Unlocking the Potential of Fintechs for Financial Inclusion: A Delphi-Based Approach

Luiz Antonio Joia 1,* and Joaquim Pedro Vasconcelos Cordeiro 2

Abstract: The financial sector is experiencing an accelerated process of transformation shaped by fintechs, which opens an important window of opportunity to increase financial inclusion in emerging markets, such as Brazil, with high financial exclusion. Thus, this article investigates, through a Delphi approach involving fintech professionals, the potential of fintechs to enable financial inclusion in emerging markets, using Brazil as a proxy. The analysis carried out identified three domains related to fintechs that have the potential to impact financial inclusion: (i) fintechs can serve niches of people without a bank account in the traditional financial market, (ii) fintechs can reduce costs for clients through increased competition, and (iii) fintechs can offer financial services in remote locations, far from traditional financial institutions. Thus, with the objective of developing a public agenda of financial inclusion through fintechs, the article proposes four lines of public policies: (i) expansion and modernization of mobile and internet infrastructure, (ii) improvement of the population’s financial and digital education, (iii) implementation of a trustworthy environment for the fintech clients, and (iv) development and enforcement of an effective legal and regulatory framework for fintechs. These policies, if implemented, can benefit people excluded from the financial system around the world.

Keywords: fintechs; financial inclusion; financial sector; Delphi method

1. Introduction

Information and Communication Technology (ICT) has impacted several business industries and created new ones, transforming old paradigms of competition, work, and employment. Thus, in an accelerated way, technological innovations have changed traditional sectors of the economy and the society in general [1–3].

In the financial sector, it is no different. According to CGAP (Consultative Group to Assist the Poor), innovative services are being made possible by ICT in an increasingly accelerated way, a process that started with mobile network operators together with a large number of agents offering services related to mobile money (m-money) [4], and which culminated in the appearance of fintechs—financial organizations that use ICT to offer financial products and services [5].

Innovations brought about by fintechs have the potential to rethink the way companies in the financial market create and deliver their products and services [6], offering opportunities for entrepreneurs to promote inclusive growth [7,8]. Chatain et al. [9] argue that by fully utilizing the potential of mobile phone services, nearly 1 billion unbanked people could have access to formal financial services (numbers of 2009). Likewise, ICT may have a significant impact on the financial inclusion of people and companies that have little or no access to the traditional banking sector [10]. In fact, the Inter-American Development Bank, in a survey conducted for Latin America and the Caribbean, found that 46% of fintechs in this region are focused on this type of client [11].
Interestingly, in many developing countries, although financial exclusion is still high by the standards of developed countries, the number of fintechs operating in the financial market has grown steadily, such as in Brazil [12]. Brazil is an emerging market with a large economy, being a member of the G20. The country encompasses a large area with great distances to be covered, being partly occupied by the Amazon Forest and presenting great socioeconomic disparities—issues that have prevented part of its population from being financially included [13]. In fact, bringing the discussion to the Brazilian context, the vigorous growth of fintechs in a country where 45 million people over the age of 16 are unbanked suggests an opportunity for the country. In line with this, USD 500 million was invested in fintechs in 2018 in Brazil, with the number of these companies reaching 423 in December of that year, an increase of 36% compared to 2017 [14]. Based on this, Brazil can be considered a proxy for emerging markets where financial exclusion is still high, despite the large, and rising, number of fintechs operating in the country.

That being said, this article investigates how fintechs can impact financial inclusion in Brazil from the perspective of fintechs themselves. In particular, the article seeks to identify, quantify, and classify the main factors that can induce this impact. To this end, industry experts (top executives, directors, and CEOs of Brazilian fintechs) were consulted via the Delphi method.

Understanding how fintechs see themselves in relation to their potential for enabling financial inclusion can help realize the disruptive potential of ICT, allowing the development and deployment of a public agenda focused on increasing financial inclusion in Brazil and other similar emerging markets. Indeed, two billion adults globally do not have access to formal financial services and are excluded from opportunities to improve their lives [15]. Moreover, digital technologies offer affordable ways for the financially excluded—the majority of whom are women—to save for school, make a payment, get a small business loan, send a remittance, or buy insurance [15]. However, most research on fintechs overlook their potential to promote the financial inclusion of unbanked and underbanked people in emerging markets, such as Brazil, this being a research gap to be filled [16]. Thus, the present study seeks to answer the following research question: What is the perception of fintechs professionals about the potential impact of fintechs on financial inclusion in Brazil?

This study is structured as follows. After this introduction, a literature review on the subject under investigation is presented. The following section presents the methodological procedures adopted, i.e., the description of the Delphi method, as well as the sampling and data collection and analysis processes. Then, in the next section, the results obtained are detailed to be discussed in the ensuing section. Finally, in the last section, the conclusions of the research are presented.

2. Literature Review

In order to answer the research question of this article, it is necessary to address some important theoretical issues, namely financial inclusion, fintechs, and the relationship of fintechs with financial inclusion, as presented below.

2.1. Financial Inclusion

The importance of financial inclusion for long-term sustainable economic development and growth is such that institutions, such as the IMF (International Monetary Fund), G20, IFC (World Bank International Finance Corporation), and AFI (Alliance for Financial Inclusion), in addition to central banks in many countries have been developing and implementing local and/or global agendas to promote it [17,18]. Moreover, financial inclusion is considered an enabler of some of the developmental goals in the 2030 United Nations Sustainable Development Goals [19]. Indeed, financial inclusion is featured as a target in eight of the seventeen sustainable development goals (SDG) [20]. These include SDG 1, on eradicating poverty; SDG 2 on ending hunger, achieving food security, and promoting sustainable agriculture; SDG 3 on profiting health and well-being; SDG 5 on
achieving gender equality and economic empowerment of women; SDG 8 on promoting economic growth and jobs; SDG 9 on supporting industry, innovation, and infrastructure; and SDG 10 on reducing inequality. Additionally, in SDG 17, on strengthening the means of implementation, there is an implicit role for greater financial inclusion through greater savings mobilization for investment and consumption that can spur growth. Thus, financial inclusion is perceived as a critical factor for the sustainability of a nation, allowing it to mitigate the socioeconomic exclusion of its poorest population [21]. In fact, indicators and statistics, reveal how big the differences are between developed and developing countries with regard to their financial inclusion [22].

Often, the academic literature sees financial inclusion only as a matter of access to the financial system. Wilson [23], for example, argues that the original definition of financial exclusion is associated with processes that prevent poor people and some social groups from accessing the financial system. Likewise, Carbo et al. [24] associate financial exclusion with social exclusion. Undoubtedly, not having access to the financial system has several negative consequences, such as exposure to risks for carrying physical cash, potentially higher costs associated with check cashing, and difficulty in managing short-term obligations [25]. However, access to financial services does not, by itself, constitute financial inclusion. Siddik and Kabiraj [26], for example, propose a definition of financial inclusion that includes, in addition to mere access, the use of these financial services, with special emphasis on credit.

It is important to highlight that in Brazil, although 70% of the population over 15 years of age has access to the financial system [27], a large portion of this access is through bank correspondents [28], which tend to offer limited services; not providing, for example, savings, credit, or insurance [29].

Moreover, access to and use of financial services alone are still not enough to improve the life of consumers [30]. Indeed, the growth of digital credit in East Africa through credit providers has led to late repayments, over-indebtedness, and default rates, especially among the poor, younger people, and rural population. In line with this, Diniz et al. [31] and the Central Bank of Brazil [32,33] see financial inclusion more broadly than just access and use of financial services. They define it as sustainable access to and use of affordable financial services, adapted to the needs of the population and favoring mainly low-income groups, usually unbanked or underbanked.

2.2. Fintechs

Fintechs are financial organizations that, using new ICTs, have broadened the scope of the financial industry, bringing about revolutionary transformations related to the operation of this sector [34]. However, the fintech concept, despite having gained importance only in recent years, has been discussed by experts for much longer. Arner et al. [35] explain that the term fintech has been used since the mid-1990s, marked by Citigroup’s attempts to use the technology to facilitate its operations (for Arner et al. [35], the term FinTech is the contraction of financial technology). Neenu and Hemalatha [36] agree with the idea, claiming that the concept of fintech started among banks to facilitate their operations with the help of technology. Reed [37] states that the term fintech was originally used to describe the technology that was used by clients in negotiations with financial institutions. Salampasis and Mention [38], however, explain that it was only after the 2008 financial crisis—with the discredit of many people in relation to the traditional financial system—that the term fintech started to become popular, being associated with the offering of the same services provided by traditional financial institutions in a new and simplified way.

For Arner et al. [35], fintechs can be seen as the marriage between financial services and ICT; thus, representing the technological capacity to develop and offer new financial solutions. The authors also argue that fintechs can address the following areas: finance and investments, financial operations and risk management, payments and infrastructure, data security and monetization, and customer interface. From another perspective, Chishti and Barberis [39], Salampasis and Mention [38], and Appiah-Otoo and Song [40] discuss the
impact of fintechs on the financial inclusion of the population. According to them, fintechs are able to reach the bottom of the economic pyramid and can have a strong socioeconomic impact in emerging markets. For the authors, the key point for this is the use of the Internet and other ICTs to educate and raise awareness among the unbanked and underbanked population, since the awareness of the opportunities offered by the financial sector is crucial for them to have more possibilities of social inclusion.

2.3. Fintechs and Financial Inclusion

Since the emergence of fintechs, there have been studies that investigate the relationship of fintechs with financial inclusion. However, there are no studies investigating the relationship of fintechs with financial inclusion from the perspective of fintechs themselves [41]. In the scientific literature, however, it is possible to find characteristics of fintechs that have the potential to impact financial exclusion—eliminating or at least reducing it.

Therefore, in order to address the relationship of fintechs with financial inclusion, a literature review was conducted in this realm. Initially, due to its scientific recognition and easy access by the researchers, the Web of Science database was chosen, comprising the following sub-databases: Science Citation Index Expanded (SCI-EXPANDED): 1945–present; Social Sciences Citation Index (SSCI): 1956–present; Arts and Humanities Citation Index (A&HCI): 1975–present; Conference Proceedings Citation Index-Science (CPCI-S): 1990–present; Conference Proceedings Citation Index-Social Science Humanities (CPCISSH): 1990–present; Book Citation Index-Science (BKCI-S): 2003–present; and Book Citation Index-Social Science Humanities (BKCI-SSH): 2003–present. After this, the search criteria were established, with the expression “fintech” being used in the “topic” field of the query, which encompasses the title, abstract, and keywords of the articles stored.

The search process carried out in March 2020 identified 304 articles on fintechs, of which 35 addressed, to a greater or lesser degree, the relationship of this concept with financial inclusion by means of fintech-induced financial inclusion drivers—hereinafter called Di. These articles were then screened in order to investigate the drivers of financial inclusion tackled by them. Thus, fourteen drivers of fintech-induced financial inclusion were consolidated from the extant academic literature on this subject. Table 1 presents the labels of these drivers (Di, i = 1 to 14), their descriptions, with a focus on their potential to enable financial inclusion, as well as the academic references from where the drivers come from.

3. Methodological Procedures

This article uses the Delphi method; an iterative process to collect and analyze anonymous expert opinions via a series of data collection obtained in successive rounds. The method is quite appropriate to expand knowledge about a problem and/or to create scenarios [42]. Based on that, the aim of this work is to ascertain the potential of fintechs to promote financial inclusion in Brazil and other emerging markets. To achieve this, one applied the Delphi method to collect, analyze, and consolidate the perceptions of fintechs professionals about how fintechs can impact financial inclusion in emerging markets, such as Brazil.

The Delphi method has been used to gather insights and forecasts about specific issues [69]; in this case, the potential impact of fintechs on financial inclusion. Thus, this article does not follow the positivist paradigm, discarding the use of surveys, structural modeling, and hypothesis testing to predict the impacts of fintechs on financial inclusion. In fact, similar to this research, there are several other examples using the Delphi method to forecast the impacts of new technologies [70,71].
Table 1. Fintech’s Potential to Impact Financial Inclusion: drivers, descriptions, and references.

| Drivers of Fintech-Induced Financial Inclusion (Di) | Descriptions                                                                 | References                                      |
|---------------------------------------------------|-------------------------------------------------------------------------------|-------------------------------------------------|
| D1                                                | Fintechs have low operating costs, managing to offer services to clients at lower values than traditional financial institutions. | [22,43,44]                                     |
| D2                                                | Fintechs foster competition in the financial sector, leading to the average cost of services being reduced. | [45–48]                                        |
| D3                                                | Fintechs develop more elaborate analyses of the information available about clients, leading them to better evaluate the risks of an operation. | [17,49–52]                                     |
| D4                                                | Fintechs have algorithms capable of using qualitative information to refine the risk analysis developed and used by traditional financial institutions. | [10,49–51]                                     |
| D5                                                | Fintechs provide products and services designed to guide good financial decisions, stimulate savings and social security planning, and avoid irresponsible debt assumption or the payment of unnecessarily high fees. | [31,53–55]                                     |
| D6                                                | Fintechs can offer products and services designed to assist in the management of formal and informal micro and small businesses, namely tax planning, financial flow management, etc. | [11,31,53–56]                                  |
| D7                                                | Fintechs, via the Internet and cell phone, can provide services independently from physical agencies and service stations; thus, meeting the financial needs of isolated communities. | [22,31,57,58]                                  |
| D8                                                | Fintechs can meet the needs of client niches whose specific characteristics are at odds with the traditional financial sector. | [46,51,59–61]                                  |
| D9                                                | Fintechs have business models based on disintermediation, facilitating access to financial services. | [10,62,63]                                     |
| D10                                               | Fintechs comply with a more flexible regulation, which makes them more agile and less bureaucratic in the provision of financial services, which allows fintechs to work with unattractive clients for traditional banks. | [22,46,58,61,64,65]                            |
| D11                                               | Fintechs may represent an alternative for those who feel intimidated or uncomfortable in banking branches, to the point of feeling unable to access the financial system. | [22,25,31,61]                                  |
| D12                                               | Insurtechs, through ICT, can offer more personalized and flexible insurance, with the potential to attend to an audience previously neglected by the traditional insurance market. | [23,29,66]                                     |
| D13                                               | Fintechs provide tools that might facilitate the negotiation between service providers and borrowers (matching, reverse auction, etc.) | [53,54]                                        |
| D14                                               | Fintechs can carry out more comprehensive and flexible risk assessments by considering more information, and thus, offering credit with less guarantee requirement. | [26,46,48,66–68]                               |

Delphi method can be compared with three alternative group communication techniques, namely conference telephone call, committee meeting, and formal conference [72]. For this research, both the committee meeting and the formal conference would not be possible to apply since they would demand all the participants to meet at the same place at the same time. A conference telephone call would have been possible in the unlikely event that all the participants were available at a determined date, but it presents a strong disadvantage if compared to the Delphi approach—the potentially high psychological effects that are avoided by the anonymity in the Delphi method.

Moreover, there are circumstances that usually support the application of the Delphi approach [72]:
• The experts who will contribute to the research do not have an adequate communication background and, eventually, represent different contexts in terms of experience and expertise.
• More individuals are needed than would be feasible for effective face-to-face interaction.
• Time and cost make frequent group meetings impossible.
• The efficiency of face-to-face meetings can be increased by an additional group communication process.
• Disagreements between individuals are so pronounced or politically unavoidable that the communication process needs mediation and guarantee of anonymity.
• The heterogeneity of the participants needs to be preserved to guarantee the validity of the results. In other words, the dominance of some subgroup of participants must be avoided, either by the quantity or strength of personality.

As all participants in this research are professionals and executives of fintechs who do not even reside in the same state in Brazil and do not necessarily know each other, it can be said that, to a greater or lesser extent, most of the circumstances listed above apply. Thus, the Delphi approach is suitable for conducting the proposed research.

3.1. Sample and Data Collection

The Delphi method is operationalized through questionnaires applied iteratively to a sample of participants and designed with a focus on the problem to be addressed, in this case, the potential impact of fintechs on financial inclusion in Brazil.

According to Kezar and Maxey [73], when the sample of participants is homogeneous, a group between 10 and 15 people is sufficient for the Delphi method. Thus, 110 professionals and executives from fintechs were contacted so that, even with a significant number of dropouts throughout the process, both the sample size and the homogeneity conditions were met. The authors used a report from the Central Bank of Brazil on fintechs operating in Brazil. That document contains, in addition to the list of fintechs, information about their main professionals/executives. Of the names contacted, 110 replied. All of them belonged to a specific fintech, with no fintech being represented by more than one professional.

The participants were initially contacted by phone and email and received detailed explanations about the research and the method to be used. In total, 41 of the 110 people who returned expressed interest in participating. Of these 41 persons, 28 took part in the first round of the survey whereas 17 took part in the second, when, as will be shown below, enough consensus was reached among the participants. All questionnaires were administrated via email.

There was, therefore, dropouts between rounds due to the profile of the interviewees, mostly senior executives and/or founders of fintechs with little free time, and the distance between the researchers and them. However, as it was already mentioned about the Delphi method, for a reasonably homogeneous group, as is the case, a sample of 10 to 15 people would be enough [73]. Thus, the final number of participants was considered adequate.

All participants have higher education, and most of them (71%) have postgraduate, master, or doctoral degrees. Their average time of experience is 12.3 years, and the average age is 38 years, presenting a relatively young profile, compatible with the fintech sector. Regarding gender, three women participated in the survey, showing a clear gap between the number of women and men (82% of the total). Concerning their positions, all participants hold executive positions in Brazilian fintechs, and almost 90% of them (15 respondents in total) are directors or CEOs of fintechs.

Data were collected according to the Delphi method, whose application is characterized by four key factors [42]:

1. Anonymity of the participants, so that they feel encouraged to freely express their opinions.
2. Iteration, so that participants can reconsider, reassess, clarify, or even modify their points of view.
3. Structured feedback between iterations, so that the participants are informed of the variety of different points of view coming from the other participants.
Participants were asked to rate their degree of agreement with the potential of each of the 14 proposed fintech-induced drivers to provide digital inclusion (Table 1). This was done using a five-point Likert scale, namely: 5 = “strongly agree”, 4 = “partially agree”, 3 = “neither agree nor disagree”, 2 = “partially disagree”, and 1 “strongly disagree”. Following this, the averages obtained from the ranking of these drivers were generated.

The questionnaire applied in the first round of the Delphi method was structured to allow participants to freely register their opinions [73]. In addition to being asked to complete the questionnaire, participants were also encouraged to provide comments to justify their decisions. Furthermore, although this did not happen, they were free to suggest new drivers and/or revise the ones presented. They could also group the drivers if they felt it necessary.

Each subsequent questionnaire was developed based on the outcomes of the previous one [42]. The process was interrupted when an adequate level of convergence between respondents (calculated via Kendall’s W statistical test) and consensus between ensuing rounds (calculated via Kendall’s Tau coefficient of correlation (T)) was reached, as presented below.

### 3.2. Data Analysis

Data analysis was performed as suggested by Delobelle and Guillon [42], who highlight the importance of intermediate statistical analysis at the end of each round of the Delphi method. Thus, at the end of the second round, Kendall’s W statistical test was carried out, through which it is possible to calculate within a Delphi round the degree of convergence between the rankings proposed by each specialist. The use of W allows realistic measurements of the level of consensus among participants when compared with the values in Table 2 [74].

#### Table 2. Interpretation of Kendall’s W for assessing the level of convergence between respondents in a Delphi method round.

| W   | Interpretation of the Consensus Level |
|-----|--------------------------------------|
| 0.1 | Very weak                            |
| 0.3 | Weak                                 |
| 0.5 | Moderate                              |
| 0.7 | Strong                                |
| 0.9 | Very strong                           |

Even with an adequate degree of consensus within the respective iteration, the consensus level between the rounds must be assessed; for this, Kendall’s Tau (T) was used [74]. When an adequate degree of consensus between consecutive rounds was achieved, the iterations were interrupted, and one sought to identify insights, consensus, and/or disagreements about the relationship between fintechs and financial inclusion as presented and discussed later in this article.

### 4. Results

Below, one presents the results obtained from the Delphi rounds carried out.

#### 4.1. Delphi First Round

Table 3 presents the first evaluation round of the 14 drivers ordered by their final averages.
Table 3. Averages of the 14 Drivers obtained in the first round of the Delphi method.

| Di | Description (Potential of Fintechs to Impact Financial Inclusion) | Average |
|----|------------------------------------------------------------------|---------|
| D8 | Fintechs can meet the needs of client niches whose specific characteristics are at odds with the traditional financial sector. | 4.643   |
| D7 | Fintechs, via the Internet and cell phones, can provide services independently from physical agencies and service stations; thus, meeting the financial needs of isolated communities. | 4.607   |
| D9 | Fintechs have business models based on disintermediation, facilitating access to financial services. | 4.536   |
| D6 | Fintechs can offer products and services designed to assist in the management of formal and informal micro and small businesses, namely tax planning, financial flow management, etc. | 4.357   |
| D2 | Fintechs foster competition in the financial sector, leading the average cost of services to be reduced. | 4.286   |
| D11| Fintechs may represent an alternative for those who feel intimidated or uncomfortable in banking branches, to the point of feeling unable to access the financial system. | 4.286   |
| D12| Insurtechs, through ICT, can offer more personalized and flexible insurance, with the potential to attend to an audience previously neglected by the traditional insurance market. | 4.214   |
| D5 | Fintechs provide products and services designed to guide good financial decisions, stimulate savings and social security planning, and avoid irresponsible debt assumption or the payment of unnecessarily high fees. | 4.143   |
| D10| Fintechs comply with a more flexible regulation, which makes them more agile and less bureaucratic in the provision of financial services, which allows fintechs to work with unattractive clients for traditional banks. | 4.143   |
| D4 | Fintechs have algorithms capable of using qualitative information to refine the risk analysis developed and used by traditional financial institutions. | 4.107   |
| D1 | Fintechs have low operating costs, managing to offer services to clients at lower values than traditional financial institutions. | 4.071   |
| D3 | Fintechs develop more elaborate analyses of the information available about clients, leading them to better evaluate the risks of an operation. | 3.929   |
| D13| Fintechs provide tools that might facilitate the negotiation between service providers and borrowers (matching, reverse auction, etc.). | 3.778   |
| D14| Fintechs can carry out more comprehensive and flexible risk assessments by considering a greater amount of information, and thus, offering credit with less guarantee requirement. | 3.107   |

No participant suggested new drivers, revised the ones presented or grouped them into new ones, although everyone could do this.

4.2. Delphi Second Round

The next step was to ask the participants to evaluate the consolidated ranking resulting from the previous round and, having access to the comments set forth by the other specialists in an anonymous way, to propose a possible reordering or new drivers, which is shown in Table 4.
Table 4. Ranking of the drivers obtained in the Delphi second round and comparison with the first round ranking of same.

| Di  | Description (Potential of Fintechs to Impact Financial Inclusion)                                                                 | Average (Round 2) | Rank (Round 2) | Rank (Round 1) | Variation |
|-----|--------------------------------------------------------------------------------------------------------------------------------|-------------------|----------------|----------------|-----------|
| D8  | Fintechs can meet the needs of client niches whose specific characteristics are at odds with the traditional financial sector. | 2.7647            | 1              | 1              | 0         |
| D2  | Fintechs foster competition in the financial sector, leading the average cost of services to be reduced.                         | 3.4118            | 2              | 5              | 3         |
| D7  | Fintechs, via the Internet and cell phones, can provide services independently from physical agencies and service stations; thus, meeting the financial needs of isolated communities. | 4.2941            | 3              | 2              | -         |
| D9  | Fintechs have business models based on disintermediation, facilitating thus access to financial services.                       | 4.4118            | 4              | 3              | -1        |
| D5  | Fintechs provide products and services designed to guide good financial decisions, stimulate savings and social security planning, and avoid irresponsible debt assumption or the payment of unnecessarily high fees. | 5.2941            | 5              | 8              | 3         |
| D6  | Fintechs can offer products and services designed to assist in the management of formal and informal micro and small businesses, namely tax planning, financial flow management, etc. | 6.7647            | 6              | 4              | -2        |
| D11 | Fintechs may represent an alternative for those who feel intimidated or uncomfortable in banking branches, to the point of feeling unable to access the financial system. | 6.7647            | 7              | 6              | -1        |
| D1  | Fintechs have low operating costs, managing to offer services to clients at lower values than traditional financial institutions. | 8.0000            | 8              | 11             | 3         |
Table 4. Cont.

| Di   | Description (Potential of Fintechs to Impact Financial Inclusion)                                                                 | Average (Round 2) | Rank (Round 2) | Rank (Round 1) | Variation |
|------|---------------------------------------------------------------------------------------------------------------------------------|-------------------|----------------|----------------|------------|
| D10  | Fintechs comply with a more flexible regulation, which makes them more agile and less bureaucratic in the provision of financial services, which allows fintechs to work with unattractive clients for traditional banks. | 8.5294            | 9              | 9              | 0          |
| D4   | Fintechs have algorithms capable of using qualitative information to refine the risk analysis developed and used by traditional financial institutions. | 9.4118            | 10             | 10             | 0          |
| D3   | Fintechs develop more elaborate analyses of the information available about clients, leading them to better evaluate the risks of an operation. | 11.0588           | 11             | 12             | 1          |
| D12  | Insurtechs, through ICT, can offer more personalized and flexible insurance, with the potential to attend to an audience previously neglected by the traditional insurance market. | 11.2353           | 12             | 7              | −5         |
| D14  | Fintechs can carry out more comprehensive and flexible risk assessments by considering a greater amount of information and thus offering credit with less guarantee requirement. | 11.4706           | 13             | 14             | 1          |
| D13  | Fintechs provide tools that might facilitate the negotiation between service providers and borrowers (matching, reverse auction, etc.). | 11.5882           | 14             | 13             | −1         |

Table 4 presents six columns. The third column shows the average of the ranks suggested by experts in the second round, and the fourth column presents the position of each driver after the second round. The fifth and sixth columns bring, respectively, the position of each driver after the first round and the respective variation between the first and second rounds.

As part of the Delphi method, at each round after the first one, the convergence of the participants’ opinions must be evaluated. Thus, at the end of the second round, Kendall’s W statistical test was applied, for which the value of 0.567 was obtained. This value, as shown in Table 2, indicates that the participants’ responses reached a level of consensus between moderate and high. To assess the statistical significance of the W value, the chi-square statistic was calculated, 125.276, with a p-value very close to zero [71], thereby indicating a high significance for the value of W [71]. Table 5 shows the values obtained.
Table 5. Statistics of the Delphi second round and participants’ level of consensus obtained in the Delphi second round.

| Second Round Statistics |       |
|-------------------------|-------|
| Number of dimensions    | 14    |
| Number of participants  | 17    |
| Level of agreement (W)  | 0.567 |
| Significance level (chi-square) | 125.276 |
| *p*-value               | 0.000 |

After verifying the level of consensus reached in the second round, the correlation coefficient between the rounds conducted was calculated. For this, Kendall’s Tau (T) was used [74]. The higher the T value, the greater the consensus between rounds, with the value 1 corresponding to an absolute consensus [70]. The value obtained for T was 0.6923 (Table 6).

Table 6. Correlation between the rankings of the two rounds in the Delphi method.

| Values                             |       |
|------------------------------------|-------|
| Kendall’s coefficient of correlation (T) | 0.6923 |
| *p*-value                          | 0.0012 |
| Number of dimensions               | 14    |

Since the statistical tests indicated an acceptable level of consensus in the second round (between moderate and large), as well as a high correlation between the first and second rounds (0.6923), one decided to end up the Delphi panel in the second round. In the next section, the results obtained are discussed.

5. Discussion

To discuss, in a consolidated manner, the final classification obtained (Table 4), the 14 drivers were grouped into clusters, as suggested by Esfahani et al. [75], Oberländer et al. [76], and Nickerson et al. [77]. For this, one adapted and applied the taxonomies of barriers to financial inclusion in developing countries proposed by Kempson et al. [78] and Rauniyar et al. [79], who categorized the dimensions of financial inclusion that can be impacted by fintechs. From this, five clusters emerged: (i) legal and regulatory framework, (ii) financial and/or digital education, (iii) mobile and internet infrastructure, (iv) behavior and culture, and (v) financial market operation. Some of the 14 drivers are related to more than one cluster and are listed according to their influence loads (Li) on financial inclusion—from the highest (14) to the lowest (1) influence load, as can be seen in Table 7. In this case, as the idea is to have a proxy of the importance of each cluster in fintech-induced financial inclusion, the influence loads of these drivers were kept the same for each impacted cluster since it would be very discretionary to divide the weight of these loads between the respectively associated clusters.

To rank the impact of each cluster on financial inclusion enabled by fintechs, the drivers associated with the respective clusters were weighted according to their classification obtained after applying the Delphi method. That is, each of the fourteen drivers (Di) was weighted according to its rank order (14 to 1) in Table 7, obtaining a proxy of the weighted average of the importance of each cluster in the financial inclusion. Indeed, as the Delphi method is based on an ordinal scale, linearity between influencing loads (Li) cannot be supported. That is, it cannot be guaranteed that a driver whose influencing load is x is twice as important as a driver whose influencing load is x/2.
Table 7. Consolidation of the fintech-induced financial inclusion drivers into clusters of impact.

| Fintech-Induced Financial Inclusion Drivers (Di); Description and Load of Influence (Li) | Legal/Regulatory Framework | Financial/Digital Education | Mobile/Internet Infrastructure | Behavior/Culture | Financial Market Operation |
|---|---|---|---|---|---|
| Service to niches not served by the market (D8) – L8 = 14 | | x | x | | x |
| Cost reduction for the customer due to increased competition (D2) – L2 = 13 | | | | | x |
| Assistance to those who are far from a financial institution (D7) – L7 = 12 | x | x | | | x |
| Disintermediation of services (D9) – L9 = 11 | x | | | | x |
| Improvement of individuals’ financial education (D5) – L5 = 10 | | | x | | |
| Improvement of companies’ financial education (D6) – L6 = 9 | | | x | | |
| Alternative for those who do not trust financial institutions (D11) – L11 = 8 | x | | | | x |
| Cost reduction for the clients due to lower operating costs (D1) – L1 = 7 | | | | | x |
| Simplified service with less demands (D10) – L10 = 6 | x | | | | x |
| Reduction of information asymmetry due to the use of unstructured information (D4) – L4 = 5 | | | | x | |
| Reduction of information asymmetry due to improved data analysis (D3) – L3 = 4 | | | x | | x |
| Development and expansion of the insurance market (D12) – L12 = 3 | x | | | | x |
| Reduction or elimination of the need for guarantees (D14) – L14 = 2 | x | | | | x |
| Reduction of asymmetries in negotiations between financial institutions and clients (D13) – L13 = 1 | | | | | x |
| Total of Associated Dimensions | 4 | 5 | 2 | 1 | 11 |
| Absolute Total (These values were obtained by vertically adding the respective loads (Li) assigned to the respective columns) | 22 | 53 | 26 | 8 | 78 |
| Weighted Average of the Level of Relevance (%) (These values were obtained by calculating the percentage contribution of the absolute total of each cluster to the total sum of the absolute total) | 11.76 | 28.34 | 13.90 | 4.28 | 41.71 |

Regarding the legal and regulatory framework cluster, the participants mentioned in their comments the power that large banks have over governments and political parties, the lenience of the law towards debtors, and the disproportionality existing between fintechs and traditional financial institutions vis-à-vis the regulation of the Central Bank.

Concerning the financial education cluster, the participants indicate its enormous relevance both for access to financial services and for their correct use. The comments, however, do not only refer to the society’s financial education as a barrier to financial inclusion but also to the society’s (little) formal education to deal with the digital world.

Remarks addressing the technological infrastructure cluster are associated with the absence of mobile and internet networks, as well as the possible lack of access to smartphones, computers, and/or other similar devices, which hinders the progress of fintechs and, consequently, the improvement in financial inclusion.

Moreover, there seem to be cultural and behavioral barriers associated with geography, trust in institutions, and age groups, for example. Thus, an eventual behavioral/cultural barrier to the use of fintechs regarding these audiences would limit the inclusive potential of ICT.
Finally, the financial market operation was by far the most relevant cluster, being important to highlight the perception expressed by many respondents that fintechs’ competition with large banks would still be quite challenging.

Thus, according to the respondents, the most relevant impact of fintechs on financial inclusion in Brazil must take place via financial market operation (41.71%), namely greater competition, lower costs, a wider range of options for the client, etc., which is also supported by Beck [80]. Then, it was pointed out the impact that fintechs can have on the digital and financial education of unbanked and underbanked (28.34%), with consequent potential to increase financial inclusion in the country, as also argued by Locatelli and Tanda [81]. Next, there is a nearly similar contribution from the technological infrastructure (13.90%) and legal/regulatory framework (11.76%) clusters and dimensions supported by Beck [80] and Gabor and Brooks [82]. Finally, a cultural and behavioral change in the unbanked and underbanked population, in terms of understanding and accepting the processes associated with fintechs, can positively impact financial inclusion in Brazil (4.28%), as also argued by Salampasis and Mention [38].

6. Conclusions

Based on Table 7, it is possible to visualize four lines of public policies to promote financial inclusion in Brazil through fintechs, as the behavioral/cultural cluster, closely linked to the possible idiosyncrasies of the unbanked/underbanked population, is generally outside the remit of the government. They are: (i) expansion and modernization of mobile infrastructure, (ii) improvement of financial and digital education, (iii) implementation of a trustworthy environment for the operation of fintechs, and (iv) development and enforcement of an adequate legal and regulatory framework for fintechs.

The first public policy—expansion and modernization of the mobile infrastructure and the Internet—would allow access to financial services, via fintechs, for people living in places of difficult access, such as rural populations and isolated communities far from service points of financial institutions. It is a transversal agenda and dear to various public sectors, namely communication, security, entrepreneurship, and so on. In this sense, the enactment of Brazilian Federal Law No. 13,879, signed on 3 March 2019, seems to be a step towards establishing greater regulatory incentives for investment by telephone operators. This new law can contribute to the advancement of mobile infrastructure and the renewal of the existing one. However, this law will not be enough to allow the expansion of mobile infrastructure and the Internet across the country. In this context, the public sector could adopt ancillary measures, such as the creation of incentives aimed at making the implementation of local solutions cheaper, such as the Internet or by radio or satellite, which is also supported by Joia and dos Santos [57] when analyzing the financial inclusion of the riverside population in the Amazonia region in Brazil.

The second public policy—promotion of financial and digital education—can enhance the impact of fintechs in serving financially excluded people, enabling the correct use of financial services, as well as better financial decisions, which is also supported by Birochi and Pozzebon [83], who developed a framework for improving financial and digital education in Brazil, as well as Morgan and Long [84], who analyzed the positive impact of improving financial education on financial inclusion in Laos. However, this is a broad and complex challenge, given that a considerable number of people lack basic education in Brazil [31]. Thus, it would be up to the public sector to include financial and digital education within the scope of initiatives developed in favor of education as a whole, namely teacher training, adaptation of school curricula, youth and adult education, and so on, in order to improve the level of financial inclusion in the country. Considering that financial education, in the medium term, will likely remain a challenge for most of the Brazilian people [85], this public agenda should also produce initiatives aimed at protecting consumers from taking inadequate amounts of risk and enforcing transparency of financial products’ terms and conditions [86]. Lack of transparency was pointed out by CGAP [30] as a possible factor contributing to high rates of late repayment and default in East Africa.
since a significant percentage of digital borrowers declared they did not fully understand the costs and fees associated with their loans.

The third public policy—implementation of a trustworthy environment for the operation of fintechs—aims to guarantee the privacy and data protection of the financially excluded, as also suggested by GPFI [15]. For this, it is necessary to develop a national digital identity infrastructure, in line with what is proposed by FATF [87]. Indeed, if users do not trust fintechs, they may elect not to use the financial services available to them [88,89].

Finally, an effective legal and regulatory framework is desirable for fintechs to develop less bureaucratic processes, such as granting credit, making guarantees more flexible, and developing personalized insurance products for an audience that is currently underserved by the financial market. Overly burdensome regulation could result in incentives to informality that, besides creating barriers to business, innovation, and inclusion, may even weaken policies targeting money laundering and the financing of terrorism [9]. The development of this legal and regulatory framework entails a model to respond to innovation [86,90], as well as public–private collaboration to meet onerous compliance obligations [91]. Hui et al. [92], for example, examined the importance of the development and enforcement of a new Regulatory Sandbox by Malaysia’s central bank to accommodate fintechs in the financial sector.

The challenges of regulating fintechs, and digital financial services in general, might be numerous, but there seem to be four core building blocks or basic regulatory enablers that can be used to guide the development of an appropriate regulatory framework for fintechs [93]. The first block is “Nonbank E-Money Issuance” that opens space for nonbank agents to provide basic financial services. The second enabler is “Use of Agents”, allowing financial service providers to use third-party agents to deliver financial services. The third block is “Risk-based Customer Due Diligence”, which means having proportionate customer due diligence for lower-risk accounts and transactions. Finally, the fourth enabler is “Consumer Protection”, which means enforcing transparency, fair treatment, and protection against fraud, just to name a few. This enabler was brought up by several of the participants of the present study, who perceived the current Brazilian legal and regulatory framework to be consumer-biased to the point of generating incentives for consumer inadequate behavior, as also argued by [31]. As two thirds of Brazilians are currently in debt and one fourth have delayed repayments [94], the danger of over-indebtedness and the need to protect consumers from predatory agents are quite pressing issues that cannot be neglected [31,95]. Consequently, government and regulators will have to pursue a balance between the ease of collection and enforcement of guarantees and appropriate consumer protection [96]. It is worth remembering that the difficulty in providing guarantees is one of the main obstacles to financial inclusion in Brazil [68]. Thus, from the point of view of a public agenda, it would be necessary to understand how barriers to credit recovery and execution of guarantees, to the detriment of client protection, could hinder financial inclusion, forcing fintechs to be more discerning and demanding with their disadvantaged public, especially when still maturing, when they have a low guarantee value, high corporate risks, and high capital costs [97]. Moreover, one of the participants’ comments suggests a disproportionality in treatment by the regulator. In fact, Brazilian Central Bank Resolution No. 4656/2018, in its Chapter III, defines and regulates the activities of fintechs, imposing, among other restrictions, the prohibition of operations with third-party capital. It is understandable, given its responsibility to look after the National Financial System, that the Central Bank of Brazil tends to be conservative. The prohibition of the use of third-party capital, however, appears to impose a structural competitive disadvantage on fintechs. It is up to regulators, therefore, to evaluate the possibility of making regulation less restrictive by creating exceptions or establishing gradations that, despite maintaining restrictions on the risk assumed by fintechs, could allow some financial leverage that is important to increase the profitability and competitiveness of the sector.
Limitations of the Study

This research, as all scientific work, has its limitations, as listed below.

First, there was a reasonable demobilization of participants between the first and second Delphi rounds. This might have been related to the fact that the chosen respondents have no relationship with the researchers (with little scope for calling for participation), and most of them are executives of the fintechs in which they work (with very little spare time). Despite this, it is important to emphasize again that the number of participants remained valid for the full application of the Delphi method [73]. Even with a rather homogeneous sample (the reason why the loss of participants did not mischaracterize it), having more respondents could have enriched the debate with new observations and/or considerations. For example, during the Delphi method iterations, there was no proposition of new dimensions in addition to those suggested by the researchers from the extant scientific literature.

In addition, the study did not analyze and explain possible differences in respondents’ perceptions on the research topic vis-à-vis the size and/or nature of the fintechs to which they belong.

Moreover, while most fintechs focus on some type of financial service (loan, payment, international money transfer, personal finance, equity finance, consumer banking, to name just a few), this article has not taken this into account, considering only the differences between fintechs and insurtechs (for insurance).

Finally, although supported by references, the five clusters in Table 7 were proposed in an inductive way, which may have some bias. Furthermore, linearity between the influence loads of the drivers of fintech-induced financial inclusion in the clusters was assumed, although the Delphi method is based on ordinal scales. Thus, the impact of the drivers on the clusters must be considered as a proxy of their real influence.

All in all, it is hoped that this research has shed light on the potential that fintechs have to enable financial inclusion in emerging markets, such as Brazil, where so many citizens still remain outside the financial system.

Author Contributions: Conceptualization, L.A.J.; methodology, L.A.J. and J.P.V.C.; software, J.P.V.C.; validation, L.A.J. and J.P.V.C.; formal analysis, J.P.V.C.; investigation, J.P.V.C.; resources, L.A.J.; data curation, J.P.V.C.; writing—original draft preparation, J.P.V.C.; writing—review and editing, L.A.J.; visualization, J.P.V.C.; supervision, L.A.J.; project administration, L.A.J.; funding acquisition, L.A.J. All authors have read and agreed to the published version of the manuscript.

Funding: This research was funded by Brazilian National Council for Scientific and Technological Development (CNPq), grant number 306517/2018-3 (L.A.J.) and the APC was funded by Brazilian School of Public and Business Administration at Getulio Vargas Foundation (EBAPE/FGV), grant number PROPESQUISA 00505100300360.

Institutional Review Board Statement: Ethical review and approval were waived for this study as respondents were kept anonymous.

Informed Consent Statement: Patient consent was waived as respondents were kept anonymous.

Data Availability Statement: Data supporting reported results can be found at http://bibliotecadigital.fgv.br/dspace/handle/10438/28667 (accessed on 5 October 2021, in Portuguese).

Conflicts of Interest: The authors declare no conflict of interest.

References
1. Al-Saqqa, S.; Al-Sayyed, R.; Al Shraideh, M.; Obaidah, M.A.; Balawi, S.A. How technology affects our life: The case of mobile free minutes in Jordan. Life Sci. J. 2014, 11, 417–423.
2. Boll, S.; Hofmann, G.; Thomas, G. Digital lifestyle 2020. Vis. Views 2008, 15, 4–7.
3. Bouton, S.; Knupfer, S.M.; Mihov, I.; Swartz, S. Urban Mobility at a Tipping Point; McKinsey & Company: New York, NY, USA, 2015.
4. CGAP. Fintechs and Financial Inclusion: Looking Past the Hype and Exploring Their Potential, CGAP Focus Note. 2019. Available online: https://www.cgap.org/sites/default/files/publications/2019_05_Focus_Note_Fintech_and_Financial_Inclusion_1_0.pdf (accessed on 24 July 2021).
5. Zalan, T.; Toufaily, E. The Promise of Fintech in Emerging Markets: Not as Disruptive. Contemp. Econ. 2017, 11, 415–430.
6. Shin, Y.J.; Choi, Y. Feasibility of the FinTech industry as an innovation platform for sustainable economic growth in Korea. *Sustainability* **2019**, *11*, 5351. [CrossRef]

7. Chueca-Vergara, C.; Ferruz Agudo, L. Fintech and Sustainability: Do They Affect Each Other? *Sustainability* **2021**, *13*, 7012. [CrossRef]

8. Dhar, V.; Stein, R. FinTech Platforms and Strategy. *Commun. ACM* **2017**, *60*, 32–35. [CrossRef]

9. Chatain, P.; Zerzan, A.; Noor, W.; Dannaoui, N.; de Koker, L. *Protecting Mobile Money against Financial Crimes: Global Policy Challenges and Solutions*; World Bank: Washington, DC, USA, 2011.

10. Gomber, P.; Kauffman, R.J.; Parker, C.; Weber, B.W. On the fintech revolution: Interpreting the forces of innovation, disruption, and transformation in financial services. *J. Manag. Inf. Syst.* **2018**, *35*, 220–265. [CrossRef]

11. IDB 2018. Fintech: Latin America 2018–growth and consolidation. Available online: https://publications.iadb.org/en/fintech-latin-america-2018-growth-and-consolidation (accessed on 25 May 2020).

12. Frost, J. The Economic Forces Driving Fintech Adoption Across Countries. BIS Working Paper No. 838. 2020. Available online: https://ssrn.com/abstract=3535904 (accessed on 19 May 2019).

13. Crocco, M.A.; Santos, F.; Figueiredo, A. Exclusão financeira no Brasil: Uma análise regional exploratória. *Braz. J. Political Econ.* **2013**, *33*, 505–526. [CrossRef]

14. Finnovation. Novo Mapa de Fintechs do Brasil. 2019. Available online: https://finnovation.com.br/ (accessed on 19 May 2019).

15. GPFI. G20 2020 Financial Inclusion Action Plan. 2020. Available online: https://www.gpfi.org/sites/gpfi/files/sites/default/files/G20%202020%20Financial%20Inclusion%20Action%20Plan.pdf (accessed on 5 October 2021).

16. Lagna, A.; Ravishankar, M.N. Making the world a better place with fintech research. *Inf. Syst. J.* **2021**. [CrossRef]

17. Amidzic, G.; Massara, A.; Mialou, A. Assessing Countries Financial Inclusion Standing: A New Composite Index. *J. Bank. Financ. Econ.* **2017**, *14*, 105–126.

18. Deng, X.; Huang, Z.; Cheng, X. FinTech and sustainable development: Evidence from China based on P2P data. *Sustainability* **2019**, *11*, 6434. [CrossRef]

19. UNSGSA. Igniting SDG Progress through Digital Financial Inclusion. 2018. Available online: https://sustainabledevelopment.un.org/index.php?page=view&type=400&nr=2655&menu=1515 (accessed on 7 October 2021).

20. Valencia, D.C.; Calabuig, C.; Villa, E.; Betancur, F. Financial Inclusion as a Complementary Strategy to Address the SDGs for Society. In *Sustainable Development Goals for Society*; Springer: Cham, Switzerland, 2021; Volume 1, pp. 79–89.

21. Ozili, P.K. Social inclusion and financial inclusion: International evidence. *Int. J. Dev. Issues* **2020**, *19*, 169–186. [CrossRef]

22. Demirgüç-Kunt, A.; Klapper, L.; Singer, D.; Ansar, S.; Hess, J.R. The Global Findex Database 2017. 2018. Available online: http://documents.worldbank.org/curated/en/332881528731828373/The-Global-Findex-Database-2017-Measuring-Financial-Inclusion-and-the-Fintech-Revolution (accessed on 25 May 2020).

23. Wilson, T.A. Supporting social enterprises to support vulnerable consumers: The example of community development finance. *Int. J. Latest Trends Eng. Technol.* **2016**, *1*, 461–465.
37. Reed, J. FinTech: Financial Technology and Modern Finance in the 21st Century; CreateSpace Independent Publishing Platform: Scotts Valley, CA, USA, 2016.

38. Salampasis, D.; Mention, A.L. FinTech: Harnessing Innovation for Financial Inclusion. In Handbook of Blockchain, Digital Finance, and Inclusion; Lee, D., Chuen, K., Deng, R., Eds.; Academic Press: Cambridge, MA, USA, 2017; pp. 451–461.

39. Chishti, S.; Barberis, J. The FinTech Book: The Financial Technology Handbook for investors, Entrepreneurs and Visionaries; John Wiley & Sons: Hoboken, NJ, USA, 2016.

40. Appiah-Otoo, I.; Song, N. The Impact of Fintech on Poverty Reduction: Evidence from China. Sustainability 2021, 13, 5225. [CrossRef]

41. Senyo, P.K.; Karanasios, S. How do fintech firms address financial inclusion? In Proceedings of the International Conference on Information Systems (ICIS), Ponorogo, Indonesia, 27–28 October 2020.

42. Franklin, K.K.; Hart, J.K. Idea Generation and Exploration: Benefits and Limitations of the Policy Delphi Research Method. Altern. High. Educ. 2006, 31, 237–246. [CrossRef]

43. Demirguc-Kunt, A.; Klapper, L.; Singer, D.; Van Oudheusden, P. The Global Findex Database 2014: Measuring Financial Inclusion around the World. 2015. Available online: https://elibrary.worldbank.org/doi/pdf/10.1596/1813-9450-7255 (accessed on 25 May 2020).

44. Demirguc-Kunt, A.; Klapper, L. Measuring financial inclusion: Explaining variation in use of financial services across and within countries. Brook. Pap. Econ. Act. Econ. Studies Program. 2013, 1, 279–340. [CrossRef]

45. BACEN. Relatório de Economia Bancária. 2017. Available online: https://www.bcb.gov.br/pec/depep/spread/REB_2017.pdf (accessed on 25 May 2020).

46. BACEN. Relatório de Economia Bancária. 2018. Available online: https://www.bcb.gov.br/content/publicacoes/relatorioeconomiaabancaria/REB_2018.pdf (accessed on 25 May 2020).

47. Chauvet, L.; Jacolin, L. Financial Inclusion, Bank Concentration, and Firm Performance. World Dev. 2017, 97, 1–13. [CrossRef]

48. Owen, A.L.; Pereira, J.M. Bank Capital Regulation in Contemporary Banking Theory: A Review of the Literature. J. Money Credit Bank. 2011, 33, 813–825. [CrossRef]

49. Gai, K.; Qiu, M.; Sun, X. A survey on FinTech. J. Netw. Comput. Appl. 2018, 103, 262–273. [CrossRef]

50. Stiglitz, J.E.; Weiss, A. Credit Rationing in Markets with Imperfect Information. Rev. Dev. Finance. 2018, 8, 1–17. [CrossRef]

51. Frame, W.S.; Srinivasan, A.; Woosley, L. The Effect of Credit Scoring on Small-Business Lending. J. Money Credit. Bank 2001, 33, 813–825. [CrossRef]

52. Liberti, J.M.; Petersen, M.A. Information and Soft. Rev. Corp. Financ. Stud. 2018, 8, 1–41.

53. Liberato, J.L.; Liebenau, J.; Mangan, J. The innovation mechanisms of fintech start-ups: Insights from SWIFT’s innotribe competition. J. Manag. Inf. Syst. 2018, 35, 145–179. [CrossRef]

54. Liberti, J.M.; Petersen, M.A. Information and Soft. Rev. Corp. Financ. Stud. 2018, 8, 1–41.

55. Liberti, J.M.; Petersen, M.A. Information and Soft. Rev. Corp. Financ. Stud. 2018, 8, 1–41.

56. Berger, A.N.; Goulding, W.; Rice, T. Do Small Businesses Still Prefer Community Banks? J. Money Credit. Bank. 2011, 33, 813–825. [CrossRef]

57. Berger, A.N.; Black, L.K. Bank size, lending technologies, and small business finance. J. Bank. Financ. 2011, 35, 724–735. [CrossRef]

58. Berger, A.N.; Goulding, W.; Rice, T. Do Small Businesses Still Prefer Community Banks? Int. Financ. Discuss. Pap. 2013, 1096, 264–278. Available online: http://www.srm.com (accessed on 25 May 2020).

59. Berger, A.N.; Black, L.K. Bank size, lending technologies, and small business finance. J. Bank. Financ. 2011, 35, 724–735. [CrossRef]

60. Berger, A.N.; Goulding, W.; Rice, T. Do Small Businesses Still Prefer Community Banks? Int. Financ. Discuss. Pap. 2013, 1096, 264–278. Available online: http://www.srm.com (accessed on 25 May 2020).

61. Berger, A.N.; Goulding, W.; Rice, T. Do Small Businesses Still Prefer Community Banks? Int. Financ. Discuss. Pap. 2013, 1096, 264–278. Available online: http://www.srm.com (accessed on 25 May 2020).

62. Berger, A.N.; Goulding, W.; Rice, T. Do Small Businesses Still Prefer Community Banks? Int. Financ. Discuss. Pap. 2013, 1096, 264–278. Available online: http://www.srm.com (accessed on 25 May 2020).

63. Berger, A.N.; Black, L.K. Bank size, lending technologies, and small business finance. J. Bank. Financ. 2011, 35, 724–735. [CrossRef]

64. Berger, A.N.; Goulding, W.; Rice, T. Do Small Businesses Still Prefer Community Banks? Int. Financ. Discuss. Pap. 2013, 1096, 264–278. Available online: http://www.srm.com (accessed on 25 May 2020).

65. IBGE. PNAD Contínuo. 2019. Available online: https://agenciadenoticias.ibge.gov.br/agencia-noticias/2012-agencia-de-noticias/noticias/23652-desocupacao-cai-para-12-3-no-ano-com-recorde-de-pessoas-na-informalidade (accessed on 22 September 2019).

66. IBGE. PNAD Contínuo. 2019. Available online: https://agenciadenoticias.ibge.gov.br/agencia-noticias/2012-agencia-de-noticias/noticias/23652-desocupacao-cai-para-12-3-no-ano-com-recorde-de-pessoas-na-informalidade (accessed on 22 September 2019).

67. DIEESE.; SEBRAE. Anuário dos Trabalhadores nos Pequenos Negócios 2016. 2018. Available online: https://m.sebrae.com.br/Sebrae/Portal%20Sebrae/Anexos/Anuario%20do%20Trabalho%20nos%20Pequenos%20Neg%C3%B3cios%202016_.pdf (accessed on 26 May 2020).

68. DIEESE.; SEBRAE. Anuário dos Trabalhadores nos Pequenos Negócios 2016. 2018. Available online: https://m.sebrae.com.br/Sebrae/Portal%20Sebrae/Anexos/Anuario%20do%20Trabalho%20nos%20Pequenos%20Neg%C3%B3cios%202016_.pdf (accessed on 26 May 2020).
68. SEBRAE. Relatório Especial: O Financiamento das MPEs no Brasil. 2017. Available online: https://datasebrae.com.br/wp-content/uploads/2018/09/Relat%C3%B3rio-Especial-O-Financiamento-das-MPE-no-Brasil-2017_FINAL.pdf (accessed on 26 May 2020).

69. Skulmoski, G.J.; Hartman, F.T.; Krahn, J. The Delphi method for graduate research. J. Inf. Technol. Educ. 2007, 6, 1–21. [CrossRef]

70. Assis, M. Motivações para Transição de Carreira na Área de Tecnologia da Informação: UMA Abordagem Delphi [Unpublished Master’s Thesis]. Getulio Vargas Foundation. 2016. Available online: https://bibliotecadigital.fgv.br/dspace/handle/10438/17843 (accessed on 25 May 2020).

71. Prado, E.P.V. Uma Proposta Alternativa de Aplicação da Técnica Delphi. In Proceedings of the XI EnANPAD 2020, online, 14–16 October 2020; pp. 1–15.

72. Mahajan, V.; Linstone, H.A.; Turoff, M. The Delphi Method: Techniques and Applications. J. Mark. Res. 2002, 13, 317. [CrossRef]

73. Kezar, A.; Maxey, D. The Delphi technique: An untapped approach of participatory research. Int. J. Soc. Res. Methodol. 2016, 19, 143–160. [CrossRef]

74. Schmidt, R.C. Managing Delphi surveys using nonparametric statistical techniques. Decis. Sci. 1997, 28, 763–774. [CrossRef]

75. Esfahani, R.H.; Ziaei, E.D.; Ziaei, M.S. Identification and Ranking effective factors in creating creativity and innovation in relation to market. J. Soc. Sci. Humanit. Res. 2019, 7. [CrossRef]

76. Nickerson, R.C.; Varshney, U.; Muntermann, J. A method for taxonomy development and its application in information systems. Eur. J. Inf. Syst. 2013, 22, 336–359. [CrossRef]

77. Oberländer, A.M.; Lösser, B.; Rau, D. Taxonomy Research in Information Systems: A Systematic Assessment. In Proceedings of the 27th European Conference on Information Systems (ECIS), Stockholm and Uppsala, Sweden, 8–14 June 2019.

78. Kempson, E.; Atkinson, A.; Pilley, O. Policy Level Response to Financial Exclusion in Developed Economies: Lessons for Developing Countries. Report of Personal Finance Research Centre, University of Bristol. 2004. Available online: http://www.pfrc.bris.ac.uk/Reports/dfid_report.pdf (accessed on 26 May 2020).

79. Rauniyar, K.; Rauniyar, K.; Sah, D.K. Role of FinTech and Innovations for Improving Digital Financial Inclusion. Int. J. Innov. Sci. Res. Technol. 2021, 6, 1419–1424. Available online: https://ijisrt.com/role-of-fintech-and-innovations-for-improving-digital-financial-inclusion (accessed on 24 May 2020).

80. Beck, T. Fintech and Financial Inclusion: Opportunities and Pitfalls; Asian Development Bank Institute: Mandaluyong, Philippines, 2020; Available online: http://hdl.handle.net/11540/12359 (accessed on 25 May 2020).

81. Locatelli, R.; Tanda, A. Financial education in times of digitalization and FinTech (r) evolution. In Financial Education and Risk Literacy; Edward Elgar Publishing: Cheltenham, UK, 2021.

82. Gabor, D.; Brooks, S. The digital revolution in financial inclusion: International development in the fintech era. New Polit. Econ. 2017, 22, 423–436. [CrossRef]

83. Biroch, R.; Pozzebon, M. Improving financial inclusion: Towards a critical financial education framework. Rev. Adm. Empresas 2016, 56, 266–287. [CrossRef]

84. Morgan, P.J.; Long, T.Q. Financial literacy, financial inclusion, and savings behavior in Laos. J. Asian Econ. 2020, 68, 101197. [CrossRef]

85. Dorea, F.F.; da Silva, M.C.; Andrade Baptista, J.A. The Importance of Financial Education for The Individual in Brazil. S. Am. Dev. Soc. J. 2018, 4, 66. [CrossRef]

86. Doskoˇ cil, R.; Škapa, S.; Olšová, P. Success Evaluation Model for Project Management. Manga Econ. Manag. 2016, 19, 167–185. [CrossRef]

87. FATF. Guidance on Digital Identity, FATF, Paris. 2020. Available online: https://www.fatf-gafi.org/publications/fatfrecommendations/documents/digital-identity-guidance.html (accessed on 5 October 2021).

88. Jentzsch, N. Implications of mandatory registration of mobile phone users in Africa. Telecommun. Policy 2012, 36, 608–620. [CrossRef]

89. Medine, D.; Murthy, G. Making Data Work for the Poor. CGAP, 1 January 2020.

90. Jenik, I.; Lauer, K. Regulatory Sandboxes and Financial Inclusion; CGAP: Washington, DC, USA, 2017. Available online: https://www.cgap.org/sites/default/files/Working-Paper-Regulatory-Sandboxes-Oct-2017.pdf (accessed on 2 August 2021).

91. Lyman, T.; de Koker, L.; Meier, C.M.; Kerse, M. Beyond KYC Utilities: Collaborative Customer Due Diligence for Financial Inclusion. 2019. Available online: https://www.cgap.org/sites/default/files/publications/2019_08_28_Working_Paper_Beyond_KYC_Utilities_0.pdf (accessed on 2 August 2021).

92. Hui, H.W.; Manaf, A.W.A.; Shakri, A.K. Fintech and the transformation of the Islamic finance regulatory framework in Malaysia. In Emerging Issues in Islamic Finance Law and Practice in Malaysia; Emerald Publishing Limited: Bingley, UK, 2019.

93. CGAP. Basic Regulatory Enablers for Digital Financial Services, CGAP Focus Note. 2018. Available online: https://www.cgap.org/sites/default/files/researches/documents/Focus-Note-Basic-Regulatory-Enablers-for-DFS-May-2018.pdf (accessed on 24 July 2021).

94. CNC. Pesquisa Nacional: Endividamento e Inadimplência do Consumidor-Fevereiro de 2021. CNC Divisão Econômica. 2021. Available online: http://stage.cnc.org.br/editorias/economia/pesquisas/pesquisa-de-endividamento-e-inadimplencia-do-consumidor-peic-8 (accessed on 25 July 2021).

95. Dzhalladova, I.; Škapa, S.; Novotna, V.; Babynyuk, A. Design and Analysis of a Model for Detection of Information Attacks in Computer Networks. Econ. Comput. Econ. Cybern. Stud. Res. 2019, 53, 95–112. [CrossRef]
96. Ryu, H.S.; Ko, K.S. Sustainable development of Fintech: Focused on uncertainty and perceived quality issues. *Sustainability* **2020**, *12*, 7669. [CrossRef]

97. Durana, P.; Michalkova, L.; Privara, A.; Marousek, J.; Tumpach, M. Does the life cycle affect earnings management and bankruptcy? *Oeconomia Copernic.* **2021**, *12*, 425–461. [CrossRef]