

# Sustainable Innovation Practices In Impact Business Models: A Brazilian Case Study

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## **Abstract:**

**Purpose:** This study sought to analyze sustainable innovation practices in Brazilian impact business models. Given the significance of organizations in today's society, it has become essential to comprehend sustainable innovations in impact business models. These models play a crucial role in addressing current social issues and ensuring the survival of organizations in an increasingly competitive market. Therefore, this study focused on impact business models, which are ventures that strive to solve social problems through sustainable business practices.

**Methodology:** This qualitative study analyzed documents and applied interviews with managers of four impact businesses linked to the Socio-Environmental Impact Business Map. Four interviews were conducted with six participants. Additionally, fifty-three secondary data sources were analyzed. The interviews and secondary data were analyzed using content analysis. The interviews and secondary data were analyzed using content analysis.

**Findings:** Regarding the elements of the impact business model, our findings revealed that the value proposition generally revolves around social and environmental aspects. The companies studied seek suppliers aligned with their purposes, and the competencies are related to social

actions and social responsibility. The economic profit impacts the social profit equation by generating benefits linked to the achievement of the business. As for the sustainable innovations adopted by the impact businesses studied, they all practice innovations in maximizing energy and water efficiency.

**Originality/value:** We aimed to fill existing gaps in the academic field, especially in how business models that innovate in Brazilian social impact ventures are configured, advancing in the face of the countless initiatives that have emerged within this ecosystem, in addition to shedding more light on the limits and potentialities of social impact businesses through innovative solutions, whether incrementally or through transformative social changes.

**Keywords:** Sustainable Innovation. Business Models. Social Impact. Sustainability. Qualitative Approach.

### **Introduction**

Sustainability has gradually integrated the business agenda and is considered by many theorists a factor of competitive advantage. In this context, in order to insert sustainability, business model innovation is a strategic point of view for socio-environmental concerns, integrating with the organizations' objectives (Baldassarre et al., 2020). Hence, new corporate behaviors are being perceived by adopting sustainable practices, resulting in new products, processes, and business models.

Associating sustainable innovation with the business model is one of many obstacles managers face. Such challenges begin in interrelationships: on one side, the value propositions of brands in promoting advances in economic, technological, social, and environmental contexts, and on the other, the pressure for sustainable development. The traditional business model is defined as creating economic value to acquire profits for shareholders (Osterwalder & Pigneur, 2010). Research on business model innovation considers three major strategic moves: challenging conventional wisdom, setting up appropriate partnerships, and undertaking experimentation (Yunus, Moingeon, & Lehmann-Ortega, 2010). When innovation is inserted into the business model, one of the objectives is redesigning the organization's concept and project sustainability at various levels, from strategic to product design (Bocken, Rana, & Short, 2015). Inserting sustainable innovation into a business requires them to modify their strategies, involve all stakeholders, and develop new practices of creating, delivering, and capturing value (Richter, 2013). This challenging scenario led to a remodeled concept as an alternative for organizations: impact business.

The fundamental characteristics of the so-called social impact businesses are positively impacting a community, broadening the perspectives of people marginalized by society, and generating shared income and financial autonomy for low-income individuals. Hence, generating social impact through business techniques with technology and aiming for profit seems to have become an alternative path to the global economy. These businesses emerged as a form of socioeconomic intervention, integrating the different impacted or impacting actors in the search for innovation, social transformation, and financial performance (Aliança de Investimentos e Negócios de Impacto, 2015). Their scope of work is broad and covers topics such as quality of education, health services, urban mobility, and reducing carbon emissions, among other social needs.

Thus, impact businesses are a compelling proposal to attract part of the private capital to solutions that act directly on social, environmental, and technological obstacles (Fonseca & Hollerback, 2019). To this end, the main focus of the business model is generating social value, with economic value creation being an extra element to make the company's financial situation viable (Mair & Martí, 2006). It is worth noting that the context of this study is permeated by the COVID-19 pandemic, which significantly impacted human relations and business.

Therefore, with regard to impact businesses, the coordinator of the 2021 Impact Business Map reported that before the pandemic, entrepreneurs focused on solving social and environmental problems through their businesses by conversing with institutes, foundations, investors, governments, and brands, and since the pandemic, a plethora of organizations have recognized the urgency and power of these positive impact initiatives (Fonseca, 2021).

Social impact businesses have sustainable innovations as a fundamental characteristic and, considering the importance of understanding the concepts and relationships of these innovations in impact business models, starting from the definition of Barbieri et al. (2010). According to the authors, sustainable innovations occur by introducing products, processes, management, or business methods, new or significantly improved for the organization and bringing economic, social, and environmental benefits.

Given the above, this study proposed to answer the following research question: *How are sustainable innovations characterized in impact business models?* From this question, the study's general objective was developed, which consists of analyzing the practices of sustainable innovations in Brazilian impact business models. In order to answer the research problem, the practices of sustainable innovation in impact business models were analyzed.

In addition to the introduction, the second section addresses the theoretical foundations of the theme, followed by the methodological procedures in the third section, the analysis and discussion of the results in the fourth, and lastly, the conclusions, suggestions for future studies, and limitations in the fifth section.

### **Theoretical Foundation**

This section presents the different theoretical conceptions about the impact business model and sustainable innovation, which bring subsidy and basis to the problem and study's objective.

#### *Impact Business Model*

In the capitalist system, organizations can be distinguished into two groups: those that maximize profit to create value for shareholders and those that fulfill social, non-profit objectives. Impact businesses emerge as a combination of these two models, possessing the ability to act as an agent of change for the world, with enough commercial characteristics to survive and still profit (Yunus, Moingeon, & Lehmann-Ortega, 2010). With an innovative orientation, impact businesses are expanding, and the current trend is that traditional companies begin to readjust to this new model type. According to Barki (2014), businesses with some kind of impact emerge due to combining private-sector skills and third-sector management, resulting in hybrid organizations that aim to solve social problems using market mechanisms.

These ventures are characterized by seeking solutions to solve social, economic, and environmental problems affecting society, encompassing different areas such as health, education, sanitation, housing, technology, and the environment, among others (Pipe Social, 2019). The Pipe Social study showed that impact businesses have been growing exponentially in Brazil, and more support and incentives have emerged to follow and be part of this ecosystem, promoting greater stability to the companies. In the analysis conducted to follow the evolution of the business pipeline, green technologies grew by 46%, which includes all the businesses that have an environmental impact, whether they are focused on water reuse, solar and wind energy, circular economy, or atmosphere analysis, among others. According to one of the platform's co-founders, environmental awareness is increasing, and there is already much research in this field in Brazil (Fonseca & Hollerback, 2019).

Businesses in the field of citizenship involve solutions for democracy, government management, transparency, civic engagement, social inclusion, diversity, and gender issues, and in the 2019 map, they grew by 43%. Therefore, impact businesses emerge as a response to dilemmas created by capitalism (Barki, 2015); they are new business models in which there is

a substitution for stakeholders in the face of the focus on maximizing value and capitalism using its resources to address global concerns (Yunus, Moingeon, & Lehmann-Ortega, 2010). The authors explained that, in the organizational structure, this new form of business is the same as that which maximizes profit in traditional companies: while companies seek to achieve their social and/or environmental goals, they must also recover their total costs.

Thus, impact businesses are financially self-sustainable, and economic viability and social impact should generally have equal weight in the business plan. This differentiates them from NGOs and civil society organizations, which require strength and energy to raise money for their actions. According to Barki (2015), impact businesses use market mechanisms to search for financial sustainability, not depending on donations or other financial support to survive. Another relevant characteristic of impact businesses is that their methods can be replicated.

Figure 1 represents the four components of a social business model.

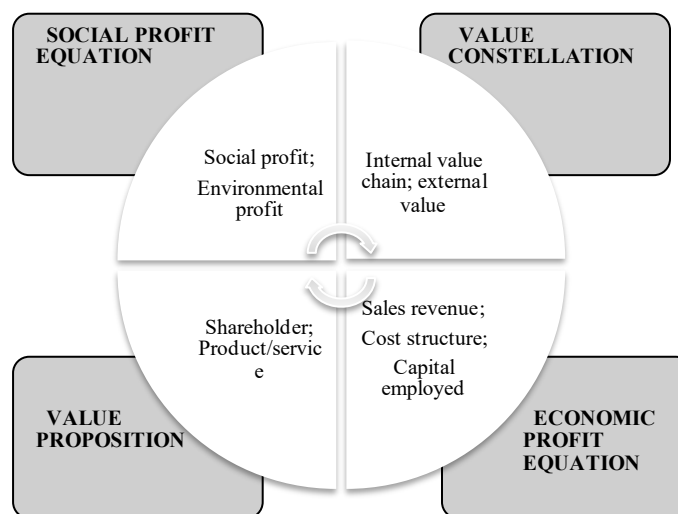


Figure 1: Components of a social business model

Source: Yunus, Moingeon, and Lehmann-Ortega (2010)

As illustrated in Figure 1, the adjustments from the traditional business model to a social structure take place in the focus of stakeholders; in this case, it changes from the customer only to all stakeholders. In a social profit equation, profits also contain a more comprehensive view of the ecosystem, whereas, in economic profit, the goal is to have full cost and capital recovery without maximizing financial profit. This same model can be applied to environmental issues by companies that have actions aimed at climate change, water scarcity, industrial pollution, and energy with high values (Yunus, Moingeon, & Lehmann-Ortega, 2010). The authors recognize that it is still difficult to measure the performance of impact businesses to measure social profit, although they firmly believe that the interest in building business models with some impact is growing.

In this context, Petrini, Scherer, and Back (2016) researched the social impact business model to propose a social business model that would help identify its elements. The authors compiled various existing models, proposing a new model definition. Through field research with 49 organizations, the authors proposed five dimensions composed of 13 elements: infrastructure, value constellation, ecosystem, and social profit equation. Their business model has a new reorganization and inclusion of elements that can compose a social impact business model based on the Canvas model and rereading the studies made by Yunus, Moingeon, and Lehmann-Ortega (2010). The rereading of this social impact business model is presented in Figure 2, which presents the new elements and relationships.

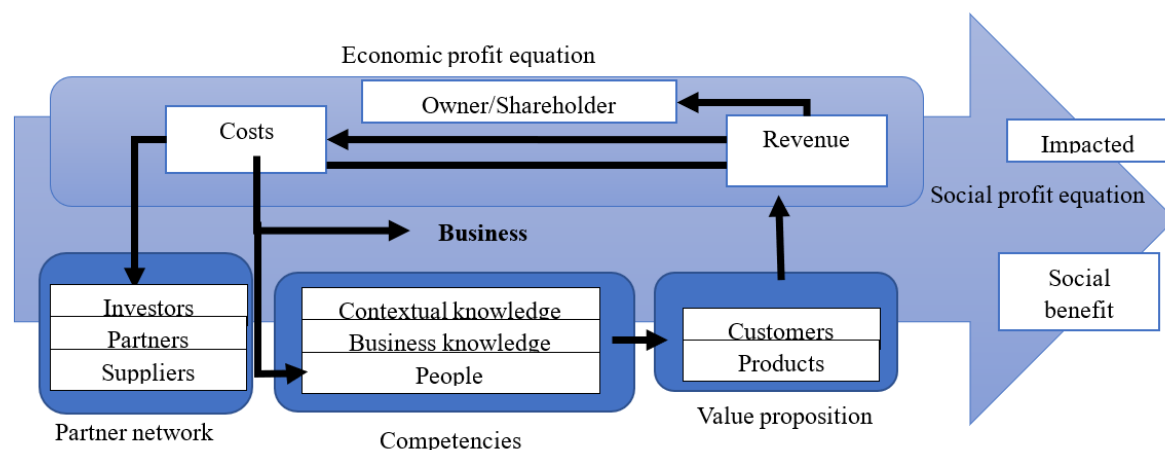


Figure 2: Rereading the social impact business model.

Source: Petrini, Scherer, and Back (2016)

Thus, the new business model structure is broader and more challenging than the conventional one, with the recruitment of shareholders being oriented towards social profit, containing the clear and anticipated specification of its objectives and how environmental, social, and sustainable principles will be addressed (Petrini, Scherer, & Back, 2016). This study is based on the framework proposed by Petrini, Scherer, and Back (2016) to analyze the aspects concerning the impact business models and their elements.

Porter and Kramer (2011) reported that sustainability challenges innovation. However, when innovation in sustainability is positioned in a business model, it can generate a win-win situation. Bocken et al. (2014) stated that innovation has become one of the differentiating modes of competitive advantage for organizations pursuing sustainable business models to meet market demand. The authors also believed that companies must introduce changes in their business models to face and innovate in unsustainable production and consumption, considering the appreciation of the environment and social benefits, in addition to the economic gain.

#### *Sustainable Innovation in the Business Model*

Environmental concerns have determined the urgency to make adjustments in producing goods and services with sustainability-oriented strategies. Climate change, resource use, and inequality are increasing the pressure to address sustainability through significant changes in organizations' daily operations and behaviors (Bocken, Rana, & Short, 2015).

According to Abdullah et al. (2022), companies' actions can significantly impact climate change, especially for companies that employ traditional management practices. As a result, many companies have begun to shift their business operations towards green management approaches that address environmental concerns. The authors have developed an interesting conceptual model that links green management practices (organizational structure, human resources, and innovation capability) to green innovation and organizational performance. This integration involves reorganizing management and incorporating green and value management practices to change how the company delivers services internally and externally (Abdullah et al., 2022). In addition, these practices help the company realize its innovation capability, thereby contributing to overall organizational performance.

In this sense, Teece (2010) considered that for companies to profit through innovation, they need to excel not only in product and service innovation but also in the design of their business model, understanding how their needs and trajectories need to be dynamic. The author also reinforced that capturing value through new products and services is necessary, not limiting



oneself to merely meeting customer needs. For Barbieri et al. (2010), developing and/or improving products, services, and processes in organizations are considered innovations, and if they are related to economic, social, and environmental aspects, they are characterized as sustainable innovation practices.

Sustainable innovation consists of a process through which sustainability, in terms of the economic, social, and environmental spheres, should be integrated into the company's systems for generating ideas from research and development and marketing (Charter & Clark, 2007). These actions should be contained in product, service, and technology development as well as inserted into new business models. Nevertheless, there is still no consolidated definition of sustainable innovation and no consensus among scholars. Some authors use 'eco-innovation' and 'clean technologies' as synonyms of sustainable innovation, focusing on innovations related to the ecological impact of products and/or services (Boons & Lüdeke-Freund, 2013). Boons and Lüdeke-Freund (2013) analyzed over fifty articles and found that the theme of innovation in relation to the business model is a relevant aspect for companies to have a competitive advantage and renew themselves. Bocken, Rana, and Short (2015) corroborate this by claiming that how companies think and operate requires considerable change in the face of systemic challenges. In this context, Bocken et al. (2014) proposed archetypes of sustainable business models bringing together innovations from research and practice toward a future research agenda. According to the authors, archetypes are used as a tool to describe mechanisms and solutions to accelerate, reshape, and/or build a business model with a sustainable bias, maximizing efficiency, creating value from waste, finding substitutes for renewable sources, and developing scales of solutions to favor society and the environment. Subsequently, Ritala et al. (2018) updated the framework of archetypes by organizing them into environmental, social, and economic categories. The nine archetypes used for innovative solutions that seek to develop the sustainable business model proposed by Bocken et al. (2014) and Ritala et al. (2018) are listed in Table 1.

The proposed archetypes consist of 1) maximizing energy and material efficiency; 2) closing resource loops; 3) replacing with renewable and natural processes; 4) providing functionality, not ownership; 5) adopting a stewardship role; 6) encouraging sufficiency to reduce consumption and production; 7) repurposing for society/environment; 8) creating inclusive value; and 9) developing sustainable scale-up solutions (Bocken et al., 2014; Ritala et al., 2018). It is worth noting that the model in question can be applied to different segments of productive activities. The archetypes aim to contribute solutions related to sustainability and innovation, and organizations can combine different archetypes that best suit the company's activity. The archetypes proposed by Bocken et al. (2014) and updated by Ritala et al. (2018) were used to analyze sustainable innovation in this study, given that they encompass a broad set of actions. The next section presents the methodological aspects adopted to develop the study.

Table 1: Innovative archetypes for sustainable business models

Innovation	Archetypes	Definition
<b>Environmental</b>	Maximize energy and material efficiency	Doing more with fewer resources, generating less waste, emissions, and pollution.
	Close resource loops	The concept “waste is eliminated by transforming existing waste streams into useful and valuable contribution to other production and providing better utilization of underutilized capacity.
	Replace with renewable and natural processes	Reducing the use of non-renewable resources by reducing emissions associated with burning fossil fuels and producing waste in landfills.
<b>Social</b>	Deliver functionality rather than ownership and maximize the use of products.	To provide services that meet users’ needs without owning physical products.
	Adopt a stewardship role	Proactive engagement among stakeholders to ensure their well-being.
	Encourage sufficiency	Solutions that actively seek to reduce consumption and production.
<b>Economic</b>	Adapt business to society/environment	Prioritize delivering social and environmental benefits through integration between the company, the communities, and other stakeholders.
	Inclusive value creation	Sharing resources, knowledge, ownership, wealth creation, and value creation.
	Developing sustainable scale-up solutions	Enabling sustainable solutions on a large scale to maximize benefits to society and the environment.

Source: elaborated from Bocken et al. (2014) and Ritala et al. (2018)

### Methodological Procedures

This study sought to analyze sustainable innovation practices in impact business models. To this end, we adopted a research methodology of qualitative approach and exploratory nature by conducting multiple case studies. The qualitative approach uses data collection without numerical measurements to discover or refine research questions in the process of interpretation (i.e., it is not a statistical analysis) (Sampieri, Collado, & Lucio, 2013). Data collection is not standardized or predetermined. Qualitative research is based on a logical and inductive process, including exploring, describing, and generating theoretical perspectives (Sampieri, Collado, & Lucio, 2013).

To recruit the companies of this study, we considered those part of the Socio-environmental Impact Business Map, prepared by the Pipe Social platform and Vivenda Program (Pipe Social, 2019). Therefore, after a first search on the specific pages, the companies were invited on social

media (e.g., Instagram and Facebook) and by email, and four companies accepted. For data protection purposes, the names of the companies were omitted; the companies are referred to herein as Alpha, Beta, Delta, and Gamma.

Data were collected via semi-structured interviews applied to the people in management positions. This procedure is used in social research, data collection, obtaining a diagnosis, and aiding in treating social problems (Lakatos & Marconi, 2003). For the authors, tools (e.g., interviews) are used to obtain the necessary information on a given subject and carried out methodically. Semi-structured interviews are characterized by the fact that the interviewer has free choice to interfere with the questions (Hair et al., 2005). According to Flick (2013), the objective of the interviews is to obtain interviewees' views on the topic, allowing them to answer as freely and as extensively as they wish.

The interview protocol was developed from the theoretical scope of the study and is composed of four blocks: the respondent profile, company characterization, sustainable innovations, and impact business model. To verify the clarity and relevance of the questions, the instrument was previously evaluated by three specialists in education and sustainability.

Thus, based on the studies by Bocken et al. (2014) and Ritala et al. (2018), sustainable innovation was analyzed based on the following dimensions: maximize energy and material efficiency, close resource loops, replace with renewable and natural processes, deliver functionality, not ownership, adopt stewardship role, encourage sufficiency, repurpose for society/environment, inclusive value creation, and develop sustainable scale-up solutions.

To investigate the social impact business model, five dimensions were listed based on Yunus, Moingeon, and Lehmann-Ortega (2010), Boons and Lüdeke-Freund (2013), and Petrini, Scherer, and Back (2016). The first dimension is the network of partners consisting of three elements: investors, suppliers, and partners; dimension 2 contemplates the company's competencies (considering key activities and resources), which details the context, business knowledge, and people; the value proposition is the third dimension, a stage in which occurs the identification of the product and service offered and the customer group served; dimension 4: economic profit equation refers to the revenue generated, with the detailing of the profit distribution relationships and, the social profit equation, defined as the fifth dimension. In addition, considering the COVID-19 pandemic, a question dealing with its influence on impact business models was included.

The interviews were conducted with technological resources, such as Zoom. The interviews were recorded and later transcribed with the authorization of the interviewees. Table 2 summarizes the profile of the interviewees and interview duration.

Table 2: Profiles of the interviewees and duration of the interviews

Company	Interviewee	Role	Academic background	Interview duration
Alpha	I1 and I2	Co-founder	Architecture and Urban Planning	130 min
Beta	I3	Co-founder	Administration	41 min and 20 sec
Gamma	I4	Co-founder	Architecture and Urbanism	53 min and 34 sec
Delta	I5 and I6	Co-founders	Architecture and Urbanism	84 min and 47 sec

Other sources of evidence were also used, such as secondary data analysis (documents, videos, inserts, guides, and publications on websites). The technology allows quick access through



dynamic searches for documentation, videos, inserts, guides, and publications on websites, and all of these possibilities were used as sources of evidence (Table 3).

Table 3: Summary of secondary data sources used in the research

Sources of secondary data	Companies			
	Alpha	Beta	Gamma	Delta
Official company website	1	1	1	1
Company blog	-	2	1	1
Youtube video	-	4	1	1
News in the media	2	4	2	3
Instagram	8	10	5	5
Company app	-	-	-	-
Other sources				

The data treatment occurred by analyzing the transcription of the audio recorded during the conversations with the managers and secondary data. For data analysis, the content analysis technique was used, respecting the phases proposed by Bardin (2011), which correspond to 1) pre-analysis; 2) exploration of the material, categorization or coding; 3) treatment of the results, inferences, and interpretation.

### Analysis and Discussion of the Results

The analysis and discussion are presented in two parts. First, a brief characterization of the cases is described, and then the evidence on impact business models and sustainable innovation is addressed and analyzed.

#### *Characterization of the Cases*

Alpha was founded in 2010 in Santa Maria (Rio Grande do Sul State [RS], southern Brazil) and offers architectural projects, real estate regularization, remodeling projects, interior design, architectural delivery, decoration consultancy, and environment redesigning as its main services and products. Beta is from Montenegro (RS) and was founded in 2016; it manufactures wallets, card holders, passport holders, T-shirts with pockets, sneakers, backpacks, and Tyvek bags (a kind of fabric made from interwoven fibers that is water resistant and difficult to tear). Gamma was founded in Recife (Pernambuco State, northeastern Brazil) in 2019. It works in the renovation and construction of properties for low-income people; in addition to qualifying female labor to perform the work, it signed a partnership with the National Service of Industrial Learning (SENAI) of Pernambuco both to refer the professionals trained in civil construction courses and to format one that meets the specific needs of the company. Delta was founded in 2018 in Pelotas (RS) and managed residential renovations for low-income families through packages involving architects, materials, credit, and manpower. Table 4 summarizes the main characteristics of the companies surveyed.

Table 4: Characterization of the analyzed companies

Characterization	Alpha	Beta	Gamma	Delta
Founding year	2010	2016	2019	2018
Headquarters	Santa Maria (RS)	Montenegro (RS)	Recife (PE)	Pelotas (RS)
No. of employees	2	19	4 direct employees; outsourced on demand.	15 2 partners 3 employees 10 manpower
Size	Small	Small	Small	Small
Main services/products	Architecture, remodeling, and interior design projects, real estate regularization, and architectural delivery (decoration consultancy and environment redesigning)	Classic wallets, ID wallets, card holders, passport holders, T-shirts with pockets, sneakers, backpacks, and bags.	Renovation and construction of properties for low-income people.	Affordable residential renovations for low-income families through packages (architect, materials, credit, and manpower).
Target audience	All social classes, including C and D	Practical people between 17 and 35 years old engaged in a cause.	Population classes C and D living in Recife's working-class suburbs	Population classes C and D living in working-class suburbs

Source: prepared by the authors

As to the companies surveyed, one can observe that they are recently founded businesses; three companies are from Rio Grande do Sul State and one is from Pernambuco State. All businesses are classified as small. As for the main services and products, three companies (Alpha, Gamma, and Delta) work with renovation and construction for low-income people. They offer from the basics, which is the basic sanitation and wiring, to complete remodeling of environments such as the kitchen and bathroom. Beta manufactures wallets, T-shirts, sneakers, keychains, and other accessories from sustainable raw materials using reverse logistics.

#### *Analysis of Sustainable Innovation Practices in Social Impact Business Models*

According to the proposed conceptual model, data and discussions will be presented regarding the evidence of sustainable innovation practices and business model elements. In the sustainable innovation construct, the practices referring to the following categories are analyzed: maximizing energy and material efficiency, closing resource loops, replacing with renewable and natural processes; delivering functionality rather than ownership; adopting a stewardship role; encouraging sufficiency; repurposing for society/environment; creating inclusive value; developing sustainable scale-up solutions.

Regarding the sustainable innovation practices adopted by the impact businesses studied, the analyzed companies have different energy and material maximization stages. However, none of them measure this process; in this sense, the investments in innovations that seek to replace the existing processes with renewable and natural ones are mainly focused on reusing water and using solar panels. This is evidenced by the statements of the manager of Alpha, Beta, Gamma, and Delta.

“Alpha is concerned with the issue of waste separation, separating what can be used by the collectors and what goes to the container. [...] changing a faucet that does not have a spinning handle. [...] we opted for led light bulbs, changing the installation of the blinds, which makes a difference in solar incidence. Regarding the clients, one of the focuses of when they elaborate the projects is rainwater collection, solar plate or solar heating, of course, everything depending on the client.” (Manager of Alpha, 2021).

“[...] we do not have techniques to measure this process of maximizing energy and material efficiency. Since May 2019, we have been reusing rainwater in the building. As of the second half of 2020, Beta has 100% solar energy. To reduce the emissions of pollutants in the supply chain, the company offsets the CO<sub>2</sub> carbon emitted from the packaging that is not reusable, in this case, the tertiary packaging, which is those plastic packaging.” (Manager of Beta, 2021)

“No metric has been defined to measure or to have as a priority in the business. As for organization, for instance, they do not have an office. Concerning the product offered, one of the works focuses on bringing energy efficiency to the life of the low-income community, so in the houses in the suburbs that are remodeled, they have a pillar focused on health. Regarding reducing emissions from the supply chain, you can say that the environmental part is not the focus yet.” (Manager of Gamma, 2021).

“Maximizing energy efficiency depends on the need and priority of the project. Delta’s clients are low-income, and sometimes they need essential renovations such as correctly installing wiring and electricity and correctly routing sewage through pipes and septic tanks. To reduce the emissions of pollutants in the supply chain, the company does prior planning of materials and prioritizes acquiring materials from suppliers in the community itself.” (Manager of Delta, 2021)

Furthermore, it is worth noting that the companies analyzed have evidence of a reorientation towards society/environment. In this sense, the interviewed companies consider value creation for a scope of stakeholders, society and/or the environment, going beyond the customer orientation of conventional business models. These findings corroborate Richter (2013), who stated that inserting sustainable innovation into business implies that the company modifies its strategies to involve all stakeholders and develop new value creation, delivery, and capture practices. Moreover, it is in line with what Fernandes, Gamma, and Barros (2018) understand by sustainable innovation: they are strategies for enhancing human resources, stimulating the business, offering employment, and social inclusion. Aspects related to the insertion of stakeholders and valorization of local labor are clear in the managers’ statements:

“Integration with the local community and stakeholders is done through the social projects that the company does, as they do not have a cost, and they do not do much maximization of outreach in relation to that.” (Manager of Alpha, 2021).

“The company shares knowledge and resources, yes. Beta has a collaborative effort with over 700 artists. They open up all the molds for people to put their designs on, and for every product sold with their art, a commission is paid to the creator. Beta also has a free course, and since the pandemic started, it has reached over 30,000 students wanting to start new businesses.” (Manager of Beta, 2021)

“The company integrates with the community by hiring local labor for renovations, purchasing the materials from local stores, the team that removes the construction waste, and the transportation to recyclable collection stations.” (Manager of Gamma, 2021).

“Integration with the community is achieved by partnering with the construction material stores of the communities, since in addition to encouraging local commerce, there is also the recognition of the enterprise and the shopkeepers’ efforts. Another practice Delta uses is hiring labor from the community, from the foreman to the laborers.” (Delta Manager, 2021)

Lastly, regarding the development of sustainable solutions at scale, we found that none of the companies develops this type of innovation, considering that they are small. Such a finding is corroborated by Bocken et al. (2014); according to the authors, emerging businesses are often based on sound sustainable principles and are usually small-scale despite being positive. Thus, the types of innovation considered in this archetype relate specifically to expanding business models for sustainability so that they can make a significant difference in environmental and social sustainability at a global level. Nonetheless, in the case studies, the pathway/challenge, as Schaltegger, Lüdeke-Freund, and Hansen (2016) pointed out, is to address new customer groups and ensure that sustainability standards are not reduced.

To investigate the social impact business model, five dimensions were listed based on the research by Yunus, Moingeon, and Lehmann-Ortega (2010), Boons and Lüdeke-Freund (2013), and Petrini, Scherer, and Back (2016). The first dimension is the network of partners made up of three elements: investors, suppliers, and partners; dimension 2 includes the company’s competencies (considering key activities and resources), knowledge of the business, and people; the value proposition is the third dimension, a stage in which the identification of the product and service offered and the client group served occurs; dimension 4: the economic profit equation refers to the revenues generated, with details of the profit distribution relations, and finally, the social profit equation, defined as the fifth dimension. At this level, the new elements and relationships responsible for generating the social impacts and their benefits are detailed.

Respondents’ perception regarding the impact business model is that it is dynamic, complex, and aligned with the conscious capitalism movement. Such perceptions corroborate the literature. From the point of view of the dynamics of the model, Zuzul and Tripsas (2019) understood that entrepreneurs who continuously their business model have more chances of success than those who strongly commit to their original idea. As for the complexity pointed out by the interviewees, such an aspect is supported by Petrini, Scherer, and Back (2016) since the authors stated that the social impact business model is broader and more challenging than the conventional one.

Furthermore, all the companies mentioned that it is a great challenge to be understood as a social business, in which there is a re-signification of the relationship between people and business and that profit is a consequence of work. The companies’ competencies stand out for their responsibility and social action, considering themselves vectors of positive societal changes.

Regarding the elements of the impact business model, we highlight: the network of partners and suppliers is mainly linked to aspects of valorization of local work and the search for suppliers aligned to the company’s purpose; the competencies revolve around promoting social changes and responsibility and social actions linked to the entrepreneurs’ technical knowledge, the value proposition comprises social and/or environmental values, as perceived in all the cases studied.

It is worth mentioning that the primary evidence on the social profit equation shows that there is the generation of social benefits that support the reason for the existence of these ventures. As for the economic profit, the evidence showed that networking and collective effort and engagement, which ends up impacting the social profit equation, provide benefits through businesses that range from physical and behavioral to mental health, even improving the self-

esteem of the impacted public. In general, the highlighted evidence corroborates the business model proposed by Petrini, Scherer, and Back (2016).

In all companies, one can identify the issue of social and/or environmental values in the value propositions of the companies studied. According to Boons et al. (2013), these values should be questioned or redefined at each strategic change adopted by the company or when one wishes to perform a balance sheet to verify whether the products or services offered by the company continue to perform the expected functions.

Still, in relation to the business model, the study analyzed whether COVID-19 altered the business model of the companies analyzed. However, none of the companies surveyed changed their business model, although they adopted new strategies to face the period, according to the statements of the managers of Beta and Gamma:

“We reflected and thought that we would be competing with people who are producing their only source of income at home, people who need that to survive. Instead of going into that competition, we decided to link these producing people to people seeking masks.” (Manager of Beta, 2021)

“We had to develop internal strategies to continue paying our workforce and employees while work was suspended. It was very difficult, but I think we developed a capacity for reinvention over this time, especially in times of crisis, which is our greatest treasure from a strategic point of view.” (Manager of Gamma, 2021).

In addition to the challenges of social distancing and the search to adapt and care for their employees, the companies realized some opportunities from the pandemic. Beta took a risk and migrated to other segments: decoration and personal organization. Today, the company manufactures comic books, cachepots, purses, and backpacks and intends to enter the fashion industry by producing jackets. The manager of Delta reported another positive aspect regarding the formation of the national network, and the company began to participate in the process from the selection made by Nova Vivenda through the Vivenda Play program. This network of partners started to boost the business, and it was in the national network that Delta had expressive growth during the pandemic.

Such aspects corroborate Pipe Social (2021), as new platform strategies emerged and established themselves with the COVID-19 pandemic; Internet sales appear to be unanimous and one of the ways to maintain product rotation, customers, and the expansion of commerce and business. The most commonly adopted measure was implementing new marketing and product/service promotion actions, together with opening new sales channels. This data indicates that the changes imposed by distances in selling resonated among impact businesses, which innovated ways of reaching their customers (Pipe Social, 2021). Although this study did not identify it, other data were also validated in a post-pandemic world: satisfaction in team productivity, the home office work model, creating jobs, new vacancies, and reducing companies' fixed costs. (Desiderio, 2020).

The data analysis enabled us to build a figure that summarizes the main findings concerning the elements of the social impact business model and the evidence of sustainable innovation practices adopted by the four Brazilian companies (Figure 3).



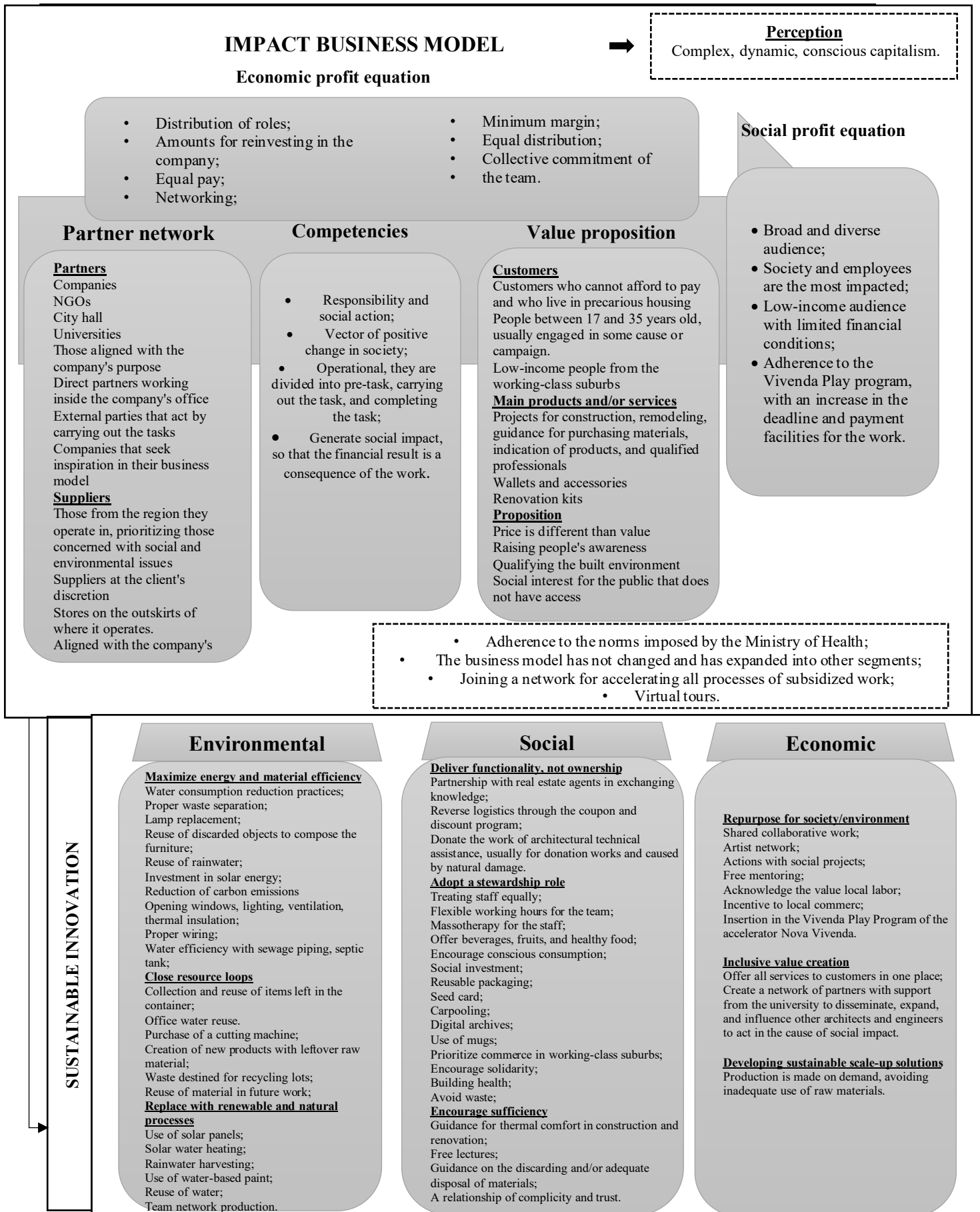


Figure 3: Summary of the study results  
Source: Elaborated by the authors based on the research data.

Figure 3 provides an overview of the results. For managers, the impact business model is complex, dynamic, and often difficult to understand by stakeholders. Additionally, we highlight a clear understanding of the economic and social profit equation, with examples of actions that characterize an impact business model. In addition, a vast network of partners of the companies studied is evident, as well as well-defined competencies and value propositions.

Figure 3 also shows aspects that the companies considered necessary concerning the COVID-19 pandemic, and below we highlight the main sustainable innovation practices of the companies studied in the social, environmental, and economic fields.

### **Concluding Remarks**

Social inequality and its evils reinforce the importance of developing solutions that meet society's demands. This study aimed to analyze sustainable innovations in impact business models within this context. A qualitative approach was used through semi-structured interviews to impact businesses to achieve these objectives. Considering the profile of impact businesses, our findings revealed that the surveyed companies are traditionally constituted since there is not yet any legislation encompassing social impact businesses. The companies fall between the tax obligations of conventional companies and do not act as non-governmental organizations. Regarding the perception of the impact business model, all the companies mentioned that it is a great challenge due to its complexity and dynamics. They also described the challenge of being understood as a social business.

As for the elements of the impact business model, the evidence revealed that the value proposition generally revolves around social and environmental aspects. The companies studied seek suppliers aligned with their purposes, and the competencies are related to social actions and social responsibility. Economic profit impacts the social profit equation by generating benefits linked to the achievement of the business. Regarding the sustainable innovations adopted by the impact businesses studied, the fact that all of them practice innovations regarding the maximization of energy and water efficiency, with the help of solar panels, reuse of water, reuse of materials, and are concerned about giving the appropriate destination to the waste based on the circular economy concept stands out.

Nevertheless, none of the organizations develop large-scale sustainable solutions to maximize socio-environmental benefits because they consider themselves small.

Pacheco et al. (2018) described several barriers to the diffusion of sustainable innovations in the context of Brazilian small and medium-sized enterprises, among which the main barriers can be considered the awareness and understanding of small and medium-sized enterprises about the eco-innovation proposal that considers spending on eco-innovation as a cost and not as an investment, the immediate culture of achieving quick results and a short-term management vision, the low awareness of these enterprises regarding the benefits of eco-innovation, customer acceptance, and sustainable awareness.

This study also contributed to understanding and identifying which ways of sustainable innovations the impact business models are adhering to, how they have established new strategies, new processes, and habits, and how this potential model can be replicated, adding social, environmental, and, being profitable in an equitable way. As far as the impacts of the COVID-19 pandemic are concerned, the companies did not change their business models. The companies studied generally began to deal more with the virtual world. One of the companies connected to a platform that leveraged its sales and another joined new segments, producing and innovating its products according to the customers' needs.

As the main contribution of this study, we highlight Figure 3, a summary of the main evidence found, which can be the basis for future research. Furthermore, we suggest expanding the qualitative research with more companies and other segments not addressed herein. Still,

quantitative research can be applied to consolidate or confront the data, which may bring new information on the subject. One of the main limitations was that the companies interviewed have been in operation for a short period and do not have a well-defined organizational structure. However, all of them showed positive objectives and future perspectives.

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