Objective: This study examines the main challenges faced by small and medium-sized enterprises (SMEs) in Rio de Janeiro amid the Covid-19 pandemic, the conceived solutions, and their outcomes, as perceived by the companies’ managers. It also assesses the extent to which these companies made use of supporting public policies and with what results.

Methodology: A qualitative and exploratory research approach was employed based on the multiple case study method. Ten SMEs from Rio de Janeiro, spanning diverse market segments, participated in the study. The analysis focuses on the initial impacts of the pandemic until the end of 2020.

Relevance: The relevance of this work lies in the exploration of a novel theme, with a focus on comprehending the challenges faced and solutions devised by SMEs amid the Covid-19 pandemic.

Results: The results showed that the public policies implemented during the pandemic were essential for the survival of the participating companies. Financial management, with emphasis on working capital, and strategic vision, which enabled the identification of alternative solutions to address the challenges posed by the pandemic, were also decisive.

Contributions: By identifying the factors that contributed to and those that hindered the performance of SMEs amidst crisis contexts, we aim to provide guidance for business managers in similar situations, as well as public policy makers.

Keywords: Covid-19; Small and medium-sized enterprises; Entrepreneurship; Strategic management; Financial management.
Resumo

Objetivo: Analisar os principais problemas enfrentados por pequenas e médias empresas do Rio de Janeiro durante a pandemia de Covid-19, bem como as soluções encontradas e os resultados alcançados, na percepção de seus gestores. Também se buscou avaliar em que medida as políticas públicas de apoio a essas empresas foram utilizadas e com que resultados.


Relevância: O trabalho tem relevância por abordar um tema novo, com foco no entendimento dos problemas enfrentados e soluções encontradas por pequenas e médias empresas durante a pandemia de Covid-19.

Resultados: Os resultados mostraram que as políticas públicas implementadas durante a pandemia foram essenciais para a sobrevivência das empresas participantes. A gestão financeira – com destaque para a posse de capital de giro – e a visão estratégica, que viabilizaram a identificação de soluções alternativas para o enfrentamento da pandemia, também foram decisivas.

Contribuições: Ao identificar os fatores que contribuíram e os que prejudicaram o desempenho de pequenas e médias empresas em contextos de crise, espera-se orientar gestores de empresas em situação semelhante e formuladores de políticas públicas.

Palavras-chave: Covid-19; Pequenas e médias empresas; Empreendedorismo; Gestão estratégica; Gestão financeira.

Los impactos de la pandemia de COVID-19 en pequeñas y medianas empresas en Río de Janeiro

Resumen

Objetivo: Analizar los principales problemas que enfrentan las pequeñas y medianas empresas de Río de Janeiro durante la pandemia de Covid-19, las soluciones encontradas y los resultados alcanzados, en la percepción de sus gestores. También buscamos evaluar en qué medida se utilizaron las políticas públicas de apoyo a estas empresas y con qué resultados.

Metodología: Se realizó una investigación cualitativa y exploratoria, basada en el método de estudio de casos múltiples. Participaron del estudio diez pequeñas y medianas empresas con sede en Río de Janeiro, de diferentes sectores de actividad. El análisis se centró en los primeros impactos de la pandemia hasta finales de 2020.

Relevancia: El trabajo es relevante porque aborda un tema nuevo, centrándose en comprender los problemas que enfrentan y las soluciones encontradas por las pequeñas y medianas empresas durante la pandemia de Covid-19.

Resultados: Los resultados mostraron que las políticas públicas implementadas durante la pandemia fueron fundamentales para la supervivencia de las empresas participantes. También fueron determinantes la gestión financiera, con énfasis en el capital de giro, y la visión estratégica, que permitió identificar soluciones alternativas para enfrentar la pandemia.

Aportes: Al identificar los factores que contribuyeron y los que dificultaron el desempeño de las pequeñas y medianas empresas en contextos de crisis, se espera orientar a los gestores de empresas en situaciones similares y a los hacedores de políticas públicas.

Palabras clave: Covid-19; Pequeñas y medianas empresas; Emprendimiento; Gestión estratégica; Gestión financiera.
INTRODUCTION

The world’s landscape underwent a seismic shift in early 2020, marked by the emergence of an epidemic that swiftly became a global pandemic, affecting all corners of the globe. At the heart of this transformative event was the Sars-CoV2 virus (severe acute respiratory syndrome coronavirus 2). Covid-19, the disease caused by this virus, presents a clinical spectrum ranging from asymptomatic infections to severe respiratory conditions. The unique and paramount risk associated with this virus lies in its highly contagious nature. Moreover, a sizable proportion of those infected remain asymptomatic or exhibit mild symptoms, further contributing to the rapid dissemination of the disease (WHO, 2022).

The fast transmissibility of the virus triggered a surge in demand for hospital care, forcing governments worldwide to impose a myriad of social distancing measures (Brasil, 2020a; Giones, Brem, Pollack, Michaelis, Klyver, & Brinckmann, 2020). The social isolation curtailed the movement of the population with the primary objective of slowing the contagion rate. Concurrently, it allowed governments to expand their healthcare infrastructure, facilitating the simultaneous treatment of a larger number of infected people (Asongu, Diop, & Nnanna, 2021; Werneck & Carvalho, 2020).

The social isolation measures forced numerous enterprises to suspend their activities, leaving only those deemed essential in operation. Nevertheless, many nations experienced a substantial surge in hospital admissions and mortality rates. Beyond the health-related challenges, these restrictive measures imposed significant economic and social setbacks. The interruption of non-essential business activities triggered an economic crisis of significant proportions (Brauner et al., 2020; Donthu & Gustafsson, 2020).

In the realm of small and medium-sized enterprises (SMEs), the focal point of this study, the ramifications were severe. Dwindling demand, financial difficulties, and logistical and operational constraints were some of the challenges faced by these companies worldwide (Bartik et al., 2020; Chit, Croucher, & Rizov, 2023; Clampit et al., 2022; Eggers, 2020; Juergensen, Guimón, & Narula, 2020).

In light of this reality, the present study examines the main challenges faced by SMEs in Rio de Janeiro amid the Covid-19 pandemic, the conceived solutions, and their outcomes, as perceived by the companies’ managers. It also assesses the extent to which these companies made use of supporting public policies and with what results.

To address these objectives, we employed a multiple case study method based on a qualitative and exploratory approach. The study encompasses 10 SMEs from the state of Rio de Janeiro, Brazil.

De Janeiro, representing diverse market segments such as consulting services, health services, civil construction, retail, and restaurants.

This research is relevant as it focuses on the main challenges faced by SMEs in a crisis context and how they were (or not) overcome. The findings can guide SMEs managers in crises situations and contribute to the body of knowledge on SMEs management. In that regard, it is worthwhile mentioning that SMEs play a crucial role in job creation and income generation (Eggers, 2020; Netto, Viturino, Porto e Slivnik, 2021; Sebrae, 2014). According to Netto et al. (2021), Brazilian SMEs account for 40% of the country’s formal employment.

It is also important to highlight the dearth of national studies about the pandemic’s impact on micro, small, and medium-sized enterprises. A search in the Spell and SciELO Brazil databases yielded only four papers (Bouças da Silva, Miranda, & Hoffmann, 2021; Brauner et al., 2020; Foguesatto, Moreira, Dallagnol, Girardi, Frantz, & Wegner, 2022; Pereira & Feitosa, 2022).

Finally, the analysis of government support policies may provide insights for effective interventions by policymakers, as well as draw attention to their pivotal role in extreme contexts.

**CONTEXTUAL BACKGROUND**

**The pandemic and its ramifications**

The advent of the Covid-19 pandemic led to profound health ramifications and far-reaching consequences on the global economy (Amal, Blumenschein, & Vasconcellos, 2021; Donthu & Gustafsson, 2020; Fauci, Lane, & Redfield, 2020). Noteworthy factors contributing to the economic turbulence across countries were the decline in workforce size and hours worked, reduced productivity stemming from the physical and psychological toll of the disease, and a downturn in household consumption due to income loss, uncertainties about the future, and mobility restrictions (Amal et al., 2021; Amitrano, Magalhães, & Silva, 2020).

In Brazil, the pandemic prompted a severe economic downturn. In 2020, the GDP contracted by 4.1%, and the average unemployment rate soared to 13.5%, translating to roughly 13.4 million unemployed individuals (IBGE, 2021a; 2021b). Meanwhile, in Rio de Janeiro, the focal point of this study, the average unemployment rate surged to 17.4%, ranking as the fourth highest among Brazilian states (IBGE, 2021c).

From a theoretical standpoint, the pandemic, given its substantial human and economic impacts, may be examined through the literature on extreme contexts (Brammer, Branicki,
Linnenluecke, 2023; Hällgren, Rouleau, & De Rond, 2018). Hällgren et al. (2018) categorize extreme contexts into emergency, risky, or disrupted, with the latter being most applicable to the pandemic’s reality. This literature posits that extreme contexts emerge from events that surpass organizations’ preventive capacities, resulting in severe physical, psychological, or material consequences (Brammer et al., 2023; Hällgren et al., 2018).

Under these circumstances, SMEs tend to bear a disproportionate burden compared to larger organizations due to their lack of financial, human, and technical resources (Juergensen et al., 2020; Netto et al., 2021). According to Eggers (2020, p. 199), the “liability of smallness” renders these enterprises particularly vulnerable despite the inherent advantages of agility that characterize them, as discussed next.

Management challenges of small and medium-sized enterprises

This study focuses on SMEs, defined according to their sector and number of employees. Small companies are those with 10 to 49 employees in agriculture, commerce, and services, and 20 to 99 employees in industry and construction. Medium-sized companies, on the other hand, employ 50 to 99 individuals in agriculture, commerce, and services, and between 100 and 499 employees in industry and construction (Sebrae, 2020).

The impacts of the Covid-19 pandemic have been particularly pronounced for these companies worldwide (Chit et al., 2023; Clampit et al., 2022; Eggers, 2020). Research across various countries highlights critical challenges faced by SMEs, encompassing sudden drops in demand, financial constraints, and logistical and operational hurdles (Bartik et al., 2020; Chit et al., 2023; Clampit et al., 2022; Eggers, 2020; Juergensen et al., 2020).

In the subsequent subsections, we delve deeper into the challenges faced by SMEs, including financial, strategic, and human resources management aspects (Eggers, 2020). Subsequently, the focus shifts to public policies aimed at supporting SMEs (Araújo, 2022; Chit et al., 2023; Eggers, 2020; Juergensen et al., 2020; OECD, 2021).

- **Financial aspects**

In the realm of financial management, SMEs often grapple with liquidity and working capital issues, as well as difficulties in access and higher costs for obtaining financial resources. These issues are commonplace due to lack of collateral, a short financial history, and lenders’ heightened risk perception (Longnecker, Petty, Palich, & Hoy, 2023; Walker & Petty, 1978).
Eggers (2020) notes that smaller companies, with fewer resources at their disposal, become more vulnerable to internal and external events. Essentially, these entities face more difficulties in navigating unforeseen events related to their business and to extreme events, exemplified by the unprecedented challenges posed by the Covid-19 pandemic (Brammer et al., 2023; Clampit et al., 2022; Santos & Ferreira, 2009).

Despite its pivotal role for their survival and growth, Zeidan and Vanzin (2019) assert that Brazilian companies face difficulties in managing their working capital. A survey by the Brazilian Institute of Geography and Statistics (IBGE, 2022) revealed that 23% of Brazilian companies cease operations within the first year and 59% within the first five years. Key contributors to these failures include small businesses’ inherent lack of resources and limited financial knowledge of owners and managers (Baños-Caballero, García-Teruel, & Martínez-Solano, 2010; Clampit et al., 2022; Eggers, 2020; Nunes, Visoto, & Silva, 2019).

Other critical issues are the absence of financial planning and cash flow management difficulties (Carrete & Serra, 2019; Longnecker et al., 2023). The literature shows that financial planning and cash flow management are crucial for judicious resource allocation and achieving business results (Carrete & Serra, 2019; Longnecker et al., 2023; Pathak, Kar, & Panda, 2022; Serrasqueiro, Leitão, & Smallbone, 2021).

More specifically, financial planning and management enable the identification of financial challenges before they escalate, guide responses to unforeseen events, and empower owners and managers to make informed decisions regarding investments, expansions, and other business strategies. They also facilitate negotiations with suppliers, creditors, and partners, as companies that demonstrate a clear understanding of their finances tend to be more valued (Longnecker et al., 2023; Serrasqueiro et al., 2021).

Studies examining the impact of the pandemic on SMEs highlight the lack of working capital as one of the primary challenges faced by these organizations (Bartik et al., 2020; Juergensen et al., 2020). A study with small U.S. companies revealed that 75% had enough cash to cover expenses for two months or less (Bartik et al., 2020). A similar study with European SMEs in the industrial sector identified liquidity problems as a core obstacle during the pandemic (Juergensen et al., 2020).

 Strategic vision and management

The concept of strategic vision has been approached through different lenses. In this study, we adopt the approach proposed by Mintzberg (2007, p. 347), according to which it can
be defined as “deliberately emergent, in the sense that while the vision […] sets direction rather deliberately, it also does so flexibly, serving as a kind of umbrella under which specific strategic positions can emerge.”

Aligned with Mintzberg’s perspective, the literature points to the need of strategic flexibility, defined as the organizations’ ability “to quickly and purposefully respond to competitive opportunities and threats” (Brinckmann et al., 2019, p. 155). Notably, strategic flexibility emerges as particularly crucial for SMEs due to their heightened competitive challenges and sensitivity to the external environment (Brinckmann et al., 2019; Guo & Cao, 2014; Miroshnychenko et al., 2021). Similarly, systemic learning is also deemed relevant for SMEs exposed to turbulence and change (Lee, Lampel, & Shapira, 2020; Lima, 2008).

The Covid-19 context accentuates the importance of strategic flexibility and systemic learning (Blais, 2023; Clauss, Breier, Kraus, Durst, & Mahto, 2022; Gold & Jones, 2023). A multiple case study involving five SMEs located in Austria, Germany, and Liechtenstein revealed that the ability to transform their business plans was crucial for their survival.

In turn, strategic planning and management encompass activities directed at steering the organization toward superior performance and increased competitiveness. Therefore, deep understanding and effective management of strategic resources are imperative for enhancing organizational results (Brinckmann et al., 2019; Giones et al., 2020).

- **People management**

Regarding people management, a key challenge for SMEs involves workforce sizing, particularly in uncertain environments. Often, this determination relies on managers’ perceptions and successive trial-and-error processes (Marinho & Vasconcellos, 2007).

Another challenge involves hiring based on trust relationships rather than technical competence, leading to professionals undertaking multiple roles and resulting in suboptimal performance (Matias & Lopes Júnior, 2002). Therefore, in addition to not having a team of qualified professionals, the problem culminates with the insufficient managerial preparedness of the leaders themselves.

These aspects underscore informality as a central characteristic of people management in SMEs, as evidenced in a recent literature review (Harney & Alkhalaf, 2021). However, the consequences of such informality are not necessarily negative. While informality may sometimes coincide with centralizing and autocratic management, yielding negative
consequences, it can also be a form of people management that promotes employee participation and involvement (Harney & Alkhalaf, 2021).

In a review of SMEs people management challenges, Harney, Gilman, Mayson, and Raby (2022) highlight the concentration of control and decision-making power, leading to resistance to delegate HR functions. Additionally, informality and close relationships between managers/owners and employees tend to hinder the creation of more structured people management policies. The scarcity of resources and vulnerability to external shocks further add to these challenges (Harney et al., 2022). Thus, despite the company’s size, people management faced fundamental challenges exacerbated by the pandemic and its aftermath (Collings, Nyberg, Wright, & McMackin, 2021).

Public policies to address the pandemic in Brazil

In an effort to alleviate the economic consequences of the pandemic, many countries implemented policies to support individuals and businesses (Amitrano et al., 2020; Araújo, 2022; Chit et al., 2023; IMF, 2021; Juergensen et al., 2020; OECD, 2021). In the case of Brazil, it was no different (Araújo, 2022; Lazzarini & Musacchio, 2020). Beyond citizen-focused support like the emergency aid, the Brazilian federal government implemented several measures targeting companies, particularly SMEs.

The first Provisional Measure, MP 927, dated March 22, 2020, allowed companies, especially SMEs, to grant vacation to employees, even those with less than a year of service. Therefore, since the first days of social isolation, the businesses that did not provide essential services could concede vacation for their employees. Payment occurred on the fifth day of the subsequent month, but the constitutional third could be paid until December 20, 2020. This measure also allowed the option to split the FGTS (Fundo de Garantia do Tempo de Serviço) deposit of March, April, and May into six installments, starting in August of that year (Brazil, 2020b).

Following this, MP 936, enacted on April 1, aimed to preserve employment, income, and business continuity (Brasil, 2020c). It introduced the proportional reduction of working hours and wages or the temporary suspension of work contracts. The company covered part of the salary, and the Federal Government’s resources financed the remaining portion. Initially applied for two months, this measure was later extended until December.

Subsequently, MP 944, dated April 3, allocated 34 billion BRL to finance payroll payments. This allowed public and private banks to undertake companies’ payrolls as a form
of loan at lower interest rates. On the other hand, companies could not dismiss any employee for two months after the last loan installment payment (Brasil, 2020d).

MP 949 directed an extraordinary credit to the energy development account, prohibiting energy companies from disconnecting the power supply to businesses due to non-payment of their utility bills (Brazil, 2020e).

To facilitate access to bank loans for micro, small, and medium-sized enterprises, MP 958 waived, until September 30, financial institutions to require federal tax and liabilities clearance, FGTS Clearance Certificate, and Debt Clearance Certificate when contracting and renegotiating credit operations carried out directly or through financial agents (Brazil, 2020f).

Resolution No. 154/2020 from CGSN extended the due dates of taxes owed by micro and small businesses – called Simples Nacional – for March, April, and May. Federal taxes were pushed by six months, and the Tax on the Movement of Goods and Services (ICMS) and the Tax on Services (ISS) were pushed by three months. The installments due in May, June, and July were also extended (Brazil, 2020g).

MP 963 allocated an extraordinary credit of five billion BRL to assist tourism companies (Brazil, 2020h). Lastly, to facilitate SMEs’ credit access, the Federal Government issued MP 975, increasing by up to 20 billion BRL its participation in the Investments Guarantee Fund (FGI), administered by BNDES, to cover operations under the Emergency Program for Access to Credit (Brazil, 2020i).

Research on the outcomes of these initiatives, both in Brazil and globally, shows that these public policies effectively protected jobs and mitigated the pandemic’s adverse effects on SMEs, preserving their survival (Araújo, 2022; OECD, 2021). According to the OECD (2021), the policies focused on four primary areas, namely job preservation schemes, with an emphasis on reduced working time arrangements and wage payment subsidies; measures to defer the payment of taxes, legal contributions, and other expenses; financial instruments to facilitate access to loans and financing; and structural policies, including support for digitization, technological development, and training.

A comparative study of public policies implemented in Brazil, Argentina, Mexico, Italy, Spain, and South Korea highlighted Brazil and South Korea as having the lowest decline in economic growth rates. However, the study emphasized that Brazil “did not exhibit the same agility in formulating structural public policies” (Araújo, 2022, p. 87).
METHODOLOGICAL APPROACH

To fulfill the outlined objectives, we opted for a qualitative and exploratory research design based on the multiple case study method. According to Yin (2018), the case study is particularly suitable when the goal involves explaining specific situations, which applies to the objectives of this study.

Data collection entailed interviews with managers from ten enterprises located in Rio de Janeiro, supported by a semi-structured protocol. Participating companies also provided their Income Statement (DRE) and Balance Sheet for 2018, 2019, and 2020, along with total revenue and number of employees in 2019 and 2020. A preliminary analysis of these documents was conducted before the interviews to guide the discussion. The profile of the participating companies and interviewees is presented in Table 1.

Conducted online between January and February 2021, all interviews were recorded with participants’ consent and subsequently transcribed by a specialized company. The interview script, included in the Appendix, comprised three sections, in addition to inquiries about the company’s business: the pre-pandemic scenario, the period following the pandemic’s onset, and at the time the interviews took place, when restrictive measures were still in place, but their impact on businesses was more discernible.
Table 1

Companies and Participants

<table>
<thead>
<tr>
<th>Code</th>
<th>Company</th>
<th>Participant</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Medical checkup services</td>
<td>Founding partner, a physician with 35 years of experience and the force behind the business’s inception, establishing the company alongside a partner three decades ago.</td>
</tr>
<tr>
<td>B</td>
<td>Physiotherapy clinic</td>
<td>Founding partner, a physiotherapist with two decades of expertise, initiating the enterprise 12 years ago.</td>
</tr>
<tr>
<td>C</td>
<td>Biotechnology</td>
<td>A pharmacist who ascended from managing the group’s compounding pharmacies to assume the role of CEO at the stem cell storage company 13 years ago.</td>
</tr>
<tr>
<td>D</td>
<td>Construction Company</td>
<td>CEO and daughter of the founding partner, a lawyer with a decade-long tenure at the helm of the company.</td>
</tr>
<tr>
<td>E</td>
<td>Shopping mall management</td>
<td>Planning and Management Director, a partner with an economic background, contributing six years of dedicated service to the company.</td>
</tr>
<tr>
<td>F</td>
<td>Restaurant</td>
<td>Chef-owner, initially trained in graphic design, transitioned to a culinary career four decades ago while working in her family’s restaurant.</td>
</tr>
<tr>
<td>G</td>
<td>Restaurant</td>
<td>Founding partner and administrator, overseeing restaurant management alongside three sons for the past 16 years.</td>
</tr>
<tr>
<td>H</td>
<td>Jewelry store</td>
<td>Entrepreneur for a quarter-century, previously overseeing a network of six jewelry stores until 2020. Currently managing a jewelry store and an event venue.</td>
</tr>
<tr>
<td>I</td>
<td>Sales consultancy</td>
<td>Founding partner and lawyer, sharing management responsibilities with a fellow founder who oversees the commercial sector. Has held this position for 25 years.</td>
</tr>
<tr>
<td>F</td>
<td>Retail (Apparel for Men and Women)</td>
<td>Franchise owner and administrator, managing with the support of a dedicated manager. Has worked in the retail sector for nine years, lacking prior experience in the industry.</td>
</tr>
</tbody>
</table>

Source: Prepared by the authors.

To analyze the data, encompassing interviews as well as the companies’ financial and operational figures, we employed one of the five analytical techniques proposed by Yin (2018). Named explanation building, this approach is suitable for an in-depth understanding of the phenomenon at hand. Throughout the analysis, the purpose is to identify patterns, trends, and relationships among different elements of the case, allowing for the construction of explanations about the phenomenon (Yin, 2018).

ANALYSIS AND DISCUSSION OF RESULTS

The analysis is organized into two sections. The first describes the challenges faced by the participating companies, while the second explores into the strategies devised to navigate the pandemic and their outcomes.
Problems encountered

The lockdown in Rio de Janeiro, with the cessation of all non-essential services, lasted for approximately three months, from the second half of March to the end of June. From July onwards, there was a gradual reopening. Based on the interviews, our aim was to assess the main problems faced by the companies during the pandemic, including working capital constraints, uncertainties regarding the future and resumption of operations, revenue reduction, and strategic management challenges, as discussed below.

- Working capital

Among the ten companies surveyed, only four possessed adequate working capital. For those lacking financial reserves, this emerged as a pivotal difficulty. Some of them were paying their bills with the revenue from the current month and, when the lockdown came, their source of income ceased. Since there was no financial reserves, they couldn't cover fixed costs. Even after the lockdown, they still had to face a significant drop in revenues.

For two companies (B and F) that lacked working capital, the consequence was the cessation of activities. Both were unable to cover their costs without proper revenues or could not access external resources.

Suddenly, my company was shut down, all bills pending and no revenue. Without working capital, I had nowhere to turn. I used my personal savings to pay the employees' severance and closed the business (Company B).

I didn’t see the possibility of returning to what it was before the pandemic, not anytime soon, perhaps due to my very high fixed costs, and the company had no working capital or credit line available at the bank. Therefore, I had no choice but to take out a family loan for the employees' dismissal and shut down the restaurant (Company F).

For the other companies without working capital that managed to keep their operations running, the primary challenge was the lack of funds to cover essential expenses. Despite this, they devised alternative strategies to avoid a complete shutdown. Notably, Companies H and J successfully negotiated reduced rent and related costs with the shopping mall where their stores are situated: “Initially, when the shopping center closed, we virtually had no income. What sustained us were credit card receivables. We engaged in negotiations with the shopping mall” (Company J).

In the case of Company E, its manager revealed that the company’s entire annual profit was distributed as dividends, with no concern for the necessary working capital to cover the
upcoming year’s expenses: “Every cash surplus at year-end is distributed. So, by February, well before the pandemic, we essentially distributed all the company’s cash” (Company E).

Company D stands out as an exception, with a working capital equivalent to ten times its fixed costs. This financial cushion enabled it to face revenue loss and delayed payments without jeopardizing its survival. Notably, this company has the state of Rio de Janeiro and some municipalities among its clients, and they delayed the payments for ongoing projects.

I have a fixed monthly cost of 100 thousand. I had 1 million in working capital. [...] Service orders dwindled, and payment terms significantly extended as businesses prioritized cash reserves. Payments that I typically received within 20 days were now taking 40 to 60 days to materialize. This led our working capital to plunge (Company D).

In summary, these findings support the literature that underscores the prevalence of liquidity and working capital challenges among SMEs (Baños-Caballero et al., 2010; Longnecker et al., 2023; Walker & Petty, 1978; Zeidan & Vanzin, 2019), including studies specifically related to the pandemic. Both the research by Bartik et al. (2020), with small businesses in the United States, and the work of Juergensen et al. (2020), with European SMEs, identified financial fragility as one of the major challenges faced during the pandemic.

O Uncertainty

A significant challenge for companies lies in their ability to respond to threats from the external environment, encompassing technological, economic, social, and political crises and changes (Brinckmann et al., 2019; Lima, 2008). These threats may manifest in ordinary circumstances or extreme contexts, such as the pandemic, leading to heightened impacts and challenges (Brammer et al., 2023; Hällgren et al., 2018).

Among the participants, a unanimous concern revolved around uncertainty regarding the future. The primary issue highlighted was the lack of clarity about the evolution of the pandemic and its implications for business, as articulated by the partner of Company H: “The worst problem was psychological, because we didn’t know what would happen the next month.”

The peak of uncertainty was observed during the lockdown period and persisted with the looming prospect of a second wave of the pandemic. Notably, the constant threat of another lockdown for shopping malls, as expressed by the manager of Company E, added a layer of
uncertainty, even though this scenario did not materialize in Rio de Janeiro but was observed in other cities.

As the shopping malls reopened, the crucial issue was not knowing whether they’d shut down again or stay open. Here in Rio, we didn’t face closures after the reopening. However, it was a rollercoaster in various cities, with shopping malls closing, reopening, and then closing again. Some places went through more than three shutdowns (Company E).

The pandemic also heightened uncertainty concerning the performance of both the national and global economies (Bartik et al., 2020; Brauner et al., 2020). Thus, some participants did not know how their business activities would resume. This uncertainty seemed to be stronger for companies with a more long-term focus, like the construction sector, where Company D operates: “The problem now is that people are lacking confidence in what’s going to happen. I have numerous proposals pending, and results are yet to be seen. It is taking longer; people are hesitating to close the deals.”

- **Decline in revenues**

Out of the ten participating companies, nine experienced a revenue decline in 2020 compared to 2019. The primary factor contributing to the revenue shortfall was the three-month lockdown, leading seven companies to temporarily cease operations – only the two restaurants and the medical checkup company managed to remain open. The second factor was the decrease in consumption associated with the economic downturn. The loss of jobs or reduced income for many Brazilians, combined with ongoing uncertainty and prolonged periods of staying at home, compounded these challenges (Amal et al., 2021; Amitrano et al., 2020).

Table 2 illustrates the percentage variation in revenue between the years of 2019 and 2020. Two companies ceased their operations. The two retail companies experienced a similar and significant revenue decline of 40% and 39%. The extent of revenue loss among the remaining companies varied according to their specific circumstances and the strategies adopted to navigate the pandemic.
Company D experienced a revenue loss because its primary clients, the state and municipalities, suspended tenders for new projects and simultaneously delayed payments for ongoing works: “We’ve been without tender participation throughout the entire year. The state and municipalities of Rio de Janeiro haven’t initiated bids since the beginning of the pandemic. That was the most critical blow for our company.”

For Companies E, I, and J, the closure of shopping centers for three months led to a substantial shortfall in revenues. Even after reopening, the return of customers was slow and gradual, resulting in a significant sales gap spanning over five months.

My business was completely closed for three months, with no revenues whatsoever. Once the shopping mall reopened, it took a while for sales to pick up again. Currently, I’m operating at around 70% of my sales volume of December 2019. However, it took the entire year to recover those sales.” (Company J).

While Company A, operating in the health sector, did not face a mandatory shutdown, it did experience a substantial 30% decline in revenues. This decrease was attributed to clients being reluctant to go out during the lockdown and even after the restrictions were lifted, despite recognizing the importance of preventive exams. After this period, there was a surge in demand for medical services, with many clients seeking tests to identify potential comorbidities associated with the disease. However, the heightened demand in the last three months of the year was insufficient to fully offset the earlier six-month shortfall in revenues.

Table 2

<table>
<thead>
<tr>
<th>Company</th>
<th>Segment</th>
<th>Revenue Change (2020/2019)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Company A</td>
<td>Health (Medical Checkup)</td>
<td>-30%</td>
</tr>
<tr>
<td>Company B</td>
<td>Health (Physiotherapy Clinic)</td>
<td>Ceased operations</td>
</tr>
<tr>
<td>Company C</td>
<td>Health (Biotechnology)</td>
<td>-12%</td>
</tr>
<tr>
<td>Company D</td>
<td>Services (Construction)</td>
<td>-71%</td>
</tr>
<tr>
<td>Company E</td>
<td>Services (Shopping Mall Management)</td>
<td>-32%</td>
</tr>
<tr>
<td>Company F</td>
<td>Food (Restaurant)</td>
<td>Ceased operations</td>
</tr>
<tr>
<td>Company G</td>
<td>Food (Restaurant)</td>
<td>-11%</td>
</tr>
<tr>
<td>Company H</td>
<td>Retail (Jewelry)</td>
<td>-40%</td>
</tr>
<tr>
<td>Company I</td>
<td>Services (Sales Consultancy)</td>
<td>+27%</td>
</tr>
<tr>
<td>Company J</td>
<td>Retail (Apparel for Men and Women)</td>
<td>-39%</td>
</tr>
</tbody>
</table>

Source: Prepared by the authors based on financial information provided by the companies.
We didn’t close at all during the lockdown as we operate in the healthcare sector. However, we faced a reduction of over 90% in our occupancy rate in April, May, and June. Although clients became more health-conscious, expressing concerns about comorbidities, they were afraid to leave their homes, despite the safety measures we implemented in the clinic (Company A).

In summary, the pandemic and its repercussions markedly affected the revenue-generating capabilities of the participating companies, mirroring the challenges faced by several SMEs around the world (Donthu & Gustafsson, 2020; Pathak et al., 2022; Sebrae, 2021). Among the participating SMEs, the sole exception was company I, which successfully adjusted its business plan and attracted investors through the network of its partners, as discussed later.

- **Strategic management issues**

To examine matters pertaining to strategic management, managers were asked to what extent their companies embraced a strategic vision – defined as the desired future direction of the organization that guides decision-making (Mintzberg, 2007) – and how their strategies were formulated and executed. Among the surveyed companies, it became evident that only three had a strategic vision, either formal or informal, which seems to have contributed to their survival during this challenging period.

Our vision is to provide solutions for shopping malls facing difficulties. We position ourselves in a market niche of shopping malls that either started with some type of problem or face challenges in reaching their maximum potential. So, our purpose is to offer tailored solutions to help these shopping malls realize their maximum sales potential. Our objectives are designed based on this purpose (Company E).

In turn, the lack of strategic vision made it more challenging for some companies to find alternative solutions to face the pandemic, as was the case with Company J: “Since I am part of a franchise, my store is a franchise, the strategic vision comes from the franchisor. The franchisor only determines sales growth. I don't work much with strategic vision.”

The two companies that ceased operations also lacked any formal or informal strategic vision, which seems to have hindered their ability to explore alternative solutions to cope with the crisis.
I never had a strategic vision for the company. My goal was always to have the maximum possible occupancy, to have a full schedule (Company B).

I never had a strategic vision for the company. I aimed to preserve the restaurant’s essence, which would be celebrating its 45th anniversary with its long-serving employees. I didn’t think about the future or strategy; I simply aimed to keep what I already had (Company F).

Despite adopting a formal strategic plan, Company A encountered challenges in its execution. The manager himself took responsibility for this and attributed it to the dynamic nature of day-to-day operations.

Every year, we undergo strategic planning with a consulting firm for the upcoming year. However, I sometimes struggle to adhere to the set objectives due to the demands of daily operations, leading to decisions that stray from the plan (Company A).

Similarly, Company E had conducted a formal strategic planning but was unable to follow it. Since the pandemic and the closure of the shopping mall were unexpected, solutions to mitigate these risks had not been previously considered, as indicated by the literature on extreme contexts. (Brammer et al., 2023; Hälgren et al., 2018).

Conversely, Company G, which had a strategic vision without a formal strategic plan, was able to adapt to the crisis and devise an alternative solution, experiencing only a modest revenue shortfall.

Before the pandemic, we were in the process of transforming our restaurants, or rather, the brands, into franchises. Although we paused during the pandemic, we have since resumed the project. Our strategic vision revolves around brand growth and business expansion. We envisioned selling food regardless of how we’d do it, making it seamless for us to embrace the delivery system (Company G).

In essence, the evidence underscores the importance of strategic vision, seen as a flexible guiding principle that enables the rise of innovative approaches in response to environmental opportunities and threats (Brinckmann et al., 2019; Mintzberg, 2007), even in extreme contexts like the Covid-19 pandemic (Brammer et al., 2023).

**People management**

Except for the companies that ceased operations (B and F), others minimally downsized their formal workforce, primarily due to the availability of supporting public policies, as discussed earlier. Moreover, and contrary to what is suggested in the literature (Marinho & Vasconcellos, 2007), having an optimal workforce size emerged as a crucial factor, as
emphasized by the partner of Company C: “We didn’t resort to any layoffs; we didn’t have to let anyone go, especially because we were already stretched thin.”

The close bond between managers/owners and their employees, a distinctive trait of SMEs (Harney et al., 2022), likely played a role in this outcome.

We made efforts not to instill in them the fear of layoffs and the uncertainty we were grappling with. We were really scared, we didn’t really know when the restaurant would reopen, the duration of our closure, or the longevity of provisional measures. Yet, we tried to reassure them all the time, stating that our last resort would be layoffs (Company G).

We only discussed these things to calm them down, ensuring they didn’t harbor thoughts of losing their jobs” (Company J).

In the four companies (A, D, E, I) that had outsourced and legal entity contracts with their workers, there was a workforce reduction or renegotiation of terms.

It also became evident that companies with more skilled and prepared employees found it easier to devise and implement alternative solutions. This underscores the strategic role of human resources management in organizations, as highlighted in the literature (Collings et al., 2021).

Solutions and Strategies

Aligned with the study’s objectives, this section delves into the solutions found to confront the pandemic and its ramifications, the use of public support policies and resulting outcomes.

- **Use of Public policies**

  The Brazilian government implemented various public policies, including provisional measures and resolutions, to aid companies affected by the pandemic, with a particular focus on micro, small, and medium-sized enterprises, as advocated by Lazzarini and Musacchio (2020). Every participating company embraced at least one public policy, which proved pivotal for their survival.

  The Provisional Measure 927, dated March 22nd, 2020, which relaxed criteria for granting vacation, was used by all participating companies. Thus, early in the social isolation period, those that did not provide essential services were able to grant vacation to employees.
I only resorted to vacation in the first month when I didn't know what to do, while analyzing whether I would close, what to do to pay the one-third of vacation along with the 13th salary. It was the sole provisional measure I used (Company B).

We resorted to all possible provisional measures, including employment contract suspensions, reduced work hours for some employees, vacation, payment of one-third of vacation in December, and paying FGTS in installments (Company I).

Another widely embraced policy, used by nine out of ten companies, was MP 936, which allowed proportional reductions in working hours and wages or the temporary suspension of employment contracts. The company covered part of the salary, while the other part was covered with federal funds. This measure was initially applied for two months and later extended until December 2020.

I granted vacation to all employees during the initial month. After that, I suspended work contracts for three months (Company F).

We adhered to all provisional measures, including contract suspensions for all employees during the shopping mall closure. Upon reopening, we brought back some salespeople while others remained at home. We also reduced working hours, as the mall initially operated with reduced hours. We split FGTS payments in installments and paid one-third of the vacation along with the 13th salary (Company J).

MP 944 allowed public and private banks to take over the payroll of companies as a form of loan, with lower interest rates than those practiced in the market. In return, the company could not lay off any employees. Two companies used this provisional measure, obtaining a private bank loan with interest rates lower than those in the market.

We suspended our employees’ work contracts. Yet, due to our substantial payroll, encompassing numerous ongoing projects with no receivables, we lacked the funds to pay the payroll supplement. Since the interest rate offered by the bank was attractive, we resorted to financing the payroll, and it was very important to keep the company running (Company D) (Company D).

While the company did not suspend any work contract, we reduced work hours up to 75%. [...] Despite not making any layoffs, primarily because we were already stretched thin, the company took out payroll loans (Company C).

The CGSN Resolution No. 154/2020 extended the due date for taxes under the Simples Nacional, alleviating costs for companies during the lockdown period and beyond. This policy was adopted by most participating companies, including those that eventually ceased operations.
We deferred payments for Simples Nacional and FGTS. We resorted to every government support measure, which prevented our bankruptcy. The shopping mall’s initiative of waiving rent and promotional funds also helped a lot, but the government support was essential (Company H).

These findings underscore the critical role of public support policies for the survival of Brazilian SMEs (Araújo, 2022; Lazzarini & Musacchio, 2020), which was also highlighted in the international literature (Amitrano et al., 2020; Bartik et al., 2020; IMF, 2021; Juergensen et al., 2020; OECD, 2021).

- **Business solutions**

  During the interviews, it became evident that several companies devised innovative approaches to sustain their operations and, to some extent, recover their revenues. As previously mentioned, two companies had to close down, while six of the remaining eight implemented alternative strategies to boost revenues and sustain their activities.

  Company C diversified its services by introducing molecular testing, a departure from its primary focus on umbilical cord cell storage. Recognizing an opportunity amid the pandemic, the company ventured into Covid-19 testing, expanding its range of services. Although the new service did not fully compensate for the significant losses in the core business, it played an important role in supporting overall revenue.

  Company D faced a hiring freeze from its primary clients—the state and municipalities. However, it identified a business opportunity amidst the pandemic. With the surge in home office practices and increased time spent at home, there was a growing demand for residential renovations. Therefore, the construction company, traditionally serving legal entities, developed partnerships with architectural firms and began catering to individual clients. According to the company, this strategic shift was neither the best positioning nor the most lucrative, but it proved essential to its survival.

  Despite operating in distinct sectors, companies G, H, and J adopted a common strategy to continue serving their customers during and after the lockdown: leveraging WhatsApp to showcase their products with photos and prices. Without a pre-existing e-commerce or delivery infrastructure but counting on a customer database, it was the alternative to sell their products.

  This alternative sales channel was not enough to restore pre-pandemic volumes but contributed to the maintenance of the business. Company G, from the food segment, managed to maintain a revenue close to the pre-pandemic level. In contract, Company F, from the same
segment and size as Company G, ceased to operate without exploring this or any other alternative.

Company I, specializing in franchise management and development, grappled with a dwindling client base and economic uncertainty. To stay afloat, it identified an opportunity and created an investment fund for former employees of state-owned companies who had left through voluntary dismissal programs. These people had capital to invest and expertise to exchange. This initiative enabled the company not only to raise funds but also to shift its business model. Now, it actively seeks out companies with franchising potential and lack of necessary capital.

As a whole, the six companies that found innovative solutions highlight the importance of strategic flexibility and the ability to learn and adapt their business plans in crisis contexts, supporting the literature (Brinckmann et al., 2019; Lima, 2008; Mintzberg, 2007). In the specific context of the pandemic, studies by Clauss et al. (2022) and Miroshnychenko et al. (2021) on European SMEs also provides evidence in this direction.

○ **Comparative analysis**

Finally, in Table 3 we synthesize the solutions found and results achieved.

### Table 3

*Problems Faced and Conceived Solutions*

<table>
<thead>
<tr>
<th>Problems</th>
<th>Companies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack of working capital</td>
<td>B, E, F, G, I and J</td>
</tr>
<tr>
<td>Uncertainty</td>
<td>All participating companies</td>
</tr>
<tr>
<td>Decline in revenues</td>
<td>A, B, C, D, E, F, G, H and J</td>
</tr>
<tr>
<td>Strategic management issues</td>
<td>A, B, C, D, F, H and J</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Solutions</th>
<th>Companies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public policies</td>
<td>All participating companies</td>
</tr>
<tr>
<td>New services</td>
<td>C</td>
</tr>
<tr>
<td>New customers</td>
<td>D</td>
</tr>
<tr>
<td>New sales tool</td>
<td>G, H and J</td>
</tr>
<tr>
<td>New investors</td>
<td>I</td>
</tr>
</tbody>
</table>

*Source:* Prepared by the authors.
In the case of the two food enterprises, Company F ceased operations, while Company G innovatively adopted a WhatsApp delivery system. The former’s closure resulted from insufficient working capital, high fixed rent costs, and a negative neighborhood impact stemming from the pandemic. Among health sector companies, Company A, despite its revenue loss, weathered the crisis due to its substantial working capital. Conversely, Company B shuttered due to lack of working capital and high fixed costs. Company C, grappling with a similar lack of working capital, navigated through the challenges by introducing new services. Retail companies H and J faced comparable revenue shortfalls and found a common solution — selling through WhatsApp. Both lacked working capital. Notably, all participating companies made use of public policies, and, with the exception of Company A, this played a pivotal role in their survival.

CONCLUDING REMARKS

This study examined the main challenges faced by SMEs in Rio de Janeiro during the Covid-19 pandemic, along with the conceived solutions and their outcomes, as perceived by the companies’ managers. Additionally, it assessed the extent to which these companies made use of supporting public policies and with what results. To fulfill these objectives, we conducted a study involving ten SMEs spanning diverse sectors.

Through a literature review, it was possible to identify that the primary challenges faced by SMEs were related to financial, strategic, and people management. Employing qualitative research methodology based on multiple case studies enabled us to scrutinize and compare the challenges faced by the ten participating companies, spanning the health, food, retail, construction, consulting, and shopping mall management segments.

The findings revealed that the foremost challenges faced by the participants were decline in revenues, insufficient working capital, uncertainties about the future, and lack of strategic vision. Despite evidence in the literature regarding people management as a prevalent issue, the participating companies did not emphasize problems of this nature.

All companies, even those that proactively sought opportunities prior to the crisis, reported being unprepared for such an unforeseen situation, consistent with the literature on extreme contexts (Brammer et al., 2023; Hälgren et al., 2018). The pandemic, besides unpredictable and disruptive, was an unprecedented event in the history of these companies and their managers, who are still cautious amidst uncertainties.
The results underscored the criticality of strategic flexibility. In other words, companies that innovated and found alternative solutions to adapt their business strategies dealt better with pandemic’s adverse effects, consistent with the existing literature on the topic (Brinckmann et al., 2019; Clauss et al., 2022; Lima, 2008; Mintzberg, 2007; Miroshnychenko et al., 2021).

Finally, it was clear that the public policies implemented by the Brazilian government played a pivotal role in the survival of seven of the eight companies still in operation – despite the alternative solutions they conceived. Hence, it is imperative to underscore the vital role of the State as an active agent in confronting economic crises. These findings align with the understanding that the economic and social ramifications of the pandemic would have been much more severe without such governmental intervention (Araújo, 2022; Amitrano et al., 2020; Bartik et al., 2020; IMF, 2021; Juergensen et al., 2020; Lazzarini & Musacchio, 2020; OECD, 2021).

Regarding our theoretical contributions, the typical financial fragility of SMEs contributed to the difficulties faced during the pandemic, corroborating evidence found in other countries (Bartik et al., 2020; Juergensen et al., 2020). On the other hand, strategic flexibility and systemic learning seem to have enabled the adaptation of business models and the identification of solutions to counteract the pandemic’s deleterious effects, also echoing the international literature (Clauss et al., 2022; Miroshnychenko et al., 2021).

From a practical standpoint, this study underscores the importance of strategic flexibility and diversity of revenue sources and distribution channels for SMEs. Additionally, effective planning and financial management, the resilience to deal with uncertainties and the ability to learn also emerged as relevant, as well as the development of networks of relationships and collaboration, an aspect identified by Foguesatto et al. (2022).

In a broader social context, the findings underscored the crucial role of countercyclical public policies, particularly in an extreme context like the Covid-19 pandemic. Without them, the severe consequences for the studied SMEs could have been even more devastating.

As for the study’s limitations, the companies were selected through convenience, relying on the relationship network of one of the authors, introducing a potential selection bias that might reduce the diversity of perspectives. Additionally, the interviews were conducted with only one manager from each company, which may have limited the understanding of their reality. For future studies, we suggest a larger company base, encompassing other regions and market segments. Furthermore, longitudinal studies could provide valuable insights into the evolution of responses to the crisis and outcomes over time.
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**APPENDIX – INTERVIEW QUESTIONNAIRE**

**The Company**
- What is your company’s primary business?
- Could you describe the specific area of activity in which your company operates?
- How would you describe the strategic vision guiding your company?

**Before the Pandemic**
- Did your company encounter challenges before the onset of the pandemic?
- What were the notable strengths of your company during this period? What were its weaknesses?
- How would you characterize the financial management practices of your company?
- How was the organizational structure dimensioned prior to the pandemic?
- Which management tools were employed by your company?

**The Pandemic**
- How did the pandemic impact your business?
- What were the primary challenges confronted by your company during the pandemic?
- Did your company avail itself of government-supported measures? If so, which ones?
- Has your company actively sought financial resources, either from banks or government programs?
- What people management strategies were employed during this period?
- Did your company devise alternative solutions to navigate the challenges posed by the pandemic? If yes, kindly elaborate.

**Current Status**
- Presently, what are the primary issues your company is grappling with?
- How do you envision the future trajectory of your company?