook creates cognitive social capital, which creates value for both buyers and sellers.

4.2.3. Facebook-based relational social capital: the resources of commitment

Relational social capital is the stock of trust contained in relationships (Morgan and Hunt, 1994). Trust creation is crucial on informal subsistence markets, as living in poverty involves high levels of uncertainty and material deprivation, which are potentially conducive to deviant behaviors and abusive relationships (Upadhyaya et al., 2014; Viswanathan et al., 2009). The same goes for Facebook buy-and-sell groups, whose sellers prefer trading with buyers they know directly or indirectly as this limits risks, especially when the transaction takes place without any deposit or contract.

Morgane explains in a discussion in an online buy-and-sell group that she "no longer takes reservations except from regular customers".

Patricia, who sews items to order and does not take deposits, also explained the benefits of working for a loyal clientele. "There are some women who will order something and never come to pick it up. Or like the other day, a woman ordered a dress for her daughter, I bought the fabric and spent hours working on it, and when she came to pick it up, she said "well actually I don't like it, I don't want it". But I had put the money up, you know. Some people just don't care. Fortunately, I have customers I can count on. Like at the moment, one woman places orders every month, I know she'll never do anything like that to me."

After most of her purchases, the main author of the article was sent a message on Messenger asking her to post a comment on the seller's Facebook page. The sellers were conscious that their reputation was an important asset.

Forming a loyal customer base assures long-term survival for a seller's business, but also guarantees that transactions will be properly completed thanks to the trust inherent to the buyer-seller relationship. Buyers also benefit from this trust, as shown by the comments made by Sylvie, who buys her shoes from a lady who will take them back if they do not fit.

There's a woman who sells me shoes. She buys all her shoes at a major store. I saw her on Facebook. When I order good deals from her, she brings the shoes to me. Like recently, I bought 4 pairs, ballet pumps and sandals for the summer. It was 8 euros a pair. Well I bought size 40 instead of 39, so they're too big. So, she's going to come and take them back, she said "don't worry, I'll come and take your shoes back". She's a woman just like me, you know, not a professional seller, I can trust her. And now I've got to know her.

Interestingly in Sylvie's example, trust results from perceived similarity between buyers and sellers, echoing Tsai and Ghoshal's (1998) model of social capital in which cognitive social capital fuels relational social capital. Once trust is established, it serves as a replacement for formal contracts, making transactions less risky and more efficient, and

this is why trust is considered the keystone of the sharing economy (Botsman and Rogers, 2011; Ert et al., 2016). Losing the trust of the community potentially puts people in a risky, isolated situation, indicating that trust clearly helps to protect market players. The same applies in the virtual world of Facebook groups, which establish and maintain trust through two specific features: their local dimension, and the inclusion of specific governance mechanisms.

Members of Facebook buy-and-sell groups often live close to each other. They are likely to meet regularly or be connected through close relatives, or have children who play together. As a result, strangers on local Facebook buy-and-sell groups are intrinsically considered to be trustworthy until proven otherwise. Besides, the potential of further encounters discourages morally reprehensible practices, which could quickly become common knowledge in the person's immediate environment. On Facebook, concern for reputation thus replaces formal monitoring mechanisms. Facebook buy-and-sell groups also have specific governance mechanisms to manage trust, in the form of their ability to spread word-of-mouth recommendations or "referrals that reflect reputational endorsement" (Viswanathan et al., 2014, p.220). In fact, Facebook structurally favours offers that have attracted the most "likes" and comments (the more an offer has been liked or discussed, the better placed it will be on the page). In Facebook groups, word-of-mouth allows sellers to gain publicity for their offers in the community.

Patricia, who sells hand-sewn clothes and other items, often benefits from recommendations posted by her customers, like Nelly who left the following comment: "Honestly, if you need some sewing done get in touch with Patricia Sewing she works miracles really beautiful work and great attention to detail".

Stéphanie is very aware of this and regularly posts photos of her latest pieces on her Facebook page. Once she had received 420 "likes", she thanked her community: "thank you all for your support and for trusting me my page has reached 420 likes thank you everyone soon once I receive the fabric I'll be making protective sleeves for family records as the booklets are often damaged please get in touch".

Any deviant behaviors are immediately reported, as is clear from the examples of comments below.

"Hi all I would like to report a certain individual in this group called Mrs XX living at 5 rue de la XX, with jack russle/miniature pincher cross-breed pups, selling them for 50 euros without any vaccination and asking for a deposit of 20 euros which she doesn't reimburse as she rips people off and doesn't hand over the dog".

"BEWARE BEWARE!!! I feel I should inform all group members that I have just removed XX because two days ago I gave her an imitation Chanel handbag in exchange for two packets of wipes. My post is still visible on the group if you want to check. It turns out she is trying to sell it for €15 on another group. I find this unacceptable so beware of this woman. Thanks."

As this shows, normalisation practices, which define acceptable behaviour on the market and set out sanctions for people who fail to follow the established norms, whether explicit or implicit (Kjellberg and Helgesson, 2006), are present on Facebook buy-and-sell groups to protect trust. These reports of misbehaviour are reminiscent of De Soto's (2000) barking dogs metaphor. Barking dogs are the beings who protect the interests of players on informal markets by signalling (with their barking) any deviant practices in the community. The protection provided by Facebook's modus operandi as a social network, and the fact that people participate in that network under their own identity, were reasons often put forward by our informants for their decision to stop using other P2P platforms, such as *leboncoin*,³ where they believe scams

³ Launched in 2006, the French website *leboncoin* aims to connect buyers and sellers and is the French equivalent to *subito* in Italy, *custojusto* in Portugal, *segundamano* in

are more common.

Auréli: Personally, I prefer Facebook, I hardly ever buy anything on *leboncoin* any more, there are too many scams. On Facebook, you know who you are buying from, even if you don't know the people, you can see their name and photos, etc. For example, when I buy clothes for my children, first I check out what the woman selling them looks like and look at photos of her children. So, I'm not buying things from “chavs”, you know, so I can be sure the clothes are clean. On *leboncoin*, you can't do that, and I've had a few unpleasant surprises.

The relational social capital generated by Facebook allows the market to regulate itself through monitoring mechanisms focusing on trust. Operating as a social network prevents market players from violating the explicit or implicit norms shared by the participants on these markets.

To conclude, Facebook's features (i.e. the local dimensions of these Facebook groups, instant communication through the newsfeed and messenger system, clearly-displayed member identities, and governance mechanisms) support structural, cognitive and relational social capital. This creates perceived proximity, similarity and commitment, which in turn facilitates value creation for both parties.

4.3. The benefits of Facebook subsistence entrepreneurship

In this last section, we observe that the primary benefit derived by our informants from their selling activities on Facebook groups is economic in nature. But having their own business provides several secondary benefits too: hedonic benefits (spending time with their family, creating), relational benefits (meeting new people) and symbolic benefits (raising self-esteem, redefining their role at home and in society).

Regarding economic benefits, a look at how our informants spend their earnings shows that they are used for expenditures that significantly improve their family lives. The extra money enables them to cook better-quality meals for the family, take their children on holiday, or buy things that facilitate social integration:

Patricia is a mother of 3 young children. She and her husband are both unemployed, and she earns extra cash through her sewing activity. She tells us: “My husband and I are used to skipping meals, sometimes, when we run out of money, we don't eat at all. Often, we make dinner for the kids, if there are any leftovers, we eat them, otherwise we don't eat. (...) With the little money I earn with my sewing, we try to have at least a nice lunch every Sunday, sitting all together around the table, with meat, vegetables, the whole works.”

Isabelle, who makes cake stands and other items for parties, saves up the sums earned during the year so she can take her family on a two-week holiday in the summer.

Thanks to the amounts she earns, Stéphanie can afford gifts and clothes for her children, and this prevents them from being stigmatised at school. She also tells us how her “extras” mean she can afford thinner-lens glasses for her son: “We have free health care (CMU), so that's OK, but my elder boy needs new glasses, and because he has bifocals, thinning them out costs 60 euros and that's not covered by our health care...and I don't want him to feel embarrassed at school... so I'm saving up 60 euros thanks to my embroidery. It's not much, but it pays for thinner glasses... and now I'm also saving up to pay for my wedding.”

This observation concerning how the women spend the money

(footnote continued)

Spain, *avito* in Morocco, *tayara* in Tunisia and *mudah* in Malaysia. *leboncoin* has around 25 million users and 28 million classified ads, making it France's main P2P platform and the fourth most visited website in the country (Parguel et al., 2017).

earned is consistent with previous observations by various researchers in developing countries. Women usually spend their extra money on food, while men tend to spend a bigger share of their extra earnings on alcohol, tobacco or male private goods (e.g. Duflo and Udry, 2004; Robinson, 2011).

Regarding relational benefits, our informants' small businesses also bring them into contact with new people. P2P markets are usually local, and made up of people with similar socio-cultural and economic characteristics. They create an environment that is conducive to new social relationships.

Stéphanie: With some customers, you get chatting... even if we don't see one another, how are you, all of that... it's nice, it makes a change... at least we chat. Because he (her partner) works, I'm not someone who goes out much, I'm quite happy at home, so I'm often alone with the children, it makes a change to talk a little. I've met a girl, she was having the same problem as I had with my ex-boyfriend, so we talked about it together, and now we try to support each other.

Samantha: I've met some women by selling items. Like Sandra, I didn't know her before. And I've seen her several times, you know, through the offers, and so now we know one another. Now we get together, when she comes to see her parents I often know about it and we meet up. There are 2 or 3 like that who have become my friends, and we even see one another when we've got nothing to sell, or we chat on Facebook.

These relationships can remain virtual (strictly on Facebook), but when transactions require a physical meeting, they sometimes turn into long-lasting real-life friendships. Deprived at-home mothers are often under-socialised, and the relational benefits they derive from their small businesses contributes to their psychological wellbeing.

Facebook subsistence entrepreneurship can also bring more real-life satisfaction and enjoyment than other employment opportunities available to deprived people. Several examples indicate positive impacts on family life or their work-life balance, and in some cases the entrepreneur gets great enjoyment out of working.

Flavie and her husband Eddie are a case in point. Following an accident in which Eddie, a former school bus driver, nearly lost his life after his employer failed to appreciate the seriousness of the situation and refused to allow him to go to hospital, they both decided that they would resign and enjoy life and the company of their children. As Eddie explains, his wife's creative skills have allowed them to survive for years without either of them having a regular job: “Flavie's like a tree with many branches. She does lots of different things and it's thanks to her that we get by. She makes nail extensions and she's set up a small team of waiters for weddings and christenings. You know, I'm not saying it's always easy, especially with 3 children. But I have no regrets. We don't have much but we are fine, we manage and we can enjoy watching our children grow up”. Flavie has several different sources of revenue. She is not interested in setting up a company, but simply wants to earn enough money in addition to the welfare benefits she receives to survive and make the most of her time with their children.

Flavie's narrative must be understood in the context of an economically deprived area, with poor economic opportunities, especially for less educated people, who are often left with part-time, fragmented-hours, low-paid jobs that are “not worth it”. One example is Cécile, mentioned earlier, who left her job at a chip shop where she worked from 11 am to 2 pm, then 5 pm to 11 pm including weekends, for the minimum wage. As well as the low pay, this inconvenient schedule was incompatible with her situation as a single mother, and Cécile reached a point when she decided it would be better for her to live on welfare and money from her small-scale activities on the informal market. In the formal job market, there are no opportunities for low-educated people to make a living from whatever they really enjoy doing. Subsistence

entrepreneurship gives them that opportunity, in contrast to the unpleasant jobs that are usually the only ones open to them (e.g. house cleaning, personal care for old people, or night work).

This is the case for Stéphanie, who loves sewing and embroidery and has set up a business selling small embroidered items (exercise book covers, cushions, bibs, etc.) via a Facebook page entitled “Stéphanie’s [items]”. Her financial motivations are closely intertwined with her desire to spend all her time on her hobby. “Embroidery is my passion. I don’t have any training in sewing, but my mother was a dressmaker so when I was small I did a lot of sewing and embroidery at home. I took it up again, I started doing embroidery on protective sleeves for health record booklets, I made gifts for newborn babies. People liked them so I thought I would give other people the chance to have some, it’s something I do because I love doing it. It has always been my dream to make a living from what I love.”

Finally, regarding symbolic benefits, earning their own money and demonstrating their capacity to create their business is a source of satisfaction in itself for our informants. Often damned by their lack of academic success, they told us that for the first time in their life, they were receiving recognition for skills unrelated to motherhood. The positive comments received on Facebook also reinforce their self-confidence and make them realise they are worth something.

Karine: It started with my daughter’s 18th birthday. She was a fan of Tinker Bell, so I thought I would try to make Tinker Bell cake stands, and also napkin rings. I looked on the Internet to find examples, and I went for it. And then everybody thought it was great, and my mother said to me why don’t you try to sell them? And that’s what I did, and it works.

Stéphanie explains that, thanks to the positive comments she receives, she is now thinking of extending her activity to another retail channel, car boot sales: “I get lots of positive feedback, often people write on my page, on my Facebook page, positive comments. I like that, oh yes, I certainly do, I’m pleased when people tell me I do good work. It gives me self-confidence. So, I’ll try to do some car boot sales next summer. Right now, I’m selling a bit less on Facebook because I’d like to build up a stock of items to sell at car boot sales in the summer.”

Even though their small businesses are not big enough to make a living, our informants’ experience of subsistence entrepreneurship improves their self-esteem, which in turn may help them enter the formal labour market. Moreover, earning money, having their “own business”, as Patricia proudly put it, gives these women an opportunity to rebalance roles in the household. Patricia explains that her husband, who has been unemployed for a long time, now helps with domestic duties, especially when she has an important sewing job to finish. Fairer division of domestic duties is certainly a source of improvement for these women’s quality of life. Facebook subsistence entrepreneurship socially redefines the role of women, and makes them more than “just” mothers.

5. Discussion

Through a multi-method field study mixing qualitative interviews with netnography and participatory observation on Facebook buy-and-sell groups involving a sample of deprived mothers, we shed light on a less visible figure of digital entrepreneur: the digital subsistence entrepreneur. This article shows how Facebook digital features create structural, cognitive and relational social capital, hence adding value to group members’ transactions and turning them into digital subsistence entrepreneurs. This research thus makes interesting contributions, and identifies marketing implications for public policy makers engaged in the regulation of the sharing economy.

5.1. Theoretical contributions

The first contribution of the paper is the unique and unexpected portrait it paints of the digital subsistence entrepreneurs that operate in developed countries. This original contribution results from bridges made between two different literatures: 1/the literature on subsistence entrepreneurship that ignores digital aspects of entrepreneurship as it usually regards developing countries, and 2/the recent literature on digital entrepreneurship that usually involves clichés of high-income, well-educated urban hipsters launching their start-up. The digital subsistence entrepreneurs encountered in this study live in post-industrial small towns. They suffer various hardships, lacking money, literacy, mobility and social networks. Yet they manage to combine resources and exploit Facebook’s digital infrastructure to create new online businesses, and value for themselves and the members of their proximate community. This entrepreneurial process makes them actual entrepreneurs. However, digital subsistence entrepreneurs differ in many ways with the entrepreneurs classically described by the literature (e.g. Drucker, 1985; Schumpeter, 1934). First, digital subsistence entrepreneurship is not deliberate: there is no active choice to start a business, entrepreneurs engage in it by pure necessity. Also contrasting with Gartner (1988), it does not pertain to the creation of an organization, which does not mean that the output is not important: digital subsistence entrepreneurship is clearly about survival. Then, digital subsistence entrepreneurs do not pursue unexploited or underexploited business opportunities; they actually display limited market-orientation. Their activity is not opportunity-driven but necessity-driven (see Williams and Williams, 2014), and as such, determined by the availability of resources that are unexploited or underexploited, such as time, skills or objects. Going further, digital subsistence entrepreneurs differ from classical digital entrepreneurs as they operate from the market where they are embedded as consumers themselves, and not from the outside, and as they pertain to an informal economy.

The subsistence businesses we describe look new in modern Western economies, but they are reminiscent of the *Ancien Régime* (Fontaine, 2015) and also replicate the type of trade described in the literature on subsistence markets in developing countries (Viswanathan et al., 2010, 2012, 2014), thus bridging the gap between separate streams of research examining entrepreneurship. This research highlights many similarities between contemporary France’s Facebook-based subsistence markets and the descriptions provided by Viswanathan and colleagues, despite the very different cultural contexts. Obviously, in both cases, subsistence markets emerge in distressed communities where people are simultaneously affected by economic, social and cultural deprivation. In both cases, these markets draw on several forms of social capital to develop, whether that capital is generated by physical proximity as in developing countries, or digital infrastructure as in developed countries. Finally, like developing countries’ subsistence entrepreneurs, digital subsistence entrepreneurs do not pursue an explicit objective of maximising profit, but simply aim at surviving (Sridharan et al., 2014). In the end, far from seeing the informal economy as primitive and the preserve of less advanced societies, we observed that the most developed economies, that are best equipped with new technologies, are now the bearers of a new, modern form of informal economy. It is time for the boundaries of entrepreneurial research to be pushed back, and for more research focusing on the rise of this unofficial economy (Viswanathan et al., 2014).

Our focus on digital subsistence entrepreneurs answers Bradley’s (2014) call to further explore the promise of the sharing economy for people “for whom sharing is not a cool, optional, sexy, ‘I-don’t-want-to-be-burdened’ thing [but is] an absolute necessity because they don’t have the resources for traditional ownership”. As such, it contributes to the emerging body of work on the sharing economy that shows the less visible side of the phenomenon: the practices of deprived people in small towns. Major platforms (e.g. *Blablacar* for carpooling, *AirBnB*) usually emerge in big cities or networks of big cities, making the sharing

economy a privilege for young, well-educated city dwellers. The success of the sharing economy in deprived areas extends Dillahunt and Malone's (2015) initial conclusion that the sharing economy is apparently feasible for these populations, by showing that they are already engaged in it. This research therefore supplies an initial answer to the question of the inclusive power of the sharing economy raised by the tenants of this new form of economy (Agyeman et al., 2013; Schor, 2014). Furthermore, this research consolidates more general studies on the benefits of the sharing economy: economic benefits in the first instance (DGE, 2015), but also social, hedonic and symbolic benefits through raised self-esteem (Botsman and Rogers, 2011; Schor, 2014). Although the additional revenue earned by our informants from their micro-businesses remains limited (between 100 and 600 euros per month), these sums can represent up to a third of the household's income. This is far from negligible, especially considering that the time devoted to the business is compatible with family life. It is noteworthy that an interest in environmental matters and anti-marketing opinions, which have been identified by previous studies (Borel et al., 2016; Daudey and Hoibian, 2014) as motivations for engaging in the sharing economy, were not mentioned in our informants' discourse.

In the end, this research also contributes to the computer science literature on Facebook by explaining how Facebook's digital features allow people who are unemployed or in financial difficulty to make money and derive other benefits from buy-and-sell groups. The social network technology relaxes all the entry barriers for deprived entrepreneurs, as starting up a small business on Facebook requires no digital or legal expertise, no entry costs and not even a particularly high level of literacy. As the home to many small businesses, Facebook is a kind of public space where all initiatives are welcome. This research also corroborates the central role of trust already identified in the literature (Barnes and Mattsson, 2017; Lee, 2015), and provides a practical illustration of how digital features help to build trust. Facebook buy-and-sell groups appear to be the most popular collaborative platforms among deprived people in France, ahead of more formal specialist trading platforms such as *leboncoin*. First, Facebook profiles provide transparency as to the real identity of buyers and sellers. Second, Facebook forums provide a space to build up a personal reputation, and potentially spread word-of-mouth. These digital features offer users more reassurance that transactions will be genuine. Going further, Facebook's digital features trigger the restoration of social capital. The density of its user network in a specific geographic area (e.g. a neighbourhood or small town) and its rapid response times provide structural social capital that forms the foundation of a 24-h-a-day market, in which buyers and sellers can trade very specific, or even unique, goods and services, and create active, fluid markets. User profiles and pictures reinforce cognitive and relational social capital by immediately providing clues to assess whether people belong to the same community and their level of trustworthiness. Future research could test the influence of other P2P platform features (e.g. profile format, number of pictures of the items for sale, or of the person and his/her family) on each of the three facets of social capital, as measured by Tsai and Ghoshal (1998).

5.2. Implications for policy makers

The research reported here clearly shows the potential empowering benefits of spontaneous bottom-up subsistence activities. These benefits are similar to the benefits derived from subsistence markets by women micro-entrepreneurs in developing countries, and as Duflo (2012, p.1074) puts it: *“increasing women's control over resources, even in the short run, will improve their say within the household, which will not only increase their welfare, but as research seems to have shown repeatedly, child nutrition and health as well”*. Women, more often than men, spend money to improve their children's well-being (Duflo, 2012). This is an argument in favour of encouraging women's micro-entrepreneurship, because even though the amount of money earned remains low, it is

directly invested in improving families' living conditions, as our field study shows. Besides, because Facebook is part of the “hot”, reactive media, it helps to reduce isolation and resolve urgent situations. Digital subsistence entrepreneurship could be encouraged as one of the factors that can alleviate problems associated with poverty. Our research therefore takes us beyond the ideological rift between the voices for (Magugui et al., 2014; Nabavi, 2009; Yunus, 2003) and against (Hulme and Mosley, 1996; Karnani, 2007) policies that encourage micro-entrepreneurship among the poor and the long-term unemployed.

To prevent an over-optimistic view of the sharing economy's empowering opportunities for deprived people, we would like to add some balance to our conclusions. Like their counterparts in developing economies, the majority of Facebook subsistence entrepreneurs will never go on to expand their business beyond the small scale that allows them to improve their daily living conditions. They are often “trapped in a necessity, survival and maintenance cycle” (Sridharan et al., 2014, p.486). Nonetheless, their activities help to meet urgent needs and boost self-esteem, and even though they are unlikely to grow into anything big, some have the potential to develop into something larger. An overly punitive approach to this kind of “under-the-radar venture” would ultimately destroy the entrepreneurial culture found in the informal economy (Williams, 2009). Rather than fighting the informal economy, public authorities need to adopt the right tools to identify and support the most promising small businesses, and then develop the structures (e.g. micro-credit organizations) and mechanisms (e.g. legal self-employment status) that can turn subsistence entrepreneurship into something more. In this perspective, unemployment advisers could appear as relevant levers.

Going further, policy makers planning to tax the substantial revenues generated by the sharing economy must consider that such taxation could deter digital subsistence entrepreneurs' activities for at least two reasons. First, these usually non-taxable entrepreneurs may fear the burden of reporting the small amounts they derive from their sharing activities. Second, as declaring these amounts could carry the risk of receiving lower unemployment or other state benefits, they could give up their subsistence micro-businesses. To avoid that, interesting options could include a reduced tax rate up to a specific threshold for sharing earnings (e.g. 10% up to €5.100 in Belgium) or the definition of an income threshold below which informal earnings are explicitly tolerated (e.g. £1.000 for trading income, the same tax-free allowance for property income in the UK). Besides, a deduction at source would simplify taxation for both digital subsistence entrepreneurs and tax authorities. This debate far exceeds the ambitions of the present paper and should be addressed through specific research as recent works have started to do (e.g. McKee, 2017; Oei and Ring, 2015).

5.3. Limitations and future research

Given its exploratory nature, this initial study on Facebook subsistence entrepreneurs has several limitations, and more research is needed to expand on its findings. First, it focuses on women who actively engage in peer-to-peer activities. But 8% of the French population are still reluctant to engage in such practices, especially older women from lower-class groups, who seldom use the Internet (DGE, 2015). The digital divide remains an obstacle, as does a greater lack of trust in the social environment within this vulnerable population (Upadhyaya et al., 2014; Viswanathan et al., 2009). The Internet helps to reduce social isolation, but cannot eradicate it totally. The sharing economy is accessible to everyone, but it may also be increasing inequality between people who possess assets and skills of sufficient value to be rented or sold (e.g. owners of a car, a house, equipment, sufficient education), and people who have very little and find themselves limited to the role of beneficiary (buyers, receivers) with no chance of becoming contributors (sellers, donors). Collaborative social networks probably tend to form circles of relationships among people of homogeneous socio-

cultural backgrounds, reinforcing the laddering of society and the isolation of the poorest individuals. Further research is necessary to address these questions.

A second limitation is that the scope of this study is limited to Facebook buy-and-sell groups, as they clearly appeared to be the main digital marketplace, with a critical mass of buyers and sellers that can restore lost social capital and form a very dynamic subsistence market. We anticipate that the launch of Facebook Marketplace will reinforce entrepreneurial activity on the platform, probably leading to some change. Will the traditional buy-and-sell groups covered in this article remain the dominant channel for subsistence markets, or will that depend on the goods or services sold? Going further, how far are our findings specific to Facebook and the configuration of its buy-and-sell groups, and how far would they hold for other P2P platforms? Presumably, the same dynamics of social capital construction can be observed on other user-friendly platforms provided they use real-name profiles for greater trust levels, and attain critical mass to maximise the density of their network and therefore the fluidity of the market. However, P2P platforms such as Facebook Marketplace do not provide any discussion forum, nor any personalisation options for a selling page. Future research could experimentally manipulate specific features of the platform, to provide a clear view of the best conditions for subsistence entrepreneurship.

Finally, the scope of this study is confined to a post-industrial area in France. It would be interesting to replicate the study in a setting outside Europe to understand the specificities of the issue, including cultural specificities.

6. Conclusions

Though subsistence entrepreneurship remains relatively scarce in developed countries, where the poor lack the necessary social capital, it seems to have high potential. In France, recent initiatives such as those of the micro-credit provider ADIE⁴ have turned out to be successful. Most firms' lack of interest in low-income markets (Yunus et al., 2015) may explain why subsistence entrepreneurship could work in a country such as France, as well as in developing countries. An alternative explanation is the fact that the economic and social conditions of the poorest sections of French society are in some respects comparable to those of developing countries (e.g. employment is precarious; their education level is low, making them less attractive on the labour market). What is more, the revolution of P2P platforms, including Facebook, seems to be providing these deprived populations with the social capital they lack, and structuring new opportunities for markets selling goods and services on a small scale.

References

Acs, Z.J., Szerb, L., 2007. Entrepreneurship, economic growth and public policy. *Small Bus. Econ.* 28 (2/3), 109–122.

Agyeman, J., McLaren, D., Schaefer-Borrego, A., 2013. Sharing Cities. Friends of the Earth. https://www.foe.co.uk/sites/default/files/downloads/agyeman_sharing_cities.pdf, Accessed date: 1 April 2018.

Aldrich, H., 2014. The democratization of entrepreneurship? Hackers, makerspaces, and crowdfunding. In: *Annual Meeting of the Academy of Management, Philadelphia, August 2014*.

Banerjee, A.V., Duflo, E., 2007. The economic lives of the poor. *J. Econ. Perspect.* 21 (1), 141–167.

Bargh, J.A., McKenna, K.Y., 2004. The internet and social life. *Annu. Rev. Psychol.* 55, 573–590.

Barnes, S.L., 2003. Determinants of individual neighborhood ties and social resources in poor urban neighborhoods. *Sociol. Spectr.* 23, 463–497.

Barnes, S.J., Mattsson, J., 2016. Understanding current and future issues in collaborative

⁴ The ADIE (*Agence pour le Droit à l'Initiative Economique* or Agency for the Right to Economic Initiative) was set up to finance and support entrepreneurs who do not have access to traditional credit. In 2016, the ADIE granted 19,431 microloans, along with 12,465 independent jobs with an ultimate reimbursement rate of > 90%. The success of this agency illustrates the great potential of entrepreneurship in developed countries.

consumption: a four-stage Delphi study. *Tech. Forecasting Soc. Chang.* 104, 200–211.

Barnes, S.J., Mattsson, J., 2017. Understanding collaborative consumption: test of a theoretical model. *Tech. Forecasting Soc. Chang.* 118, 281–292.

Barrios, A., Blocker, C.P., 2015. The contextual value of social capital for subsistence entrepreneur mobility. *J. Public Policy Market.* 34 (2), 272–286.

Bashir, N., 2017. Doing research in people's homes: fieldwork, ethics and safety – on the practical challenges of researching and representing life on the margins. *Qual. Res.* <http://dx.doi.org/10.1177/1468794117731808>. (1468794117731808) (forthcoming).

Borel, S., Roux, D., Demailly, D., 2016. La place des enjeux sociaux et environnementaux dans la consommation collaborative. available at: http://www.iddri.org/Themes/01-PicoPaper_Annexe3.pdf, Accessed date: 1 April 2018.

Botsman, R., Rogers, R., 2011. *What's Mine Is Yours. How Collaborative Consumption Is Changing the Way We Live*. Harper Collins Business, London.

Bradley, J., 2014. *Brooking's Bradley: A sharing economy that serves all*. available at: <https://www.youtube.com/watch?v=WpzSewvyTi4>, Accessed date: 1 April 2018.

Bruton, G.D., Ketchen, D., Ireland, D., 2013. Entrepreneurship as a solution to poverty. *J. Bus. Ventur.* 28 (6), 683–689.

Cantillon, R., 1734. *Essai sur la Nature du Commerce en Général*. MacMillan, London.

Chandna, V., Salimath, M.S., 2018. Peer-to-peer selling in online platforms: a salient business model for virtual entrepreneurship. *J. Bus. Res.* 84, 162–174.

Coskuner-Balli, G., Thompson, C., 2013. The status costs of subordinate cultural capital: at-home fathers' collective pursuit of cultural legitimacy through capitalizing consumption practices. *J. Consum. Res.* 40 (1), 19–41.

Daudey, E., Hoibian, S., 2014. La société collaborative - mythe et réalité. available at: <http://www.credoc.fr/pdf/Rech/C313.pdf>, Accessed date: 1 April 2018.

De Soto, H., 2000. *The Mystery of Capital: Why Capitalism Triumphs in the West and Fails Everywhere Else*. Bantam Press Edition, London.

Denzin, N.K., Lincoln, Y.S., 1999. *The SAGE Handbook of Qualitative Research*, 3rd ed. Sage Publications, Thousand Oaks, CA.

DGE, 2015. *Prospective – Enjeux et perspectives de la consommation collaborative, Enquête auprès des consommateurs*. available at: http://www.entreprises.gouv.fr/files/files/directions_services/etudes-et-statistiques/prospective/Numerique/2015-07-Consommation-collaborative-Enquete.pdf, Accessed date: 1 April 2018.

Dillahunt, T.R., Malone, A.R., 2015. The promise of the sharing economy among disadvantaged communities. In: *Proceedings of the 33rd Annual ACM Conference on Human Factors in Computing Systems*, pp. 2285–2294.

Divakaran, P.K.P., 2017. The netnographic method as early warning: linking antecedents of pre-lease behaviour of technology-enabled community to future market trends. *Technol. Forecast. Soc. Chang.* 125, 245–257.

Drucker, P., 1985. *Innovation and Entrepreneurship*. Harper & Row, New York.

Duflo, E., 2012. Women empowerment and economic development. *J. Econ. Lit.* 50 (4), 1051–1079.

Duflo, E., Udry, C., 2004. Intra-household allocation resource in Côte d'Ivoire: social norms, separate accounts and consumption choices. *National Bureau of Economic Research Working Paper*. available at: <http://www.nber.org/papers/w10498>, Accessed date: 1 April 2018.

Ellis, C., 2007. Telling secrets, revealing lives: relational ethics in research with intimate others. *Qual. Inq.* 13 (1), 3–29.

Ellison, N.B., Steinfield, C., Lampe, C., 2007. The benefits of Facebook “friends”: social capital and college students' use of online social network sites. *J. Comput.-Mediat. Commun.* 12 (4), 1143–1168.

Ert, E., Fleisher, A., Magen, N., 2016. Trust and reputation in the sharing economy: the role of personal photos in Airbnb. *Tour. Manag.* 55, 62–73.

Faugier, J., Sargeant, M., 1997. Sampling hard to reach population. *J. Adv. Nurs.* 26, 790–797.

Fol, S., 2010. Mobilité et ancrage dans les quartiers pauvres : Les ressources de la proximité. *Regards Sociologiques* 40, 27–43.

Fontaine, L., 2014. *Le Marché : Histoire et usages d'une conquête sociale*. Gallimard, Paris.

Fontaine, L., 2015. Préface. In: Ménascé, D. (Ed.), *La France du Bon Coin : le Micro-Entrepreneuriat à l'Heure de l'Economie Collaborative*. Les Notes de l'Institut, Paris.

Fontaine, L., Weber, F., 2010. Les Paradoxes de l'Economie Informelle. In: *A qui Profitent les Règles?* Karthala, Paris.

Gartner, W.B., 1988. “Who is an entrepreneur?” is the wrong question. *American Journal of Small Business* 12 (4), 11–32.

Gau, R., Ramirez, E., Barua, M.E., Gonzalez, R., 2014. Community-based initiatives and poverty alleviation in subsistence marketplaces. *J. Macromarketing* 34 (2), 160–170.

Geertz, C., 1973. *The Interpretation of Cultures: Selected Essays*. Basic Books, New York.

Grabher, G., Ibert, O., 2014. Distance as asset? Knowledge collaboration in hybrid virtual communities. *J. Econ. Geogr.* 14 (1), 97–123.

Guba, E.G., Lincoln, Y.S., 1989. *Fourth Generation Evaluation*. Sage, Newbury Park, CA.

Hickman, P., 2013. Third places and social interaction in deprived neighbourhoods in great Britain. *J. Housing Built Environ.* 28 (2), 221–236.

Hill, R.P., Stephens, D.L., 1997. Impoverished consumers and consumer behavior: the case of AFDC mothers. *J. Macromarketing* 17 (2), 32–48.

Hulme, D., Mosley, P., 1996. *Finance Against Poverty*. Routledge, London.

Johnston, K., Tanner, M., Lalla, N., Kawalski, D., 2013. Social capital: the benefit of Facebook ‘friends’. *Behav. Inform. Technol.* 32 (1), 24–36.

Karnani, A., 2007. The mirage of marketing to the bottom of the pyramid: how the private sector can help alleviate poverty. *Calif. Manag. Rev.* 49 (4), 90–111.

Khanna, T., 2007. *Billions of Entrepreneurs: How China and India Are Reshaping their Futures and Yours*. Harvard Business School Press, Boston, MA.

Kjellberg, H., Helgesson, C.F., 2006. Multiple versions of markets: multiplicity and performativity in market practice. *Ind. Mark. Manag.* 35 (7), 839–855.

Kozinets, R., 2002. The field behind the screen: using netnography for marketing research

- in online communities. *J. Mark. Res.* 39 (1), 61–72.
- Kozinets, R., 2015. *Netnography: Redefined*, 2nd ed. Sage, London.
- Lancelot-Miltgen, C., Peyrat-Guillard, D., 2014. Cultural and generational influences on privacy concerns: a qualitative study in seven European countries. *Eur. J. Inf. Syst.* 23 (2), 103–125.
- Langer, R., Beckman, S.C., 2005. Sensitive research topics: Netnography revisited. *Qual. Market. Res. Int. J.* 8 (2), 189–203.
- Laurell, C., Sandström, C., 2017. The sharing economy in social media: analyzing tensions between market and non-market logics. *Tech. Forecasting Soc. Chang.* 125, 58–65.
- Lee, J., 2015. Trust and social commerce. In: *University of Pittsburgh Law Review*. 77. pp. 137–181.
- Magugui, C.K., Kogei, J.K., Chepkemei, A., 2014. Microfinance in the achievement of millennium developmental goals. *Int. J. Econ. Comm. Manag.* 2 (8), 1–7.
- Mai, N.T., Rahtz, D.R., Shultz, C.J., 2014. Tourism as catalyst for quality of life in transitioning subsistence marketplaces: perspectives from Ha Long, Vietnam. *J. Macromarket.* 34 (1), 28–44.
- Martin, L.M., 2004. E-innovation: internet impacts on small UK hospitality firms. *Int. J. Contemp. Hosp. Manag.* 16 (2), 82–90.
- McCracken, G., 1988. *The Long Interview*. Sage, Newbury Park, CA.
- McKee, D., 2017. Neoliberalism and the legality of peer platform markets. *Environ. Innov. Soc. Trans.* 23, 105–113.
- Millman, C., Wong, W.C., Li, Z., Matlay, H., 2009. Educating students for e-entrepreneurship in the UK, the USA and China. *Ind. High. Educ.* 23 (3), 243–252.
- Morgan, R.M., Hunt, S.D., 1994. The commitment-trust theory of relationship marketing. *J. Mark.* 58 (3), 20–38.
- Murie, A., Musterd, S., 2004. Social exclusion and opportunity structures in European cities and neighbourhoods. *Urban Stud.* 41 (8), 1441–1459.
- Nabavi, S.A.H., 2009. Poverty and microenterprise development. *Eur. J. Soc. Sci.* 9 (1), 120–128.
- Nahapiet, J., Ghoshal, S., 1997. Social capital, intellectual capital and the creation of value in firms. *Acad. Manag. Proc.* 35–39.
- Nambisan, S., 2017. Digital entrepreneurship: toward a digital technology perspective of entrepreneurship. *Enterp. Theory Pract.* 41 (6), 1029–1055.
- Narayan, D., Pritchett, L., 1999. Cents and sociability: household income and social capital in rural Tanzania. *Econ. Dev. Cult. Chang.* 47 (4), 871–897.
- Oei, S.-Y., Ring, D.M., 2015. Can sharing be taxed? In: *Washington University Law Review*. 93(4). pp. 989–1069.
- Parguel, B., Lunardo, R., Benoit-Moreau, F., 2017. Sustainability of the sharing economy in question: when second-hand peer-to-peer platforms stimulate indulgent consumption. *Technol. Forecast. Soc. Chang.* 125, 48–57.
- Patton, M.Q., 1990. *Qualitative Evaluation and Research Methods*. Sage, Newbury Park, CA.
- Pénard, T., Poussing, N., 2010. Internet use and social capital: the strength of virtual ties. *J. Econ. Issues* 44 (3), 569–595.
- Polanyi, K., 1944. *La Grande Transformation*. 1983 Gallimard, Paris.
- Putnam, R., 2000. *Bowling Alone: The Collapse and Revival of American Community*. Simon and Schuster, New York.
- Rifkin, J., 2014. *The Zero Marginal Cost Society: The Internet of Things, the Collaborative Commons, and the Eclipse of Capitalism*. Palgrave Macmillan.
- Robinson, J., 2011. Limited insurance within the household: evidence from a field experiment in Kenya. In: *Munich Personal RePEc Archive Paper*, pp. 30842.
- Scaraboto, D., 2015. Selling, sharing, and everything in between: the hybrid economies of collaborative networks. *J. Consum. Res.* 42 (1), 152–176.
- Scarduzio, J.A., Geist-Martin, P., 2008. Making sense of fractured identities: male professors' narratives of sexual harassment. *Commun. Monogr.* 75 (4), 369–395.
- Schor, J., 2014. *Debating the Sharing Economy*. Great Transition Initiative. available at <http://www.greattransition.org/publication/debating-the-sharing-economy>, Accessed date: 1 April 2018.
- Schumpeter, J.A., 1934. *The Theory of Economic Development*, Cambridge, Mass. Harvard University Press.
- Smith, J., Flowers, P., Larkin, M., 2009. *Interpretative Phenomenological Analysis: Theory, Method and Research*. Sage, London.
- Sridharan, S., Maltz, E., Viswanathan, M., Gupta, S., 2014. Transformative subsistence entrepreneurship: a study in India. *J. Macromarket.* 34 (4), 1–19.
- Thompson, C.J., 1997. Interpreting consumers: a hermeneutical framework for deriving marketing insights from the texts of consumers' consumption stories. *J. Mark. Res.* 34 (4), 438–455.
- Thompson, C.J., Arsel, Z., 2004. The Starbucks brandscape and consumers' (anticorporate) experiences of glocalization. *J. Consum. Res.* 31 (3), 631–642.
- Tracy, S.J., 2010. Qualitative quality: eight "big-tent" criteria for excellent qualitative research. *Qual. Inq.* 16 (10), 837–851.
- Tsai, W., Ghoshal, S., 1998. Social capital and value creation: the role of intrafirm networks. *Acad. Manag. J.* 41 (4), 464–476.
- Upadhyaya, S., Vann, R.J., Camacho, S., Baker, C.N., Leary, R.B., Mittelstaedt, J.D., Rosa, J.A., 2014. Subsistence consumer-merchant marketplace deviance in marketing systems: antecedents, implications and recommendations. *J. Macromarket.* 34 (2), 145–159.
- Van Stel, A., Carree, M., Thurik, R., 2005. The effect of entrepreneurial activity on national economic growth. *Small Bus. Econ.* 24 (3), 311–321.
- Venkataraman, S., 1997. The distinctive domain of entrepreneurship research. *Advances in entrepreneurship, firm emergence and growth.* 3 (1), 119–138.
- Venugopal, S., Viswanathan, M., Jung, K., 2015. Consumption constraints and entrepreneurial intentions in subsistence marketplaces. *J. Public Policy Market.* 34 (2), 235–251.
- Viswanathan, M., 2007. Understanding product and market interactions in subsistence marketplaces: a study in South India. In: Rosa, J.A., Viswanathan, M. (Eds.), *Product and Market Development for Subsistence Marketplaces (Advances in International Management, Volume 20)*. Emerald Group Publishing Limited, pp. 21–57.
- Viswanathan, M., Sridharan, S., Gau, R., Ritchie, R.J.B., 2009. Designing marketplace literacy education in resource-constrained contexts: implications for public policy and marketing. *J. Public Policy Market.* 28 (1), 85–94.
- Viswanathan, M., Sridharan, S., Ritchie, R., 2010. Understanding consumption and entrepreneurship in subsistence marketplaces. *J. Bus. Res.* 63 (6), 570–581.
- Viswanathan, M., Sridharan, S., Ritchie, R.J.B., Venugopal, S., Jung, K., 2012. Marketing interactions in subsistence marketplaces: a bottom-up approach to designing public policy. *J. Public Policy Market.* 31 (2), 159–177.
- Viswanathan, M., Echambadi, R., Venugopal, S., Sridharan, S., 2014. Subsistence entrepreneurship, value creation and community exchange systems: a social capital explanation. *J. Macromarket.* 34 (2), 213–226.
- Wang, H., Wellman, B., 2010. Social connectivity in America. *Am. Behav. Sci.* 53 (8), 1148–1169.
- Weick, K.E., 2007. The generative properties of richness. *Acad. Manag. J.* 50 (1), 14–19.
- Whittaker, L., Gillepsie, A., 2013. Social networking sites: mediating the self and its communities. *J. Community Appl. Soc. Psychol.* 23 (6), 492–504.
- Williams, C.C., 2009. The hidden enterprise culture: entrepreneurs in the underground economy in England, Ukraine and Russia. *J. Appl. Manag. Entrep.* 14 (2), 44–60.
- Williams, N., Williams, C.C., 2014. Beyond necessity versus opportunity entrepreneurship: some lessons from English deprived urban neighbourhoods. *Int. Entrep. Manag. J.* 10 (1), 23–40.
- Williams, C.C., Windebank, J., 2000. Self-help and mutual aid in deprived urban neighbourhoods: some lessons from Southampton. *Urban Stud.* 37 (1), 127–147.
- Young, K., 2011. Social ties, social networks and the Facebook experience. *Int. J. Emerg. Technol. Soc.* 9 (1), 20–34.
- Yunus, M., 2003. *Banker to the Poor*. Public Affairs, New York.
- Yunus, M., Faive-Tavignot, B., Dalsace, F., Ménascé, D., 2015. Comment lutter contre la pauvreté dans les pays développés? *Harv. Bus. Rev.* 7, 26–34.
- Zaheer, H., Breyer, Y., Dumay, J., Enjeti, M., 2018. Straight from the horse's mouth: Founders' perspectives on achieving 'traction' in digital start-ups. *Comput. Hum. Behav.* <http://dx.doi.org/10.1016/j.chb.2018.03.002>. forthcoming.
- Zeng, M.A., 2018. Foresight by online communities: the case of renewable energies. *Technol. Forecast. Soc. Chang.* 129, 27–42.

Eva Delacroix is associate professor of Marketing at Paris-Dauphine University, France. She holds a PhD in marketing and a master degree in social psychology. Her primary research interests focus on the contexts of poverty, and on how technology can improve low-income consumers' lives. She has published in marketing journals, such as *Recherche et Applications en Marketing*, *Journal of Consumer Behavior*, *Management et Avenir*, *Revue Française du Marketing*.

Associate Professor, Université Paris-Dauphine, PSL Research University, CNRS, UMR 7088, DRM, Place du Maréchal de Lattre de Tassigny, 75016 Paris, France, +33 144 054 454, eva.delacroix@dauphine.fr.

Béatrice Parguel is a CNRS researcher in marketing within Paris-Dauphine University. She animates the Center for Marketing and Public Policy Research, which explores the societal implications of consumption. Her research, based on psychological theories and experimental methodologies, particularly explores consumers' information and education, and is published in journals such as *International Journal of Research in Marketing*, *Journal of Business Ethics*, *Journal of Business Research* or *Technological Forecasting & Social Change*. Béatrice Parguel has won several awards for her research.

CNRS Researcher, Université Paris-Dauphine, PSL Research University, CNRS, UMR 7088, DRM, M-LAB, Place du Maréchal de Lattre de Tassigny, 75016 Paris, France, +33 144 054 454, beatrice.parguel@gmail.com.

Florence Benoit-Moreau, associate professor of Marketing within the University Paris-Dauphine, holds a Master degree from HEC Paris and a PhD from the University Paris-Dauphine. She was formerly consultant for The Boston Consulting Group. She leads a Master program specialized in Integrated Marketing Communication and executive programs in Digital marketing & Communication. Her research addresses issues of sustainable consumption and lifestyles, environmental communication and greenwashing as well as collaborative consumption, and are published in *Journal of Business Ethics*, *International Journal of Advertising*, *International Journal of Research in Marketing* or *Technological Forecasting & Social Change*.

Associate Professor, Université Paris-Dauphine, PSL Research University, CNRS, UMR 7088, DRM, Place du Maréchal de Lattre de Tassigny, 75016 Paris, France, +33 144 054 454, florence.benoit-moreau@dauphine.fr.