Introduction

The continuous concentration process that characterizes the traditional financial system represents an obstacle to include the poor. In Brazil for example, four banks account for 72.7% of total assets of the country's commercial financial institutions. Linked to that, consumer loans are characterized by high interest rates (Furche, Madeira, Marcel & Medel, 2017). At the same time, traditional financial products usually do not meet the needs of the poor (Gonzalez, Diniz & Pozzebon, 2015).

To overcome this situation, different types of social organizations struggle to create solidarity-based institutions and arrangements, seeking sustainable models that face poverty through promoting access to financial services that in turn foster local development and community empowerment (Freire, 2013). Among these organizations, NGOs (non-governmental organizations), government-sponsored, donor driven and for-profit initiatives have emerged along the last 20 years to overcome the traditional financial system inability to serve almost 40% of the adult population of the world (Demirgüç-Kunt & Singer, 2017).

Nevertheless, microfinance institutions also did not provide a full response to the needs for financial inclusion. Besides criticism on the possible neoliberal characteristics of microfinance, what would avoid it to be an effective instrument to promote development (Bateman, 2010), another obstacle is the inability of microfinance institutions to scale up. While some claim a more relevant participation from the mainstream financial sector to overcome the scale challenge (Littlefield et al., 2006; Young, 2009), others point out the risk of mission drift when mainstreaming microfinance (Copestake, 2007; Mersland and Strom, 2011). The cases of Compartamos in Mexico and some of India’s biggest microfinance institutions in the southern state of Andhra Pradesh (Gonzalez, Diniz &
Pozzebon, 2015), call the attention for the constant tension between scale and social goals faced by organizations in the social finance universe.

Theoretical lenses linked to hybrid organizations have been usual to investigate the conflicting aspects of microfinance institutions. For example, Marconatto, Cruz & Pedrozo (2016) present two logics of MFIs: “Social” and “financial” to explore the microcredit model of a community bank and a commercial institution.

In parallel to the efforts of microfinance institutions, technological advances have greatly contributed to the emergence of more agile and efficient alternatives to the conventional financial system, well-known for its rigidity and resistance to change. (Vasiljeva & Lukanova, 2016; Mead, 2016; Riato, 2016). Some of those technological advances have generated new business models largely known as Fintech, an acronym for "Financial Technology". Fintech comprises a universe of financial startups operating on digital platforms (Siqueira & Diniz, 2017) and include some organizations that may be oriented to the underserved, a market segment traditionally served by microfinance institutions.

Considering that some Fintech are new entrants into the field of microfinance, we propose a definition of Social Fintech, or Socialtech, as a financial startup operating on digital platforms, with a clear social mission and operating in the microfinance field. Socialtech, like other MFI, is a hybrid organization that aims to reconcile financial and social objectives, but differently of traditional MFI, Socialtech add the startup logic to its financial and social goals. In this sense, there is a potential overlapping of different types of organizations acting in the same field, with similar objectives, but coming from a quite different background.

This paper proposes to investigate the hybridism in emergent organizations based on technological platforms of social financial organizations by researching three different cases of organizations that can be classified as “socialtech”. In this sense, we propose a discussion to frame the potential reach and limits of such organizations. Besides their different origins, purposes and organizational structures, the three Brazilian cases investigated in this study – Avante, IOUU and Palmas - have in common the clear social mission, the focus on financial services and the digital platform as basis for their operations.

**Research Objective**
With the emergence of Fintech, new forms of organization are offering credit and microcredit to microentrepreneurs and to micro and small enterprises, with differentiated models of fundraising for both business sustainability and credit line financing. We are naming some Fintech that have a clearly defined social mission, as Social Fintech, or SocialTech. Thus, the objective of this article is to present a definition of SocialTech, using concepts from hybrid organizations and MFI, as well to discuss the different logics and its implications of such particular organizations. The investigation of three socialtech cases in Brazil provides the empiric evidence for the study of the hybridism in these emergent social financial organizations operating on technological platforms.

**Hybrid Organizations from the point of view of Institutional Logics**

The studies of hybrid organizations may be focused on understanding the multiple identities, multiple forms or multiple logics. The approach of this study is hybrid organizations from the point of view of institutional logics. Institutional logics are related to cultural and politics patterns, values and beliefs. Institutional logics are an interpretative approach, by its nature. (Battilana, Besharov & Mitzinneck, 2017, p.136). Logics can be defined as: "The activities, structures, processes and meanings by which organizations make sense of and combine aspects of multiple organizational forms" (Battilana & Lee, 2014, p.388).

Hybrid organizations are on the frontier between economic performance and social impact (Ebrahim, Battilana & Mair, 2014). Some studies have focused on the conflicts and challenges of integrating conflicting logics on hybrid organization (Pache & Santos, 2012; Battilana & Dourado, 2010), others have focused on beneficial coexistence of multiple logics (Binder, 2007; Mars & Lounsbury, 2009). While on the one hand hybrid organizations can have access to a new combination of resources as well as can expand the repertoire with which they respond to complex and dynamic environments (Jay, 2013), on the other, they live the challenge of conforming two (or more) conflicting logics, as in pursuing social objectives that may lead to actions incompatible with the maximization profit logic of, and vice versa. Battilana and Lee (2014) explore the tensions that can arise from conflicting logics, these tensions are internal and external. Internal tension is the difficulty in creating a common sense among employees. External tension is related to acquiring legitimacy and acquiring resources. These stresses, according to
the authors, lead hybrid organizations to experience a trade-off between creating value and capture value.

The approach of microfinance institutions as hybrid organizations has been prevalent in the literature. For example, Battilana and Dourado (2010) present the case of social microcredit organizations in Bolivia, which spinoff, giving rise to commercial organizations. The authors identified that the new organizations operated under the logic of "Development" and "Banking". Marconatto et al. (2016) present two logics of MFIs: "Social" and "financial" to explore the microcredit model of a community bank (Banco Palmas) and a commercial institution (Banco Itau).

Considering some Fintech as new entrants into the field of microfinance, we propose a definition of Socialtech, as a financial startup with a clear social mission that operates on digital platforms. Socialtech, like other MFIs, are hybrid organizations and operate under social, financial and, we add, startup logic.

**The "Social" Logic**
Marconatto et al. (2016) identified characteristics of the social orientation of MFIs related to the priority service of their target public, consisting of poor families. MFI seek to meet the target public wellbeing and their immediate financial demands. An MFI that has a more social orientation values in-depth service rather than scale. They may, at the same time, develop action in related objectives as education, health, empowerment, development of social capital. The developmental logic described by Battilana and Dourado (2010) is similar. It refers to the mission of offering financial services to those without access in the conventional sector. Other studies related to social logic tend to focus microfinance through other social perspectives: solidarity Economy (Silva Jr, & Rigo Step 2015), Botton of Pyramid (BoP) (Casselman, Sama & Stefanidis, 2015), Social Business (Mahmud , 2017) and Conscious Capitalism (Kharbanda, 2016).

**The "Financial" Logic**
For Marconatto et al. (2016), financial orientation refers to seeking a scale in service, maximizing efficiency, effectiveness and performance. An MFI with more financial guidance, according to the authors, naturally seeks the sustainability of the organization and tend to have better economic performance vis-à-vis the MFIs that do not have this orientation. There is less dependency on subsidies since funding providers are mainstream actors, such as equity investors and debtholders.
The "Banking" logic described in Battilana and Dourado (2010) refers to the need to fulfill the fiduciary obligations of commercial financial institutions is related to financial logic.

**The “Startup” Logic**

The very rapid growth (considered a success factor) of startups, especially new technology-based firms such as Fintech. Their success is linked, among other factors (such as market, geographic divide, etc.), to the entrepreneur's human capital and the forms of business financing. (Davila, Foster & Gupta, 2003; Colombo & Grilli, 2010).

They can be financed via government agencies, crowdfunding (Equity, Loan, Reward) or via corporate and venture capitalists (CVC and VC). Each financing model imposes different gains and restrictions on the business. VC generally contributes to business management (Siqueira and Diniz, 2017b) and assist and pressure for generation of patents and innovation (Pahnke, Katila & Eisenhardt, 2015). Although funding via crowdfunding may be a viable option for earlier stages, shareholders in this model rarely contribute to business management (Siqueira and Diniz, 2017b). CVC helps with significant organization resources but “put less attention to issues that lead to high-performing commercial innovation” (Pahnke et al, 2015). The rapid growth is also linked to its objective of meeting a society's demand, for this, the startup uses shorter test and learning cycle, launching minimum viable product and testing acceptance and growth hypothesis. In this sense, experimentation is a characteristic of startups. (Moogk, 2012)

On table 1 we can find a brief resume of the three logics presented here, that influences Socialtechs:

<table>
<thead>
<tr>
<th>Main Objectives</th>
<th>Social Objectives related to Regional or Community needs</th>
<th>Fulfill the fiduciary obligations</th>
<th>Fast growth, innovation, patents, Minimum Viable Product, Experimentation and error</th>
</tr>
</thead>
<tbody>
<tr>
<td>How</td>
<td>Meeting demands in depth</td>
<td>Efficiency, Effectiveness and performance</td>
<td>High human capital market experience, ability to attract experienced and high skilled collaborators to business, ability to attract funds to capitalize on the business</td>
</tr>
<tr>
<td>Capital</td>
<td>More dependent upon subsidies</td>
<td>Less dependency on subsidies</td>
<td>Scalability with use of technology and the founders' human capital represent better investment options in terms of return for investors</td>
</tr>
</tbody>
</table>

Table 1 – Summary of Logics

**Framework for studying Hybrid Organizations**

Besharov & Smith (2014) proposed a framework to study the implications that the coexistence of multiple logics can impose on hybrid organizations. For these authors, the
degree of hybridization can vary in two dimensions: incompatibility and centrality. Both can be evaluated at the field, organization and individual level.

Incompatibility dimension is related to the consistency in the actions in relation to hybrid organizations main goals. The compatibility between the logics is smaller when there is inconsistency of the actions with the values and objectives of the organization. The incompatibility is also related to the hiring process and socialization since hiring socialized employees in a specific logic can lead to incompatibility between the logics. At the individual level, incompatibility increases when the inside agents has strong ties to external agents of the field, imposing an external logic, or even when an inside agent has weak ties or little interdependence with the other internal members of the organization, reducing the ability to cooperate or to work under different logics. (Besharov & Smith, 2014).

The dimension of centrality is related to the relevance of the logics. If the logics are equally relevant, then the centrality is high, however, if one logic prevails over the other, then there is a lower degree of centrality. Fragmentation in the field, with the existence of a clusters of actors can impose pressure on the prevalence of one logic, decreasing the centrality. Changes in the mission and new participants also affect the centrality by imposing adherence to a specific logic. Also, resource dependency can increase centrality if the organization is dependent on actor resources or a group of actors who can impose their logic. At the individual level, the unequal distribution of power among representatives of different logics can also increase centrality. (Besharov & Smith, 2014).

Variation on degree of Incompatibility and Centrality originate 4 different hybrid organizations, under multiple logics approach: Contested, Estranged, Dominant and Aligned, as figure 1 demonstrate.
Figure 1 – Hybrid Organizations.
Source: Besharov & Smith (2014)

Framework for Identification of MFIs

Marconatto et al. (2016) reviewed and identified a number of definitions for microfinance institutions. These definitions can shape the potential for legitimacy, access to financial support, etc. The authors proposed to study the MFI from 7 constituent elements that shape the hybridization of MFI: orientation (social or financial), source of capital, legal format (NGO, OSCIP, etc.), methods, target audience, Level of Poverty and scope. The framework is demonstrate in figure 2. We can observe that there is a continuous between both logics: social and financial, avoiding treat MFI only as a social or financial.
Research Model: Using both frameworks

Through the framework of Besharov & Smith (2014) it is possible to analyze the implications of logic multiplicity for hybrid organizations. With the help of the framework proposed by Marconatto et al. (2016) it is possible to identify MFIs according to their constitutive attributes. The current research will use both frameworks in an attempt to how ICTs change the field of MFIs.

In the framework of Besharov & Smith (2014) the organization main objectives are more important than the means by which the objective is reached. In the framework of Marconatto et al. (2016) it is equal import to understands the methods (means) and orientation as a constitutive attribute of a MFI. On the other hand, the framework of Marconatto et al. (2016) does not explore attributes at the field and individual level.

From the integration of the two frameworks it is possible to think questions that will guide the analysis of case studies, according Table 2.
Methodological Aspects

In order to discuss different Social Fintech models and their multiplicity logics, three cases will be explored: Banco Palmas, IOUU and Avante.

Composes the data source: semi-structured interviews with founders and employees, publications on the public web pages of the institutions, as well presentations at lectures and events in which these organizations participated. The interviews were transcribed and the whole set of texts were analyzed seeking to answer the issues proposed in the research model. Table 3 contains the data sources used for this analysis.

Case Analysis

In this section the cases are analyzed according to the two models presented in order to highlight the role of ICT
Case 1: Avante
Avante is a company created in 2012 with the objective of offering microcredit to microentrepreneurs, having served until today more than 24,000 people. It received several awards for its social impact and received funds from social impact fund (Artemisia). The organization began in 2012 in the model of traditional microfinance institution, with an agency in the outskirts of São Paulo (Parasopolis). Since then the company has been working so that the technology would reduce the cost of the operation, since the traditional model proved to be very expensive and inefficient. The company closed the agency in São Paulo, equipped the agents with tablets and transferred the base of customer acquisition to the Northeast of Brazil, especially to the states of Ceará, Maranhão and Pernambuco. In addition to the investment of the social impact fund (Artemisia, Vox Capital, Kviva) Avante established a partnership with the same company (Gentera) responsible for investments in Compartamos (largest microcredit organization in Mexico) with Omni Bank. All these investments enabled the development of its own technology to transform the smartphone into a POS machine, as well as the expansion of credit operations.

Case 2: IOUU
IOUU is a company that was created in 2016, with a focus on loans to micro and small businesses, offering to them the opportunity to access the financial system. IOUU works a digital platform that connects investors and entrepreneurs, intermediating P2P loans. The company first went through two acceleration processes, one from a university and another from the city hall of São Paulo. Having been subsequently selected for acceleration by an organization dedicated to fostering Impact business. The founders' experience in the financial market had shown that traditional banks did not know how to prioritize nano, micro and small businesses, due to bureaucracies and form of credit analysis. The first fundraising was done by the organization using a Crowdfunding Equity platform. During 2016 and 2017, the founders developed and tested a model of score credit algorithm that considers multiple sources (social networks, psychometric test scores, e-mail, credit bureau). The operation is completed automated, from the receipt of the request for loan, through the analysis, availability in the platform to attract investment, to the sending of the transaction to financial partners, which are responsible for legalizing the transaction using appropriate financial instruments that backs the loan in the
investments. The team is basically composed for developers and the goal is to have a credit assessment engine and P2P transaction operationalization that can be used by other organizations.

Case 3: Banco Palmas

Banco Palmas is an NGO that integrates the national productive microcredit program. Banco Palmas collaborated and participated in the creation of more than 100 community banks in Brazil. It is undoubtedly the most important community bank, given its performance and history. Microcredit, one of the bank’s main activities, was restructured in order to guarantee its continuity and reduce of the default. The social currency Palmas, which emerged as an instrument for local transactions, acted in this process as a way to materialize this pride into action and contribute for the transformation of the neighbourhood by the hands of the community. The bank also offers courses and workshops, many of which also offer participants a scholarship. The bank also promotes meetings for the residents of the neighbourhood to discuss local issues, such as land regulations, elections, cleaning, etc.

However, it has been modernizing to guarantee both its sustainability and to explore new ways of financing its credit line. One of the modernizations was the development of a digital payment platform (e-Dinheiro) that allows to operate digital payment accounts as well as offer various services through the platform such as cellular credit, microinsurance, bill payments, transfers (P2P) and payments (B2C). The possibility of reducing costs with the issuance and control of the paper form of the Palmas currency, as well as the possibility of connecting several community banks in the same platform, were of great interest to Banco Palmas. e-Dinheiro relies on local development, since purchases are restricted to the neighbourhood’s shops, and offers an opportunity for extra income to its representatives. Finally, a per-transaction fee model can generate revenues that help the bank’s sustainability.

Using Basharov & Smith (2014) model to evaluate Logics

The purpose of using the Basharov & Smith (2014) model is to show that ICT, as used by Socialtech in order to generate social impact, changes the current scenario of conflict between social and financial logic, which is common in microfinance institutions. It is verified that ICT imposes its own logic, which is that of startup, as can be seen in table 4.
According to the interviews, it is possible to verify that the startup logic ends up guiding many of the actions, from the hiring to the way to generate impact. As the Besharov & Smith (2014) model aims to analyze incompatibility and centrality, based on consistency in the actions and relevance of the logics, we sought to verify both dimensions for the three cases, according to table 5.

Table 4 – Logics of Socialtech

<table>
<thead>
<tr>
<th>SocialTech</th>
<th>Source of funds for credit</th>
<th>Business Sustainability</th>
<th>Social</th>
<th>Financial</th>
<th>Startup</th>
</tr>
</thead>
<tbody>
<tr>
<td>Palmas</td>
<td>Public microcredit program</td>
<td>Donations, national and international development programs, revenues from transactions on the digital platform</td>
<td>Social Business, Solidarity Economy</td>
<td>Sustainability</td>
<td>Interpersonal Relationship, Digital platform</td>
</tr>
<tr>
<td>ROU</td>
<td>P2P model, Investors lend directly to MFIs</td>
<td>Rate per transaction, Equity Crowdfunding</td>
<td>Financial Inclusion, Micro and Small Business</td>
<td>Profit, Shareholders, Investors</td>
<td>Digital Relationship, Digital Platform, Big Data, Algorithm</td>
</tr>
<tr>
<td>Asante</td>
<td>Funding in the financial market (investors and funds)</td>
<td>Base of the Pyramid: microentrepreneur of the favela</td>
<td>Base of the Pyramid: microentrepreneur of the favela</td>
<td>Profit, Shareholders, Investors</td>
<td>Interpersonal Relationship, Digital Platform, Big Data, Algorithm</td>
</tr>
</tbody>
</table>

Table 5 – Using Besharov & Smith (2014) model
Using Marconatto et al. (2016) to evaluate attributes

By means of the model of Marconato et al. (2016) it is possible to analyze 7 constituent elements that shape the hybridization of SocialTech. We added an eighth element to the original model, named “ICT”, in order to highlight the ICT role in hybridization, according to table 6

<table>
<thead>
<tr>
<th>Attributes (Marconatto, et al., 2016)</th>
<th>AVANTE</th>
<th>IOUU</th>
<th>PALMAS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Orientation</td>
<td>conscious Capitalism, Performance, Customer Care</td>
<td>Lowest interest rates, Tech-oriented</td>
<td>Solidarity Economy, Social transformation</td>
</tr>
<tr>
<td>Source of capital</td>
<td>Corporate Venture Capital and Venture Capital</td>
<td>Equity Crowdfunding and P2P Lending</td>
<td>Donations, national and international development programs, revenues from transactions on the platform</td>
</tr>
<tr>
<td>Legal Format</td>
<td>S/A and acts as correspondent Banking</td>
<td>P2P and acts as correspondent Banking</td>
<td>PALMAS Community Development Bank and acts as correspondent bank</td>
</tr>
<tr>
<td>Methods</td>
<td>Individual Microcredit without collateral, account and means of payment</td>
<td>Individual Microcredit without collateral, account and means of payment</td>
<td>Microcredit (in group and with guarantor), Social Currency and means of payment</td>
</tr>
<tr>
<td>Target Public</td>
<td>Microentrepreneurs</td>
<td>Micro and small companies</td>
<td>Microentrepreneurs and the community in general</td>
</tr>
<tr>
<td>Level of Poverty</td>
<td>More poor (including subsistence)</td>
<td>Less poor</td>
<td>More poor</td>
</tr>
<tr>
<td>Scope</td>
<td>Microcredit for micro-entrepreneurs and other financial services</td>
<td>Different credit ranges and different forms of score evaluation and credit for consumption</td>
<td>Financial and non-financial services (training, education, assistance, organization, workshops)</td>
</tr>
<tr>
<td>ICT</td>
<td>Tablet for agents, smartphone application for microentrepreneurs with POS functionality. With technology, an agent for 800 microentrepreneurs is used</td>
<td>Company located in Israel</td>
<td>Platform to operate payment account, government benefits account and other financial services such as payment of bills, credit cell, transfers and micro insurance</td>
</tr>
</tbody>
</table>

Discussion

Both the Avante and the IOUU CEOs were very experienced in the financial market and, by starting the organization, brought experience and contacts, which facilitated fundraising and operationalization of the idea.

The high cost and inefficiency of the traditional sector to feed the audience of nano, small and micro enterprises was seen as an opportunity. Technology is seen as the means by which costs are reduced while scaling up, breaking the dilemma of traditional microfinance institutions that, while scaling for operations, suffered from mission drift.

On the other hand, the case of Banco Palmas is different, since it was born as an NGO and only later, it adhered to the startup model, buying and putting into operation in the community banks the e-Dinheiro platform, permitting to extend the scope of experience, and guarantee resources for self-sustaining operations while maintaining a focus on social
mission. The interviews also showed that the process of acceleration and fundraising was fundamental for Avante and IOUU, while the launch of an MVP was strategy for all three cases. It was not possible to observe conflict between the social and financial logics, a phenomenon that we here attribute to the logic of startup that allows to scale without losing the logic of social mission. Staturtp's logic guides actions, including hiring people and how the social impact will be generated.

In these three cases of SocialTech, when the logics can be considered equally important for the operation, the organization presents a high degree of centrality. When logic provides comparable actions for action, then there is a degree of compatibility, according to the model of Besharov & Smith (2014)

**Conclusion**

We proposed in this article the concept of Socialtech as a kind of fintech that operates in the field of microfinance institutions.

MFIs have traditionally been studied as hybrid organizations facing the well-known conflict between social and financial logics. When scaling for operation, MFIs run the risk of mission drift.

In this paper, on the other hand, we discuss that SocialTech, as new entrants in the field of MFI, act primarily under the logic of Startup. This logic puts pressure on organizations for constant innovation and results, but on the other hand, it attracts a broader range of investments, as well as allowing for scale without necessarily increasing costs, since it is possible to automate all or almost all operation using advanced technologies. This logic is also strongly customer centric, so it is equally important to meet social demands, which are a source of opportunity for the business, as far as providing financial returns to investors. In this way, both social and financial logic are equally important in Socialtech guided by the logic of startup.

Using Marconotto's model we tried to show the difference between three SocialTech models as well as the role of ICT in these organizations. Using the Besharov’s model, we try to show how the logic of Startup reduces the conflict between the logics because they are highly centralized (when the multiple logics are equally important) and and provides a guide to non-conflict actions for employees.
**Contributions**

There are two main contributions from this paper. One is the use of two distinct frameworks to investigate an emergent phenomenon, hybrid by nature, seeking to build a new definition for a new type of social organization: SocialTech. Second, is an expected practical contribution by the identification of practical implications of different logics imbricated in such type of organization, what can help practitioners in the field and also policy makers to better understand the potential and limits of socialtech organizations.

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