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## Surveilled Inclusion and the Pitfalls of Social Fintech Platforms

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### Abstract

While most studies on digital financial inclusion highlight its positive aspects, we focus on the surveillance phenomenon by investigating the role played by microcredit agents who operate digital financial platforms. We combine the concepts of *surveillance capitalism* and *platform capitalism* within the digital financial inclusion process and propose a *surveilled inclusion model* that considers the role of human agents interacting with clients to expand the network effects and control of the digital platform in a dialectic interplay. We combine an instrumental/in-depth case study and critical hermeneutics as methodological strategies to produce results that help to uncover the hidden agenda of social fintech organizations that use digital platforms to provide microcredit. In addition, we expand Zuboff's concept of surveillance capitalism by including the role of microcredit agents who reinforce the imprisonment of clients in endless cycles of payment and credit renewal.

**Keywords:** Financial Inclusion, Digital Platform, Social Fintech, Surveillance Capitalism, Platform Capitalism

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### 1 Introduction

Studies of financial inclusion have traditionally highlighted its positive aspects, such as its contribution to the objectives of sustainable development—for example, fighting poverty (Demirgüç-Kunt & Singer, 2017; Senyo et al., 2022). Digital transformation has led to the evolution of financial inclusion, making it achievable through digital platforms, and expectations for its positive impact have grown even further (Arner et al., 2020; Diniz et al., 2021). However, our review and experience in the field suggest that studies on the use of digital platforms to promote financial inclusion may have neglected potential negative aspects of those initiatives, such as the phenomenon of digital surveillance. Through the intensive use of technology, digital surveillance not only extracts and commodifies data from users but also gradually undermines their

decision-making and self-determination capacities, with the ultimate goal of modulating and controlling behavior (Couldry & Mejias, 2019; Heeks, 2021; Zuboff, 2015).

The consequences of digital surveillance have attracted considerable attention in the fields of political economy (Langley & Leyshon, 2021), cultural studies (Lyon, 2018), workplace surveillance (Ball, 2021), and state surveillance (Ringrose & Ramjee, 2020). In the Global South, however, less emphasis has been placed on digital surveillance in the field of ICT4D (information and communication technology for development), in which research on digital platforms for financial inclusion, such as fintech (financial technology), is concentrated (Bonina et al., 2021, Sahay et al., 2017; Senyo et al., 2022; Walsham, 2017). One of the few exceptions is a study on Aadhaar, India's national biometric digital identity program

(Krishna, 2021). The ethical aspects of digital surveillance are even more critical in platforms created to promote financial inclusion because they deal with a vulnerable segment of the population.

In this paper, we explore digital platforms devoted to financial inclusion; in particular, we focus on the phenomenon of digital surveillance. We investigate the case of a microcredit platform—considered to be a social fintech—that offers financial services in the impoverished Brazilian Northeast. Based on this case, we identify the ways in which the intermediation of human microcredit agents (also known in the literature as loan officers) is essential to create a critical mass and network effects that guarantee the engagement of potential clients using digital devices ranging from mobile phones to algorithms supported by digital platforms. We then critically analyze the role of these agents by investigating how digital platforms devoted to financial inclusion might give rise to two sets of consequences. First, microcredit agents collect information from microentrepreneurs, which reduces information asymmetries in the process of granting credit to clients (Canales, 2013), thereby enabling these agents to provide loans to microentrepreneurs who have been excluded from the traditional financial system. Second, these agents constantly monitor microentrepreneurs and reinforce their lock-in to the platform. The close relationships between microcredit agents and the communities in which they operate expand the ability for real-time surveillance. Therefore, the research question guiding our study is: *How does the interplay between human agents and digital platforms expand the surveillance of microcredit clients?*

To explore this question, we articulate an analytical framework through two steps. First, we combine Zuboff's (2015) concept of *surveillance capitalism* with Langley and Leyshon's (2017) concept of *platform capitalism*, the underlying assumptions of which will be fully described later. Based on this initial analytical foundation, we propose a *surveilled inclusion model* that considers the role of human agents who interact with clients to expand the network effect and control of the financial inclusion platform. Our study uses a methodological design that articulates an instrumental, in-depth case study (Stake, 2005) and critical hermeneutics (Myers, 1995) to produce results that help to uncover the hidden agendas (Cecez-Kecmanovic, 2011) of social fintechs. Our study also unveils an interesting dichotomy: Underlying a discourse of humanization with respect to credit access and the social impact of financial inclusion, we find extended surveillance acting in favor of platform profits. Our results connect financial inclusion platforms with surveillance activities that ultimately trap microentrepreneurs in endless cycles of payment and credit renewal.

Our study makes two main contributions. First, we propose a new understanding of the role and impact of digital platforms on financial inclusion that not only highlights the positive impacts of digital platforms but also considers their negative aspects (e.g., extended surveillance and digital imprisonment) for financially included clients, who are typically poor people living in vulnerable conditions. Second, we propose a surveilled inclusion model that expands Zuboff's concept of surveillance capitalism. While the extant literature focuses on the direct interaction of the platform with the surveilled user, our model includes the interplay between human agents and algorithms that reinforces client imprisonment within the platform.

In the next section, we review the literature on digital platforms and surveillance and present an initial theoretical framework that combines platform and surveillance capitalism within the concept of surveillance platforms. In Section 3, we deepen the review of financial inclusion and expand the initial framework by proposing a surveilled inclusion model. In Sections 4 and 5, we explain the research methods and the case background. In Section 6, we present our results, identifying strategies used to create and increase network effects and control. In Sections 7 and 8, we discuss the theoretical and practical implications of our research and offer concluding remarks.

## 2 Digital Platforms and Surveillance

Digital platforms represent a key tenet of current economic dynamics and enable the existence of new types of organizations (Evans & Schmalensee, 2016; Mazzucato et al., 2021). The use of this term has proliferated in the academic literature of various fields and research traditions (Thomas et al., 2014). In sociology, economics, and cultural studies, for instance, researchers have expressed an interest in the political economy of platforms and the platform's form of capitalization (e.g., Langley & Leyshon, 2021). In information systems (IS) studies, the dominant focus has been on platforms' technical (Tiwana, 2014) and economic (Gawer & Cusumano, 2008) perspectives, as well as ICT4D, the Global South, and critical approaches to a lesser degree (Bonina et al., 2021).

Digital platforms can be classified as one-sided, two-sided, or multi-sided platforms according to the number of different groups (or sides) that transact through them (Gawer & Cusumano, 2008). The value of the platform itself also grows as the number of users increases, which allows such platforms to attract and create value for the parties involved (Staykova & Damsgaard, 2015) through the network effect, a mechanism that increases the usefulness of the platform for its user base. In this way, increased adoption implies greater value, which implies increased adoption (Reuver et al., 2018). In this sense,

the network effect is an important platform feature for creating and maintaining conditions for accelerated growth (Evans, 2009; Ondrus et al., 2015).

Digital platforms have the potential to generate positive outcomes for social development and inclusion because of their capacity to scale up and create new business models (Bonina et al., 2021). Examples include platforms that contribute to the alleviation of humanitarian crises (Hellmann et al., 2016) or facilitate digital activism (Chamakiotis et al., 2021). Despite their potential to generate positive effects for society and their relevance for social development, the negative effects of digital platforms remain understudied (Bonina et al., 2021).

In this paper, we explore surveillance on digital platforms by critically combining two central concepts: platform capitalism (Langley & Leyshon, 2017) and surveillance capitalism (Zuboff, 2015). While the literature on surveillance capitalism illuminates the mechanisms used to connect poor people to social fintech platforms and imprison them, the literature on platform capitalism explores the logic of capitalization in terms of digital platforms, describing how surveillance links poor people to the exploitation mechanisms of financialized capitalism (Lavinias, 2018).

## **2.1 Platform Capitalism**

Steinberg (2021) points out the emergence of so-called platform capitalism, in which platform businesses “digitally mediate transactions that transform economy, society and culture” (p. 4). Digital platforms extract revenue by creating markets and managing network effects through rapid scaling up, and they are central to understanding contemporary digital economic activity. Langley and Leyshon (2017) relate these platforms to the intermediation and capitalization of ideas, knowledge, and work. In this way, social media, marketplaces, crowdsourcing platforms, crowdfunding, and other manifestations of the “sharing economy” have a digital platform in common that is at the center of the process of economic circulation and promises a certain degree of economic democratization and collaboration. Platforms are not simple architectures or circulation channels; rather, they induce, produce, and program those circulations (Coelho et al., 2022). Srnicek (2016) suggests that network effects create a “natural” path toward monopoly, while Langley and Leyshon (2017) explain that, far from being natural, digital platforms monetize from direct or indirect income in which the related winner-takes-all logic induces a monopoly (or oligopoly). Additionally, the concept of platform capitalism is fundamental to understanding the power of platforms to attract investments from venture capital structures (Langley & Leyshon, 2017). The capitalization logic of digital platforms connects with Morozov’s criticism of digital platforms’ social welfare

privatization. Morozov (2018) argues that these platforms increasingly assume the management and organization of public health, education, financial, and labor market services. For example, the 2008 economic crisis both pushed people toward these privatized services, given the state economic deterioration, and directed large masses of capital to risky investments in digital platforms that became more profitable than the stock market or treasury bonds (Morozov, 2018). In the same way, social fintech platforms attract investments to a privatized “social good.”

## **2.2 Surveillance Capitalism**

There is no single complete and incontestable definition of surveillance. Gad and Lauritsen (2009) argue that surveillance is situational and there is no valid general definition for surveillance in specific contexts. Since two of the main aspects of surveillance that we explore in this study are collecting data from and establishing control over those who are surveilled, we define surveillance as “any collection and processing of personal data, whether identifiable or not, for the purposes of influencing or managing those whose data have been garnered” (Lyon, 2001, p. 2).

The advancement of computational power and its ubiquity (Lyon, 2001) has produced a hyperconnected society (Firmino et al., 2019), placing digital surveillance at the center of surveillance studies (Lyon, 2001, 2018), particularly in the context of digital platforms. We deal with platforms or digital companies that present themselves as intermediaries, seeking profit through the rapid growth of connected users—for example ride-sharing (Firmino et al., 2019) and food-delivery (Newlands, 2020) platforms. In this study, we specifically deal with surveillance on fintech platforms (Langley & Leyshon, 2021). The main business of these platform organizations is data extraction and processing, the sale of data to third parties either directly or embedded in products and services, and the use of predictive algorithms (West, 2019).

In Zuboff’s surveillance capitalism (2015), big tech platforms not only extract and use data in predictive algorithms but also sell the possibility of shaping user behavior. Once these platforms manipulate human behavior, surveillance capitalism has no need for contracts since digital eyes and real-time monitoring mechanisms guarantee expected behavior. According to Zuboff, contracts are based on trust and reciprocity and are needed in a society of equals. Surveillance capitalism, however, puts reciprocity at risk—in addition to the freedoms and values developed over the historical evolution of the relationship between market capitalism and democracy. Couldry and Mejias (2019) note that platforms use predictive tools to arbitrarily monetize personal data and explore individualities and behaviors, thus compromising the rights of a liberal economy.

Even under the risk of surveillance and behavior manipulation, users are attracted to these platforms through “rewards” such as personalization and social participation. Zuboff (2015) calls this “reward and punishment” relationship a “Faustian pact”: individuals either contribute their personal data to guarantee social participation or are excluded. This pact is a reference to the Faustian legend, popularized by Goethe’s *Faust* (1808), in which Faust agrees to sell his soul to the devil in exchange for worldly desires fulfilled by diabolical magic. In this context, the Faustian pact refers to people being subjected to continuous data extraction and the commodification of their behavior for the privilege of participating on these platforms. For Zuboff, big tech is indifferent to the qualitative value of their users’ data. Even when subjectivity and contextual information are captured, user data is extracted, aggregated, and commodified into a form of surveillant asset that presents subjective traits with only quantitative value.

Human-based surveillance adds contextual and subjective data to surveilled systems. In Newland’s (2020) study of food-delivery platforms, while human agents (supervisors and consumers) acted in conjunction with the algorithmic surveillance of riders, they had a secondary and ex post role since there is little capacity for (and interest in) the use of contextual data. Manley et al. (2012) mentioned the use of human agents, such as parents and teachers, to complement digital information collected on elite athletes in sports academies, which was only possible because of the restrictive and controlled nature of each institution. This combination of multiple discrete systems that include the incorporation of human agents in a whole system of surveillance is defined as a *surveillant assemblage* by Haggerty and Ericson (2000). In this surveillant assemblage model, human agents are incorporated as information collectors along with other digital data

collection sources. In our case, the role of human agents in the field of microcredit goes beyond that of mere collectors of data because humans are active in influencing user behavior, a role that Zuboff (2015) characterizes as being performed by digital surveillance systems.

### 2.3 An Initial Framework that Combines Platform and Surveillance Capitalism

Langley and Leyshon (2017) note that digital platforms have great potential to attract venture capital investments because they contain two important structures: temporal (rapid upscaling) and portfolio (few platforms will monetize the entire portfolio to compensate others that are expected to fail). Based on platform capitalism (Langley & Leyshon, 2017) and surveillance capitalism (Zuboff, 2015), we begin by proposing a surveillance platform framework (Figure 1) that describes the process by which venture capital investments are directed to digital platforms and then returned in the form of profits through the creation and management of network effects.

In addition to the important social participation tools that platforms offer, their capacity to extract, analyze, and combine digital data allows platforms to control human behavior (Zuboff, 2015) and produce expected behaviors. This control manifests as a way of designing behaviors to create and manage the network effect, thanks to the ability of platforms to become central to economic circulation (Langley & Leyshon, 2017). Through our proposed analytical framework, we wish to emphasize that the network effect is not a “natural process” of connections and transactions among “free” participants on the platform through which value is generated, but rather results from an artificially created process of investment applied to digital platforms that develop strategies to modify, commodify, and monetize human behavior.

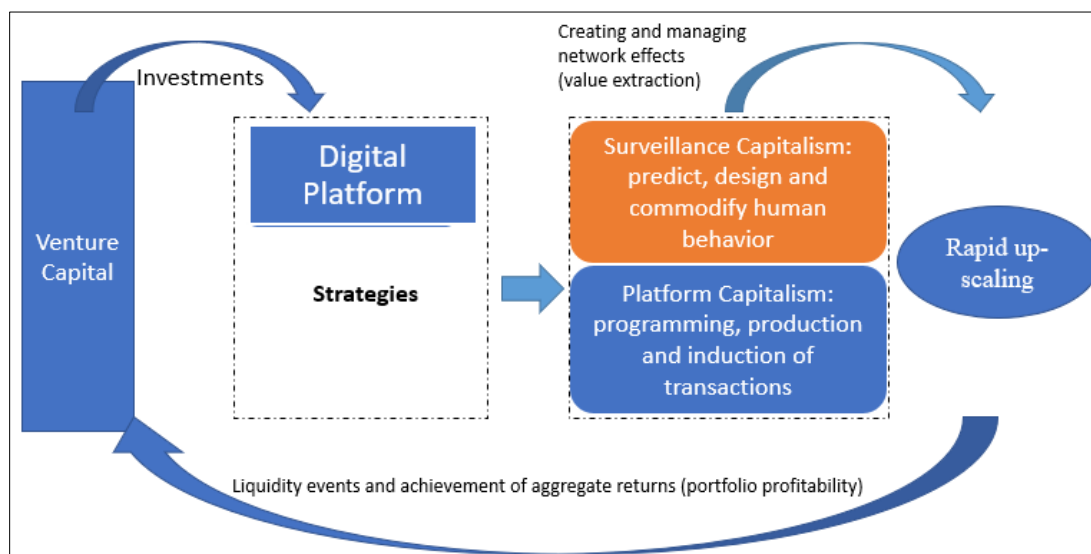


Figure 1. Surveillance Platform Framework

### **3 Financial Inclusion, Microcredit, and Social Fintech**

In this section, we review the literature on three topics of interest: financial inclusion, microcredit, and social fintech. We then integrate the financial inclusion domain into the previously presented surveillance platform framework to create the surveilled inclusion model.

#### **3.1 Financial Inclusion and Microcredit**

A number of factors can create market failures that lead small businesses and people engaged in informal labor to be excluded from formal financial systems (Watkins, 2018), such as (1) an insufficient financial history, (2) the inability to afford banking service fees, (3) limited or no collateral, (4) no formal employment, and (5) difficulty filling out banking forms due to poor language skills. When such customers are offered credit, they tend to pay higher interest rates based on the argument that they present a high level of risk. Beginning with Grameen Bank in 1983 (Yunus, 2001), microcredit has emerged as a solution to traditional problems preventing the extension of credit to low-income clients (Armendáriz & Morduch, 2010), with microfinance institutions (MFIs) providing microcredit to individuals seeking to operate micro- and small-scale businesses.

Microcredit agents employed by MFIs promote services, authorize credit extensions, select suitable clients and monitor them, and collect funds from clients in default. They also reduce information asymmetry by virtue of their proximity to clients, which is important to the establishment of mutual groups—also known as “solidarity groups”—to offset inadequate accounting records and the lack of formal guarantees (Al-Azzam et al., 2012; Gonzalez et al., 2015). Interactions between MFIs and clients through a network of credit agents help to establish legitimacy and a full understanding of loan products and facilitate problem solving (Pytkowska & Korynski, 2017).

Regardless of their configuration, MFIs often face difficulties in gaining operational scale, which involves investment in infrastructure and funding (Young, 2010). In addition to the difficulties of scaling up, other criticisms of MFI models have been noted by authors arguing for better investigation of the root causes of financial exclusion (Bateman, 2013; Mader, 2015; Soederberg, 2014), who maintain that financial inclusion entails financing subsistence, trapping poor individuals in the meager conditions of informal labor. From this perspective, access issues faced by the poorest populations should be solved by better income distribution and access to better public services, rather

than by borrowed money (Gabor & Brooks, 2017). Accordingly, microcredit treats the existence of marginalized individuals as a financial issue (financialization) instead of considering proper social policies that can truly attend to the needs of such individuals (Lavinias, 2018). Transforming the poor into microentrepreneurs by giving them access to microcredit is then a solution that (hopefully) provides them with the minimum support necessary to survive. In addition to all these issues concerning microcredit and MFIs, Bruton et al. (2015) claim that microentrepreneurial activity encouraged by governments and international organizations through microcredit programs creates little substantial value for those individuals (and for society) since it offers no substantial improvement in their living standards.

Despite these criticisms, microcredit has evolved in the last decade into a type of digital financial inclusion recommended by international organizations, such as the World Bank and the OECD, and clearly defined by the G20 Principles for Innovative Financial Inclusion (Soederberg, 2014). As such, the so-called social fintechs have emerged from the digital transformation of MFIs.

#### **3.2 Social Fintechs**

Fintechs are startup businesses that have been described as agile and demand driven (Knewtson & Rosenbaum, 2020; Nicoletti, 2017). Some authors believe they impact the traditional MFI approach to financial inclusion due to their specialization, reduction of bureaucracy, and low transaction costs in addition to their reliance on digital platforms (Dula & Chuen, 2018; Lagna & Ravishankar, 2021; Pytkowska & Korynski, 2017). Much like other microfinance institutions, social fintechs are hybrid organizations that seek to simultaneously generate economic and social returns (Battilana, 2018).

Despite the widespread adoption of mobile phones by potential clients and the implementation of digital platforms for the entire operation, human credit agents did not disappear with the emergence of social fintechs. The process of requesting microcredit starts with a credit agent and proceeds through a platform that performs back-office analysis for preapproval and sometimes also requires approval from the financial partner that funds the fintech—which can be a traditional bank—before credit is released to the microentrepreneur. Pytkowska and Korynski (2017) indicate that the value chain of a social fintech is complemented by funding (comprising investors’ relations), contracting, and performance reporting. Ashta (2018) states that technology improves the visibility of fintechs so that they can attract funding by increasing their impact through cost reductions and outreach.

Gabor and Brooks (2017) critically analyzed fintechs in the financial inclusion domain and pointed out that such organizations are part of a global, complex ecosystem formed by venture capital, financial markets, governments, regulators, development institutions, the World Bank, and philanthropic institutions (in particular, institutions created by tech or financial companies). They explain that this ecosystem produces reports and surveys that connect economic development with financial market development, resulting in financial inclusion and financial education and eventually leading to individuals receiving microcredit to invest in their microbusinesses.

While digital financial inclusion has become viable due to the high rates of mobile phone use (Pytkowska & Korynski, 2017), this enables individuals to be easily traced, read, mapped, and even controlled, making it possible for institutions to exercise control and extract profit from individuals through the use of algorithms and sophisticated credit scoring (Gabor & Brooks, 2017). Fintechs create mechanisms that provide operational efficiencies and gains to capital market investors by attracting and securing investments that guarantee funding. Thus, digital financial inclusion is not only a way to offer credit to the “excluded” but also a way to connect a large number of microentrepreneurs with predictive algorithms that can exert control over them.

### **3.3 Proposing a Surveilled Inclusion Model**

We made two adaptations to the previously developed surveillance platform framework (Figure 1) to incorporate the theoretical review of financial inclusion and social fintechs. First, we adopted social fintechs as a specific category of digital platforms. Second, to generalize this source of investment and capture the idea of an ecosystem, we relied on Langley and Leyshon (2017), who focus on venture capital, and Gabor and Brooks (2017), who delineate an ecosystem related to the universe of financial inclusion with banks, governments, development agencies, philanthropic institutions, and venture capital funds. Thus, we replaced venture capital with the “financial market” in proposing the surveilled inclusion model (Figure 2) to analyze our case study.

## **4 Methodological Approach**

To address our research question, we adopted a critical perspective regarding assumptions that are often taken for granted to uncover contradictory, historical, and ideological aspects of social practices (Ngwenyama & Lee, 1997; Stahl, 2008). We adopted Stake’s (2005) approach by developing an instrumental case study—that is, a case that plays a supporting role in analytical

and theoretical development. We chose an instrumental case study based on its ability to explore a research question that transcends the case, thus offering plausible understanding to similar contexts. This understanding represents a step toward producing a theoretical generalization from one or a few cases to many (Stake, 2005).

We investigated a Brazilian fintech microcredit platform, hereafter referred to as MP. There are several reasons underlying our choice of this platform as an instrumental case. It represents a social fintech that has attracted interest from the media because of its social impact. MP has also received social entrepreneurship awards and the “B Corp” certification, which recognizes for-profit organizations making a social impact. This certification that is granted by Sistema B (2021), an international organization with a mission to “create a favorable ecosystem to strengthen companies that use the power of the market to solve social and environmental problems.” MP has also attracted national and international investors, such as a venture capital fund, a major investor in microfinance projects around the world, and a large Brazilian bank.

The relevance of MP is confirmed by the numerous videos, news stories, and documented case studies concerning its history and trajectory available in the public domain. This notoriety allowed us to collect a huge volume of rich secondary data concerning MP from 2013 to 2019. Table 1 presents a summary of secondary data collection, omitting details that could identify the organization or participants, thereby preserving anonymity according to the ethical protocol approved by our university.

The large amount of available secondary data helps to justify the use of MP as the primary source of data for this study. Nonetheless, we triangulated secondary data with two other sources: interviews and observations. According to Stake (2005), the strength of triangulation is not necessarily convergence but rather enrichment and the possibility of complementarity from multiple perspectives. We also followed guidelines provided by Glesne (1999) on how to elaborate semi-structured interviews and field notes, combining open-ended questions/issues with others inspired by the theoretical framework.

The interviews were conducted between March 2018 and January 2019 and lasted from 45 to 90 minutes. We carefully selected our interviewees to complement the secondary data in accordance with Stake’s (2005) guidelines. For an in-depth case study, Stake indicates that it is not the representativeness of a theoretical sampling that truly counts but rather the competence, knowledge, and experience of the selected respondents in relation to the object of the investigation.

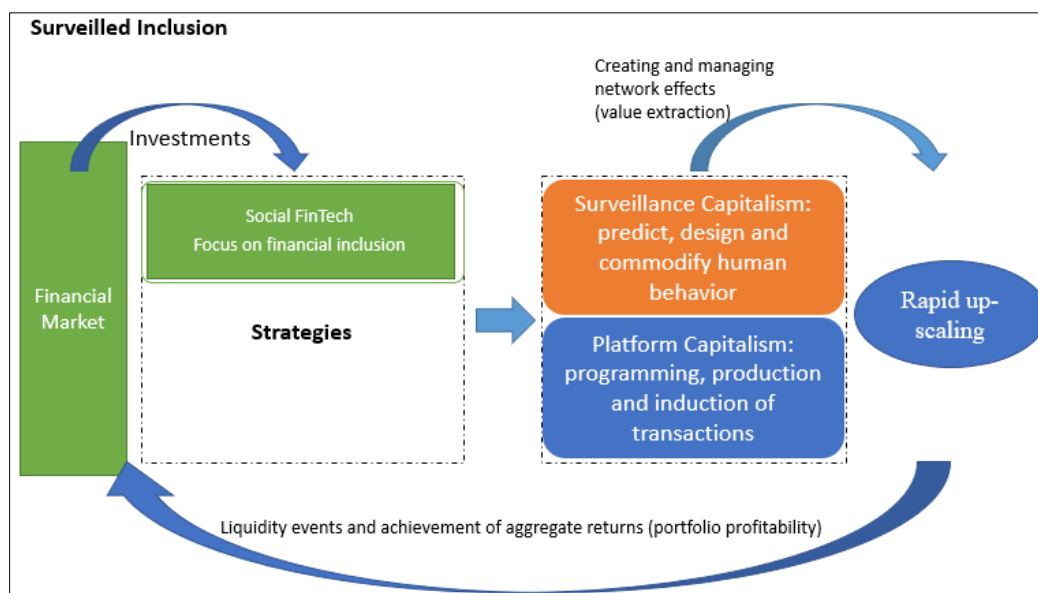


Figure 2. A Surveilled Inclusion Model

Table 1. Summary of Secondary Data Collection

Description of data source	Quantity	Time frame
Articles about the company in broad circulation magazines and newspapers	12	2013 to 2019
Case studies (published by a Brazilian journal and by Harvard Business Cases)	2	2015 and 2018
Public pages and presentations from institutional websites and social networks of the company and its partners	11	2018 and 2019
Presentations and speeches by MP's CEO at public events (available online)	3	2015 to 2018
Interviews with CEOs and directors of partner companies discussing MP (available online)	2	2017 to 2019
Accountability reports to investors from MP's partner companies (available online)	3	2018 to 2019
Employee and former employee anonymous reports concerning MP (from a website that grade companies based on employee reports)	19	2018
Mentions of MP on a website that collects customer complaints	43	2019

Table 2. Summary of Interviews

Interviewee position	Position description	Years working at MP	Previous experience	Interview duration	Empirical material
CEO	CEO and MP founder	Since 2012	Worked in banks and was a partner in a large stock brokerage	~ 45 min	Recorded and transcribed
Regional coordinator	Coordinator of microcredit agents in several states	Three	Worked in several microcredit institutions as an agent and manager since 2005	~ 60 min	Recorded and transcribed
Local supervisor	Manager of microcredit agents in small towns	Three	Worked for four years as a microcredit agent for another institution	~ 90 min	Field notes
Microcredit agent	Microcredit agent in a small town	One	Worked for four years as a microcredit agent for another institution	~ 45 min	Field notes



We conducted four in-person interviews. The first interview was with the MP's CEO and took place at MP. This interview included questions about the CEO's trajectory and personal vision as well as MP's history and accomplishments. When we asked questions about the role of microcredit agents at MP, the CEO identified a regional microcredit coordinator who was knowledgeable about the topic. We interviewed this employee and asked questions about his personal trajectory, his vision of MP, and the role of microcredit agents. The remaining two interviews were with a microcredit team supervisor and a field microcredit agent and took place in two cities in a poorer region of the Brazilian Northeast, where MP began its expansion. We questioned these individuals about issues similar to those discussed with the coordinator. Based on the richness of the collected data, we realized that the three employees we interviewed held positions that gave them extensive experience in the role of credit agent, thus making them familiar with the activity of such agents in the field. Table 2 above summarizes the data collected through the interviews.

Last but not least, we note that one of the authors immersed themselves for four months between 2018 and 2019 in one of the critical areas of MP's operations in the Brazilian Northeast. During this period, this author was not only able to conduct the documented interviews but also made numerous observations and had informal conversations with several microcredit agents and microentrepreneurs (including those who did or did not accept microcredit). This experience in the field was recorded in photos, videos, and field notes that were transferred to the field diary along with the researcher's personal memos. Although these field notes do not represent the main source of data for this paper, they helped to make better sense of the whole context in which MP operates. As we explain in the next section on critical hermeneutics, the presence of a researcher in the field made it possible to expand our interpretation and discover what was not openly stated or was hidden in the interviews, discourses, speeches, reports, and quotes on microcredit and entrepreneurship used in the paper. Finally, to ensure the quality of our research approach, we followed four criteria aligned with our epistemological stance: *authenticity*, *plausibility*, *reflexivity*, and *criticality* (Pozzebon, 2018).

#### 4.1 The Hermeneutic Method

We combined Lejano and Leong's (2012) hermeneutic approach with the critical hermeneutics proposed by Myers (1995). For Myers (2004), hermeneutics is both an interpretivist philosophy and a method of analysis; it is the science of interpreting the meaning of a text or text-like expression, such as a conversation, speech,

gesture, expression, action, or even an organization or culture. As a first step, Lejano and Leong (2012) propose developing a "sense" of the situation from the collected data, i.e., the primary texts, to help interpret the meaning of the primary texts. In the second "reference" step, the primary texts are connected to the external situation to capture their context. The complete hermeneutic cycle, which proceeds cyclically from the primary texts (the situation) to external texts (the context), makes it possible to expand the interpretation and discover what was not openly said or what was hidden in the primary texts.

For critical hermeneutics, reality is historically constituted; therefore, the researcher must combine an understanding of the participants with a full understanding of the given situation, connecting interpretative sense data with the social, political, and economic macrocontext. Thus, researchers must conclude the hermeneutic cycle by critically analyzing and interpreting the meaning of the context of the data collected (Myers, 1995). Cecez-Kecmanovic (2001) used critical hermeneutics to reveal the hidden forms of distorted communication mediated by ICTs in the restructuring process of a university undergoing a financial crisis. Myers and Young (1997) used critical hermeneutics to reveal hidden agendas during a hospital's system implementation.

In this study, we interpreted data by performing hermeneutic cycles beginning with the situation itself (sense) and proceeding to the context (reference) and vice versa. Combining Lejano and Leong's (2012) approach with Myers's (1995) critical perspective, we found historically constituted social and economic structures that determined the "situation itself." We started with the MP CEO's speeches at events, our interviews with microcredit agents, reports, and case studies, and then expanded the collection of texts based on links that appeared throughout the primary texts regarding other companies (partners) and their representatives. We critically interpreted the data using the surveilled inclusion framework developed from theory.

## 5 The Case of MP: Context and History

Influenced by the concept of "conscious capitalism," the CEO of MP left the online brokerage firm in which he was a partner and decided to use his background in the financial market to implement MP as a platform to reach out to low-income customers who could not be served by traditional banks. He founded MP in 2012 as its main investor. MP's first business model aimed to provide credit to clients that had neither the knowledge nor the conditions necessary to access credit from traditional banks. At the time, the digital platform

offered its financial products exclusively online. The core component of the digital platform consisted of a website to perform simulations and a contract for financial products from partners. Data on clients were collected through online questionnaires, and a proprietary algorithm classified and selected “suitable” customers. MP also launched a financial education platform called the Learning Platform to reach an audience less accustomed to financial products. By the beginning of 2013, it had achieved a monthly growth rate of 66% by selling the products of its financial partners on the platform.

In 2014, the CEO realized that there would be low levels of competition from financial providers in the slums of large cities, thus providing an opportunity for MP to profit in this market. At the time, Brazilian slums comprised a population of 11.7 million people with an annual income of over 60 billion BRL (12 billion USD), which was equivalent to that of the country’s fifth largest state. Moreover, half of the population living in these slums was unbanked. MP opened its first physical store in a slum in São Paulo in early 2015 to serve as a pilot for the company’s second business model, adding this physical operation to its already successful online platform. A large bank financed the microcredit operations of clients previously selected by MP. Microcredit agents from the community surrounding the physical store were hired not only to reach local microentrepreneurs but also to collect the personal and business data to be used by MP’s algorithms. In the CEO’s opinion, this process would provide a “humanized financial service.” This proximity helped MP to know clients better and generate trust from their target audience, which was not used to doing business online.

This new venture attracted a first round of equity investment, which was originally intended to open 28 physical stores in other slums around the country. The main investor was FIP, a venture capital fund owned by a group of investors concerned about making a so-called “social impact.” This partner held 22% of MP’s market value, estimated at 17 million BRL (3.4 million USD), eight times larger than the initial investment made two years earlier when MP was founded.

By analyzing data collected from clients’ purchases on the internet and forms filled out by microcredit agents, MP’s algorithm identified customer profiles and directed potentially good clients to the bank for a second analysis. The efficiency of credit scores calculated by MP’s algorithm relied on personal and business data collected by microcredit agents about microentrepreneurs. MP used a psychometric questionnaire developed by a US company to create what the CEO called a “humanized financial service” to select the best clients. This questionnaire revealed a customer’s way of thinking about things not directly related to the financial product.

During the implementation of the second business model, MP and its CEO received awards recognizing the good financial inclusion work that MP was doing with people living in the slums. Nonetheless, the high operating costs of the physical store and low demand from customers frustrated the expected revenues from this second business model. In addition, MP’s larger banking partner applied its own scoring models because it was ultimately responsible for approving credit to the clients recommended by MP, which resulted in the rejection of almost 85% of those clients. MP also underestimated how overextended the levels of debt among individuals living in slums and the strong competition from other finance providers not dedicated to microcredit.

After abandoning the plan to open 28 physical stores in slums, at the beginning of 2015, MP decided to change its area of operation from the slums in São Paulo to small cities in the northeastern region of the country near a clothing production center that sold garments wholesale and at very low prices throughout the whole country. Even though they were based on unhealthy and unsafe manufacturing units located in houses, in which all family members worked overtime, these small and mostly informal businesses were essential for supporting employment and revenue in the local economy. MP’s new business model focused on offering microcredit to these individuals based on the high levels of informality and the microcredit culture previously introduced by traditional MFIs in the region.

MP began a new partnership with a private, midsized bank—the Banco—that had extensive experience with the lower middle class in areas poorly served by larger banks. In addition to becoming a business partner, Banco invested in MP. Without physical stores, financial services were available in two ways: directly via the digital platform and through microcredit agents. To reduce the risk associated with individual credit, MP’s algorithm evaluated not only the business conditions for repayment but also the “character” of the microentrepreneur. Termed the “blended credit score,” the CEO claimed that MP’s algorithm was the only one in the world to perform this type of assessment.

In 2015, MP’s valuation was 46 million BRL (9.2 million USD), which was almost three times higher than just one year prior. Also in 2015, MP acquired an e-commerce platform for garment wholesalers to create a complete solution for microentrepreneurs on both sides of the clothing industry: manufacturers and resellers.

In 2016, MP acquired an Israeli startup specializing in mobile payments to provide a more affordable payment infrastructure than the POS machines used by local microentrepreneurs. The combined acquisition of the e-commerce platform and the digital payment

solution reinforced the digital strategy of MP, which connected peripheral components to expand the coverage of services offered by the platform and thus the number of connected users.

At the same time, since clients generally prefer human contact, microcredit agents were given a central role in the business model. According to the CEO, the combination of digital and human elements would increase scale and performance. MP’s agents also received support from the digital platform that directed them to “hot” customers identified by algorithms, reducing customer acquisition costs. This strategy explained why MP’s agents reached more customers

than its main competitor in the region, a traditional low-tech MFI.

In 2017, MP’s new valuation reached 263 million BRL (52.6 million USD), 5.7 times larger than in the previous investment round in 2015. With more than 30,000 customers in small cities in northeastern Brazil and 150 microcredit agents, MP received its third round of investments, totaling approximately 40 million BRL (8 million USD), which was provided by a combination of FIP and other major international microcredit investors. MP’s timeline is presented in Figure 3.

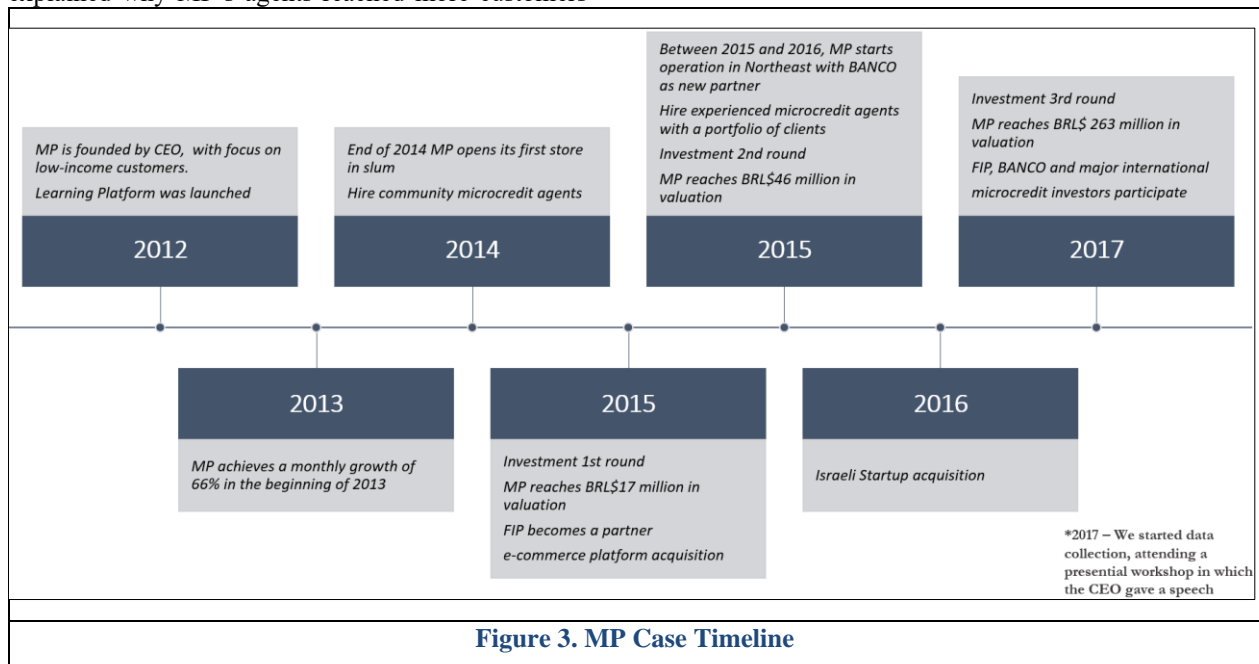


Figure 3. MP Case Timeline

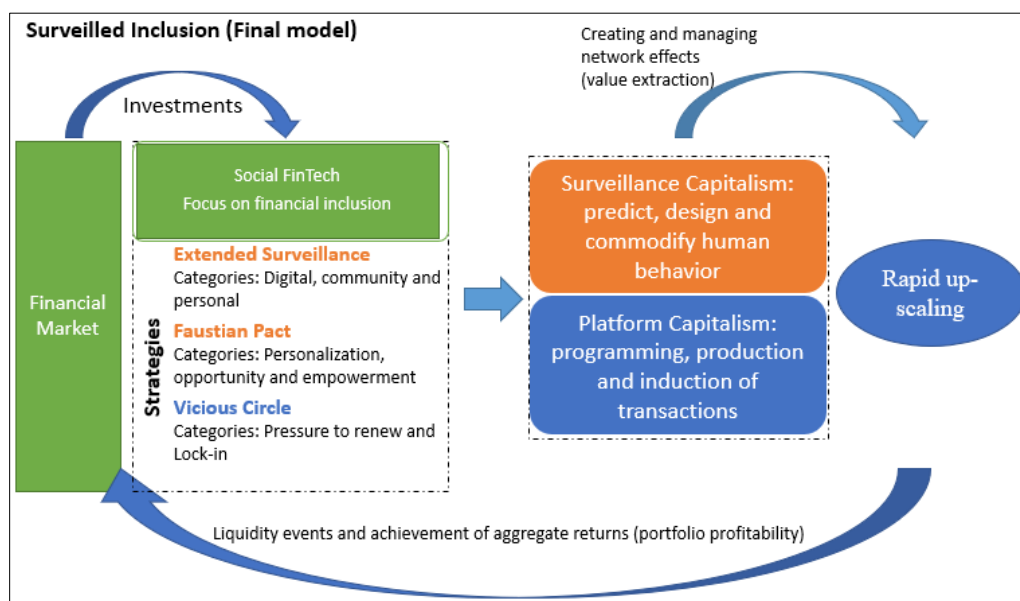


Figure 4. Surveilled Inclusion (Final Conceptual Model)

## 6 Unveiling Strategies and Categories for Surveilled Inclusion

Considering the surveilled inclusion model, we can view the two main investors highlighted in the case—FIP (the venture capital fund) and Banco—as representative of the financial market. By the end of data collection, no liquidity event had taken place. In the various rounds, FIP increased its participation, becoming the main MP investor. The case description highlights this accelerated growth process, which, in turn, attracted new rounds of investments. Critical hermeneutics analysis allowed us to identify strategies and categories for creating and managing network effects by predicting, designing, and commodifying human behavior. The three strategies are *extended surveillance*, the *Faustian pact*, and the *vicious circle* (see Figure 4 above); we present these strategies, identify their respective categories, and corroborate them with representative quotations.

### 6.1 Extended Surveillance

We propose an extended surveillance model that allows the platform to control behavior and is based not only on extracting data from surveilled people but also focuses on three categories of surveillance: *digital*, *community*, and *personal*. In this conceptual model, the interplay between microcredit agents and algorithms increases surveillance and the ability to control and modify the behavior of microentrepreneurs.

The category of *digital surveillance* operates by extracting data from multiple discrete surveillant systems: from browsing websites and from MP applications, such as the payment app, the Learning Platform, and its e-commerce system. By “abstracting” (reducing) microentrepreneurs into digital data, they become a “hot client” or just a credit score. For example, from the psychometric questionnaire and the web navigation data, the algorithm identifies “hot clients”—that is, those customers most likely to close a deal—thereby supporting microcredit agents in the field. This algorithm directs agents to ideal customers and calculates the credit score and is mentioned by agents as a significant difference between MP’s operation and other microfinance institutions:

*You have to give him [the agents] the client, the hot client, to make their life easier. Today, in the individual microcredit industry in the world, [a single] agent creates 0.6-0.7 customers per day, and ours make 2. (CEO speech at a public event, 2017—secondary data)*

While in other institutions, information asymmetry, control, and surveillance are mainly carried out through meetings organized by agents with solidarity groups, according to the regional coordinator we interviewed, MP’s microcredit is easier to sell because of the algorithm, which allows microcredit to be extended to individuals with no need for collateral (Regional coordinator, 2018—interview). Digital surveillance also includes information about clients provided by agents, since the algorithm adjusts the score calculation based on the agent’s impressions of the microentrepreneur’s personality. A business intelligence system is specifically designed to improve the accuracy of the assessment of potential microcredit borrowers. As part of the system, agents complete a form that assesses the potential client’s psychological profile. The information provided by the agents is fed into a database that contains a history of all approved and non-approved customers (Case study, 2015—secondary data).

The category of *community surveillance* refers to the ability of the agent to act directly within the context of the surveilled microentrepreneur. MP operates in small towns in northeastern Brazil, where individuals develop strong knowledge from others within their communities. Microcredit agents capture the community knowledge about individuals by talking to people that are not direct client targets. An agent who was interviewed mentioned a case in which a client’s neighbor revealed that everything in the client’s house was a fake scenario: the house and sewing machines did not belong to the client who was applying for the loan. In this case, a community member not involved with the credit negotiation dismantled a setup created by the potential client to obtain a loan (Local supervisor interview, 2018, field notes). This community surveillance also allowed for the identification of clients who applied for loans from different institutions but hid this information from the microcredit agent with whom they were negotiating. Based on connections with many people within the community, the agent establishes trust relationships to legitimately navigate within the context and proactively act in the MP’s interest, collecting information that clients do not want to reveal in the process of loan negotiation: “Proximity with the community is [an] essential part of business” (Microcredit agent in a newspaper interview, 2015—secondary data).

The last category, *personal surveillance*, occurs in the most intimate part of the private life of surveilled microentrepreneurs. The personal relationship that agents develop with borrowers through broad access to customers’ houses and private lives reduces barriers to selling financial products. This close relationship helps agents collect loan payments and encourages loan renewal: “[The agent] has to spend time creating this warm relationship with the client, the way the Brazilian client likes it.” (CEO speech at a public event, 2017—secondary data)

One interviewee reported that agents feel like they are part of clients' lives since these relationships tend to be long-lasting due to renewals (Local microcredit agent conversation, 2019—fieldnotes). Another interviewee said that “the agent who knocks on the door to sell must also knock on the door to collect payments” (Local supervisor interview, 2018—fieldnotes). The CEO told the story of an agent who went to a microentrepreneur's house to collect a late payment and found a situation of serious poverty and scarcity of resources, including food, and convinced the client to get another loan. Given their proximity to clients, agents maintain surveillance over their private lives beyond the ability of algorithms to collect data on them, helping to ensure low default rates and continued credit renewals. Additional quotations for all categories are presented in Appendix A.

As Gabor and Brooks (2017) argue, the plethora of alternative data makes it possible to calculate the credit score of people who are at risk and financially excluded. However, the increased access to digital devices and multiple ways of tracking digital footprints may not be enough for a microcredit model to operate in a purely digital way. Equipped with digital tools, microcredit agents are proactive actors with a history of trust in the community and personal relationships with clients, giving them proximity and access to clients' private lives. In this way, extended surveillance is the main strategy used to guarantee expected behavior—buying, paying, selling, producing, renewing—regardless of laws concerning regular civil contracts and the principle of good faith (Zuboff, 2015).

## 6.2 The Faustian Pact

The Faustian pact refers to the strategy of offering (and positioning) a product as essential to social participation. This product mediates the agreement that induces users to allow extended surveillance in exchange for financial and social inclusion. While for Zuboff (2015), the digital social networks provided by big tech companies are essential products for social participation, in this study, the proclaimed benefit of microcredit is the reward made possible by MP's digital platform. In the Faustian pact, we observe three interrelated categories that are presented as “rewards”: *personalization*, *opportunity*, and *empowerment*.

*Personalization* refers to benefits received in exchange for being tracked, allowing the platform to recognize users' needs even before they recognize those needs themselves (Zuboff, 2015). This category represents the ability to create relationships between the platform and the microentrepreneur based on customer data. According to the MP CEO, a fundamental aspect of MP's business model is to know microentrepreneurs' personal stories in order to offer the best service and rate of interest for their individual situations.

Personalization pertains to delivering a specifically tailored product (microcredit). MP and its extended surveillance practices map the profile and character of the client and create their “personal stories,” which leads to personalization of the microcredit service, including interest rates.

*So, it is useless to close our eyes and not want to look at this guy in a personalized way. So, what does [MP] do? Look at him; we create these personal stories when we are going to do microcredit. (CEO speech at a public event, 2015—secondary data)*

Personalization, which is based on tracking and mapping the microentrepreneur's financial and personal life is presented as a rhetorical benefit of being seen as an individual with one's own story rather than as a structural condition of the business.

The category of *opportunity* refers both to the microcredit extended by the platform and to the so-called humanized service offered by microcredit agents. Since the credit applications of microentrepreneurs are constantly rejected by traditional banks, the MP algorithm represents an opportunity for the microentrepreneur to be seen as a good client. When microcredit is granted, the platform becomes a believer in the potential of the microentrepreneur. We consider “opportunity” (microcredit approval) to be a rhetorical reward since the microcredit underlying the contract is not exactly based on good faith but rather on extended surveillance that guarantees the expected payment and renewal behavior.

*So, when I offer this treatment at the end, I manage to have a satisfied customer and also a customer who doesn't have so much difficulty getting credit, it will be an opportunity. (Regional coordinator, 2018—interview)*

Finally, *empowerment* refers to the idea that microcredit and financial solutions are presented as superpowers. MP claims that its microcredit gives “superpowers to the real Brazilian superheroes” (Institutional video, 2018—secondary data). This empowerment rhetoric suggests that microcredit can expand social capital to poor communities, enabling microentrepreneurs to overcome their vulnerable condition. By positioning microcredit as a tool that empowers the microentrepreneur in the entrepreneurship war, MP supposedly qualifies individuals for social participation: “Entrepreneurship is a war. And to go to war you need a weapon. So, we are a company focused on a warrior” (CEO speech at a public event, 2017—secondary data).

Analyzing the Faustian pact, the case of MP helps to describe how social fintech rhetorically positions

*personalized* microcredit as an *opportunity* for the *empowered* microentrepreneur to participate in a process of social transformation. For the CEO and MP's partners (financial markets, agents, employees), microcredit enables involvement and social participation and represents an opportunity for inclusion, income, and, ultimately, major life changes. The Faustian pact strategy transforms a social and financial problem into an individual problem (Gabor & Brooks, 2017). Each individual microentrepreneur becomes a superhero empowered to receive microcredit and to single-handedly transform their own quality of life. The requirement that must be met to be financially and socially included is to be tracked, mapped, and allow one's life invaded by surveillance practices.

### 6.3 The Vicious Circle

The vicious circle is a strategy for creating dependency through a revolving cycle of microcredit, trapping clients in a vicious circle of adhesion and renewal, allowing for continuous value extraction. This vicious circle comprises two categories: pressure to renew and lock-in.

The *pressure to renew* is fundamental to MP's business model since the cost of acquiring a new client (CAC) is high and renewal guarantees the extraction of value throughout the client relationship. The CEO refers to the value that customers generate for MP as the lifetime value (LTV). MP's algorithms are critical to reducing CAC and increasing LTV. CAC and LTV are important indicators that demonstrate the value of venture capital investment in social fintech and provide measures used to grant bonuses and incentives to agents. Microcredit itself is designed to pressure clients to renew: credit is extended at a low value and for a short term, which does not allow the microentrepreneur to conduct an investment cycle but only to use the loan as working capital. The microcredit operation at MP indicates that typical loans are of low value (between 1,000 and 5,000 BRL—200 and 1,000 USD) with short terms (between five and seven months) combined with very low default rates (2% to 7%) and constant credit renewal (more than 80%): "Renewal is automatic. Need more? No need to ask" (Institutional website, 2019—secondary data).

The category of *lock-in* describes mechanisms to imprison the microentrepreneur within the microcredit renewal loop. When the platform creates mechanisms to establish a network effect and generate client loyalty, it produces lock-in. MP's loyalty model includes lowering the interest rate on renewals for clients that refer new clients. One of the interviewed agents reported rarely engaging in an active search for clients since most new customers were referrals from others (Microcredit agent interview, 2019—fieldnotes). In addition to the microcredit service, MP offers a payment app and adjacent platforms for financial

education and e-commerce, which is a lock-in strategy based on the introduction of new functionalities.

*They are community customers that refer other customers, and I can get an interest rate of 2% for that customer that refers us to a customer. But it's the customer they help, they indicate, so as a way to reward, because he is a partner to us, we can offer a lower rate. (Regional coordinator, 2018—interview)*

Pressure to renew and lock-in converge toward the situation that Alvarez et al. (2015) pointed out in their criticism of microcredit. The low default rates in microfinance and the fact that microcredit involves revolving credit are indications that microbusinesses do not take the necessary risks for expansion and wealth generation. According to Alvarez et al., the proliferation of small retail operation businesses made possible through numerous loans causes the prices of items produced or traded in the community to fall, making the income earned by microentrepreneurs insufficient to maintain their businesses and improve their standard of living. Considering these criticisms, we see that MP amplifies the vicious circle usually found in low-tech microcredit operations by pushing for renewals and creating lock-in, which creates more opportunities for value extraction (such as LTV) in the short term.

## 7 The Implications of Surveilled Inclusion

The literature on digital platforms, specifically in the context of network effects, points to a value creation that seems to be neutral and beneficial for all sides of the platform. This article discusses the fact that, far from being neutral, these network effects are designed to control human behavior. The apparent neutrality discussed in the literature is due to the fact that most studies have not explored platforms in the broad context of a production system. In our study, we examined the questions of who generates wealth (microentrepreneurs), to whom this wealth flows (social fintech platforms), where it concentrates (the financial market as a whole), and what processes are used to keep this value production system in operation (surveilled inclusion).

Although we point out the social unfairness of how the platform operates in our study, we do not wish to generalize the surveilled platform process or suggest that surveilled inclusion is a general function of all such platforms. We are aware of several examples of platforms producing positive results (Chamakiotis et al., 2021; Hellmann et al., 2016). We acknowledge that social fintech platforms reduce costs, have greater financing capacity, and therefore have greater potential

to include people in the financial market (Lagna & Ravishankar, 2021). However, in contrast to the large number of studies exclusively highlighting the social inclusion potential of such platforms, we position our study as a warning for future research on digital platforms, particularly platforms that are designed to produce financial inclusion.

In the second stream of literature presented in this paper, we show how the financial inclusion and microentrepreneurship discourse reinforces microcredit as a condition for social participation, which, in turn, relates to controlling and changing human behavior. Companies in this sector empower the poorest citizens with microcredit to socially include them, transforming citizens into microentrepreneurs who are fully responsible for their social survival in the context of financial services. In this sense, microcredit and microentrepreneurship, enabled and managed by the digital platform, mediate entrepreneurs' social participation. Despite its efforts toward financial inclusion, microcredit itself needs to be subject to debate; otherwise, it mainly serves the interests of the financial market and does not serve the poorest population—namely, microentrepreneurs and workers in the informal sector—and thus produces a result opposite to the expected social inclusion. The studied platform ultimately ends up subjecting clients to a vicious circle of microcredit by offering small, recurrent loans that may not actually contribute to real transformation in the living conditions of poor individuals beyond the level of mere survival. Therefore, the question of what the microcredit model—mediated and facilitated by digital technologies—can contribute to development is fundamental. We argue that answering this question is critical for policy makers, so-called impact investors, and practitioners working on social fintechs and traditional MFIs.

Our main contribution, however, is to propose a better understanding of what we call the extended surveillance strategy. While in Zuboff (2015) and Gabor and Brooks (2017), surveillance seems to be totally focused on the power of digital technologies, we argue that there is an interplay between human and digital elements, emphasizing how human agents are a central element in the digital financial inclusion field by facilitating loan provision while considerably expanding surveillance capacity along several dimensions: namely, *digital*, *community*, and *personal relationships*. Some of the main references consulted in this study—Zuboff (2015), Langley and Leyshon (2017), Gabor and Brooks (2017), and Srnicek (2016)—explored a new logic of accumulation based on user (or transaction) data to control behavior. This logic involves the massive use of digital business models applied to the mechanisms for extracting, transforming, storing, and analyzing data to design,

predict, and modify behavior based on the growing use of digital tools by the population at large.

A platform that employs the logic of digital financial inclusion, however, adds microcredit agents, actors who reinforce the power of the platform to connect microentrepreneurs to the accumulative cycle of the financial system. In this case, the human agent does not play a secondary and an *ex post facto* role, as in the case of food-delivery platforms (Newlands, 2020), nor does the human agent act in a limited context, as in the elite athlete case mentioned above (Menley, 2012). In our case, the surveillant assemblage connecting the digital platform and its algorithms with human agents greatly improves the platform's performance and assertiveness.

Our field observations and the associated literature confirm that microentrepreneurs are cautious about engaging in online transactions, particularly with financial institutions. There are several reasons for this, ranging from poor access to devices and the internet to insufficient digital skills, but microentrepreneurs also fear scams and the risk of having their personal lives and (often) informal businesses tracked (Krishna, 2020). Furthermore, their community ties and social relationships create a safety net that can provide alternative financial support, such as collective savings and informal credit with small merchants (González, 2020). Extended surveillance appears to be well designed to break down these barriers and resistance and allow microcredit agents to access microentrepreneurs' homes in real time to verify production and working conditions, thereby reducing client default rates and guaranteeing constant microcredit renewal. These agents use their personal relationships and insertion in the community to access clients' private lives and carry out extended surveillance to monitor, track, change, and modify their behavior; in doing so, they challenge not only the right to contractual freedom but also the right to digital invisibility. Researchers and practitioners should seek to acquire a better understanding of how alternative financial instruments support the activities of microentrepreneurs in order to design a non-surveillance-based financial product that strengthens established local arrangements.

In the long term, surveilled inclusion is a crippling mechanism because it attacks the resilience of its target audience. It combines the discourses concerning financial inclusion and microentrepreneurship and makes each person, individually, a competitor for resources and market access to ensure its own reproduction. As pointed out by Mader (2015), Baterman (2013), and Soedeberg (2014), microcredit initially drains resources from poor populations with low income-generating capacity, while in the long term, these practices cause conditions to become even worse for their clients by locating them on the edge of

credit renewals. Unlike traditional low-tech MFIs, social fintech and their platforms have the power to scale and attract massive investment, which expands their capacity for action and could exacerbate these reported microcredit problems, especially among populations that have already been excluded, and that, as noted by Gabor and Brooks (2017), are the last frontier for financial market accumulation. Therefore, researchers and practitioners should continue to deepen the ongoing discussion on the ethical issues of profiting from (digital) financialization of the poor based on (digital) surveillance practices (Hussain, 2019; Jain and Gabor, 2020; Mader, 2015).

Since democracy comprises a set of values, obligations, and rights, it may be challenging for large groups of the population to fully realize it, especially in countries located in the Global South (Heeks, 2021; Sahay et al., 2017). In this sense, what puts democracies at risk is not (only) surveillance practices that extinguish self-determination and freedoms, as Zuboff (2015) argues, but also a process that potentially generates more inequalities through a logic of financialization (González, 2020; Lavinás, 2018) that is enhanced by platform capitalism. In either case, exclusion or inclusion with surveillance is a true Faustian pact: whether held captive by exclusion and the lack of access to power or forced to serve the devil himself, one cannot escape oppression.

## **8 Concluding Remarks**

This study discusses the ways in which the power of sociotechnical arrangements enables oppression through a discourse of inclusion. Trauth (2017) explained that research into social inclusion should focus on the process that explains social inclusion or exclusion. In the same vein, Rodgers (1995) suggests that the term social exclusion describes not only a situation of exclusion but also the process that produces it. Our work seeks not only to contribute to the identification of strategies that may appear to be directed toward social inclusion but also to the process

that increases inequalities. Taken together, these strategies entail the constant monitoring of microentrepreneurs through what we call extended surveillance—that is, offering proclaimed benefits that act as bait for a Faustian pact: once hooked, microentrepreneurs are imprisoned in a vicious circle of renewal that reduces their ability to react and escape the platform's control.

We have expanded the discussion on platform capitalism and surveillance capitalism to present the surveilled inclusion model by considering not only technological elements but also human agents that enhance the capacity of digital platforms to monitor and shape user behavior. These agents rely on close relationships within the community and with microentrepreneurs.

The study of a single case with the use of mainly secondary sources could at first glance be considered a limitation of this research. However, there is nothing that prevents the use of secondary data as the primary source of empirical material. We argue that our sources and empirical data provide rich and varied information taken from various perspectives. Yet one weakness that could not be remediated is the absence of quotes from the microentrepreneurs and microcredit clients. Although one of the authors had intense conversations and interactions with them during our fieldwork, the field notes and memos were more useful in the hermeneutical analysis than in the production of quotes because they helped us better understand and conceptualize the strategies and categories of surveilled inclusion.

Finally, as extensively discussed throughout this paper, our results highlight several ethical (e.g., using surveillance practices to subject clients to a vicious circle of microcredit) and practical (e.g., how to design microcredit platforms without engaging in surveilling practices) issues regarding the role of microcredit agents and digital platforms for society, and we strongly encourage the deep investigation of these implications in future studies.



## References

- Al-Azzam, M., Carter Hill, R., & Sarangi, S. (2012). Repayment performance in group lending: Evidence from Jordan. *Journal of Development Economics*, 97(2), 404-414.
- Alvarez, S. A., Barney, J. B., & Newman, A. M. (2015). The poverty problem and the industrialization solution. *Asia Pacific Journal of Management*, 32(1), 23-37.
- Arner, D. W., Buckley, R. P., Zetzsche, D. A., & Veidt, R. (2020). Sustainability, FinTech and financial inclusion. *European Business Organization Law Review*, 21(1), 7-35.
- Ashta, A. (2018). News and trends in Fintech and digital microfinance: Why are European MFIs invisible? *FIIB Business Review*, 7(4), 232-243.
- Ball, K. (2021). *Electronic monitoring and surveillance in the workplace*. European Commission, Joint Research Centre, Publications Office <https://data.europa.eu/doi/10.2760/5137>
- Bateman, M. (2013). *The age of microfinance: Destroying Latin American economies from the bottom up* (ÖFSE Working Paper, No. 39). Austrian Foundation for Development Research (ÖFSE).
- Battilana, J. (2018). Cracking the organizational challenge of pursuing joint social and financial goals: Social enterprise as a laboratory to understand hybrid organizing. *M@n@gement*, 21(4), 1278-1305.
- Bonina, C., Koskinen, K., Eaton, B., & Gawer, A. (2021). Digital platforms for development: Foundations and research agenda. *Information Systems Journal*, 31(6), 869-902.
- Bruton, G. D., Ahlstrom, D., & Si, S. (2015). Entrepreneurship, poverty, and Asia: Moving beyond subsistence entrepreneurship. *Asia Pacific Journal of Management*, 32(1), 1-22.
- Canales, R. (2013). Weaving straw into gold: enhancing microcredit impact through personal involvement. *Organization Science* 25(1).1-28.
- Cecez-Kecmanovic, D. (2001). Critical information system research: A Habermasian approach. *Proceedings of the 9th European Conference on Information Systems* (pp. 141-162).
- Cecez-Kecmanovic, D. (2011). Doing critical information systems research—arguments for a critical research methodology. *European Journal of Information Systems*, 20(4), 440-455.
- Chamakiotis, P., Petrakaki, D., & Panteli, N. (2021). Social value creation through digital activism in an online health community. *Information Systems Journal*, 31(1), 94-119.
- Coelho, T.R., Pozzebon, M., & Cunha, M.A. (2022). Citizens influencing public policy-making: Resourcing as a source of relational power in e-participation platforms *Information Systems Journal*, 32(2), 344-376.
- Couldry, N., & Mejias, U. A. (2019). Data colonialism: Rethinking big data's relation to the contemporary subject. *Television & New Media*, 20(4), 336-349.
- Demirgüç-Kunt, A., & Singer, D. (2017). Financial inclusion and inclusive growth: A review of recent empirical evidence. *World Bank Policy Research Working Paper*, (8040).
- Diniz, E. H., Cernev, A. K., Rodrigues, D. A., & Daneluzzi, F. (2021). Solidarity cryptocurrencies as digital community platforms. *Information Technology for Development*, 27(3), 524-538.
- Dula, C., & Chuen, D. L. K. (2018). Reshaping the Financial Order. In D. W. Arner, J. Barberis, R. P. Buckley, D. L. K. Chuen, & R. Deng (Eds.), *Handbook of blockchain, digital finance, and inclusion* (Vol. 1, pp. 1-18). Academic Press.
- Evans, D. S. (2009). How catalysts ignite: The economics of platform-based start-ups. In Gawer, A. (Ed.), *Platform, markets and innovation* (pp. 99-130). Edward Elgar.
- Evans, D. S., & Schmalensee, R. (2016). *Matchmakers: The new economics of multisided platforms*. Harvard Business Review Press.
- Firmino, R. J., Cardoso, B. V. & Evangelista, R. (2019). Hyperconnectivity and (Im)mobility: Uber and surveillance capitalism by the Global South. *Surveillance & Society* 17(1-2), 205-212.
- Gabor, D., & Brooks, S. (2017). The digital revolution in financial inclusion: International development in the fintech era. *New Political Economy*, 22(4), 423-436.
- Gad, C., & Lauritsen, P. (2009). Situated surveillance: An ethnographic study of fisheries inspection in Denmark. *Surveillance & Society*, 7(1), 49-57.
- Gawer, A., & Cusumano, M. (2008). How companies become platform leaders. *MIT Sloan Management Review*, 49(2), 28-35.
- Glesne, C. (1999) *Becoming qualitative researchers*. Longman.

- Gonzalez, L., Diniz, E. H., & Pozzebon, M. (2015). The value of proximity finance: how the traditional banking system can contribute to microfinance. *Innovations: Technology, Governance, Globalization*, 10(1-2), 125-137.
- González, F. (2020). Micro-credit and the financialization of low-income households. In P. Mader, D. Mertens, & N. van der Zwan (Eds.), *The Routledge international handbook of financialization* (pp. 301-311). Routledge.
- Haggerty, K. D., & Ericson, R. V. (2000). The surveillant assemblage. *British Journal of Sociology*, 51(4), 605-622.
- Heeks, R. (2021). From digital divide to digital justice in the Global South: Conceptualising adverse digital incorporation. *Proceedings of the IFIP 9.4 1st Virtual Conference on Implications of Information and Digital Technologies for Development*.
- Hellmann, D., Maitland, C., & Tapia, A. (2016). Collaborative analytics and brokering in digital humanitarian response. *Proceedings of the ACM Conference on Computer Supported Cooperative Work*.
- Hussain, B. (2019). Disciplinary technologies of microfinance: fictitious proximity, visibility and surveillance in rural microfinance in Bangladesh. *Sociologus*, 69(2), 147-166.
- Knewton, H. S., & Rosenbaum, Z. A. (2020). Toward understanding Fintech and its industry. *Managerial Finance*, 46(8), 1043-1060.
- Krishna, S. (2021). Digital identity, datafication and social justice: understanding Aadhaar use among informal workers in south India. *Information Technology for Development*, 27(1), 67-90.
- Lagna, A., & Ravishankar, M. N. (2021). Making the world a better place with fintech research. *Information Systems Journal*. 32(1), 61-102.
- Langley, P., & Leyshon, A. (2021). The platform political economy of fintech: Reintermediation, consolidation and capitalisation. *New Political Economy*, 26(3), 376-388.
- Langley, P., & Leyshon, A. (2017). Platform capitalism: the intermediation and capitalisation of digital economic circulation. *Finance and Society*, 3(1), 11-31.
- Lavinas, L. (2018). The collateralization of social policy under financialized capitalism. *Development and Change*, 49(2), 502-517.
- Lejano, R., & Leong, C. (2012). A hermeneutic approach to explaining and understanding public controversies. *Journal of Public Administration Research and Theory*, 22(4), 793-814.
- Lyon, D. (2001) *Surveillance society*. McGraw-Hill.
- Mader, P. (2015). The financialization of poverty. In P. Mader (Ed.), *The political economy of microfinance* (pp. 78-120). Palgrave Macmillan.
- Manley, A., Palmer, C., & Roderick, M. (2012). Disciplinary power, the oligopticon and rhizomatic surveillance in elite sports academies. *Surveillance & Society*, 10(3-4), 303-319.
- Mazzucato, M., Entsminger, J., & Kattel, R. (2021). Reshaping platform-driven digital markets. In M. Moore & D. Tambini (Eds.), *Regulating big tech: Policy responses to digital dominance*. Oxford University Press. <https://doi.org/10.1093/oso/9780197616093.003.0002>.
- Morozov, E. (2018). *Big tech*. Ubu Editora.
- Myers, M. D. (1995). Dialectical hermeneutics: A theoretical framework for the implementation of information systems. *Information Systems Journal*, 5(1), 51-70.
- Myers, M. D. (2004). Hermeneutics in Information Systems Research. In J. Mingers & L. Willcocks (Eds.), *Social theory and philosophy for information systems* (pp. 103-128). Wiley.
- Myers, M. D., & Young, L. W. (1997). Hidden agendas, power and managerial assumptions in information systems development: An ethnographic study. *Information Technology & People*, 10(3), 224-240.
- Newlands, G. (2020). Algorithmic surveillance in the GIG economy: The organization of work through Lefebvrian conceived space. *Organization Studies*, 42(5), 719-737
- Ngwenyama, O. K., & Lee, A. S. (1997). Communication richness in electronic mail: Critical social theory and the contextuality of meaning. *MIS Quarterly*, 21(2), 145-166.
- Nicoletti, B. (2017). *Future of fintech*. Palgrave Macmillan.
- Ondrus, J., Gannamaneni, A., & Lyytinen, K. (2015). The impact of openness on the market potential of multi-sided platforms: A case study of mobile payment platforms. *Journal of Information Technology*. 30(3), 260-275.
- Pozzebon, M. (2018). From aseptic distance to passionate engagement: reflections about the place and value of participatory inquiry. *RAUSP Management Journal*, 53(2), 280-284.

- Pytkowska, J., & Korynski, P. (2017). *Digitalizing Microfinance in Europe*. Microfinance Centre. <https://www.european-microfinance.org/sites/default/files/document/file/Digitalization-research-paper.pdf>
- Reuver, M., Sørensen, C., & Basole, R. C. (2018). The digital platform: A research agenda. *Journal of Information Technology*, 33(2), 124-135.
- Ringrose, K., & Ramjee, D. (2020). Watch where you walk: law enforcement surveillance and protester privacy. *California Law Review Online*, 11, 349-366
- Rodgers, G. (1995). What is special about a “social exclusion” approach? In G. Rodgers, C. Gore & J. B. Figueiredo (Eds.), *Social exclusion: Rhetoric, reality, responses* (pp. 43-56). International Institute for Labour Studies
- Sahay, S., Sein, M. K., & Urquhart, C. (2017). Flipping the context: ICT4D, the next grand challenge for IS research and practice. *Journal of the Association for Information Systems*, 18(12), 837-847.
- Senyo, P. K., Gozman, D., Karanasios, S., Dacre, N., & Baba, M. (2022). Moving away from trading on the margins: Economic empowerment of informal businesses through fintech. *Information Systems Journal*, 33(1), 154-184.
- Sistema B. (2021). *What are B Corps?* <https://www.sistemab.org/en/welcome/>
- Soederberg, S. (2014). *Debtfare states and the poverty industry: Money, discipline and the surplus population*. Routledge.
- Srnicek, N. (2016). *Platform capitalism*. Polity.
- Stahl, B. C. (2008). The ethical nature of critical research in information systems. *Information Systems Journal*, 18(2), 137-163.
- Stake, R. E. (2005). Case studies. In N. K. Denz & Y. Lincoln (Eds.), *The SAGE handbook of qualitative research* (3rd ed., pp. 443-466). SAGE.
- Staykova, K. S., & Damsgaard, J. (2015). A typology of multi-sided platforms: The core and the periphery. *Proceedings of the 23rd European Conference on Information Systems*.
- Steinberg, M. (2021). From automobile capitalism to platform capitalism: Toyotism as a prehistory of digital platforms. *Organization Studies*, 43(7), 1069-1090.
- Thomas, L. D. W., Autio, E., & Gann, D. M. (2014). Architectural leverage: Putting platforms in context. *Academy of Management Perspectives*, 28(2), 198-219.
- Tiwana, A. (2014). *Platform ecosystems: Aligning architecture, governance, and strategy*. Newnes.
- Trauth, E. (2017). A research agenda for social inclusion in information systems. *The Data Base for Advances in Information Systems*, 48(2), 9-20.
- Walsham, G. (2017). ICT4D research: Reflections on history and future agenda. *Information Technology for Development*, 23(1), 18-41.
- Watkins, T. A. (2018). *Introduction to microfinance*. World Scientific.
- West, E. (2019). Amazon: Surveillance as a service. *Surveillance & Society*, 17(1-2), 27-33.
- Young, B. (2010). From microcredit to microfinance to inclusive finance: A response to global financial openness. In G. R. D. Underhill, J. Blom & D. Mügge (Eds.), *Global financial integration thirty years on* (pp. 256-269). Cambridge University Press
- Yunus, M. (2001). *Banker to the poor: The autobiography of Muhammad Yunus, founder of the Grameen Bank*. Oxford University Press.
- Zuboff, S. (2015). Big other: Surveillance capitalism and the prospects of an information civilization. *Journal of Information Technology*, 30(1), 75-89.

## Appendix A: Additional Quotations that Corroborate the Categories Identified Under the Strategies Extended Surveillance, Faustian Pact, and Vicious Circle

Strategy		
Category	Refers to	Illustrations from quotations and field notes
<b>Strategy: Extended surveillance</b>		
<b>Digital</b>	Extraction and combination of data, from multiple sources	<i>[MP] bets on technology. The deal includes a rating system that allows us to see which users are most willing to make a deal, which we consider “hot.” The tool allows us to know who has visited the site more than once and collects information during registration on-site. (Newspaper, 2013—secondary data)</i>
	To abstract the microentrepreneur into data.	<i>If he [the agent] gets it right, when he sends a proposal, the algorithm calibrates it. (CEO speech at a public event, 2017—secondary data)</i>
	Interplay that allows increased agent productivity in terms of the ability to deal with a higher number of microentrepreneurs	<i>MP came in a different model, through technology, from a credit score made for microentrepreneurs, where I can offer credit without bureaucracy and without any collateral ... MP differentiates in the product, the product is very good for the entrepreneur and for the employee [agent] to sell. (Regional coordinator, 2018—interview)</i>
<b>Community</b>	Stronger social ties and community visibility	<i>We have a network of agents who are there, as we say, [in microentrepreneurs views:] with the same burden as mine. (CEO speech at a public event, 2015—secondary data)</i>
	Identification between community agent and microentrepreneur	<i>But as these employees of mine, we hire people from the community itself. There is trust more in the agent than in the institution itself. (Regional coordinator, 2018—interview)</i>
	Trust in the agent	
<b>Personal</b>	Agent’s focus should be on developing personal relationships	<i>Another thing is the score made by the agent, who is there in front of the client. He gives a score for [Lena]’s personality and her business. (CEO speech at a public event, 2017—secondary data)</i>
	Personal relationships are the “humanization” of financial service	<i>Thus, we combine an algorithm developed by our in-house team with the human service of our agent. (CEO in a newspaper interview, 2015—secondary data)</i>
	Personal visits at the microentrepreneur’s home: “humanized” collection	<i>The relationship between the company [via the agent] and the customer should be close and personal, establishing a partnership, trust, and loyalty. (Case study, 2015, secondary data)</i>
<b>Strategy: Faustian pact</b>		
<b>Personalization</b>	Personal stories	<i>There is an area in MP in which the broker calculates the customer’s risk, the product’s risk ... For example, 1.2 is for me to anticipate his receivable. 5.3 is a guy I know a little, who is a high risk and may be a debtor. (CEO, 2018—interview)</i>
	Personalized rate	
	Suitable product	<i>The product recommendation is made by the algorithm that, after obtaining answers to a series of questions about the profile and history of the interested party, indicates the most appropriate solution (Newspaper, 2015—secondary data)</i>
<b>Opportunity</b>	Microcredit as Leap of faith	<i>If you go out into the field, and I do it a lot, I live one week a year at a client’s house and one week a year at an agent’s house, every time I go to the field, you basically cry in the morning and in the afternoon. Because you see a guy who just wants a leap of faith, and his mission is to raise a family. (CEO speech at an event, 2017—secondary data)</i>
	Microcredit as an opportunity to be treated with respect and attention	<i>Our client is not worried about paying interest rates, he wants to have an opportunity and a quality service. (Coordinator personal interview, 2018).</i>
<b>Empowerment</b>	Empowerment through microcredit	<i>We have built a microentrepreneur one-stop shop, providing superpowers to the real Brazilian superheroes. (Institutional presentation, 2018—secondary data)</i>

	Microcredit as a Superpower	<p><i>At the time [MP] promotes entrepreneurship, it gives this guy the right weapon to win this battle that is entrepreneurship, at the end of the day I'm allowing this guy to provide a better education to his son. (CEO, 201—interview)</i></p> <p><i>Entrepreneurship is a war. And to go to war you need a weapon. So, we are a company focused on a warrior. (CEO speech at a public event, 2017—secondary data)</i></p>
<b>Strategy: Vicious circle</b>		
<b>Pressure to renew</b>	<p>Pressure due to the microcredit business model</p> <p>Pressure due to the microcredit characteristics</p> <p>Pressure by offering automatic renew</p>	<p><i>We approve 67% of proposals, 80% of our clients renew and we have an average default rate of 7%. (CEO Speech, event in 2017—secondary data)</i></p> <p><i>The cool thing is to borrow in the short term because you can also follow [the client] for longer periods, you can invest [in the client]. And the difference is that the long term is not even worth it for the customer, because he pays more interest and also cannot renew it so easily, [since] lots of things can happen in that period. (Regional coordinator, 2018—interview)</i></p> <p><i>The app makes it a lot easier. ... With the app, the guy [the microentrepreneur] can request and renew the microcredit. (CEO Speech, event in 2017—secondary data)</i></p>
<b>Lock-in</b>	<p>Loyalty</p> <p>Platform with Multiple solutions (one-stop shop)</p>	<p><i>In this sense, the main [MP] external indicators were the rate of referral of new customers by the old ones. (Case study, 2015, secondary data)</i></p> <p><i>The fact that we go to the customer, who usually received refusals, results in a closer and reciprocal relationship of trust, a loyalty that is very important for the business. (CEO in a newspaper interview, 2015)</i></p> <p><i>Multi-solution leads to more client loyalty, more agent efficiency, less risk, resulting in lower CAC and higher LTV. (Institutional presentation, 2018—secondary data)</i></p>

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