

Effects of covid-19 and strategies employed by entrepreneurs in the Peruvian gastronomic sector during the pandemic

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■ ABSTRACT

This study investigates the impact of the coronavirus disease of 2019 (COVID-19) pandemic on the gastronomic sector in Lima, Peru. The theory of dynamic capabilities an appropriate theoretical framework for analyzing how Peruvian gastronomic entrepreneurs have adapted and responded effectively to the challenges imposed by the COVID-19 pandemic. Through questionnaires and in-depth interviews, the study examines response strategies these businesses adopted to mitigate pandemic consequences. The findings reveal a significant sales reduction as the pandemic's primary effect, attributed to reduced customer traffic due to government-imposed quarantines. Marketing strategies, operational shifts, and cost reductions were common survival tactics. Despite challenges, the study underscores the gastronomy sector's adaptability, creativity, and preparedness in navigating the crisis. Practical implications include the importance of crisis management planning.

Keywords: COVID-19, pandemic, Peru, gastronomic, strategies, dynamic capabilities

Efectos del covid-19 y estrategias empleadas por empresarios del sector gastronómico peruano durante la pandemia

■ RESUMEN

Este estudio investiga el impacto de la pandemia de la enfermedad por coronavirus de 2019 (covid-19) en el sector gastronómico en Lima, Perú. La teoría de las capacidades dinámicas se presenta como un marco teórico apropiado para analizar cómo los emprendedores gastronómicos peruanos han logrado adaptarse y responder eficazmente a los desafíos impuestos por la pandemia del covid-19. A través de cuestionarios y entrevistas en profundidad, el estudio examina las estrategias de respuesta adoptadas por estas empresas para mitigar las consecuencias de la pandemia. Los hallazgos revelan una reducción significativa en las ventas como efecto principal de la pandemia, atribuida a la reducción del tráfico de clientes debido a las cuarentenas impuestas por el gobierno. Las estrategias de *marketing*, los cambios operativos y las reducciones de costos fueron tácticas de supervivencia comunes. A pesar de los desafíos, el estudio subraya la adaptabilidad, la creatividad y la preparación del sector de la gastronomía para afrontar la crisis. Las implicaciones prácticas incluyen la importancia de la planificación de la gestión de crisis.

Palabras clave: covid-19, pandemia, Perú, gastronomía, estrategias, capacidades dinámicas

Introduction

The COVID-19 pandemic has profoundly and widely impacted businesses of all sizes, from large corporations to Micro, Small, and Medium-sized Enterprises (MSMEs) (Bartik et al., 2020; Fairlie, 2020). Studies have shown that the pandemic has led to significant disruptions in supply chains, reduced consumer demand, and financial strain across various industries (Gourinchas, 2020; Shen, 2020). Larger businesses have faced challenges such as navigating complex global operations, while MSMEs have often been more vulnerable due to limited resources and access to capital (Kuckertz et al., 2020).

According to an Organisation for Economy Co-operation and Development (OECD) report (2020), the pandemic has caused a 3.5% drop in global GDP, particularly severely impacting micro, small, and medium-sized enterprises, which account for 99% of businesses worldwide. Research in Latin America has indicated

that microenterprises and Small and Medium-sized enterprises (SMEs) have been the hardest hit, with massive closures and difficulties adapting to the new market conditions. In Peru, for example, an Economic Commission for Latin America and the Caribbean study (2020) found that 60% of microenterprises and 40% of SMEs have closed their doors during the pandemic.

The pandemic has left a profound impact globally, causing a series of devastating consequences across various economic and social sectors. Among the hardest-hit, the gastronomic industry has faced considerable challenges. For example, many small restaurants and eateries have struggled to survive due to lockdowns and reduced consumer spending, whereas larger chains have had more resilience due to diversified revenue streams and stronger financial backing (Fairlie, 2020; OECD, 2020). In the gastronomy sector, these effects have been particularly acute, with numerous establishments closing temporarily or permanently due to mobility restrictions and changes in consumer behavior (Food and Agriculture Organization, 2020). The combination of these factors has tested the resilience and adaptive capacity of businesses in the sector, highlighting the need for effective crisis management strategies and diverse business strategies to mitigate the effects of the pandemic.

The gastronomic sector, crucial in Peru's culture, economy, and employment, has suffered significant setbacks. Peru's internationally acclaimed cuisine, known for its diversity and excellence, has driven growth and is a major tourist attraction. However, lockdowns, movement restrictions, and fears of contagion have dramatically altered the sector's dynamics. The enforcement of quarantines, social distancing mandates, and border closures have severely affected numerous economic activities, with tourism, gastronomy, and related sectors bearing the brunt due to their reliance on physical mobility (Wiantara et al., 2022).

Predictions regarding the pandemic's impact on the tourism industry highlight unprecedented global economic consequences (Sigala, 2020). According to estimates from the International Labor Organization (ILO), the international tourism movement

decreased by 20 to 30%, resulting in a staggering loss of USD 300 to USD 400 billion in tourism export revenues and the direct shedding of 100 to 120 million jobs within the sector. These repercussions stand as the most significant decline in history, surpassing even the aftermath of September 11 (ILO, 2020).

In Peru, the domain of tourism services encompasses four sub-sectors: tourism, domestic tourism, cultural heritage, hospitality, and gastronomy. The gastronomic sector has flourished over the past fifteen years as one of the country's fastest-growing industries. This sector contributes, on average, 6.20% to the GDP (Instituto Nacional de Estadística e Informática [INEI], 2022a), encompassing the food and beverage industries (3.2%) along with accommodation and restaurants (3%).

In recent years, the country's gastronomic sector has emerged as a vibrant and promising force in Latin America. The official Peru Travel portal (2015) affirms that their cuisine ranks among the world's most esteemed. This was confirmed in 2023 when Peru was again recognized as the "World's Leading Culinary Destination" at the World Travel Awards, cementing its status as a global gastronomic hub. This accolade builds on Peru's consistent recognition in this category since 2012, excluding 2020 due to the pandemic. Moreover, the Peruvian capital of Lima was named the "Best Gastronomic City in Latin America" in 2023 by the World Culinary Awards. This recognition highlights the city's vibrant and innovative culinary scene, which features diverse restaurants, from traditional *cevicherías* to cutting-edge fine dining establishments. Its culinary fusion is a testament to centuries of cultural exchange, incorporating influences from Spanish, African, Chinese, Japanese, and Italian culinary traditions. Recognizing its significance, the Peruvian government elevated the country's gastronomy to the status of National Heritage in 2007.

Peru's tourism and gastronomy sectors have shown significant resilience and adaptation in the face of the COVID-19 pandemic. As of 2023, the tourism sector has begun to recover, with international arrivals increasing by 40% compared to 2021 (Ministerio de Comercio Exterior y Turismo, 2023).

The gastronomy sector, a crucial part of Peru's cultural identity and tourism appeal, has also seen a revival. In 2023, the gastronomy sector contributed approximately 3.5% to the national GDP, up from 2.8% in 2020 (INEI, 2023). The combined tourism and gastronomy sectors account for around 9% of Peru's GDP, highlighting their importance in the country's economic landscape (World Travel & Tourism Council, 2022). Additionally, this sector triggers multiplier effects than other sectors, interconnecting with agriculture, livestock, industry, education and training, transportation, and communication (ComexPerú, 2022). Moreover, this industry fosters economic ties and social bonds, nurturing a culture of identity and respect for tradition.

The strong performance of Peru's tourism and gastronomy sectors has significantly impacted the country's overall economy. In 2022, the foodservice industry in Peru accounted for an estimated 15-20% of total foreign tourist revenue (United States Department of Agriculture [USDA], 2023). Also, the agriculture sector, which includes food production, contributed around 5% of Peru's GDP while employing nearly 28% of the population (USDA, 2023). These industries' continued growth and development are expected to play a crucial role in Peru's economic recovery and long-term prosperity. During the first half of 2023 compared with 2022, the hotel and restaurant sector grew by 5.3% but was still lower than in 2019.

However, the dynamics of restaurants, food stalls, and other gastronomic establishments underwent a dramatic transformation with the onset of COVID-19. Lockdowns and social distancing measures, imposed to curb the virus's spread, forced many restaurants to temporarily close or adapt to delivery and take-out models. Furthermore, the decrease in tourism and capacity restrictions within venues significantly impacted the revenues of gastronomic businesses, posing a threat to their survival. It is estimated that in 2020, there was a 50% drop in sales due to the pandemic, amounting to USD 4.43 billion, with a partial recovery of nearly 30% in 2021 (Monge, 2021). SMEs play a pivotal role in these sectors, employing a significant portion of

the workforce and driving innovation and cultural preservation (Asociación Peruana de Gastronomía [APEGA], 2023). As the country continues to navigate post-pandemic recovery, updated data underscores the critical contributions of these sectors to Peru's economy.

A notable obstacle that affected the gastronomic sector was the health measures and mandatory lockdowns approved by the government, twice in 2020 and again in February 2021. In Peru's case, it marked one of the world's lengthiest lockdowns, limiting freedom of assembly and movement across Peruvian territory while restricting economic activities, thus adversely affecting restaurant and eatery consumption. To prevent massive virus transmission, the government enacted border closures, interprovincial movement restrictions, daily curfews, and a mandatory period of national isolation, a measure extended several times that became one of the world's longest (Pajuelo, 2021).

The impact of the COVID-19 pandemic was intricate, involving not just a loss of life but also presenting a dire scenario for businesses, especially for economies characterized by a predominantly smaller business universe, as seen with micro and small businesses in Latin America and Peru (Flores-Goycochea, 2022). The effects of this health emergency translated not only into Peru experiencing the highest number of daily deaths per million inhabitants but also marked an unprecedented impact on businesses. Informal employment in Peru remained high, constituting 70% of the economically active population before the pandemic, surging to 76.80% by the end of 2021 (Instituto Peruano de Economía, 2021).

Before the COVID-19 pandemic, Peru boasted 200,000 restaurants that employed nearly one million individuals. However, a year into the pandemic crisis, approximately 40% of food establishments were shuttered, leading to half a million direct job losses, resulting in a 50% reduction in the workforce.

To mitigate the effects of the COVID-19 pandemic, the government implemented various programs to bolster gastronomy's re-

covery. One notable initiative is the National Government Guarantees Program “Reactiva Perú,” which accounted for 8% of the GDP. Its objective was to ensure the continuity of payment chains by providing guarantees to micro, small, medium, and large companies to access working capital loans, facilitating the fulfillment of short-term financial commitments. Additionally, the government allowed for the deferment of tax payments and instituted other measures for economic and financial sustainability. However, it is presumed that these measures fell short.

Given this contextual backdrop and recognizing the significance of the Peruvian gastronomic sector, delving into the pandemic’s impact on Peru’s gastronomy becomes essential. This exploration should encompass aspects such as the adaptation strategies undertaken by restaurants and the sector’s resilience in the face of these challenges to mitigate the far-reaching consequences of the global COVID-19 pandemic. The use of a mixed-method approach, incorporating both surveys and interviews, is essential for this study to comprehensively capture the multifaceted impact of the COVID-19 pandemic on the gastronomy sector in Peru. The quantitative analysis, derived from survey data, enables the systematic collection of structured information on the operational and financial impacts experienced by restaurants. We seamlessly integrate qualitative insights from entrepreneurs, enabling us to elaborate on specific effects and adaptation strategies mentioned in their survey responses. The combination of these approaches will allow: a) obtain a generalizable diagnosis of the crisis management strategies implemented by gastronomic entrepreneurs, and b) deepen the understanding of the processes, motivations, and factors that have influenced the development of dynamic capabilities to cope with the crisis.

We anchor the theory of dynamic capability (Teece et al., 1997) to provide a robust conceptual foundation for this study. This framework is particularly relevant for the quantitative analysis to diagnose the pandemic’s impact on the gastronomy sector in Peru. To this end, we posed a first research question: How did the pandemic affect the Peruvian gastronomic sector? On the other

hand, the theory of dynamic capability emphasizes the ability of organizations to integrate, build, and reconfigure internal and external competencies to address rapidly changing environments. This theory is instrumental for the qualitative analysis of Peruvian restaurants' adaptive strategies and resilience. It allows us to explore how these businesses have leveraged their resources and capabilities to innovate, transform, and sustain themselves amidst the pandemic-induced disruptions. In summary, what strategies were implemented to mitigate the effects of the pandemic? This framework provides a comprehensive theoretical basis for examining the adaptation and resilience of the gastronomy sector in Peru during the COVID-19 pandemic. Specifically, based on the results obtained, the DC theory capabilities suggests that Lima's gastronomic entrepreneurs were able to identify and seize emerging opportunities, such as the growing demand for home delivery services and online sales, and reconfigure their internal resources and processes, transforming their physical spaces and developing new product lines.

This study contributes valuable insights into the management of gastronomic enterprises during a crisis context and paves the way for fresh perspectives in future research. The analysis provides evidence from a developing country based on a combination of questionnaires and interviews. Thus it provides new insights for the current literature on crisis management and adaptation of entrepreneurial capabilities. Another contribution of integrating both quantitative and qualitative methods is that this study offers a holistic and robust analysis of the multifaceted effects of the COVID-19 crisis on the Peruvian gastronomic industry. Furthermore, the findings can play a pivotal role in shaping policies and programs designed to aid recovery and fortify strategies within the sector.

The COVID-19 pandemic has deeply impacted Peru's gastronomy, a cornerstone of its cultural identity and economic fabric. Research in this domain unveils the present-day ramifications and lays the groundwork for revitalizing and rejuvenating the gastronomic industry in the post-pandemic era.

The article is structured into four parts: next, we present the literature review on the subject, proceed with the study's methodology, follow the presentation of findings, and culminate in discussions, conclusions, implications, limitations, and a delineation of future research directions.

Theoretical Framework and Literature Review

The Theory of Dynamic Capabilities

Developed by Teece et al. (1997), the theory of dynamic capabilities focuses on an organization's ability to integrate, build, and reconfigure internal and external competencies in response to rapid changes in the environment and to maintain its competitive advantage. Eisenhardt and Martin (2000) define DC as the organizational and strategic routines through which firms acquire new combinations of resources based on how markets emerge, evolve, and perish.

As an enhancement of the resource-based view (Barney, 2001), DC emerged as an approach to understanding strategic changes (Teece et al., 1997), aiming to provide a framework for how firms develop and sustain competitive advantages in turbulent environments (Alves & Galina, 2021). In practice, this theory manifests through the adaptation of the organization's resources. The ability to react correctly, adequately, and timely to environmental changes requires a combination of multiple organizational capabilities. Hence, this perspective argues that organizations need multiple capabilities to survive in times of crisis (Chudziński et al., 2023).

Dynamic capabilities allow for prospecting new opportunities in business environments and transforming organizational resources into assets, as well as tangible and intangible capabilities (Lucianetti et al., 2018). The dynamic resources of organizations reflect their abilities to create, expand, and modify their existing resource base. Thus, these resources facilitate change and renewal, fostering innovation that achieves better adaptation to the environment (Dabić et al., 2013).

The economic and social constraints applied to contain global crises inevitably caused significant business disruptions, especially in MSMEs. In such a complex environment, developing dynamic capabilities becomes crucial (Fainshmidt et al., 2017). Therefore, deploying DC increases the organization's chances of success in the current context (Bailey & Breslin, 2021). This theory is particularly relevant for analyzing the gastronomy sector in Peru, given the significant and disruptive impact that the COVID-19 pandemic has had on this industry.

The DC theory has been widely used in strategy and business management research, but its application in the gastronomy sector remains limited. Nevertheless, some studies have explored the potential of this approach to understand the adaptation and survival of gastronomic businesses in changing competitive environments. Sánchez-Gutiérrez et al. (2018) found that dynamic capabilities in learning, integration, and reconfiguration were key determinants of innovative performance in restaurants in Mexico. Ottenbacher and Harrington (2013) studied how dynamic capabilities in marketing, operations, and talent management influence the success of new restaurants in Germany. These studies suggest that developing key dynamic capabilities, such as innovation, marketing, and resource management, may be crucial for gastronomic enterprises to adapt and thrive in turbulent and competitive environments.

The COVID-19 Pandemic Crisis in the Gastronomic Sector

Globally, empirical evidence demonstrates that extended lockdown periods, monetary policy decisions, and international travel restrictions during the COVID-19 pandemic severely affected economic activities and caused fluctuations in opening, closing, and minimum and maximum prices of major stock market indices. The rising COVID-19 cases and deaths also significantly increased global inflation, unemployment, and energy prices (Ozili & Arun, 2020). The pandemic's impact was felt across all economies and industry sectors, with tourism (encom-

passing the hotel and restaurant industry, culture, entertainment, cinema, education, and health) being among the hardest hit (Albulescu, 2020).

The COVID-19 pandemic brought about a growing trend of avoiding in-person dining at food establishments (Kim et al., 2020). Therefore, it is reasonable to assume that restaurants offering in-person dining services experienced a significant decrease in their revenues, which, at the worst moments, were only 10-15% of their pre-pandemic levels. Estimates have been made to explain why small restaurants quickly collapsed due to the COVID-19 pandemic, including: a) new costs arising from health authority requirements to control the effects of the COVID-19 outbreak (such as providing safety equipment and implementing social distancing); b) a reduction in customer traffic due to health restrictions implemented for social distancing; and c) closures and government regulations limiting business hours (Dube et al., 2020; Kim et al., 2020).

Peru was not an exception; the health crisis affected its development, leading to increased poverty levels, extreme poverty, and social inequality (Huamán, 2021). In terms of sectors, the Peruvian gastronomic sector was also one of the hardest hit by the health crisis (Gaud et al., 2022). According to the Peruvian Gastronomy Association (APEGA, 2021), the sector contributed up to 10% of Peru's GDP in 2016. This includes not only restaurants but the entire ecosystem: small-scale agriculture and artisanal fishing. Gastronomic tourism affects over 6 million individuals in the country (INEI, 2022a; INEI, 2022b). Data shows that more than 80,000 restaurants officially closed in Peru due to the pandemic, a quarter of them in Lima. This represents around 40% of the country's establishments (ComexPerú, 2022). Similar situations have occurred in other regions and countries.

According to Plzáková & Smeral (2022), after several weeks of bars and restaurants being closed or operating with limited activities in Europe, a difficult recovery is anticipated due to reduced consumption and the lack of tourists. In Mexico, 95% of

restaurants closed during the mandatory quarantine. According to Mendoza (2020), many of these small and medium-sized enterprises will not have the conditions to resume activities after this period, as their sales dropped by 126% in May 2020. Amid the pandemic, restaurants worldwide had to make drastic adaptations, focusing on offering takeout and delivery services, while traditionally, the venue, ambiance, and service were part of the experience that customers were willing to pay for (Martínez, 2020). In other countries like Paraguay, managers of micro, small, and medium-sized enterprises in the trade, construction, industry, and hotel and restaurant services sectors highlighted that their sales had suffered significant declines between February and April 2021 (Sánchez-Báez et al., 2022). In the case of Bali, Indonesia, over 1,000 restaurants and hotel businesses closed due to the pandemic (Wiantara et al., 2022), while those that remained open began implementing different strategies to increase sales. The most common strategy was implementing delivery systems within a certain range. Others offered special discounts for specific menu items and allowed only pick-up orders, not allowing on-site dining to avoid the risk of contagion. Additionally, they devised measures to reduce costs, anticipating the routine costs incurred by restaurants, among other strategies. Concern for employees was also evident, with some managers enrolling them in pre-employment programs launched by the government to alleviate unemployment in that sector.

In Colombia, the study by Zapata-Cuervo et al. (2021) yielded results similar to those of the Indonesian case. The majority of restaurants in their sample that reopened after the lockdown transformed their services into delivery and implemented heightened sanitary measures. They adhered to protocols mandated by their government and aligned with World Health Organization recommendations to prevent contagion. Additionally, in order to retain their employees, they repositioned them to be part of the delivery service. This strategy aimed to maintain a close and per-

sonalized customer relationship while reducing delivery costs associated with third-party delivery companies like Rappy and Uber Eats. Innovative marketing strategies were adopted for those unable to transition to the delivery system due to the complexity of their menus. These included virtual cooking classes, pre-cooked menu offerings, and expanding their premises to include terraces and gardens and negotiating with suppliers.

Similarly, the study by Lai et al. (2020) focusing on micro, small, and medium-sized restaurants in Malaysia illustrated the adaptations made by managers or owners during the pandemic. These adaptations revolved around fostering creativity, upholding reputation, and sustaining profitability. For instance, many restaurants creatively modified the concept of takeout and delivery. One noteworthy approach was providing customers with ingredients to prepare a burger at home, aligning with the “home cooking” concept, among other innovative strategies.

On the other hand, the study conducted by Tse et al. (2006) regarding how restaurants in Hong Kong responded to the 2003 SARS crisis showed that restaurant managers and owners efficiently addressed the crisis through a combination of cost reduction and increased sales strategies. This was supplemented by a range of additional measures, such as assigning an employee to offer wipes and hand sanitizer to customers, frequent disinfection of dining tables, and sterilization of food utensils and conveyor belts using ultraviolet rays or hot water. Cost reduction was achieved through workforce reduction or temporarily closing certain parts of the business (Tew et al., 2008). However, the study showed that the SARS crisis exposed the lack of crisis management plans among most Hong Kong restaurants.

Implemented Measures Following COVID-19 in Peru

With the outbreak of the COVID-19 pandemic, the demand for restaurant services plummeted by around 50% (Salas, 2020).

On March 15, 2020, the Peruvian government imposed a prohibition on dine-in services at restaurants, except for home delivery orders. Four key measures were implemented within this industry: (a) the declaration of a State of Emergency, (b) initiation of the first quarantine period (90 days), (c) reduction of seating capacity to an average of 30% after the conclusion of the first quarantine, and (d) financial support measures. These measures were intended to avoid disruptions in the restaurant's short- and medium-term payment chain and related sectors (Salas, 2020).

In 2020, the first quarantine in Peru started from March 15 to June 30, including curfews in 18 out of 25 regions. Subsequently, from July 1 to October 30, a partial quarantine was enforced across 18 regions, including Lima. Notably, Lima presented the highest number of infections. Following October 2020, the quarantine measures were lifted. However, in 2021, due to a surge in infections, health restrictions were reintroduced from January 31 to February 15, followed by successive lockdowns aimed at sustaining the decline in infections and preventing further economic contraction.

To counteract the economic contraction caused by COVID-19, the government implemented the "Fondo al Apoyo Empresarial" (FAE – MYPE) program through Urgent Decree No. 029-2020. This initiative aimed to allocate state resources to ensure working capital financing for Mypes, with funding ranging from USD 1 to USD 1,824,000, addressing economic challenges. In this context, the "FAE-Turismo" program was implemented with a budget of 500 million soles (equivalent in USD), created by Urgent Decree No. 076-2020. The program aimed to provide working capital credit to Mypes within the tourism sector, including restaurants (Flores-Goycochea, 2022). The goal was to extend these resources to 20,000 companies operating within the gastronomic sector. However, disbursements were limited despite allowing for credits equivalent to four months of sales or three months of average debt.

Materials and Methods

This study aims to analyze the impact of the COVID-19 pandemic and the strategies employed by entrepreneurs in the gastronomic sector in Lima, Peru, utilizing a mixed-methods approach. The use of this research approach, combining quantitative and qualitative methods, is justified by the multidimensional nature of the phenomenon studied and the need to address different theoretical perspectives in a complementary manner (Hernández-Sampieri & Mendoza, 2018).

On the one hand, the quantitative approach will allow a generalizable diagnosis of the effects identified by Peruvian gastronomic entrepreneurs during the COVID-19 pandemic. The numerical and statistical data obtained through this approach will provide an overview of the magnitude, frequency, and trends of entrepreneurial responses to the crisis. Conversely, the qualitative approach is justified to deepen the understanding of the phenomenon from the dynamic capabilities theory. Through this approach, it is possible to obtain more detailed and contextualized information on how entrepreneurs have developed and deployed fundamental capabilities, such as marketing and innovation, to adapt and respond effectively to the challenges imposed by the pandemic. In summary, the mixed approach is justified by the complementarity of the quantitative and qualitative approaches to address the different theoretical aspects of the study, providing both an overview and a deeper understanding of the business strategies adopted by Peruvian gastronomic entrepreneurs during the COVID-19 pandemic.

Data Source

The dataset used in this study comprises 111 complete records collected through a specifically tailored questionnaire administered between September 21 and October 13, 2022. The participants included restaurant owners and managers located in Lima, Peru. Additionally, six semi-structured interviews were conduct-

ed with entrepreneurs who had completed the questionnaire, enriching the data with supplementary insights into the existing situation of restaurants in Lima and the challenges they confront.

Questionnaire Description

The questionnaire used in this study comprised 18 questions. The general restaurant information (restaurant name, year founded, type of cuisine offered) and respondent profiles (gender, age, education level, position, ownership of another restaurant) were filled out by the entrepreneurs. The restaurant's pre-pandemic and pandemic status (employment, sales, and revenues) and magnitude (percentage of change) were single-choice questions. The pandemic's effects on restaurants were a multiple-choice question. The proposed alternatives were obtained from the literature related to the effects of COVID-19 worldwide in the context of the global crisis (Alonso et al., 2020; Bartik et al., 2020; Gashi et al., 2021; Lu et al., 2020b; Shafi et al., 2020). For example, we considered decrease in sales, lack of customer traffic, liquidity problems, and difficulty hiring personnel. Respondents were also allowed to provide additional comments and participate in virtual interviews.

Notably, including an open-ended question in the survey enables entrepreneurs to provide additional qualitative insights and contextual information regarding the impact of the pandemic and their responses. These free-form comments complement the structured survey data and provide a richer, more nuanced understanding of the challenges and resilience factors within the sector. By adding an open-ended question for free comments, we seamlessly integrate qualitative insights from entrepreneurs, allowing us to elaborate on specific effects and strategies for adaptation noted in their responses. This linkage ensures a richer, more nuanced analysis that combines statistical trends with personal experiences and perspectives.

The interviews were conducted using three basic questions, which are indicated below. However, being a semi-structured interview, there were instances to complement these questions and better understand the aspects the sector's business people

pointed out. The questions aim to encourage entrepreneurs to elaborate on their use of business capabilities and resources to confront the effects of the pandemic. Specifically, as indicated by the theory of dynamic capabilities, the goal is to explore how entrepreneurs in the sector developed the ability to adapt, integrate, and reconfigure their internal (e.g., business model) and external (e.g., government support) resources and competencies to address changing environments and maintain their presence in this vulnerable sector. The essential questions were: (a) What measures have you implemented in your company to face the crisis derived from the pandemic by COVID-19?, (b) Have you had to adapt your business model due to the pandemic? Why yes? Why not?, (c) Have you applied for or participated in any assistance or benefits provided by the government? Why yes? Why not?, and (d) How do you see the expectations for the sector in the next six months?

Notably, the questionnaire received ethical approval from the university's Ethics Committee overseeing the study (Report No. 008b/2021; Protocol No. 008/2021, dated July 22, 2021).

Sample Description

The weighted average age of the participants stands at approximately 36 years old, calculated from the midpoints and the number of individuals in each age group. The survey sample exhibits a gender distribution of 49% women and 51% men. Regarding age distribution, 43% of the participants were under 30 years old; 25% were between 31 and 40 years old; 17% were between 41 and 50 years old; 7% were between 51 and 60 years old; 6% were between 61 and 70 years old; and a small percentage (less than 1%) were 71 years or older. Concerning educational attainment, 39% had completed secondary education, 32% had completed university studies, and 29% had completed technical studies. Additionally, 22% of participants had prior experience in managing other restaurants.

Before the pandemic, the derived weighted average of dollar sales among surveyed restaurants prior to the pandemic approx-

imates USD 984,397. The culinary offerings of these restaurants encompass diverse cuisines, ranging from traditional “Comida criolla” to exotic “Comida de la selva.” The distribution of restaurants based on their culinary focus is presented in Table 1. Under the “Mariscos” category, all restaurants specializing in seafood dishes are included.

Table 1

Distribution of Restaurants According to the Type of Cuisine They Offer

Type of cuisine	Distribution
Creole Cuisine	39 (35%)
Meats	20 (18%)
Seafood	16 (14%)
Asian Cuisine	9 (8.1%)
Bakery and Café	9 (8.1%)
Fast Food	7 (6.3%)
Others	6 (5.4%)
Italian Cuisine	5 (4.5%)
General Total	111

Note. Others: Gourmet Food (1), Vegetarian Food (2), Jungle Cuisine (1), and Restaurant/Hostel (2).

Techniques and Software Used

In the quantitative part of the study, the programming language R (R Core Team, 2023) was used to calculate descriptive statistics and apply the Kendall-Tau association test (Kendall, 1938). This statistical coefficient measures the strength and direction of the association between variables; however, it does not imply causality. The choice of the Kendall-Tau test is justified by the categorical and nominal nature of the variables, coupled with their non-normal distribution, as indicated by the Shapiro-Wilk normality test. With a significance level of 0.05, all p-values calculated for the Shapiro-Wilk statistic are below the cut-off value. Therefore, the null hypothesis that the data conforms to a normal distribution is rejected.

In the qualitative part, content analysis was employed to examine the data derived from the questionnaire (72 free-comment questions) and semi-structured interviews. This analytical methodology focuses on identifying recurring patterns and themes within participants' discourse, thereby providing a more profound and intricate comprehension of the responses in the questionnaire and during the semi-structured interviews.

A cross-validation of results was carried out through the triangulation of the quantitative and qualitative findings. According to Hernández-Sampieri and Mendoza (2018), this allows greater validity and reliability of the results by contrasting and complementing the perspectives obtained through different sources and data collection techniques.

Results and Discussion

The total number of responses reached 315, exceeding the 111 participating restaurants in the study. This occurrence arises due to some restaurants encountering multiple issues. The problems are presented in order of frequency, with a decrease in sales emerging as the most common problem, reported by 71.17% of the surveyed restaurants. The primary issues identified by the respondents are detailed in Table 2.

Table 2

Hierarchy of Effects on Enterprises in the Lima Gastronomic Sector

Effects	Number of restaurants (%)
Decrease in sales	79 (71.17%)
Lack of customer traffic	61 (54.95%)
Liquidity issue	50 (45.04%)
Difficulty in hiring personnel	36 (32.43%)
Compliance with sanitary regulations	31 (27.92%)
Need to modify the business model	29 (26.12%)
Supply chain difficulties	28 (25.22%)
Coordination issues	1 (0.009%)

Effects on Sales and Employment

Among the primary consequences arising from the COVID-19 pandemic on gastronomic establishments in Lima, a significant decrease in sales emerges as a prominent feature. It is worth noting that many food establishments, regardless of their size, have experienced a decline in their sales. Table 3 provides information regarding the decline in sales across different types of gastronomic establishments, categorized based on their culinary offerings. Among the 111 surveyed establishments, the majority experienced a decrease in sales.

Notably, establishments offering Creole cuisine were the most affected, with 72% (28 out of 39) reporting a reduction in sales. Similarly, establishments serving meat and seafood experienced substantial effects, with 70% (14 out of 20) and 69% (11 out of 16), respectively, reporting decreased sales. Other establishments, such as those offering Italian, Oriental, fast food, pastry, and café options, also experienced reduced sales, although to a lesser extent. Based on the findings, the main effect of the pandemic mentioned by 71% of the study participants was the decrease in sales impacting various establishment categories, attributed to reduced customer traffic (55% of establishments). This reduction resulted from various periods of government-imposed quarantine measures. These findings align with studies conducted by Dube et al. (2020), Kim et al. (2020), and Mendoza (2020). A third issue stemming from the sales decline was the liquidity issue, which almost half of the food establishments (45%) mentioned. The following table, Table 3, presents numerical and percentage data indicating the businesses that witnessed decreased sales due to the COVID-19 pandemic.

Table 3

Decrease in Sales Based on Gastronomic Offer

	NO	YES	Total
Creole Cuisine	11 (28%)	28 (72%)	39
Meats	6 (30%)	14 (70%)	20
Seafood	5 (31%)	11 (69%)	16
Bakery and Coffee Shop	5 (56%)	4 (44%)	9
Oriental Cuisine	2 (22%)	7 (78%)	9
Fast Food	0 (0%)	7 (100%)	7
Others	2 (33%)	4 (67%)	6
Italian Cuisine	1 (20%)	4 (80%)	5
Total	32 (29%)	79 (71%)	111

It can be determined that establishments in the seafood and traditional cuisine sectors, especially micro or small establishments, might have faced more significant challenges. Larger businesses generally have more resources to cope with crises due to better access to credit and collateral.

Additionally, the pandemic significantly impacted employment generation. At the commencement of the pandemic, the total number of employees across all studied restaurants stood at 999. However, this number decreased by nearly 40% during the pandemic to 604 employees. A consistent result of any crisis and declining sales in any sector is the reduction in hiring new workers (Lu et al., 2020a). If establishment revenues continue to decline, hiring is expected to decrease. Notably, the study's labor variable indicated a 40% decline in the workforce, representing a significant reduction. It is important to acknowledge that behind each worker is a family, and approximately 400 individuals lost their jobs. Some workers also opted not to work due to the risk of infection, particularly at the pandemic's outset when the disease was poorly understood and lacked effective treatment.

Prominent Issues

In addition to the impact on sales and employment, the COVID-19 pandemic catalyzed four primary issues faced by owners of

Lima's gastronomic establishments: (a) lack of customer flow, (b) liquidity problem, (c) personnel hiring challenges, and (d) compliance with sanitary regulations. The frequencies of these issues, categorized by establishment type, are shown in Table 4.

The first issue expressed was the lack of customer influx. This fact was reported 61 times, representing 55% of the 111 analyzed cases. Table 4 shows that the problem of lack of customer influx is common across most culinary offerings, with Creole Cuisine presenting the highest number of cases (23 restaurants). Remarkably, all the participating bakeries and coffee shops conveyed no challenges pertaining to customer influx (8% of the sample).

Regarding liquidity problems, out of the 111 businesses included in the table, 50 experienced liquidity issues, accounting for 45% of the businesses. These findings suggest that liquidity was a common problem in the gastronomic sector. Restaurants offering Creole Cuisine (20 cases, 51% of their sector) and Seafood (13 cases, 81%) were the most affected by liquidity problems.

Regarding hiring difficulties, it can be observed that the culinary offering with the highest number of businesses experiencing hiring difficulties is Creole Cuisine, with ten businesses facing challenges. Out of the 111 businesses listed in Table 4, 36 encountered challenges in hiring personnel, accounting for 32% of the total businesses. These results suggest that personnel recruitment was also a common challenge in the gastronomic sector.

Lastly, Table 4 shows that difficulty complying with sanitary regulations is less common than the lack of customer influx issue, but it remains relevant in some gastronomic establishments. Only 28% of the analyzed gastronomic establishments have faced difficulties complying with sanitary regulations. In this case, Creole Cuisine restaurants also top the list with the most cases (11 cases), followed by establishments dedicated to bakery and coffee shop services (7 cases). Evidently, a majority of various culinary offerings in the city of Lima did not encounter significant challenges in adhering to sanitary regulations.

The results indicate that the necessity to modify the business model is less common compared to the issue of inadequate

Table 4
Frequency of problems by culinary offering

Culinary offering	Lack of customer flow		Liquidity issue		Difficulty in hiring personnel		Compliance with sanitary regulations		Total
	NO	YES	NO	YES	NO	YES	NO	YES	
Creole Cuisine	16 (41%)	23 (59%)	19 (49%)	20 (51%)	29 (74%)	10 (26%)	28 (72%)	11 (28%)	39
Meat	8 (40%)	12 (60%)	14 (70%)	6 (30%)	16 (80%)	4 (20%)	17 (85%)	3 (15%)	20
Seafood	4 (25%)	12 (75%)	3 (19%)	13 (81%)	11 (69%)	5 (31%)	13 (81%)	3 (19%)	16
Oriental Cuisine	4 (44%)	5 (56%)	7 (78%)	2 (22%)	7 (78%)	2 (22%)	7 (78%)	2 (22%)	9
Pastry & Coffee Shop	9 (100%)	0 (0%)	6 (67%)	3 (33%)	2 (22%)	7 (78%)	2 (22%)	7 (78%)	9
Fast Food	4 (57%)	3 (43%)	5 (71%)	2 (29%)	6 (86%)	1 (14%)	4 (57%)	3 (43%)	7
Others	2 (36%)	4 (64%)	3 (50%)	3 (50%)	1 (17%)	5 (83%)	4 (67%)	2 (33%)	6
Italian Cuisine	3 (60%)	2 (40%)	4 (80%)	1 (20%)	3 (60%)	2 (40%)	5 (100%)	0 (0%)	5
Total	50 (45%)	61 (55%)	61 (55%)	50 (45%)	75 (68%)	36 (32%)	80 (72%)	31 (28%)	111

customer flow, though it remains relevant in some gastronomic establishments. As shown in Table 5, it can be observed that 74% of the analyzed gastronomic establishments (82 out of the sample) did not experience the need to modify their business model. Conversely, the cuisine category “Comida Criolla” demonstrated the highest occurrence of this requirement, with 12 cases (30%). Moreover, 37.5% of the seafood-focused establishments, called “Mariscos” (6 out of 16), experienced this necessity. The qualitative analysis delves into the strategies followed by entrepreneurs within the gastronomic sector due to the adaptations necessitated by their usual operations.

Table 5

Frequency of Need to Modify Business Model by Cuisine Offering

	NO	YES	Total
Creole Cuisine	27 (69%)	12 (31%)	39
Meats	18 (90%)	2 (10%)	20
Seafood	10 (63%)	6 (38%)	16
Oriental Cuisine	7 (78%)	2 (22%)	9
Pastry and Coffee Shop	7 (78%)	2 (22%)	9
Fast Food	6 (86%)	1 (14%)	7
Others	3 (50%)	3 (50%)	6
Italian Cuisine	4 (80%)	1 (20%)	5
Total	82 (76%)	29 (24%)	111

Correlations between Variables

Table 6 shows the associations between eight variables, representing the challenges Peruvian gastronomic companies faced during the COVID-19 pandemic (detailed in Table 2). These associations are calculated using the Kendall-Tau methodology, a non-parametric correlation measure.

The Kendall-Tau correlation varies between -1 and 1 in continuous values. A value close to 1 indicates a strong positive correla-

tion, which means that if one variable increases, the other tends to do the same. A value near -1 indicates a strong negative correlation (i.e., if one variable increases, the other tends to decrease). A value near 0 suggests that there is not much correlation between the two variables.

The identified correlation results align with those found in other studies, such as Lai et al. (2020), where owners or managers took creative actions to address the crisis. For instance, the negative correlation between lack of inputs and modification of business models suggests that the scarcity of raw materials for food establishments may encourage owners to innovate in terms of the dishes offered, focusing on those with available ingredients. This may lead to a greater adaptation of business models in the face of input shortages.

The positive correlation between hiring staff and compliance with government-mandated health measures is unexpected, as many restaurants reassigned tasks to existing staff rather than hiring new employees to meet these requirements. However, this result is consistent with a study conducted by Tse et al. (2006) on how Hong Kong restaurants responded to the 2003 SARS crisis. Unlike the COVID-19 pandemic, the SARS crisis did not involve lockdowns but did intensify health measures, requiring many restaurants to hire staff to ensure compliance. For example, additional personnel were needed to manage entry control, temperature checks, and sanitization.

Table 6

Kendall's Tau Correlations Between the Identified Problems

Variable	Lack of customer traffic	Liquidity problems	Decrease in sales	Need to modify the business model	Difficulty in hiring personnel	Compliance with sanitary regulations	Supply chain difficulties	Coordination issues
1. Lack of customer traffic	—	—	—	—	—	—	—	—
2. Liquidity problem	0.201 * (0.035)	—	—	—	—	—	—	—
3. Decrease in sales	0.303 ** (0.001)	-0.023 (0.806)	—	—	—	—	—	—
4. Need to modify the business model	0.250 ** (0.009)	0.245 * (0.010)	0.016 (0.864)	—	—	—	—	—
5. Difficulty in hiring personnel	0.008 (0.930)	-0.008 (0.930)	-0.281 ** (0.003)	0.201 * (0.035)	—	—	—	—
6. Compliance with sanitary regulations	-0.082 (0.389)	-0.039 (0.683)	-0.224 * (0.019)	-0.005 (0.962)	0.341 *** ($< .001$)	—	—	—
7. Supply chain difficulties	-0.183 (0.055)	0.100 (0.297)	-0.042 (0.656)	-0.204 * (0.033)	-0.137 (0.152)	-0.130 (0.171)	—	—
8. Coordination issues	-0.105 (0.269)	-0.086 (0.365)	0.061 (0.524)	-0.057 (0.552)	-0.066 (0.488)	-0.059 (0.534)	0.164 (0.085)	—

Note. In parentheses p-value

* p < .05, ** p < .01, *** p < .001

Qualitative Analysis

Below is the analysis of the comments made by 54 entrepreneurs in the open-ended questionnaire and the six semi-structured interviews conducted with participating entrepreneurs in the study.

The qualitative analysis considered 42 primary codes, subsequently grouped into five categories, as shown in Table 7. The highest number of primary codes is observed in the categories of strategies followed by entrepreneurs and pandemic effects, with a total of 17 and 12 codes, respectively. Among the strategies, a change in the business model towards delivery stands out, as well as negotiations regarding lease agreements for rented locations and the activation of social media. In the case of effects, there is an agreement with the aspects analyzed in the quantitative section, such as reduced sales, decreased workforce, customer issues, logistical problems, and more. Table 7 presents the definitions of code groups or categories used to analyze the survey data, which refers to the themes or concepts that emerged from the content analysis of respondents' answers.

Table 7

Definitions of Categories

Categories	Definition
Public Sector Support (4)	Set of government-initiated initiatives to support the operation of businesses in the context of the COVID-19 pandemic.
Pandemic Effects (12)	Diversity of areas linked to the management of gastronomic businesses where considerable modifications were observed due to the COVID-19 pandemic.
Expectations (6)	Set of aspects describing the future based on the context of the COVID-19 pandemic. There is a greater focus on negative aspects than positive ones.
Sanitary Safety Regulatory (3)	Range of areas related to the various mechanisms established by the government to prevent COVID-19 virus transmission and enable a return to normalcy in the business environment.
Strategies (17)	Series of diverse actions implemented to overcome the effects caused by the COVID-19 pandemic crisis.

Note. In parentheses, the number of first-order codes is mentioned.

Triangulation of the Pandemic Effects

To link the quantitative results with the qualitative results, a triangulation of the effects caused by the pandemic was carried out. The multiple-choice question about the effects of the pandemic was compared with the coding of the open question of the survey, referring to providing free comments about the pandemic, as seen in Table 8. It can be seen that the eight effects included in the survey were explicitly pointed out in the complementary comments. Therefore, it can be considered that these effects have been transversal at a global level. Two statements (lack of traffic of clients and difficulty in hiring personnel) were not mentioned in the same way, but when coded, they were related to those themes. Therefore, they were included as similarities.

Besides the similarities, we also have some disagreements. First of all, there was a discrepancy in relation to the increase in operating costs. This did not appear explicitly in the survey and was mentioned in the open question. The coordination item was the biggest surprise. This was the last in the ranking (see Table 2) and did not show any significant correlation with some of the other seven items analyzed quantitatively (see Table 6). However, two first-order codes linked to transversal competencies, such as teamwork and work empathy, can be included in the qualitative analysis.

Table 8

Triangulation of Quantitative and Qualitative Analysis

Hierarchy effect of pandemic	Quantitative analysis								Qualitative analysis		
	Correlations								Effects of pandemic mentioned		
	DS	CT	LP	HP	SR	BM	SC	CI			
1	Decrease in sales (DS)	*		*	*					1	Decrease in sales
2	Lack of customer traffic (CT)	*	*			*				2	Problems with clients
										3	Difficulty in customer relations
3	Liquidity problems (LP)	*				*				4	Liquidity problems
										5	Increase in personnel due to delivery
4	Difficulty in hiring personnel (HP)	*				*	*			6	Personal movement
										7	Staff reduction
										8	Quarantines
5	Compliance with sanitary regulations (SR)	*		*						9	Security protocols
										10	Business model change (delivery)
6	Need to modify the business model (BM)	*	*	*				*		11	Logistical problem
										12	Teamwork
7	Supply chain difficulties (SC)									13	Work empathy
8	Coordination issues (CI)										

Below is a more detailed analysis of the adaptation strategies implemented by entrepreneurs in the gastronomic sector to face the crisis caused by the COVID-19 pandemic. Some excerpts from study participants are provided to delve deeper into the analysed comments.

Public Sector Support

There is a constant concern about the lack of support from the public sector (government, ministries, and municipalities), both at the central and local levels, in addressing the economic crisis generated by the pandemic. The lack of governmental organization has exacerbated the COVID-19 crisis, resulting in financial instability. Entrepreneurs expressed their discontent with the government's lack of measures and subsidies. For example: "Well, in my opinion, I would have liked the government to provide support, whether for small or large companies, because here there's practically total discrimination" (E004) and "So, there was this 'reactiva' [government program], but it was for large companies, so we as individuals with a business didn't get it..." (E005).

However, some gastronomic entrepreneurs were able to participate in government programs, although scarce in the sector: "There was a law that the government passed, which provided loan facilities, the program was called 'Reactiva Peru,' so we accessed it. I don't remember the exact amount now, but the interest rate was minimal" (E005).

Pandemic Effects

The topic of reduced sales is the most recurrent. The pandemic has significantly decreased business revenue, adversely affecting their financial stability. Government-enforced quarantines and restrictions have played a pivotal role in this sales decline. According to the study participants, "Income has significantly decreased during the pandemic" (E023); "Quarantines affected business income" (E064); "...encouraging sales was tough, no, no, it's not like sales were happening, it was difficult" (E038).

Another relevant theme observed in the narratives and comments pertains to personnel, highlighting empathy, collaborative efforts, and resilience in overcoming challenges. It was universally understood that the entire team needed to work cohesively, as the business was the source of income for all. This sentiment is echoed in the following statements: "The staff understands the pandemic's challenges and the situation of the sector" (E036); "It was the

circumstances when I saw my staff, they wanted it, their needs were heard, they said we want to earn, even if it's just to eat" (E003); and "Everything was, as I say, thanks to the people who worked. To my team from 'El Rey de Mares,' we supported each other. They've always been with me through thick and thin" (E091).

Based on this prevailing reality, there is an empowerment of entrepreneurs who express remarkable resilience, motivation, and dedication to moving their businesses forward. Some examples include: "We need to make use of all our energy, our good life, and continue moving forward. We have to keep moving forward" (E003); "I took on a lot of responsibility for managing social media, administration, and sometimes even taking orders. So, I was multitasking and working long hours each day" (E002); and "The pandemic forced us to, in one way or another, be creative. To keep producing" (E003).

Expectations

There exists a negative perception regarding expectations, with comments reflecting concern about the country's political stability and the sustainability of businesses. However, amid these apprehensions, optimistic projections also emerge. These include the revival of the gastronomy sector, the establishment of new locations, the recognition of teamwork's significance in surmounting the pandemic's effects, and achieving business recovery.

The fear of customers acquiring products during the pandemic and economic revival limited to certain companies is also mentioned: "After COVID returned, it was very difficult, because customers hardly wanted to buy, well, let me explain, they were quite afraid, clearly, they didn't want to buy the product..." (E005).

Within the positive expectations towards the future, albeit scarce, one can mention the following:

Today, this year, the restaurant has been doing better. Hopefully, we will continue to grow in the future. My customers order my dishes. I have customers who... And the best advertisement that makes you a customer is WhatsApp and Facebook. (E001)

Safety Measures

Entrepreneurs emphasize rigor in complying with health and safety measures. One said, “We had to implement everything. We had to buy machines for entry, for disinfection, we had to stock up on gel, soap, liquids, all staff had to be checked” (E091); another commented that “Over time, we gradually introduced biosecurity protocols to protect consumers, and this helped us return to the expected level of sales” (E014).

Adaptation Business Strategies

Among the most recurring strategies, the implementation of delivery stands out, involving a shift from waitstaff to delivery coordinators. Other strategies implemented include, among others, a) application of discounts and promotions, b) mini markets, c) advertising, d) reinauguration, e) renting the premises, and f) new products/businesses. To illustrate, changing the restaurant’s name as a strategy for reinvention: “So, during the pandemic, throughout the pandemic, my brain was working at a hundred miles per hour, I had to give it a name that would have an impact, that would stick, that would resonate” (E001).

Another strategy for adapting to the pandemic was implementing new services, such as establishing a mini-market. This initiative was facilitated through licenses and permits issued by the government. This participant describes it as follows: “Provisional licenses were granted to various types of businesses, not just restaurants, right? But also other types of businesses that were allowed. So, if you weren’t engaged in that sector, you could apply” (E002).

Diversified advertising endeavours were widely undertaken to attract customers, serving as a lifeline for revenue preservation and crisis survival. These initiatives encompassed the acquisition of WhatsApp lists, motivating customers to share food dishes on their social media, and utilizing platforms like Facebook, Instagram, and TikTok. As described in the following statement:

We had to activate our social media. In fact, we have Facebook,

Instagram, and now even TikTok. We had to activate social media, we had to give more importance to Google Maps, activate our photos and everything. So, being active on social media allowed us to reach more places through deliveries as well. (E002)

The reduction of rental costs was a highlighted topic in the interviews. To address this aspect, entrepreneurs mentioned negotiating rental payments with the owners of the premises, who, in certain cases, were family members, as detailed here: “My brother, as family, gave me a year to work and generate my customers and everything else” (E001), and “My intention was to close, as I mentioned, and go bankrupt, but I talked to the owner and they provided me with a payment arrangement” (E091).

One noteworthy result was the recurring adoption of a new business model, shifting from in-person dining to delivery services. This transition was a nearly universal phenomenon worldwide (Elshaer, 2021; Vig & Agarwal, 2021). A role shift occurred in Lima, as in other Latin American places like Colombia (Zapata-Cuervo et al., 2021). Servers became delivery personnel, and there was an explosive growth in food delivery services. Similar situations occurred in other regions and continents, such as Bali, Indonesia (Wiantara et al., 2022), and Malaysia (Lai et al., 2020). Surviving restaurants changed their sales strategies, pivoting to delivery services. Associated with this change were leasing premises for celebrations following the lockdown, temporary shifts in business models toward mini-markets, and cost reduction strategies. This was facilitated by the food and supply networks established by food establishments. These results are also similar to the ones detected by Reardon and Vos (2023), who found the use of business operations (e-commerce, e-logistics, e-payment, and e-procurement platforms to link to suppliers and buyers) to adjust the shocks provoked by the pandemic in Asia and Africa.

Despite the various changes implemented, only 29% of the establishments recognized changing their business models, indicating a survival-oriented strategy that eventually impacted their overall business model.

Customer scarcity persisted despite quarantines, with many clients avoiding purchases during the pandemic. Economic recovery was slow to manifest in the sector, requiring a concerted effort to restore customer confidence. The in-depth interviews emphasized the importance of creativity and social media advertising in driving business success, including establishing a social media presence.

Finally, the responsibility assumed by Lima's gastronomy entrepreneurs stood out, demonstrating concern for family and employee safety. Employees also exhibited significant dedication to the business's success. Restaurant owners displayed resilience and creativity, acting as a cohesive team committed to navigating the crisis.

Conclusion

This study has yielded valuable evidence on the effects of the COVID-19 pandemic on the gastronomic sector in Lima, Peru. The foremost challenge identified because of that enormous crisis was a decrease in sales, coupled with reduced customer traffic and liquidity problems. This, in turn, triggered a contraction in hiring, with a 40% decline in the establishments studied.

In line with the theory of dynamic capabilities, the interviews have highlighted the importance of adaptability and creativity as crucial internal organizational factors to overcome the economic challenges stemming from the pandemic-induced recession. One of the central dynamic capabilities is the ability to innovate and adopt entrepreneurial strategies. Nearly all surviving establishments adopted diverse marketing strategies to counteract decreased customer traffic (using social media, discounts/promotions, reopening, etc.), operational strategies (delivery services, renting space, and mini markets), and cost-cutting measures (negotiating fixed costs like rent). Likewise, this theory provides valuable insights into how the gastronomy sector in Peru cannot only recover from the current crisis but also build greater capacity to face future crises and contribute to sustainable development. This includes adopting responsible and sustainable business prac-

tices to enhance the sector's long-term resilience. Teece (2018) emphasizes that dynamic capabilities not only help firms survive in the short term but also develop a foundation for sustainable long-term growth.

The study has also highlighted the importance of family support, teamwork, motivation, resilience, and creativity in navigating this crisis.

Practical Implications

The study's findings offer practical implications, emphasizing the necessity of formulating robust crisis management plans within the gastronomy sector to facilitate effective responses to future emergencies. Remarkably, the responses from interviewees indicated a lack of crisis management plans tailored to this specific scenario despite a previous, albeit less severe, crisis experienced in 2003 without mobility constraints (Tse et al., 2006). Managers and owners predominantly reacted based on instinct and prior experience; while some adeptly adapted to the new pandemic circumstances, others experienced delays in decision-making. To mitigate unfavorable outcomes such as staff layoffs or business closures, it is recommended that business owners, particularly within the gastronomy sector, develop comprehensive risk management manuals outlining protocols for addressing future crises.

Additionally, the study suggests the imperative of enhancing the dissemination of government support initiatives during health emergencies. Numerous business owners failed to access available support programs due to inadequate information and awareness or because they learned about them too late. Two crucial steps are proposed to address this: evaluating the efficacy of various support programs and refining the marketing channels to ensure timely information distribution during future crises.

Future Research Directions

Based on the results obtained, the theory of dynamic capabilities suggests that Lima's gastronomic entrepreneurs were able to identify and seize emerging opportunities, such as the growing

demand for home delivery services and online sales, and reconfigure their internal resources and processes by modifying their business models and transforming their physical spaces to comply with the new health regulations resulting from the pandemic. However, much remains to be explored regarding applying this theoretical approach in the global gastronomy industry. Future research could delve deeper into how dynamic capabilities manifest and are explicitly managed in this sector. Another future line of research is related to detecting how important information technologies are for companies to manage and survive crises.

A significant recurring theme pertains to financial support, with many establishments unable to benefit from government subsidies due to their informal status, as most assistance was directed toward formal businesses. Additionally, some interviewees noted that subsidies were often inaccessible due to delays. A potential avenue for future research could involve a comprehensive assessment of the coverage and impacts of the provided subsidies.

Study Limitations

One of the study's limitations lies in its exclusive focus on restaurants within Lima. Given the gastronomic sector's national significance, a more comprehensive representation from establishments nationwide would have enhanced the study's robustness.

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