



## Article

# Fostering Innovative SMEs in a Developing Country: The ALI Program Experience

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**Abstract:** Small and medium enterprises (SMEs) play an essential economic role through income and employment generation as well as reducing inequalities. In this regard, continuous innovation is a pillar for guaranteeing SMEs' survival worldwide. In Brazil, the ALI Program (Portuguese acronym for Local Innovation Agent) trains groups of SMEs to implement a continuous innovation process based on agile methodologies. This paper applied focus group methodology to investigate whether, after participating in the program, SMEs practice some innovation processes in their business and the difficulties perceived by entrepreneurs in incorporating innovation processes into their ventures. Based on the extant literature and on the focus group, it was observed that SMEs see innovation as a risk, fear innovating because of tradition, family, and/or generational context, and do not see innovation as a process suitable to be systematized with agile tools. In addition, factors such as the age of the SMEs' leaders, the age of the SMEs, the gender of the SMEs' leaders, and the nature of the SMEs (family business or not) may affect their openness to innovation. Recommendations are stated for practitioners (such as ALIs) to improve their training quality, policymakers to improve and create similar programs, and researchers interested in future research directions.

**Keywords:** small and medium-sized enterprises (SMEs); micro and small businesses (MSBs); Brazilian support service for micro and small enterprises (SEBRAE); local innovation agent ALI program; organizational agility; entrepreneurship; lean startup; agile methods; agile tools



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## 1. Introduction

Small and medium-sized enterprises (SMEs) deserve specific attention as they represent a significant share of global business. SMEs account for 90% of all industries and 50% of employment globally [1]. Their relevance to Latin American countries is evidenced by the fact that they represent 99% of companies in the region and 70% of the job positions [2]. Given this context, innovation is considered the main factor of social and economic development and the source of competitiveness of regions and countries [3].

Olavarrieta and Diaz [4] pointed out that high-quality replication studies in Latin American and emerging markets are frequently desk rejected because they are seen as not helping the knowledge-building process. However, the authors listed five problems that may arrive from this usual editorial practice. Among them, this process creates the wrong incentive for the top-trained researchers in emerging nations, turning their focus on novel and very specific problems, but ones that are not relevant and necessary for their business communities (such as innovation in SMEs).

Consequently, this also raises concerns about the applicability of business theories for SMEs in Latin American and emerging markets, such as organizational agility [3,5]. Moreover, the extant literature demonstrates how SMEs in Brazil are not mature enough regarding innovation. One of the studies indicates that only 3.65% of SMEs are occasional innovators [6]. Another study demonstrates that SMEs have no systematic innovation processes [7]. On the other hand, a study case demonstrated preliminary positive results of

the implementation of innovation management in a technology-based SME [8]. In a more recent paper carried out after the COVID-19 pandemic, it was indicated that SMEs need to innovate in their business models, even partially [9].

Some studies work on using agile methodologies in emerging enterprises [10], and others bring the possibility of innovation in microenterprises [11]. However, few studies investigate the cases of applying agile methodologies in SMEs in Brazil, the largest Latin American country. Since 1972, SEBRAE (Portuguese acronym of the Brazilian Support Service for Micro and Small Enterprises), a non-profit organization, has worked to stimulate entrepreneurship and enable the competitiveness and sustainability of micro and small businesses (MSBs) in Brazil [12]. SEBRAE operates in all Brazilian states offering courses, consultancy, and projects to support entrepreneurship and innovation [12]. As well as previous authors investigating SEBRAE, here, SME is assumed as a synonym of MSB [13,14].

Among the SEBRAE programs, the Local Innovation Agent Program (known by the Portuguese acronym ALI Program) was founded in 2008. It is a government-sponsored program and is also the largest innovation fostering program focused on SMEs in Brazil [14]. The ALI Program's objective "is to revolutionize the small business through innovation" [15]. To achieve this purpose, the ALI Program hires local innovation agents (ALIs) from the business sector. Each ALI becomes responsible for performing eight-month training with a group of 20 SMEs on innovation and skills identified as necessary for SMEs' survival, based on organizational agility. An eligible ALI candidate must have graduated from a university in the last ten years, prove experience in the business sector, and be approved. After being approved in this initial phase and before training SMEs in the ALI Program, the ALIs receive training on innovation and agility that is also eliminatory [14]. Hence, the ALI Program training for SMEs is based on and inspired by agile and innovation methodologies.

Like Olavarrieta and Diaz [4] observed for replication research in Latin America, most publications about the ALI Program are limited to journals with a regional scope. Carvalho et al. (2020) [14] executed a literature review about the ALI Program considering Web of Sciences, Scopus, and *Revista de Administração e Inovação* (RAI), the most important Brazilian innovation journal. The authors found 34 papers and identified that most of them only focused on SMEs from a unique Brazilian state. The program was investigated in only 10 of the 27 Brazilian states. The most investigated state is Paraná (seven papers). Of the papers, 13 (38%) were descriptive, 4 (12%) were qualitative, and 17 (50%) were quantitative. Regardless of the research limitations, the authors concluded that SMEs in the ALI Program were able to improve innovation over the program independent of previous management and innovation levels, which is evidence of the relevance of conducting research about the ALI Program and other, similar programs in different Latin American countries and emerging markets.

Along these lines, the current paper aims to register and discuss the understanding of five SMEs in different industries after receiving the eight-month innovation training in the ALI Program in São Paulo between 2019 and 2020. From this point of view, the current paper contributes to bringing a more recent period of investigation to the literature in a broader spread journal. Remarkably, the ALI Program had two versions: one from 2008 to 2018 and another between 2019 and 2020 [14]. Hence, it is important to note whether, during this period, the results differ from the previous versions. The current registration and discussion may be a useful tool for improving and building new versions of the program in the future.

São Paulo is the Brazilian state with the largest population, four times larger than the population of the state of Paraná [16], the most-investigated state. Assuming the number of SMEs is proportional to the number of people, there is a gap in the investigation of the context of the ALI Program application in São Paulo. In this regard, this current paper is mainly directed to practitioners, such as ALI agents, ALI Program leaders, and policy-makers, not only from Brazil, but also those interested in applying for similar programs in similar contexts, e.g., other developing countries. The recording and discussion of the

ALI Program experience are important for the improvement of the program as well as for developing similar innovation-fostering programs for SMEs in other countries, especially in Latin American and emerging markets.

Based on the perspective of organizational agility [3,5], the current research also aims to investigate (1) whether participating SMEs practice some innovation processes in their business; and (2) the difficulties perceived by entrepreneurs in incorporating innovation processes into their ventures. Comparing the observations with the extant literature (especially about similar programs in Latin America), the evidence is discussed, considering the particularity of the studied cases and what can be considered for future research directions. In this regard, this paper is also directed to researchers to whom the recording and interpretation of an experience of fostering innovation in SMEs in a less-investigated context (Brazil) may be relevant for building scientific advances. Future research directions are proposed along the text and summarized in the conclusion.

## 2. Materials and Methods

### 2.1. Theoretical Background

Like many management practices, adopting agility through the development and promotion of agile methods has been almost entirely driven by consultants and practitioners, with little participation from the academic community in the first stages of evolution [17]. Later, in the context of information system development, a definition of agility was proposed as follows: “continual readiness of a method to rapidly or inherently create change, proactively or reactively embrace change, and learn from change while contributing to perceived customer value (economy, quality, and simplicity), through its collective components and relationships with its environment” [17]. In this regard, agility is different from flexibility and leanness. Flexibility also corresponds to the ability to create change and proactively or reactively embrace change. However, unlike agility, flexibility does it in a timely manner and through its internal components (and relationships with its environment). Moreover, leanness is defined as “the contribution to perceived customer value (economy, quality, and simplicity)” [17]. Thus, flexibility and leanness can be seen as the basis for achieving agility, which, differently from both, also encompasses the creation through its collective components.

Organizational agility refers to the ability of organizations (here, SMEs) to create a new value by adapting their resources and strategies [5]. Organizational agility is also seen as the ability of an SME to cope with the volatile, uncertain, complex, and ambiguous (VUCA) changes and thrive in a competitive environment of continually and unpredictably changing opportunities. Organizational agility is divided into reactive, proactive, and innovative. Reactive agility responds to a change in the market after identifying it. Proactive agility identifies a new customer’s desire in the market and changes the organizational strategy to attend to that desire and achieve the maximum return. Innovative agility is centered on developing new products and markets that customers did not know they desired [18]. In this regard, agility is seen as a key ability for SMEs to compete and survive [3,19]. Specifically, for SMEs, digital technologies capability, relational capability, and innovation capability contribute to building organizational agility. In turn, agility has a positive impact on performance [3].

Consequently, agility is also now seen as a fundamental pillar for research in the innovation context. Agility improves the innovation performance of innovative firms by facilitating ambidexterity [20]. Ambidexterity refers to the organizational exploration and exploitation orientation. On the one hand, exploitation is focused on current internal capabilities, knowledge, and well-established processes. Exploitation is usually associated with short-term success and profitability. On the other hand, exploration is focused on discovering new capabilities, learning new knowledge, and creating new ways of doing business. Exploration is associated with uncertain outcomes, high autonomy, and long-term success [21]. Although there is evidence that agility and innovation are connected, i.e., agility affects innovation performance in innovative firms [20], and innovation capa-

bility affects agility in SMEs [3], it also raises other questions for further investigations, such as which kind of agility impacts most the innovation performance. SMEs also have inherent characteristics that differentiate them from larger enterprises, such as limited resources and specialization capabilities, as well as more flexibility for adapting to new circumstances [3,22,23]. These characteristics reflect in the innovation [22,23]. For example, it was demonstrated that decision-makers in more innovative SMEs are more likely to adopt social media and public cloud computing [24]. SMEs may also be recommended to take different innovative routes to improve their performance when digital transformation is changing their business model [25].

Given this context, questions such as “does agility affect innovation performance differently in SMEs than in other enterprises?” or “which kind of agility impacts most the innovation performance in SMEs?” may arise as recommended for further investigation. This answer is useful for designing more effective innovation-fostering programs. Innovation has been pointed out as a driver for improving SMEs’ performance [25–27]. Additionally, innovative SMEs contribute most significantly to a country’s economy (particularly regarding job creation) [3]. Consequently, they have been the center of attention in many studies [3,25,27–30].

Parallel to the concept of agility, there are different intensities of innovation, e.g., incremental, frugal, radical, or disruptive. Incremental innovation often refers to a series of small improvements made to an existing product or service. Frugal innovation is an emerging concept defined as the process of designing a novel product architecture at reasonable prices that provide consumers with the latest applications, as opposed to the existing solution [31]. In this regard, the agile tool Minimum Viable Product (MVP) taught by Ries in his book [32] represents an essential approach for SMEs to achieve frugal innovation. A study stated that frugal innovation achievement is a very tricky and complex task for SMEs [33].

Radical innovation requires creating new internal knowledge within an organization that generates the successful commercialization of a novel product or service. The concept of disruptive innovation is defined by Bower and Christensen [34] as a discovery that enables a significant breakthrough in capabilities. In this regard, disruptive innovation causes changes to the extent that traditional competencies are rendered irrelevant or trivial [35], and existing rules of the competition are disturbed [36]. Searching to answer how SMEs achieve the agility to respond to disruptive digital innovations in their ecosystem, a study concluded that mitigating organizational rigidity is enabled by the mechanism of achieving boundary openness, while developing innovative capability is enabled by the mechanism of achieving organizational adaptability [19].

Interpreting innovation from the perspective of organizational agility suggests that frugal and incremental innovations are more related to reactive agility, while radical innovation is more related to proactive agility. Innovative agility seems to be related to disruptive agility. However, deeper investigations are recommended.

Besides proactive, reactive, and innovative agility, intellectual agility is a common term in the literature. Intellectual agility is often considered a synonym for the wider concept of organizational agility [5]. However, intellectual agility is rooted in intellectual capital. Hence, intellectual agility is about creating an environment within the organizations in which employees can invest their efforts in the formulation of responses to organizational challenges through modifications in the existing product, process, and management, and creating innovative strategies [5].

Knowledge understood as intellectual capital has been pointed out as essential for explaining the cumulative growth of innovative SMEs. Intellectual capital has three components, i.e., human capital, structural capital, and relational capital. Among them, human capital seems to be unable to directly influence growth if not through social capital and, to a very low degree, through relational capital. Thus, the key to growth seems to be fostering SMEs’ capability for transforming knowledge from human capital into social capital (i.e., organizational value) [29].

Finally, based on 110 SMEs in Serbia, a paper [5] investigated the nexus between entrepreneurial leadership, human capital, and innovation. The authors concluded that the intellectual agility of employees positively influences the innovativeness of SMEs, but this effect is strongly mediated through entrepreneurial leadership. In this regard, the relationship between intellectual capital and intellectual agility is an open field for further investigations in SMEs.

## 2.2. Innovation Fostering Programs Focused on SMEs in Latin America

Multiple searches for similar programs in Latin America (i.e., focused on fostering innovation in SMEs) were executed in Scopus in August 2022. Eleven papers were identified: four in Spanish and seven in English. This may be evidence that the Latin American context is investigated less frequently. The papers studied programs in Mexico, Argentina, Chile, Colombia, Costa Rica, and Venezuela. The most investigated country was Mexico [37–41]. Four papers did not mention any program, but rather recommendations for program creation [42–45]. It is worth noting that none of the mentioned programs were based on agility, such as the ALI Program.

The extant literature about the programs can be divided between those programs that directly finance innovation [37–39,46] and those that finance indirectly [40,41,47], e.g., through training and consulting, such as the ALI Program. Similarly, there were multi-sectorial programs [37–39,46] and specific programs, e.g., focused on SMEs in agriculture [40,48]. The ALI Program has no sectorial focus. Some programs also promote innovation to improve SMEs' exporting [43,45,46] or create jobs [47]. The ALI Program promotes innovation to increase SMEs' competitiveness, guaranteeing survival.

Among the analyzed papers, one [38] investigated the collaboration between SMEs and academia regarding open innovation. A government program in Mexico sponsored this collaboration. This program relates to what is proposed by the ALI Program regarding innovation learning. In the Mexican case, the SMEs participated in the funding program with projects to develop innovation and collaborated with a research center or university. The authors applied an absorptive capacity approach to understanding the process of developing new knowledge for achieving innovation.

Drawing on the ambidexterity literature, the authors [38] interpret the organizational exploration and exploitation orientation results. Although the sample of the Mexican program was heterogeneous and limited (16 SMEs), it was possible to conclude that the exploitation of new knowledge is a complex dimension for creating value from collaboration, which makes the outcome difficult to measure using traditional means. In this case, the authors argued that ambidexterity for developing new knowledge for innovation is based on exploiting characteristics as an iterative learning process between SMEs and universities, while exploring characteristics is integrally delegated to the university [38].

On this subject, the orientation of the ALI Program is not clear. Before becoming an ALI, the selected candidates receive training. After this training, they conduct an eight-month training with groups of 20 SMEs (a cycle). After each cycle, the ALI is instructed to write a scientific paper under the supervision of an experienced academic. However, as a search in Scopus can reveal, absolutely no paper from an ALI has been published in English yet.

It is possible to assume that the ALI Program attempts to connect SMEs to universities and research centers. However, this attempt is weak and underdeveloped. Other strategies should be investigated and benchmarked beyond the Latin American context to strengthen this connection between SMEs and academia. Moreover, researchers could investigate more about the ambidexterity development of the SMEs in the ALI or similar programs.

Being a university graduate is a requirement for any candidate to become an ALI [13]. It should be ideal that during the training to become an ALI, candidates receive a scientific education equivalent to a master's degree so that ALIs could deliver more in terms of developing new knowledge for innovation based on exploring characteristics and strengthening ambidexterity.



### 2.3. Brazilian Context

The ALI Program is an important program that promotes innovation among SMEs in Brazil. It started in 2008 with pilot versions in the Federal District and the state of Paraná. Between 2008 and 2010, the program was conducted by SEBRAE and adopted by some Brazilian states. From December 2010, the program began to be conducted at the national level and promoted in partnership with SEBRAE and the National Council for Scientific and Technological Development (CNPQ). Remarkably, the ALI Program had two versions: one from 2008 to 2018, and another between 2019 and 2020 [14]. In 2019 and 2020, the program served 5840 SMEs in the state of São Paulo (the largest Brazilian state in terms of population) from different industries.

In Brazil, the classification of SMEs follows the parameters of the National Statute of Microenterprises and Small Businesses, created by Complementary Law n°. 123/2006. The purpose of this statute is to simplify and differentiate this sector, stimulating the generation of employment and reducing informality in the economy [49].

According to the statute, SMEs are divided into:

- Individual micro entrepreneur (MEI): gross revenue of up to BRL 81,000.00 per year.
- Micro entrepreneur (ME): gross revenue of up to BRL 360,000.00 per year.
- Small business (EPP): gross revenue greater than BRL 360,000.00 and equal to or less than BRL 4,800,000.00 per year.

The ALI Program attends the three categories, and they are considered SMEs in the current paper. In 2019 and 2020, 146 local innovation agents (ALIs) were selected for the program. Within the program, ALIs become responsible for applying a pre-established methodology that accompanies entrepreneurs (SMEs' representatives) in identifying their customers' problems, creating a value proposition, developing new solutions, and planning their implementation. The objective of the ALI Program is to transform SMEs through innovation processes, and for this, it works with accredited agents (ALIs) who visit SMEs, applying its innovative methodology designed by the CERTI Foundation (CERTI is a Portuguese acronym Reference Centers for Innovative Technologies) [15] and based on the organizational agility.

Among other books, the ALI Program's recommended bibliography presents the books *Scaling Lean: Mastering the Key Metrics for Startup Growth* [50] by Maurya and *Competing Against Luck: A Story of Innovation and Customer Choice* [51] by Christensen. So, the choice for textbooks of the ALI Program represents the state-of-art of scientific discussion on the impacts of organizational agility on innovation for SMEs, translated and adapted to a comprehensive language for the SMEs' practitioners.

At the end of the program, the ALIs have to write a scientific paper reflecting on their experience, but it is not necessary to publish it. This paper is born within the scope of the paper from an ALI in the city of São José dos Campos, São Paulo.

### 2.4. ALI Program Methodology

The ALI selection process consists of three phases and a training session. In the first stage, a curricular and documentary evaluation of the candidate is carried out. The ALI candidate must have higher education. In the second stage, a knowledge test is carried out involving, among other topics, innovation, business management, entrepreneurship, and knowledge about innovation ecosystems. In the third stage, an individual interview is carried out with the local program managers. After this process, the candidates participate in a qualifying face-to-face training, where the methodology of the program is applied in groups and ends with an application of part of the methodology of each candidate to a real SME. The training has an eliminatory character and is conducted by SEBRAE's consultants. It serves as an evaluation of the behavioral characteristics of the candidates.

When starting their work, the ALIs had the function of applying the methodology to 40 SMEs of different sizes and industries over a period of one and a half years. This service was divided into two eight-month cycles, where each agent was responsible for 20 SMEs per cycle.

The ALI Program has no cost to the SME, and the SME is free to decide whether they will implement the proposed tools or not. The methodology consists of eleven face-to-face meetings with the responsible ALI and a representative of the SME in a sequence of presentations and application of tools designed for the program.

The first meeting is the only group meeting with the ALI and the representatives of all SMEs. At this meeting, the ALI presents the program and all its stages and the main concept of innovation. After this meeting, representatives are invited to fill in a tool called "Innovation Radar" [52]. This is a self-assessment where each representative chooses a score from 1 to 5, measuring SMEs' points defined as follows: Productivity and Cost Reduction, Culture of Innovation, Capital, Network, Processes, Technology, Customer Experience, Opportunities, Presence, Revenue with Innovation, and Market and New Markets. After this assessment, each representative receives an individualized diagnosis of their maturity to innovate and the answer as to whether they are approved to participate in the ALI Program. The individualized diagnosis categorizes the SMEs according to their score as beginners, aspirants, eventual innovators, and impact innovators.

Although this is not a definitive criterion, in general, the SMEs categorized as beginners are indicated for more basic programs offered by SEBRAE, the aspiring and eventual innovators are invited to participate in the ALI Program, and the impact innovators are indicated for a more advanced program.

From the second meeting, the meetings are individual, with each representative of the SMEs. In this last meeting, the ALI leads the representative to define a business model implementation plan, defining cost estimates, objectives, metrics, actions, and deadlines for the work carried out in the program to be implemented and its results to be measured. The representative receives a certificate of completion of the follow-up.

Although the SME is free to decide whether they will implement the proposed tools or not, after 6–12 months of participation in the program, the ALI returns to accompany and reassess the SME. Reassessing the innovation radar is mandatory and reassessing the management is optional. This is the way the success of the program may be evaluated [53].

### 2.5. Methodological Procedures

A focus group is established in qualitative research. Although there are many possible variations of the method, a focus group basically consists of an informal discussion among selected individuals about specific topics. Thus, a focus group enables access to participants' own language, concepts, and concerns. It fosters the production of more fully articulated conceptualizations and enables the observation of the collective sense-making process [54].

A focus group is usually one or more discussion groups. Each group has 6–8 (and rarely more than 12 participants) from a pre-existing group (here, representatives/leaders of the SMEs that participated in the ALI Program). Participants focus collectively upon a topic selected by the researcher (ALI) and presented to them. The most common way of presenting a topic is through a set of questions [54].

In the current application, the questions were freely elaborated by the ALI based on the experience in the ALI Program. They were:

- What is innovation to you?
- How do you practice innovation in your enterprise?
- What are the obstacles for your enterprise to be more innovative?
- What opportunities do you see that innovation can bring?

It is recommended that focus group participants be homogeneous, particularly concerning "status" factors such as occupation, social class, or age. The focus group study was carried out after the end of the first cycle of the ALI Program [54]. This cycle had the registration of 20 SMEs, with 19 enterprises participating until the end of the cycle. The event was optional for participants, and all SMEs were invited. Five representatives of the SMEs showed up, and they were investigated as one focus group. They were considered to be homogeneous once they all had leadership positions at their SMEs. The focus group was recorded, a recommended practice for this research method [54].

Three of the representatives were women and two men. The names of the representatives and SMEs have been changed to preserve the identity of the participants:

- Alexander, manager of Confection Prime, a textile SME.
- Arielle from Accounting Speedy, an accounting SME.
- Cindy from Coffee Daisy, an SME in the commercial industry that is a coffee shop and flower shop.
- Denzel from Emporium Fresh, a natural products emporium.
- Nikki, manager of Business Intellect, a consultant network.

Focus groups are an adequate methodological choice when the purpose is to elicit people's understandings, opinions, and views. One of the advantages of the focus group method is its flexibility and consequent potential breadth of use. However, the disadvantages lie in its limited reliability and validity and various forms of moderator and respondent bias [54].

Deciding on using a focus group method can be based on three considerations: the purpose of the research, the kind of output desired, and the practical aspects of conducting focus groups [54]. When carrying out work that investigates changes in mentality, the confrontation with thoughts, emotions, dilemmas, and other subjective aspects of the respondents is assumed; Rey [55] states that qualitative research is the best approach to bring a more authentic expression of the subjects involved. The emergence of the subject is legitimated, considering research as a communication process that intends to facilitate the authentic expression of the studied subjects [55].

The purpose of this research was wholly aligned with the focus group method to better understand how people feel or think about a problem, idea, product, or service [56]. Given the restrictions of being one ALI in one city studying a unique cycle and the infrastructure availability (a meeting room with recording equipment), the research should have a qualitative, descriptive, and exploratory nature. Thus, the focus group was judged an adequate method.

The event was held on 11 November 2020, in the service space of the SME called Coffee Daisy. At first, the ALI presented some concepts about innovation to the participants and then started a discussion about the application of innovation in the participating SMEs. After this presentation, the agent encouraged the participants to talk about how innovation can be applied in their SMEs, asking them the directive questions. Based on the question, the entrepreneurs raised their points of view and exchanged information with the other members of the group. The agent also recorded the findings of the event in the format of a paper, which was corrected and supervised by an experienced academic.

### 3. Results

The ALI systematically compiled the information at the event in Table 1. The names of the SMEs and their representative participants have been changed for privacy reasons. This table presents statements made by entrepreneurs regarding their understanding of innovation and management practices, identifying opportunities for how innovation can improve their enterprises, and the risks associated with implementing innovative business models.

The information collected in the focus group shows that SMEs are motivated and recognize the importance of making innovations in their businesses. However, the following considerations can be made about the practice of innovation processes in their business and the perceived difficulties in incorporating innovation processes into their ventures.



**Table 1.** Summary of results of the focus group with entrepreneurs.

| Representative/SME                | SME Classification | Gender | Statements   | Opportunities   | Risks  |
|-----------------------------------|--------------------|--------|--|---|--|
| <i>Alexander/Confection Prime</i> | EPP                | Man    | Innovation is related to the insights that the entrepreneur has daily.                         | Innovation must always be exercised.  | One difficulty in innovating is overcoming the fear of the risks involved.   |
|                                   |                    |        |  | The entrepreneur can overcome the fears involved in the “act” of innovating.  | In family businesses, implementing innovations can be more difficult compared to the way of managing previous generations. |
| <i>Arielle/Accounting Speedy</i>  | EPP                | Woman  |  | Recently changed working tools (software).  |  |
|                                   |                    |        |  | Accounting is a hypercompetitive market, so it is important to do it differently.   |  |
|                                   |                    |        |  | Changes in the physical space proved to be efficient in terms of the relationship of employees and in the way of working. |  |
|                                   |                    |        |  | The enterprise changed its approach to customer relations, carrying out closer and more individualized communication.     |  |
|                                   |                    |        | Changes in laws make accounting enterprises need to adapt to new trends constantly.            |   |  |
| <i>Cindy/Coffee Daisy</i>         | ME                 | Woman  | The enterprise focuses more on the purpose and desire of businesswomen than on customer needs. | She talks a lot with her customers informally.  | Afraid of “doing different”.   |
| <i>Denzel/Emporium Fresh</i>      | MEI                | Man    |  |   | Due to their more traditional worldview, it is difficult for entrepreneurs from another generation to innovate.            |
|                                   |                    |        |  |   | It is difficult to undertake due to financial insecurity in a business.  |
| <i>Nikki/Business Intellect</i>   | MEI                | Woman  |  | Launching new products and services can be a good solution to financial stagnation.                                       |  |
|                                   |                    |        |  | Observing substitute competitors can help to understand unmet customer needs and improve your offering.                   |  |

The observation “The enterprise focuses more on the purpose and desire of businesswomen than on customer needs” indicates that the Coffee Daisy is very far from the customer-centric approach. Customer centricity is a pillar of the agile philosophy. During the ALI Program, the SMEs have repeatedly come in contact with the concept of “Jobs to be done”. This concept emphasizes the importance of listening to the customer to understand what results they are looking for. In addition, the SMEs conducted several interviews with customers during the program. However, this SME failed to see value in listening to its customers and creating a systematic opportunity discovery through systematically summarizing informal conversations. Although encouraged to build minimum viable products (MVP) (i.e., incremental and frugal innovation) in a validated learning process with constant iterations (organizational proactive and reactive agility), the SME was unable to overcome the fear of “doing it differently”, as mentioned by the businesswoman.

This same fear appears in Denzel’s statement, who fears innovation due to financial risks, even having used the construction of MVP, which is a tool precisely to mitigate risks and validate the product on a small scale before investing a lot. The generational statement where the fear of innovating due to a more traditional worldview reveals an aspect that Dabic and colleagues [5] already stated. While investigating intellectual agility, these authors observed that younger employees could bring innovation to SMEs and concluded that hiring younger employees into the team is a good recruitment practice [5]. In this regard, executing future focus groups with participants from the same generation may be interesting.

Businesswoman Arielle demonstrates a greater sensitivity to the results expected by her customers, claiming to have made changes in the service of her clients, making her interactions more individualized. The businesswoman did not state whether this improvement arose from an opportunity arising from the observations of her customers’ needs. The absence of this statement may demonstrate a devaluation of the importance of listening to the customer’s voice. In addition, the businesswoman points to specific changes such as work software and room layout, which can improve deliveries. Still, as they do not involve continuous processes, they do not guarantee a substantial change around a more innovative performance in the market. Changes in legislation are mentioned as influencing the company’s performance. Although they bring value to the customer, they are conditional changes for the continuity of an accounting business. The enterprise’s tradition is mentioned as an impediment to growth.

Businesswoman Nikki sees the launch of new products and services as a solution to periods of financial stagnation. Again here, innovation is not seen from a systematic bias, but as an individualized action for a specific problem. The representative also points out the importance of observing indirect competitors who serve their customers better. However, it does not mention a defined and continuous process in its enterprise that allows the understanding that it is a method incorporated into the business practice.

In his speech, Alexander showed that he sees innovation as spontaneous insights from everyday life, which may indicate a lack of understanding of the processes and tools that encourage entrepreneurs and employees to develop new ideas (i.e., systematic innovation based on agile tools). Some statements reinforce the view of innovation as spontaneous ideas rather than systems and methodologies applied in enterprise management when referring to innovating as the “act of innovating”. The entrepreneur reveals fears of innovating and the need to overcome them, and the generational obstacle appears again when the difficulties of innovating in a family business are mentioned.

From this discussion stimulated by the focus group, it is possible to see some persistent points in the statements of SMEs:

1. The view of innovation as a risk.
2. The fear of innovating because of tradition, family, and/or generational contexts.
3. Innovation is not seen as a process/system.

Although the ALI Program brings these SMEs a vision that is more aligned with the best practices and consolidated concepts in the area of innovation, this is not enough to

internalize in its participants the need to change processes and work systematically in the search for opportunities with customers, in the collaboration between the team and an anticipatory vision of the future, and exploring new opportunities, as mentioned by Dabic and colleagues [5] regarding intellectual agility as an essential role of leaders in SME innovation.

#### 4. Discussion

Once most of the representatives (19 out of 20) attended the program until the end of the training (eight months), they believed in the importance of developing human capital through continuous education. Human capital has been pointed out as the most important pillar of intellectual capital for promoting the cumulative growth of innovative SMEs [29]. Thus, this also indicates that SMEs' representatives may have a practical perception of what the drivers of growth actually are. In the observed cases, this perception agrees with what was observed in the previous literature [29].

The literature also indicated that government programs focused on developing marketing and innovation skills are more effective in promoting SMEs' survival [30]. In this regard, the SME representatives mentioned these skills as being the most important of the training period. However, it is worth noting that the observed program was executed before the pandemic and did not focus on digital transformation. This should have become a critical skill for survival during the pandemic. Hence, future investigations could focus on understanding the impacts of government programs on the survival of SMEs through improving digital transformation and innovation.

It is worth noting that although innovative SMEs are frequently associated with an innovative geographical hub [28], no representative of SMEs mentioned that aspects pertinent to their geographical location were affecting their business and possibilities for innovation. However, Arielle from Accounting Speedy mentioned the impact of national laws on her business, and Denzel from Emporium Fresh mentioned financial insecurity that may be related to the financial conditions of the country (besides the SME financial performance).

Among the analyzed SMEs, two are MEIs (the smallest possible category in terms of revenue, also classified as self-employment), one is ME (intermediary category), and two are EPPs (the largest category). There was no observed tendency to understand innovation in certain ways depending on the SME's size.

On the other hand, three of the five representatives of the SMEs were women (one in each size category of SME). This is a very small sample for making non-gender-biased assumptions. However, none of the women described understanding innovation as a process, while the men showed they understood innovation as a process, but at the same time considered innovation as a risk. In this regard, the association of innovation as a risk may be an obstacle to women in adopting innovation as a process in their SMEs because the female social role construction relates women with non-risky behaviors in many cultures [57,58].

Previous findings pointing out that family SMEs led by women tend to be less engaged in innovation through digital transformation is intriguing [59]. It is also known that gender-based roles are influenced by the local culture [57,58]. In this regard, future investigations should focus on understanding the specific particularities and necessities for equally promoting innovation in SMEs independently of the leaders' and representatives' gender. The gender-focused perspective on future investigations is relevant globally once SMEs are responsible for more than 50% worldwide [1] and most female jobs [60].

On this theme, another correlated topic is the family SME. Two representatives (Alexander from Confection Prime and Denzel from Emporium Fresh, both men) mentioned that their SMEs are family businesses, which is an obstacle to implementing innovation as a process. Hence, further investigation should also replicate the study [59] to confirm the results (i.e., family SMEs led by women tend to be less engaged in innovation) in different

cultural contexts. Apparently, in the currently observed context, the expected results may be confirmed.

The age of the leadership and the age of the SME also seem to affect the acceptance of agile and innovation methodologies. Denzel and Alexander mention generational conflict as an obstacle to innovation. Arielle mentioned the “tradition” of the SME as an obstacle, which may be related to the age of the enterprise or to a generational conflict. The literature expects those younger employees to be more open to intellectual agility [5]. Moreover, based on the technological acceptance model (TAM) and social cognitive theory (SCT), a previous paper [61] concluded that, in a family business, younger and older generations have different preferences when adopting smartphones and tablets at work. Generational considerations should be taken into account while training SMEs.

In summary, six factors were discussed as possibly affecting the adoption of innovation and organizational agility. They were the age of the SMEs’ leaders, the age of the SMEs, the gender of the SMEs’ leaders, the nature of the SMEs (family business or not), geographical position, and the size of the SMEs. Except for the last two, the other four seemed to affect in the following way: older leaders, older SMEs, SMEs led by women, and family SMEs tend to be more resistant to adopting organizational agility and systematization of innovation.

## 5. Conclusions

The ALI Program is a government program to promote innovation in SMEs. The ALI Program offers eight-month innovation training based on agile methodologies to achieve the innovation objective. One local innovation agent (ALI) is responsible for training 20 SMEs in each eight-month training cycle. After each cycle, the ALI is instructed to write a scientific paper under the supervision of an academic. Here, the experience of an ALI in São Paulo between 2019 and 2020 is presented and discussed based on the perspective of organizational agility.

Regardless of the identified obstacles, the actions of the ALI Program can be understood as a driver for enterprises to understand the need to innovate in a context of uncertainty (VUCA). It is observed that, even for well-established enterprises, the need to innovate and the understanding of what innovation really is raised a debate that had not been carried out by the ALI Program team before. In this sense, the actions of the ALI Program are effective in reinforcing the entrepreneurs’ awareness of the importance of innovating and motivating them to do things differently. On the other hand, the SMEs studied here still understand innovation as one-off actions and have not incorporated innovation management into their businesses.

The findings showed that even after finishing the ALI Program, SMEs see innovation as a risk, fear innovating because of tradition, family, and/or generational contexts, and do not see innovation as a process suitable to be systematized with agile tools. Many reasons can be investigated regarding the reasons for the program’s unsuccess, and they should be the focus of further research. It is suggested here that the age of SMEs’ leaders, the age of the SMEs, the gender of the SMEs’ leaders, and the nature of the SMEs (family business or not) could be explicative factors for the observed innovation resistance. Finally, based on what was observed in the literature from similar programs in Latin America, it is recommended that policymakers associate the ALI Program with a financing program so that the SMEs participating in the program have more resources for investing in innovation.

Like all research, this study is not without limitations, and the limitations represent opportunities for further research. First, the sample size (five SMEs) is minimal and does not enable general and robust conclusions. This happens because the participation in the research was completely free and limited to the experience of one ALI during one cycle in one specific region (São José dos Campos, São Paulo state).

To overcome this limitation, it is recommended to the ALI agents and ALI Program leaders to promote coordination and collaboration for data collection among different ALIs and cycles so that the results can be analyzed considering a broader view. This also

enables more research with other methods, such as quantitative and mixed approaches, thus improving the strength and the implications of the findings.

It is also recommended that policymakers create strategies for promoting the collaboration between SMEs, and academia for innovation should be built and tested. Specifically, it is recommended that the ALIs receive scientific training, equivalent to a master's degree, before training SMEs. It is assumed that once ALIs have more scientific capacitation, they will be able to show the relevance of scientific knowledge and research to SMEs' businesses. Consequently, more SME representatives will be interested in participating in research.

As pointed out in the introduction, there is a lack of replication studies for Latin American and emerging markets. Once more data are feasible, it is recommended to replicate in Brazil the paper that investigated the nexus between entrepreneurial leadership, human capital, and innovation in Serbia [5]. It is relevant to confirm whether the relationship between the intellectual agility of employees and the innovativeness of SMEs, strongly mediated through entrepreneurial leadership, is confirmed in other contexts for building and improving the theoretical knowledge on the theme.

Second, although the best practices for focus groups were followed [54], the guiding questions were created based on the ALI's experience. Because no guiding questions on the theme were found, it is recommended that researchers and/or ALI agents systematically develop guiding questions based on a literature review and expert validation.

Third, although the focus group was assumed to be homogeneous once all members had occupied similar leadership positions, the findings and previous literature indicate that generation and gender may affect the results, probably due to cultural reasons. So, it is recommended that researchers and/or ALI agents execute focus groups with all members of the same gender. Then, the results from focus groups with different genders could be compared and discussed. The same procedure is recommended for investigating generational differences.

Regarding necessary replication studies, a study about French family SMEs pointed out that gender differences affect the role of IT in SME performance and the importance of family harmony [59]. It is recommended that researchers replicate this study in Latin American and emerging markets once the cultural view of gender roles may affect the results. In addition, it is recommended to policymakers and/or ALI Program leaders to consider specific particularities and necessities for equally promoting innovation in SMEs. These particularities may be based on gender, generation, regional culture, or the nature of the SME (family or non-family business) and may require different educational approaches to reach the same innovative performance. Given this context, promoting research on the theme and generating knowledge may be seen as the first step toward creating adequate policies and educational approaches.

This research work is just the beginning of a better understanding of how the concept of organizational agility can contribute to the innovation of SMEs in practice. It is hoped that this work could contribute a piece to the puzzle.

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## References

- World Bank. World Bank SME Finance: Development News, Research, Data. Available online: <https://www.worldbank.org/en/topic/smefinance> (accessed on 8 January 2022).
- Fernández, I.A.; Rosas, M.d.L.A.C. El Desarrollo Sostenible Como Imperativo Estratégico: El Contexto de La Pequeña y Mediana Empresa Latinoamericana. *Rev. Lasallista Investig* **2020**, *16*, 28–43. [[CrossRef](#)]
- Troise, C.; Corvello, V.; Ghobadian, A.; O'Regan, N. How Can SMEs Successfully Navigate VUCA Environment: The Role of Agility in the Digital Transformation Era. *Technol. Forecast. Soc. Change* **2022**, *174*, 121227. [[CrossRef](#)]
- Olavarrieta, S.; Diaz, D. The Strong Need for Extended Research and Replications in Latin American and Emerging Markets. *J. Bus. Res.* **2021**, *127*, 384–388. [[CrossRef](#)]
- Dabić, M.; Stojčić, N.; Simić, M.; Potocan, V.; Slavković, M.; Nedelko, Z. Intellectual Agility and Innovation in Micro and Small Businesses: The Mediating Role of Entrepreneurial Leadership. *J. Bus. Res.* **2021**, *123*, 683–695. [[CrossRef](#)]
- Berne, D.F.; Coda, R.; Krakauer, P.; Donaire, D. The Innovation Challenge in Micro and Small Enterprises (MSE). *Innov. Manag. Rev.* **2019**, *16*, 235–252. [[CrossRef](#)]
- Vasconcelos, R.; Oliveria, M. Does Innovation Make a Difference? *Innov. Manag. Rev.* **2018**, *15*, 137–154. [[CrossRef](#)]
- De Souza, G.; Melo, I.C.; Amaral, D.C. Evaluating the Transition for Self-Managed Teams through Analysis of Roles in Agile Product Development Process in a Technology-Based Startup. *J. Technol. Manag. Appl. Eng.* **2020**, *36*, 2–14.
- Rodrigues, C.D.; de Noronha, M.E.S. What Companies Can Learn from Unicorn Startups to Overcome the COVID-19 Crisis. *Innov. Manag. Rev.* **2021**. [[CrossRef](#)]
- Nardes, F.B.S.; Miranda, R.C.D.R. Lean Startup e Canvas: Uma Proposta de Metodologia Para Startups. *Rev. Bras. Adm. Cient.* **2014**, *5*, 252–272. [[CrossRef](#)]
- Silva, G.; Dacorso, A.L.R. Inovação Aberta Como Uma Vantagem Competitiva Para a Micro e Pequena Empresa. *Rev. Adm. Innov. RAI* **2013**, *10*, 251–269. [[CrossRef](#)]
- SEBRAE. O Que é SEBRAE? Available online: [https://www.sebrae.com.br/sites/PortalSebrae/canais\\_adicionais/o\\_que\\_fazemos#:~:text=O%20Servi%C3%A7o%20Brasileiro%20de%20Apoio%20%C3%A0s%20Micro%20e,apoio%20aos%20pequenos%20neg%C3%B3cios%20de%20todo%20o%20pa%C3%ADs](https://www.sebrae.com.br/sites/PortalSebrae/canais_adicionais/o_que_fazemos#:~:text=O%20Servi%C3%A7o%20Brasileiro%20de%20Apoio%20%C3%A0s%20Micro%20e,apoio%20aos%20pequenos%20neg%C3%B3cios%20de%20todo%20o%20pa%C3%ADs) (accessed on 11 July 2022).
- De Carvalho, G.D.G.; Vosgerau, D.S.R.; de Carvalho, H.G.; Candido, R.; Cavalcante, M.B. Competências Dos Agentes Locais de Inovação: Análise de Conteúdo Utilizando Atlas TI. *Rev. Espac.* **2016**, *37*, 1–20.
- De Carvalho, G.D.G.; de Resende, L.M.M.; de Carvalho, H.G.; Pontes, J.; Correa, R.O. The Local Innovation Agents Program: A Literature Review on the Largest Brazilian Small Business Innovation Support Program. *Int. J. Innov. Sci.* **2020**, *12*, 565–588. [[CrossRef](#)]
- SEBRAE. Programa ALI. Available online: <https://www.sebrae.com.br/sites/PortalSebrae/ufs/pe/sebraeaz/ali-agente-local-de-inovacao,f137767836fc7710VgnVCM10000d701210aRCRD> (accessed on 11 July 2022).
- IBGE—Brazilian Institute of Geography and Statistics Cities and States [Cidades e Estados]. Available online: <https://ibge.gov.br/cidades-e-estados.html> (accessed on 11 July 2022).
- Conboy, K. Agility from First Principles: Reconstructing the Concept of Agility in Information Systems Development. *Inf. Syst. Res.* **2009**, *20*, 329–354. [[CrossRef](#)]
- Najrani, M. The Endless Opportunity of Organizational Agility. *Strateg. Dir.* **2016**, *32*, 37–38. [[CrossRef](#)]
- Chan, C.M.L.; Teoh, S.Y.; Yeow, A.; Pan, G. Agility in Responding to Disruptive Digital Innovation: Case Study of an SME. *Inf. Syst. J.* **2019**, *29*, 436–455. [[CrossRef](#)]
- Martinez-Sanchez, A.; Perez-Perez, M.; Vicente-Oliva, S. Absorptive Capacity and Technology: Influences on Innovative Firms. *Manag. Res. J. Iberoam. Acad. Manag.* **2019**, *17*, 250–265. [[CrossRef](#)]
- Cenamor, J.; Parida, V.; Wincent, J. How Entrepreneurial SMEs Compete through Digital Platforms: The Roles of Digital Platform Capability, Network Capability and Ambidexterity. *J. Bus. Res.* **2019**, *100*, 196–206. [[CrossRef](#)]
- Chen, Y.-Y.K.; Jaw, Y.-L.; Wu, B.-L. Effect of Digital Transformation on Organisational Performance of SMEs. *Internet Res.* **2016**, *26*, 186–212. [[CrossRef](#)]
- González-Varona, J.; López-Paredes, A.; Poza, D.; Acebes, F. Building and Development of an Organizational Competence for Digital Transformation in SMEs. *J. Ind. Eng. Manag.* **2021**, *14*, 15. [[CrossRef](#)]
- Hassan, S.S.; Reuter, C.; Bzhalava, L. Perception or Capabilities? An Empirical Investigation of the Factors Influencing the Adoption of Social Media and Public Cloud in German SMEs. *Int. J. Innov. Manag.* **2021**, *25*, 2150002. [[CrossRef](#)]
- Bouwman, H.; Nikou, S.; de Reuver, M. Digitalization, Business Models, and SMEs: How Do Business Model Innovation Practices Improve Performance of Digitalizing SMEs? *Telecomm. Policy* **2019**, *43*, 101828. [[CrossRef](#)]
- AlMujaini, H.; Hilmi, M.F.; Abudaqa, A.; Alzahmi, R. Corporate Foresight Organizational Learning and Performance: The Moderating Role of Digital Transformation and Mediating Role of Innovativeness in SMEs. *Int. J. Data Netw. Sci.* **2021**, *5*, 703–712. [[CrossRef](#)]

27. Ardito, L.; Raby, S.; Albino, V.; Bertoldi, B. The Duality of Digital and Environmental Orientations in the Context of SMEs: Implications for Innovation Performance. *J. Bus. Res.* **2021**, *123*, 44–56. [CrossRef]
28. Simmie, J. Knowledge Spillovers and Reasons for the Concentration of Innovative SMEs. *Urban Stud.* **2002**, *39*, 885–902. [CrossRef]
29. González-Loureiro, M.; Dorrego, P.F. Intellectual Capital and System of Innovation: What Really Matters at Innovative SMEs. *Intang. Cap.* **2012**, *8*, 239–274. [CrossRef]
30. Najib, M.; Rahman, A.A.A.; Fahma, F. Business Survival of small and medium-sized restaurants through a Crisis: The Role of Government Support and Innovation. *Sustainability* **2021**, *13*, 10535. [CrossRef]
31. Yousaf, Z.; Radulescu, M.; Sinisi, C.I.; Serbanescu, L.; Păunescu, L.M. Towards Sustainable Digital Innovation of SMEs from the Developing Countries in the Context of the Digital Economy and Frugal Environment. *Sustainability* **2021**, *13*, 5715. [CrossRef]
32. Ries, E. *The Lean Startup: How Today's Entrepreneurs Use Continuous Innovation to Create Radically Successful Businesses*, 1st ed.; Crown Publishing: New York, NY, USA, 2011.
33. Nassani, A.A.; Sinisi, C.; Mihai, D.; Paunescu, L.; Yousaf, Z.; Haffar, M. Towards the Achievement of Frugal Innovation: Exploring Major Antecedents among SMEs. *Sustainability* **2022**, *14*, 4120. [CrossRef]
34. Bower, J.L.; Christensen, C.M. Disruptive Technologies: Catching the Wave. *Harv Bus. Rev.* **1995**, *73*, 1–43.
35. Schumpeter, J. *The Theory of Economic Development*; Harvard University Press: Boston, MA, USA, 1934.
36. Lyytinen, K.; Rose, G.M. The Disruptive Nature of Information Technology Innovations: The Case of Internet Computing in Systems Development Organizations. *MIS Q.* **2003**, *27*, 557. [CrossRef]
37. Góngora, G.; García, D.; Madrid, A. Efecto Del Apoyo Público Sobre El Comportamiento Innovador y El Rendimiento En PYMES. *Rev. Cienc. Soc. RCS* **2010**, *16*, 400–417. [CrossRef]
38. Avalos-Quispe, G.; Hernández-Simón, L. Open Innovation in SMEs: Potential and Realized Absorptive Capacity for Interorganizational Learning in Dyad Collaborations with Academia. *J. Open Innov. Technol. Mark. Complex.* **2019**, *5*, 72. [CrossRef]
39. Van Hoof, B.; Lyon, T.P. Cleaner Production in Small Firms Taking Part in Mexico's Sustainable Supplier Program. *J. Clean. Prod.* **2013**, *41*, 270–282. [CrossRef]
40. Donovan, J.; Rutsaert, P.; Domínguez, C.; Peña, M. Capacities of Local Maize Seed Enterprises in Mexico: Implications for Seed Systems Development. *Food Secur.* **2022**, *14*, 509–529. [CrossRef]
41. Solleiro, J.L.; Gaona, C.; Castañón, R. Políticas Para El Desarrollo de Sistemas de Innovación En México. *J. Technol. Manag. Innov.* **2014**, *9*, 98–109. [CrossRef]
42. Morantes, M.E.L.; Ferrer, N.J.L.; Parra, O.D.S.B.; de Hernández, V.E.V. Gestión Tecnológica En Pymes Del Sector Textil Del Municipio Maracaibo-Estado Zulia—Venezuela. *Rev. Venez. Gerenc.* **2018**, *23*, 314–335.
43. Escandón-Barbosa, D.; Ochoa, A.E. Success Factors in the Internalisation of Export Companies in Colombia. *Econ. Reg.* **2021**, *17*, 570–581. [CrossRef]
44. Albarracín, E.J.G.; Lema, D.G.P. De Impacto de La Innovación Sobre El Rendimiento de La Mipyme: Un Estudio Empírico En Colombia. *Estud. Gerenc.* **2012**, *28*, 11–27. [CrossRef]
45. Alvarez, R. Sources of Export Success in Small- and Medium-Sized Enterprises: The Impact of Public Programs. *Int. Bus. Rev.* **2004**, *13*, 383–400. [CrossRef]
46. Monge-González, R.; Rodríguez-Alvarez, J.A.; Leiva, J.C. An Impact Evaluation of a Fund to Finance Innovation in SMEs. *Acad. Rev. Latinoam. Adm.* **2016**, *29*, 20–43. [CrossRef]
47. Castillo, V.; Maffioli, A.; Rojo, S.; Stucchi, R. The Effect of Innovation Policy on SMEs' Employment and Wages in Argentina. *Small Bus. Econ.* **2014**, *42*, 387–406. [CrossRef]
48. Junior, P.N.A.; Melo, I.C.; Yamanaka, L.; Severino, M.R.; Rentizelas, A. Supporting the Bidding Decisions of Smallholder Farmers in Public Calls in Brazil. *Agriculture* **2021**, *12*, 48. [CrossRef]
49. SEBRAE. Lei Geral Da Micro e Pequena Empresa. Available online: <https://www.sebrae.com.br/sites/PortalSebrae/artigos/lei-geral-da-micro-e-pequena-empresa,46b1494aed4bd710VgnVCM100000d701210aRCRD> (accessed on 11 July 2022).
50. Maurya, A. *Scaling Lean: Mastering the Key Metrics for Startup Growth*; Penguin Random House: New York, NY, USA, 2016.
51. Christensen, C.M.; Dillon, K.; Hall, T.; Duncan, D.S. *Competing Against Luck: The Story of Innovation and Customer Choice*; Harper Business: New York, NY, USA, 2016.
52. Bachmann, D. *Perfil Do Grau de Inovação Das MPes Do Paraná*; SEBRAE: Curitiba, Brazil, 2009.
53. De Carvalho, G.D.G.; de Carvalho, H.G.; Cardoso, H.H.R.; Gonçalves, A.D. Assessing a Micro and Small Businesses Innovation Support Programme in Brazil: The Local Innovation Agents Programme. *J. Int. Dev.* **2018**, *30*, 1064–1068. [CrossRef]
54. Wilkinson, S. Focus Group Methodology: A Review. *Int. J. Soc. Res. Methodol.* **1998**, *1*, 181–203. [CrossRef]
55. Gonzalez Rey, F.L. *Pesquisa Qualitativa e Subjetividade: Os Processos de Construção Da Informação*, 1st ed.; Cengage Learning: Boston, MA, USA, 2001.
56. Krueger, R.A. *Casey Focus Groups: A Practical Guide for Applied Research*, 4th ed.; SAGE Publications: Thousand Oaks, CA, USA, 2008.
57. Bussey, K.; Bandura, A. Social Cognitive Theory of Gender Development and Differentiation. *Psychol Rev.* **1999**, *106*, 676–713. [CrossRef]
58. Eagly, A.H.; Karau, S.J. Role Congruity Theory of Prejudice toward Female Leaders. *Psychol Rev.* **2002**, *109*, 573–598. [CrossRef]
59. Dutot, V.; Bergeron, F.; Calabrò, A. The Impact of Family Harmony on Family SMEs' Performance: The Mediating Role of Information Technologies. *J. Fam. Bus. Manag.* **2021**. [CrossRef]

- 
60. Lopez-Nicolas, C.; Nikou, S.; Molina-Castillo, F.-J.; Bouwman, H. Gender Differences and Business Model Experimentation in European SMEs. *J. Bus. Ind. Mark.* **2020**, *35*, 1205–1219. [[CrossRef](#)]
  61. Apergis, E. Who Is Tech Savvy? Exploring the Adoption of Smartphones and Tablets: An Empirical Investigation. *J. High Technol. Manag. Res.* **2019**, *30*, 100351. [[CrossRef](#)]