




## Article

# Sustainable Social Systems: Innovative Service Implications in the Restaurant Business in the Post-COVID Era with Digital Transformation Strategies

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**Abstract:** The COVID-19 pandemic led to changes in and modifications of the role of information and communication technologies in the digitalization of service provision. This paper aims to identify and summarize these changes in business operations, in the context of strategic management in the restaurant industry, triggered by COVID-19. Based on in-depth interviews with 16 key experts in the restaurant industry (CEOs of chain restaurants), this paper clarifies and concretizes the rapidly transforming problem of identifying the main changes in the restaurant market during the pandemic. These depend on a restaurant's adaptation level to the challenges that arose, using three dimensions (consumer demand, corporate strategy optimization, and the use of the company's innovative potential). The analysis shows that chain restaurants, which have sufficient resources to solve the problem of staff turnover, develop technological solutions, and build a brand and customer loyalty, were more resistant to problems arising from the spread of the coronavirus infection than other companies in the catering industry. The presence of serious problems associated with consumer demand and the optimization of the format of the offered dishes and service had a significant impact on the relationship between the impact of the spread of the coronavirus infection and the inability to adapt to the new reality of doing business. The findings reveal that companies need to expand their digital capabilities and adapt their management strategy to the post-pandemic conditions to adapt to the post-COVID-19 period. This paper serves as a framework for understanding the role of digital transformation in sustainable business development.

**Keywords:** sustainable digital transformation; strategic management; chain restaurant business; consumer preferences; innovative potential; expert interview; COVID-19



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## 1. Introduction

The outbreak of COVID-19 has had great social and political significance and has been felt throughout the economy. Thousands of companies were forced to close establishments, the communication method shifted online, and telecommuting was introduced. Small and medium-sized enterprises (SMEs) of the restaurant industry were the business community majority whose service systems suffered the most, being of significant importance in the functioning analysis [1,2]. Often, these SMEs are the last stage of the food supply chain, making direct contact with the final consumer [3,4].

The restaurant industry is one of the sectors with the need for its activity adjustment to be the greatest for the period ahead, and the numbers from the latest survey by the Association of Hotels, Restaurants and Similar Establishments of Portugal (AHRESP) are laid bare [5]. Half of restaurants were at a standstill at the end of 2020, and 35% were considering insolvency. The losses were overwhelming; more than 80% of restaurants

saw turnover drop by more than 60% in three months. Since the first lockdown, 38% of companies laid people off. However, some managed to avoid this course of action: 25% of restaurants implemented takeaway and delivery services. The kitchen became an ideas laboratory, to keep restaurants going. Joining global home delivery platforms like “UberEats” or “Glovo” helped bigger chains stay afloat until the wave passed.

The pandemic severely disrupted full-service restaurants compared to quick-service ones [6], including four resilience determinants, namely, social (i.e., restaurant rating), physical (i.e., contactless service), economic (i.e., chain operation), and natural (e.g., location) capitals, which are significantly associated with restaurant business resilience during the pandemic. These four determinants play different roles in full-service and quick-service restaurants’ resilience. Now, it is clear restaurants need a comprehensive approach to address the challenges posed by the pandemic.

As the authors’ previous studies showed, changing strategies and tactics to offset the impact of COVID-19 gave an advantage, to a greater extent, to chain restaurants that were already equipped with a digital infrastructure and had some innovative potential in order to quickly use their resources [7,8]. Companies use innovation to strategically differentiate themselves from competitors with a more compelling value proposition, while also taking into account the company’s innovative potential. This prompted scientists and practitioners to explore consumer preferences and, based on them, analyze and form a competitive value proposition, taking into account the innovative potential of the company [9–11].

Sustainable digital transformation has become a necessity for doing business and customer interactions [12,13]. Based on the literature analysis, the factors determining demand in the restaurant business were identified, such as the quality and range of menus [14], food and service costs [15], sales forecasts [16], and online reviews and customer service evaluations [17–19]. Among these factors, crisis events are dynamic, difficult to predict, and can lead to serious consequences for the industry. However, only a small number of empirical studies examined the crises impact on restaurant demand [20–22]. Based on previous studies’ analyses, this paper substantiates the need to take into account the pandemic’s impact on a company’s sustainable digital transformation. The research question is as follows: What are the main changes in business operations that show the adaptability of chain companies to the problems that arose during the pandemic?

The objective of this paper is to justify the sustainable digital transformation significance, depending on the restaurant adaptability level, to the challenges encountered during the pandemic; how likely a sustainable digital transformation is to be used in business operations in the restaurant industry; and how valuable it is in terms of the post-COVID era.

To fill this gap in the research, the authors collected data on the current issues of consumer demand, corporate strategy optimization, and the use of a company’s innovative potential through in-depth interviews with restaurant industry experts. The information was analyzed to investigate the pandemic’s impact on the restaurant business’ ability to adapt to the new business reality. The reasons preventing the timely application and development of a company’s innovative potential were also studied.

This study was a groundbreaking attempt to uncover the unfolding global COVID-19 pandemic’s implications on the restaurant industry. The expert data analysis can be used to more accurately assess restaurant business management decisions and forecast demand based on various pandemic scenarios. The authors assessed the significant factors associated with COVID-19 by identifying different blocks of innovation capacity. The results were a contribution to the strategic management literature on the factors determining restaurant sustainability.

## 2. Literature Review

### 2.1. Analysis of the Demand Structure in Chain Restaurants: Consumer Preferences

Sustainable digital transformation, according to Guo et al. [23], consists of four components: increasing the use of online processes; introducing digital products or services; implementing online platforms; improving the digitalization of supply chains. It is ar-

gued that a digital transformation enhances business performance by developing digital strategies, adopting digital technologies, and changing the way value is created.

The creation of value and innovative capacity in SMEs around the world is a key source of having a long-term presence in the market. Al-Kalouti et al. [24] argue that for most service companies, the ability to innovate is a key source of a long-term competitive advantage.

Consumer demand analysis has a particular importance for the restaurant industry's sustainability, given the increased competition for customer attention in the market during a pandemic [25–27]. Forecasting trends and studying characteristics that affect consumer demand can help regulate restaurant management and conduct strategic planning and marketing analyses [19,28–30]. Digital transformation resources such as information technologies use and knowledge influence organizational effectiveness investigation in chain restaurants and can help facilitate a company's future sustainable strategy formation. Consumer demand analysis, in the restaurant industry, includes many factors that were previously researched. These factors can be divided into two categories:

1. Internal environment micro-level factors are directly related to products and services, corrected due to management processes self-regulation within the company's restaurant activities. For example, consumer preferences in the range of dishes [31]; compliance with sanitary regulations [32]; service quality and atmosphere [33]; online reviews and customer satisfaction [34].
2. External environmental macro-level factors influence business processes from the outside, regardless of the company's current activities, for example, economic conditions (gross domestic product, unemployment, and interest rates); socio-demographic characteristics (population and migration); external environment: weather conditions and periods (day of the week and season); events (cultural, national, and public holidays) and the political situation in the country; and crises (financial downturns and infectious diseases) [35,36].

Demand structure analysis in restaurants can include several research types, depending on how consumer preferences are assessed. Most studies used micro-level factors for analysis. For example, restaurant demand measures, individual customer preferences, customer behavioral intentions, or identified systematic choices [37–39]. Although such studies involve data heterogeneity, they may have limitations and be subject to respondent bias depending on the primary information source. Another group of micro-level studies use individual restaurants, as the analysis unit relies on statistical data (e.g., restaurant sales and visits) to describe demand [22,40]. These surveys can be more accurate and reliable than consumer surveys but often include small sample sizes and focus on a few specific restaurants. The third group of studies focuses on a combination of micro- and macro-level analysis using aggregated data and in-depth expert interviews with chain restaurant companies to predict demand for restaurant services [41]. This type of research can take into account the internal and external factors influencing demand in restaurants, as well as the years of professional business experience, such as the average bill for the restaurant chain or what management decisions were made depending on changes in food consumption format preferences. Due to the larger factor analysis, companies can identify the main changes in the chain restaurant market during the COVID-19 pandemic.

## 2.2. Impact of the COVID-19 Crisis on the Restaurant Industry

Service innovation relativized the physical doors closing and then opening to the online world, where customers could find home delivery platforms ready to bridge the gap between restaurants and entire society [6,42]. This solution, fundamental and highly beneficial at the height of the pandemic, allowed restaurants to expand their business and invest in new ways to attract customers:

- The alternative to human contact and mechanized service is a newly emerging reality. Self-service allows consumers to personalize their order to the maximum and have it arrive, in real-time, to the kitchen, streamlining processes and saving time. Robots serve the table; traditional menus are replaced with digital menus, accessible by QR codes; and there

is contactless payment. All these alternatives also served to accelerate the technological trends guaranteeing the quality of service and a limitless consumer experience.

- New technologies not only improved the consumer experience but also made restaurants much more profitable:
  1. Speeding up processes. This provides the opportunity for better and more efficient cost management and, in turn, saves a company's time for what matters: customer loyalty.
  2. Managing waste. About one-third of all food produced for human consumption is recycled [43]. In other words, every day, delicious and fresh food goes to waste in restaurants, just because it has not been sold in time. This situation leads to the creation of new solutions within the industry. For example, the "Too Good To Go" app lets customers buy and collect Magic Bags of this food—at a great price—directly from restaurants.

A disruptive and unpredictable crisis has the potential to adversely affect ongoing operations, reputation, profitability, growth, and business survival [44,45]. A significant amount of research looks at the impact of various crises and industry crisis management, but there is much less research on these topics in the restaurant sector [46,47]. Most of these studies focused on the impact of potential damage to the competitiveness and companies' economic stability in the industry. Researchers are still examining the impact of the pandemic on restaurant demand. The uncertainty and high risks of the evolving COVID-19 crisis highlighted the need to assess its long-term impact on restaurant demand to help the industry and research community better understand and prepare for the recovery from this public health disaster.

Conducting in-depth interviews with restaurant chain executives to identify major market changes in the restaurant industry can offer a more practical understanding of how restaurants are adapting to the crisis.

### 3. Methodology

#### 3.1. Method Description

Assessment of changes in the use of digital technologies in the service market is based on in-depth interviews and obtains detailed information from restaurant industry experts on service provision, transformation, and companies' innovative potential during the pandemic.

The in-depth interview uses a mix of detailing and clarifying questions to motivate experts to freely share their personal experience and express, in detail, their beliefs, attitudes, and feelings on the research topic [48] (p. 121). The interview provides an opportunity to understand how restaurants were able to adapt to the dynamic market conditions of the pandemic and offer practical recommendations to companies on using their innovative potential. The method's benefits can be divided into three main categories:

1. It allows the researcher and the expert to establish a comfortable relationship for more detailed answers on sensitive topics [49].
2. The researcher can independently select candidates for interviews in order to receive the most accurate data-obtained sample and can also ask clarifying questions, obtain additional information, and return to key questions immediately during the dialogue in order to gain a better understanding of the expert's attitude to particular interview questions [50].
3. In-depth interviews are useful when a detailed portrait of customer opinions and behavior is needed. In addition, researchers analyze innovative ideas and contexts and can provide a more accurate picture of market changes [51]. Berent [52] suggested two main reasons for this: First, the respondent's ability to analyze the motivation for a particular action. Second, the use of active listening, which, together with anonymity, gives the respondent a sense of security and the chance to frankly express personal thoughts and feelings. Webb [53] noted that researchers could track changes in a respondent's tone and choice of words in order to accurately interpret expert opinion.

This makes it possible to establish a strong mutual understanding and a high degree of trust, thereby improving the data quality.

### 3.2. Research Design

The in-depth interview was chosen as a research method based on the premise that this approach is able to identify significant patterns of changes that have occurred during the pandemic and, based on expert opinion, it is possible to develop recommendations for companies to develop a value proposition based on the company's innovative potential.

The interview method algorithm consisted of the following mandatory steps:

1. The preparatory stage included sampling strategy development, selecting experts, and developing an interview guide (script), which contains the questions that will be asked during the interview.
2. The field study consisted of recruiting experts, conducting the interview itself, and transcribing the interview, if an audio recording was made; otherwise, a text document was immediately recorded with answers to the questions posed during the interview.
3. The analytical stage included the analytical report preparation of interview results. Using the text document data describing the answers and the expert's impressions, an analytical report and/or presentation of the study results was compiled.

### 3.3. Data Collection

Conducting in-depth interviews with restaurant chain managers was used to collect primary data from November 2021 to November 2022. This method allowed researchers to collect data from respondents in Portugal and Russia (where the scientific bases of research are located), which led to the identification of expert opinions on the main changes in the market situation in the restaurant industry on the European continent. According to the criteria, the participants hold senior positions in the largest chain restaurants. Companies started their work before the start of the pandemic (in 2019) and have different sales channels. The interview contained 13 questions to identify the main changes in the restaurant market. On completion, the data were analyzed and systematized in accordance with the information received. For the purposes of this study, a chain restaurant was defined as a full-service restaurant establishment offering table service, with a wide selection of food and beverages and a range of related services at two or more locations and with a common management structure.

## 4. Findings and Discussion

The interviews with restaurant industry experts and the features of the changes influencing a company's value proposition development were analyzed. The pandemic served as a strong motivator for restaurant business restructuring, forcing restaurants to build and/or optimize an analytics system of large amounts of online data, e-commerce, and a corresponding business strategy. It is important to understand what drives customers to return, what characteristics of the value proposition motivate them to recommend a restaurant, what the brand image is, and what specific product and service characteristics create value for customers. In this regard, one can track the growing popularity and importance of using individual in-depth interviews with restaurant business experts to analyze value propositions and restaurants' innovative potential.

### 4.1. Analysis of Restaurant Companies Profiles, Represented by Respondents

The total number was 16 interview participants. The data of the respondents' restaurant companies contained profiles of the following nature (Table 1).

Restaurant profiles are chain restaurant holdings. Among them, 37.5% belong to the average service level; casual and business dining, along with quick service restaurants, represent 25% each; and 12.5% belong to the luxury dining restaurant format.



**Table 1.** Profiles of restaurants, 2022.

Criterion	Description	Number of Answers	%
Restaurant format (classes of chain restaurants by service characteristics [7])	1. Luxury dining (upscale)	2	12.5
	2. Fine dining (midscale)	6	37.5
	3. Casual and business dining (low-scale)	4	25
	4. Quick service dining	4	25
Foundation date	Restaurants working before 2019, before the pandemic	16	100
Company size (number of employees)	Small: 15–100	6	37.5
	Average: 101–250	3	18.8
	Large: >251	7	43.8
Directions of activity (establishments of new sales channels)	Online and offline business formats	10	62.5
	Mostly offline operations	5	31.2
	Mostly delivery and takeaway orders	1	6.3
Delivery form	Own delivery system	12	75.6
	Own delivery system and aggregators	4	25.4
	New products and services	6	37.5
Key innovations helped businesses during the pandemic	Marketing campaign	8	50
	Online services and applications	16	100
	Loyalty program	12	75

Source: own development based on the retrieved data.

All the restaurants were established before the pandemic started. Overall, 43.8% are large enterprises, and 37.5% are small businesses enterprises. The experts representing the medium-sized category equal 18.8%. While 62.5% of establishments combine online and offline business formats, 31.3% work mainly offline, and 6.3% work mainly for delivery and pickup. In addition, 75.6% of establishments deliver through their own system, and 25.4% use aggregators.

#### 4.2. Restaurant Business Adaptability Results and Demand Structure Analysis

The interviews showed the chain restaurants' adaptability level to the problems arising during the pandemic. The experts' answers were divided into the following categories (Table 2).

**Table 2.** The level of adaptability, of chain restaurants, to the challenges that have arisen during the pandemic by expert evaluation, 2022.

Level of Adaptability of Chain Restaurants to the Challenges That Have Arisen during the Pandemic by Experts' Evaluation from "1" to "7"	Number of Answers	%
"1"—No, the restaurant has not adapted to the pandemic problems	1	6.3
"2"—Poorly adapted, there are serious problems (customer demand/ margins continue to fall, while costs rise, etc.)	1	6.3
"3"—Quite poorly adapted, there are minor problems with optimizing the format of the proposed dishes and service (purchasing ingredients, optimizing menu, developing delivery, etc.)	2	12.5
"4"—Difficult to answer, forced to emergency problem adaptation caused by the repeated lockdown	1	6.3
"5"—Some adaptation, but there are serious problems with increased safety requirements (redevelopment, purchasing personal protective equipment, monitoring the workers' well-being, etc.)	0	0
"6"—Adapted, but there are minor management problems (staff turnover, technological development, etc.)	6	37.5
"7"—Yes, the restaurant has fully adapted to the pandemic problems, customers come back not only for the food but also for the atmosphere	5	31.3

Source: own development based on the retrieved data.

One of the main issues facing the heads of restaurant businesses during the pandemic was to analyze the possibilities to solve emerging problems related to consumer demand, which may influence digital technology implementation.

According to half of the research participants, restaurant adaptation costs more than in the pre-pandemic period and requires larger investments, both emotional and physical. The serious problems associated with consumer demand and menu and service optimization

inclined experts to the opinion that their chain restaurants are more likely not to adapt to the new reality of doing business.

Three global types of companies were identified, differentiated by their level of adaptability to the problems that arose during the pandemic until 2022. Based on the characteristics of each type, in terms of the adaptability level, sustainability recommendations were formed as part of the company's activities improving in terms of the strategic management of innovative potential for chain restaurants in the digital transformation era. The first type—A (31.4%) has different problems with adaptability and estimate themselves to the level of "1", "2", "3", and "4" (Table 3). The second type—B (level "6", 37.5%) is sure their restaurant establishments have managed to adapt, but there are minor management problems; the third type—C (level "7", 31.3%) is convinced that, due to a strong brand and quality service, they have been able to fully adapt to the problems that arose during the pandemic.

**Table 3.** Characteristics of restaurants' levels of adaptability to demand problems that arose during the pandemic, 2022.

Key Elements of Chain Restaurants' Adaptability	Characteristics of Consumer Demand	Estimates of Characteristics by Adaptability Level Types, %		
		A	B	C
1.a Structure of demand	Increased for cheaper meals	6.3	12.5	18.8
	Increased stratification of expensive and cheap meals	6.3	0.0	6.3
	The structure of demand has not changed compared to pre-pandemic demand	18.8	25.1	6.3
	Increased demand for higher quality food ingredients	12.5	0.0	0.0
	Narrowed range of popular dishes	12.5	25.1	12.5
	Increased demand for exotic, unusual dishes	6.3	0.0	0.0
1.b Consumer preferences in the range of dishes	Increased demand for the most popular dishes	12.5	0.0	6.3
	Preferences have not changed compared to pre-pandemic period	12.5	25.1	12.5
	Bias in favor of delivery orders	6.3	25.2	18.8
	Increased demand for speed of service	0.0	0.0	12.5
	Bulk purchase of semi-finished products	0.0	0.0	12.5
	Significantly dropped	6.3	0.0	0.0
1.c Changes in average bill per restaurant visit	Slightly decreased	12.5	18.8	0.0
	Slightly grew	0.0	12.5	12.5
	Significantly grew	0.0	12.5	18.8
	Visits by two persons/small groups	6.3	12.5	6.3
	Decreased number of corporations	6.3	18.8	6.3
1.d Changes in format preferences of restaurants' food consumption	Increased takeaway orders	18.8	31.5	12.5
	Increased delivery orders to home	0.0	18.8	18.8
	Increased delivery orders to work	6.3	18.8	6.3
	Menu assortment matrix has not changed; changes in dishes (size and visual)	0.0	12.5	6.3
	"Breakfast" format is developing	0.0	0.0	6.3
	Decreased number of older visitors	12.5	6.3	12.5
	Increased share of romantic couples	6.3	0.0	6.3
	Number of tourists has sharply fallen	12.5	25.1	25.1
1.e Changes in the visitors' composition	Composition of visitors has not changed	6.3	18.8	0.0
	Culture of consumption has changed	6.3	0.0	0.0
	Fewer impulsive restaurant visits	6.3	6.3	0.0
	Number of tourists has increased	0.0	0.0	12.5
	Increased influx of new guests from competing restaurants	0.0	0.0	12.5

Table 3. Cont.

Key Elements of Chain Restaurants' Adaptability	Characteristics of Consumer Demand	Estimates of Characteristics by Adaptability Level Types, %		
		A	B	C
1.f Other new consumer requirements	Tendency to buy cheaper meals but larger portions	6.3	0.0	0.0
	Demand for the bonus system; service quality Active feedback in reviews	0.0	12.5	0.0
	Demand for takeaway and delivery orders doubled	6.3	25.2	12.5
	Increased demand for stock diversity	12.5	0.0	0.0
	Increased demand for menu variety	0.0	0.0	12.5
	No additional requirements due to COVID-19	6.3	12.5	12.5

Source: own development based on the retrieved data.

The results suggest each of the chain restaurants adapted to the demand during the pandemic, and the adaptations are characterized by consumers' preferences. This shows which consumer preferences should be taken into account when digitalizing a business. The more quickly chain restaurants reacted to ongoing changes and were able to change value proposition characteristics in a timely manner, using the company's innovative potential, the smaller the impact of the COVID-19 pandemic was.

The overall implication of the findings is to achieve high-organizational effectiveness, meaning the restaurant operators, first, need to establish distinctive strategies for how to use digital resources to form a competitive value proposition and develop the companies' innovative capacity. The changes in the service provision structure under the influence of COVID-19 dictate a new reality for the restaurant market. However, industry representatives note positive aspects. The pandemic period has shown that companies with better service levels have the greatest chances of staying afloat, while their less successful competitors are often forced to suspend or completely stop their activities. This concerns both the value proposition characteristics and the companies' timely innovative potential development. The crisis prompted chain restaurants to optimize their management structure, digitalize business processes, and improve service quality.

Industry experts believe that, in recent years, the norms of running a chain restaurant business have been quite quickly standardizing: market leaders, using their own innovative potential, are introducing new developments, which are leading to an increase in the gap between them and other players in the available resources and business opportunities. During the pandemic, large companies took advantage of their competitive advantages and the innovative potential that had been developed before the pandemic began. This confirms the speed of the implementation of the innovations necessary to provide quality service (Table 4).

Table 4. Innovations that were introduced to chain restaurants during the lockdowns in 2020 and in 2021.

Main Innovations Implemented in the Restaurant during the 2020 Lockdown	%	Developments That Were Used during the 2021 Lockdown	%
Cost reduction: menu, service types, events, and staff amount.	37	Full use of ensuring sanitary standards' developments and services provision and introducing new rules in accordance with the additional requirements of 2021.	40
Compliance with sanitary standards for customers and staff.	32	Optimization of the concept and well-functioning management mechanism improvement, in accordance with the restaurant developing new directions. Service developments' integration in 2020 in the process of providing restaurant services.	30
Development of a food delivery service (own and through aggregators).	26	Analysis of the company's strategy in accordance with the target audience change, connected with the tourism migrations.	15
Optimization of all management processes. A radical change in the concept from "fine dining" to "quick service".	5	Use this period to carry out renovations to improve the atmosphere in restaurants.	15

Source: own development based on the retrieved data.



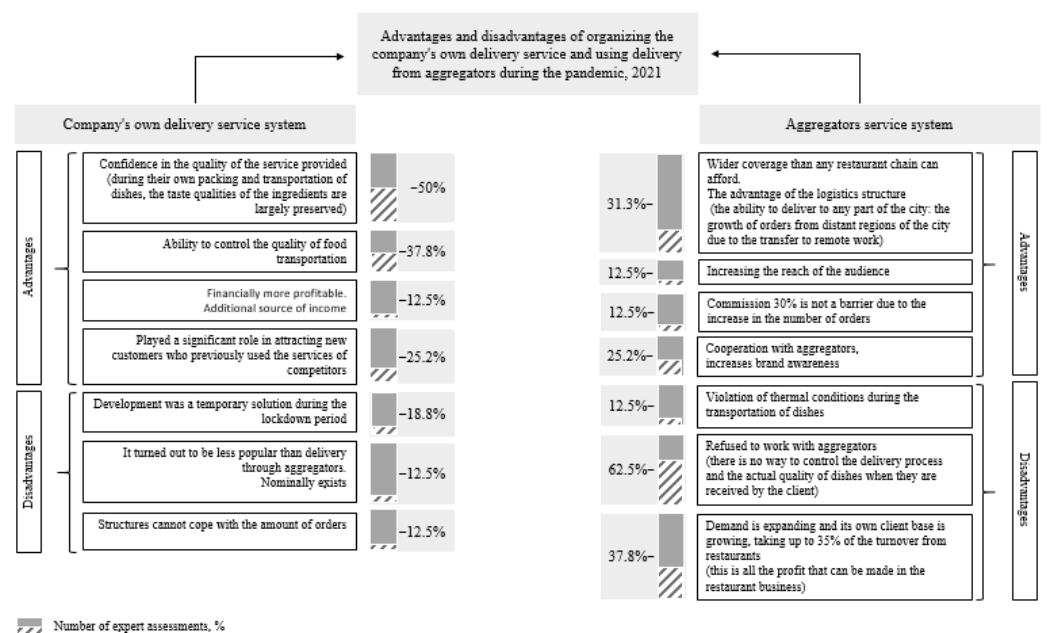
The restaurant industry has shown a significant increase in the innovations related to service quality during the pandemic, including through the innovative potential expansion. Most of the experts noted an increase in the innovations introduced after the lockdown and intentions to use them on an ongoing basis in the post-pandemic period (Table 5).

**Table 5.** Innovations that were implemented after the lockdown, and innovations that will be used on an ongoing basis in the post-pandemic period.

Innovations That Were Implemented after the Lockdown	%	Innovations that Will Be Used on an Ongoing Basis in the Post-Pandemic Period	%
Improvement of service quality in accordance with sanitary standards.	23	Compliance with sanitary standards.	50
Development of the meals' delivery system, semi-finished products, and groceries.	17	Development of delivery service forms.	14
Compliance with government regulations.	14	Development of catering service.	11
Development of employees multitasking due to the staff reduction.	14	Development of website and social networks; business digitalization.	7
Reduction in working hours in line with the restaurant's opening hours reduction.	10	Analysis of positioning, strategic development, and loyalty programs.	7
Analysis and change in strategy to attract additional customer audiences.	8	Coordinated concept change does not allow for making accurate forecasts now.	4
Development of food delivery through aggregators.	6	Development of a loyalty program.	4
Development of loyalty programs (carrying out new promotions, advertising campaigns, and providing gifts).	4	Changing the economic model of doing business when the crisis worsens.	3
Usual work process without innovations.	4	-	-

Source: own development based on the retrieved data.

Today, most chain restaurants use several delivery types in order to provide the maximum variability for the consumer's convenience. The most common food delivery methods among interview experts are their own delivery systems. Each of the delivery form options has its own advantages and disadvantages (Figure 1). However, 75.6% of experts believe delivery through aggregators cannibalizes the restaurant's own delivery, and 25.4% are sure aggregators contribute to restaurant brand promotion and increase chain restaurant recognition among consumers due to their wide presence in the media space.



**Figure 1.** Advantages and disadvantages of using the company's own delivery service system or using aggregators during the pandemic, 2022.

Experts (75.6%) consider their own delivery system to be optimal, since dish and service quality (freshness, taste, and appearance) is the main advantage.

With the delivery services' advent during the COVID-19 pandemic, online services and apps have also developed; 62.5% of experts see them as useful for their business development and believe online communication increases brand awareness and a growth in demand, simplifying and speeding up communication between the client and restaurant.

The pandemic has brought the future closer by forming new behavioral consumption habits in a short time. According to most experts in the chain restaurant business, success in overcoming the pandemic crisis was determined by a combination of the following factors:

1. Using the opportunity to quickly adapt the business to delivery (for example, developing a company's own delivery service system or using aggregators).
2. Reducing costs during a crisis with timely management measures application (for example, cost optimization, staff reduction, menu reduction, the rapid implementation of changes, and the search for additional income sources).
3. Developing a company's innovative potential as a support measure during the crisis (for example, using brand promotion online, new related programs to simplify the services' provision, and aggregators).

The change in consumer attitudes toward restaurant and service standards affects the restaurateurs' views. Experts note that even those companies whose initial concept did not involve innovative potential development are now planning to actively use these opportunities. Before the pandemic and the introduction of lockdowns, some restaurateurs were not sure about the advisability of a delivery service, developing an online presence, or using marketing promotion tools, or they hesitated to implement them. However, during the period of severe restrictions, no one had any doubts about the need to introduce and apply these directions.

A significant number of participants agreed that the pandemic has forced restaurants to rethink business development plans. The priority was delivery development. Among the answers were such areas as business digitalization, organizational systematization, and product promotion, for example, expanding the online presence of an institution (brand growth in social media and improvement of a website or mobile app), a marketing campaign, and loyalty program development. However, some experts said, for their business, that the pandemic consequences were so devastating all plans had to be postponed, and, in the short term, they have a long recovery period. They attribute this to the lack of timely management decisions and the delayed use of the company's innovative potential.

Three global types of companies were identified and differentiated by their adaptability level to the problems that arose during the pandemic in 2021–2022 (Table 2). Based on the characteristics of each type, in terms of the adaptability level, recommendations were formed as part of improving the strategic management of the innovative potential for chain restaurants to reach sustainability in the digital transformation era.

This paper offers useful service market experts' insights that can give a better understanding of the role that consumer preferences play in digitalization and technology strategies and improving the innovation capabilities process of organizations. With the increasing role of sustainable digital transformation, businesses are reliant on their innovation capabilities to enhance their existing procedures and provide support for their innovative endeavors.

Turning to practical recommendations for business leaders and marketing professionals, the following describes possible ways to adjust the entrepreneurial activities of companies, depending on the level of adaptability of the company to external changes in the market. For the first type of companies—A (the level of chain restaurants' adaptability to the problems arose during the pandemic: "1", "2", "3", and "4"), which did not adapt to the problems, two types of problems were identified as critical and significant. The peculiarity of these companies' types lies in the lack of response to changes in the structure of demand and consumer preferences for food consumption. These companies are focused on making organizational management complicated to maintain current product

performance rather than developing the company's values. The organizational component is sufficiently developed: production process management is implemented. However, attention is not paid to establishing a relationship between the available resources and consumers' demand in the value proposition. In companies of this type, control is not exercised in terms of tracking external changes in the consumption model, and, since products and related services do not convey value, that is, they do not form the image of chain restaurants among stakeholders, companies do not appropriately develop or have the required consumer volume. Thus, companies focused on organizational management broadcast only the product characteristics, without associating them with the consumer values. It is important to note the functional characteristics that convey information about the company's products' high quality are not sufficient to influence consumer choice. For a homogeneous supply in the market, matching demand plays a decisive role, which distinguishes the chain restaurants' products from competitors, broadcasting the characteristics of a product and the service quality's high level. Accordingly, in order for companies of the first type, who were affected by problems specific to the level of adaptability, "1", "2", "3", and "4", to create favorable conditions for the innovative potential realization based on the value proposition in strategy, they need to do the following:

- Form a strategy for assessing the material and technical innovation potential, including (1) material and technical resources' availability and (2) production progressiveness and flexibility.
- Analyze the investment innovation potential required, including (1) financial stability, (2) liquidity and business activity, (3) profitability, and (4) an innovative financial strategy.
- Assess the staff for innovation potential, including (1) qualifications and production potential, (2) their motivation to carry out innovative activities, and (3) training and retraining.

The second type of companies—B is characterized by a low level of staff involvement and a focus on solving issues caused by the high competition for consumer attention (the adaptability level of chain restaurants to the problems that arose during pandemic number "6"). Unlike the previous type, these companies recognize the strategic importance of consumer preferences for the restaurant. A lot of effort is spent on market research, while companies' ability to create a competitive advantage, in the form of quality service because of well-coordinated employees' work, is not used. In other words, companies understand the value proposition significance, study the market, and analyze their competitive position, though they take little action to improve the accompanying service quality by building team processes among employees. That is why companies with a low level of staff involvement should carefully consider the team processes' development. Thus, strategic recommendations for companies with a low level of staff involvement and a lack of focus on solving issues caused by the high competition for consumer attention can be formulated as follows:

- Develop an organizational structure most closely matching the strategic choice of the value proposition and, in accordance with it, eliminate problems that arise in communication between departments affecting product and service quality.
- Implement an adaptation strategy in accordance with the organizational culture, as part of the staff innovative potential assessment, and focus only on those aspects the company can actually provide.
- Carry out regular monitoring, such as the information assessment and analytical block part of innovative potential, to take into account the presented opportunities and prospects, real difficulties, rules, and restrictions the company has to face in the near future.

The third type of companies—C is determined by the presence of the value proposition focus (the chain restaurants' adaptability level to the problems that arose during pandemic number "7"). Belonging to this type indicates the companies' actions relevance to strengthening their position in the restaurant market. Since the innovations' implementation is based on the relationship between the innovative potential and companies' value proposition, it is quite easy to adapt to various industry changes and build an innovative

marketing strategy in accordance with the new reality. Companies characterized by a value proposition orientation regularly analyze and respond quickly to market changes, have a well-functioning management structure, use technology in innovations' implementation, and have a great advantage in demonstrating a direct and positive relationship between innovation and performance. Accordingly, companies with a focus on the value proposition should agree on a strategy for the information and analytical block of innovation potential, including (1) intellectual property management, (2) market research, and (3) new technologies based on consumer demands' development.

After analyzing and identifying the value proposition characteristics most demanded by consumers, strategic decisions are made based on the innovative potential implementation to create innovations. Companies using strategic marketing tools should do the following:

- Divide existing business processes into parts (separate characteristics of the value proposition) to form an understanding of the company's functioning logic and the division of responsibility areas for the product and service quality.
- Identify and evaluate the client's attitude to each characteristic of the value proposition.
- Develop or improve business processes, taking into account the consumers' interests.

In this way, companies can strengthen relationships with customers or confirm a high reputation. To successfully maintain an up-to-date value proposition, it is necessary to conduct regular expert assessments of the consumer perceptions of each characteristic and identify strengths and weaknesses that can be improved by using the innovative potential.

## 5. Limitations and Future Research

This paper shows the main changes in the restaurant market in the COVID-19 pandemic context. In-depth interviews make it possible to form practical sustainability recommendations for using the company's innovative potential in the digital transformation era during the pandemic. However, a number of limitations remain because this research was based on data from restaurant chains in Portugal and Russia.

The results cannot be generalized to other restaurant types (non-chain business models) or other restaurant services formats (e.g., cafes, bars, etc.). In further research, it would be interesting to analyze similar expert opinions in other countries. In this volatile economic environment, empirical research on the restaurant industry's response to the pandemic is especially valuable. Therefore, the authors call for further analyses based on the initial interviews' data. This will help shed light on changing restaurant behavior in response to the COVID-19 pandemic.

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