

Sports Business Resilience in the COVID-19 Crisis: The Delphi Qualitative Approach

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Abstract

The present study attempts to evaluate the challenges of sports businesses in the COVID-19 pandemic crisis and introduce their resilience solutions. This research was qualitative, with the Delphi method used to conduct it. In the first phase, 9 challenges and 88 business resilience strategies were extracted in the form of a questionnaire. In the second phase, these challenges and strategies were provided to the Delphi panel consisting of 18 professors of sports management and sports business managers, who were selected in a purposeful manner through snowball sampling method. Finally, 11 challenges in the two categories of *supply side challenges* and *demand side challenges* were identified. In addition, 94 sports business resilience strategies for COVID and post-COVID eras were identified in four categories, namely *marketing mix management*, *process management*, *organizational resource management*, and *strategic action management*. These operational strategies can save sports businesses from the risk of bankruptcy and exclusion from the sports ecosystem and strengthen these firms for future crises by increasing their resilience.

Keywords: Sports industry, Supply chain, Supply side, Demand side, COVID-19.

1. Introduction

Today, sport is not only a game or a hobby, but also it is an industry that has created many businesses in combination with other fields such as medical engineering, psychology, nutrition, information technology, tourism, marketing, etc., (Rahimi & Alidoust Ghahfarokhi, 2019). The sports industry is defined as a market in which the products offered are directly related to sport, fitness, leisure, and products. Sports industry products include sports, material goods and services related to sports, and recreational and fitness activities. The sports industry also includes management, finance, marketing, and other administrative and business goods and services (Pitts et al., 1994).

The sports industry is part of the social-economic achievements and power of a society. Originally, it should adapt to the new living conditions, work situations, and the conditions in which business is being conducted. The industry must adjust to the conditions of the world market (i.e., supply and demand).

In December 2019, at the same time as the prevalence of the COVID-19 in the world, the most important sport events at the international, regional, and national levels were canceled or postponed in order to maintain the health of athletes and people involved in sports (Parnell et

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al., 2020). For the first time in the history of the International Games, the 2020 Olympics and Paralympics were postponed to 2021 (Somoggi, 2020).

The annual global value of the sports industry is estimated at 756 billion US dollars (Bas et al., 2020). The COVID-19 pandemic at the end of 2019 hit the sports industry hard. Many professional leagues suspended their seasons and millions of jobs were put at risk as public sport events across the world were cancelled. Analysis suggests that revenue in the sports industry would be under 74 billion U.S. dollars in 2020 as a result of the crisis, almost half that of the pre-COVID-19 estimates (Gough, 2020). The prevalence of COVID-19 not only hit professional sports, but also many people working in the retail and sports services industries related to leagues and sport events, including tourism, transportation, catering restaurants, sporting goods companies, and event media (Evans et al., 2020; Ratten, 2020). The recession of these activities damaged millions of dollars to the sports industry (Ozili & Arun, 2020).

In addition to the economic consequences of canceling games and sport events, decreased physical activity has led to adverse psychological and social consequences due to lack of discharging the social emotions and has also led to social isolation (Bas et al., 2020; Evans et al., 2020). In addition, inactivity along with irregular sleep patterns and improper diet has led to weight gain and loss of athletes' physical fitness (Evans et al., 2020).

Concurrent with the outbreak of COVID, major sports organizations have shown their solidarity with other institutions responsible for reducing the spread of the virus and have worked with other organizations to defeat the COVID. For example, FIFA, in collaboration with famous football players, has launched a campaign in 13 languages, through which it has asked people to follow the guidelines of the World Health Organization (WHO) to control the spread of the virus. Moreover, numerous protocols have been written by the sports community to prevent the spread of the virus around the world (Australian Government, 2020; Council of the European Union, 2020; Hughes et al., 2020; Ludvigsen & Hayton, 2020).

In Iran, preventive plans have been implemented to cut the COVID prevalence chain, including home quarantine, social distancing, reduction of working hours, closure of schools and universities. These actions have affected supply, production, and demand, and have led to the complete closure of some businesses and occupations. According to official reports, due to the prevalence of Corona virus, Iran's economy has been in a state of recession with uncertainty since the end of 2020 through 2021. In fact, no matter if the virus is controlled or not, the Iranian economy will be affected by the economic consequences of this virus until the end of 2021.

Despite the high share of sports in the world economy, the sport services and goods in Iran are mostly deemed related to entertainment and recreation, and are considered unnecessary and wastefully luxury. Also, similar to the most of developing countries, sports are neither a top priority in the state budget nor a pillar of the country's education system (Andreff, 2006); therefore, it has suffered from the COVID crisis more than other businesses. The prevalence of COVID-19 has led to the closure of gyms, stadiums, swimming pools, fitness clubs, physiotherapy centers, and playgrounds, and many people are no longer able to participate actively in individual or group sports outside home. Almost all of its businesses are shut down completely. On the other hand, with the declining household incomes and the non-necessity of the industry's products, the demand for sports business products and services has fallen sharply. Reports have shown that about 28,000 sports clubs and nearly 300,000 people (either coaches or employees) have suffered from COVID-19. The financial loss of Iran's sports sector in the first three months of COVID-19 prevalence was estimated at about 450 million dollars (Firouzi, 2020).

Given the importance of sports to the physical and mental health of individuals in a community, and due to the serious damage that sports businesses may suffer from the COVID crisis, it is necessary to anticipate and formulate resilience strategies for this important industry. The term *resilience* has been used in various fields and disciplines such as biology, safety engineering, metallurgy, individual and industrial psychology, supply chain, strategic management, etc. Although the concept of resilience has been redefined in a number of these areas, the concept of “capacity to return to a stable state after disruption” is common to all of these definitions (Bhamra, 2011, 5376).

Business resilience is also defined as an organization’s ability to anticipate, avoid, and positively adapt to environmental disturbances and changes; this ability is a combination of organizational capacity to restore post-disruption performance and build the necessary capabilities before responding to a crisis (Burnard et al., 2018). Business resilience means the ability and capacity of an organization to face crises and challenges, the ability to return to normal business conditions, and a very important feature that organizations must be equipped with for the survival, resilience, and continuity of their business (Guimarães, 2018). Resilience strategies are multidimensional, complex, and dynamic methods, strategies, and processes for dealing with complex change that help an organization adapt quickly to uncertainty and take advantage of new opportunities (Gibson & Tarrant, 2010; Rajesh, 2020). Based on what we said, the present study aims to investigate the challenges and strategies of sports businesses during and after COVID-19 crisis. Accordingly, the research questions are as follows:

- What are the challenges facing sports businesses during the COVID-19 crisis?
- What are the strategies for sports businesses to cope during and after the COVID-19 crisis?

2. Materials and Methods

As an applied, qualitative research, this study relied on the Delphi research method. Delphi method is based on a structured process for collecting and classifying available knowledge from a group of experts by means of a series of questionnaires interspersed with controlled opinion feedback (Adler & Ziglio, 1996). Delphi demonstrates a beneficial communication device among a group of experts and then facilitates the organization of a group judgment. The Delphi method has been developed in order to make discussion between experts possible without permitting a certain social interactive behavior as the one that happens during a normal group discussion and hampers opinion forming (Wissema, 1982). The Delphi method is beneficial when the problem at hand can benefit from collective, subjective judgments or decisions and when group dynamics do not allow for effective communication (e.g., time differences, distance, and personality conflicts). Physical group meetings may be too costly. However, even when face-to-face group meetings are possible, a forecasting effort may benefit from the supplement of a Delphi process (Grime & Wright, 2016). Unlike survey research methods, the validity of the Delphi method is not equal to the number of participants in the research; rather, it depends on the scientific credibility of the participating specialists. Participants in a Delphi study usually range from five to 20 people (Rowe & Wright, 2001).

Therefore, this research was done in two phases. In the first phase, literature review and semi-structured interviews with two sports managers, three sports business managers, and four academic experts were conducted (Table 1).

Nine challenges that sport businesses face in COVID era and 88 organizational (or business) resilience strategies were extracted and molded in the form of a questionnaire. Then, the Delphi panel was asked to express its views on each component (resilience strategies/

challenges), which included *approve*, *remove*, *add*, *integrate* with other components, and *separate* into two or more components.

Table 1. Demographic Characteristics of Delphi Panel Members (Round I)

	Gender	Field	Work experience (years)	Education
1	Male	Sports managers	16	Master in physical education
2	Female	Sports managers	10	Master in physical education
3	Male	Sports business managers	15	PhD candidate in physical education
4	Male	Sports business managers	5	Master in MBA
5	Male	Sports business managers	12	PhD candidate in physical education
6	Male	Academic experts	7	PhD in sport management
7	Male	Academic experts	10	PhD in sport management
8	Male	Academic experts	13	PhD in sport management
9	Female	Academic experts	6	PhD in strategic management

In the second phase, these challenges and strategies were provided to the Delphi panel consisting of 18 professors of sports management and sports business managers, who were selected based on their education, experience, and previous familiarity with the subject of the research in a purposeful manner using snowball sampling method.

In the first round of the Delphi method, participants in the Delphi panel were asked to indicate whether the items presented in questionnaire were “challenges or strategies” of sports businesses during the COVID-19 epidemic, and in case of a negative answer, state their reason. In addition, they were asked that if they knew of a new challenge or strategy for resilience in this area, add it to the initial questionnaire. After merging the answers in the first round, the modified questionnaire was returned to the Delphi panel for the second time by adding or deleting new cases. Finally, after two rounds of Delphi meetings, sports business resilience strategies during the COVID-19 crisis were extracted and then were categorized using expert opinion.

3. Results

After receiving feedback from the first round of the Delphi panel, two new items were added to the challenges in the initial questionnaire and no items were removed. Therefore, after final approval, 11 challenges for sports businesses were identified, which were divided into two categories, namely *supply side challenges* and *demand side challenges*.

Regarding strategies, seven new items were added to the strategies of the initial questionnaire and four items were removed. Table 2 illustrates the investigation and change of the number of components in the two phases of Delphi. The criterion for removing and adding items was the agreement and consensus of all Delphi panel members.

Table 2. Investigate and Change of Number of Components in Two Phases of Delphi

		Number of initial components	Investigation and change of component				Number of final components
			Approved	Removed	Added	Integrated with other components	
Phase I	Challenges	9	8	-	1	-	1 (into two component)
	Resilience strategies	88	81	4	7	-	3 (into 6 component)
Phase II	Challenges	11	11	-	-	-	-
	Resilience strategies	94	94	-	-	-	-

Finally, sports business resilience strategies came to 94 items that were presented in four categories, including *marketing mix management*, *organizational resource management*, *process management*, and *strategic action management* (Figure 1).

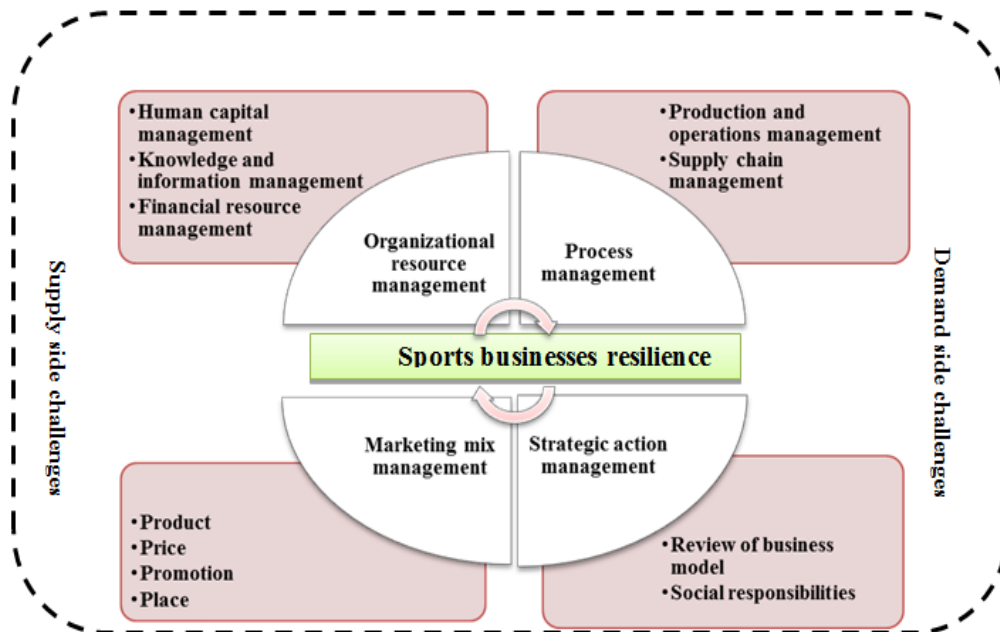


Figure 1. Challenges and Strategies for Sports Businesses to Cope With COVID-19

3.1. The Main Challenges for Sports Businesses During the COVID-19 Crisis

After analyzing the opinions of experts, 11 challenges of the sports industry in the COVID-19 era were identified, including the two categories of *supply side challenges* and *demand side challenges*.

3.1.1. Demand Side Challenges

The demand side challenges included the following items:

- The change in the expectations, lifestyle, and shopping priorities of customers and increased health sensitivities after COVID-19 pandemic;
- The decrease in customer demand due to the reduced purchasing power and increased prices of sports goods and services;
- The reduction in impulsive and hedonistic buying behaviors, recreation, and entertainment;
- The reduction of foreign customers due to the continuation of border restrictions and reduction of exports;
- The belief that sport goods and services are merely recreational and unnecessary (or wastefully luxury);
- The collective use of many sport goods and services.

3.1.2. Supply Side Challenges

The supply side challenges included the following cases:

- The decreased liquidity and increased debt of sports businesses due to the reduced demand and sales;
- The increase in the price of products and services due to the increase in the production costs (such as the increased price of raw materials, health costs, overhead costs, etc.);
- The instability of the supply chain of raw materials and supply of final goods or services;
- The decreased product production or the service delivery below actual capacity due to production constraints;
- The decrease in government ability to help businesses due to the reduced government revenues (such as oil and tax revenues) and increased government spending (such as health care, insurance).

3.2. Resilience Strategies for Sports Businesses During the COVID-19 Crisis

Sports business resilience strategies during the COVID-19 crisis were also extracted and classified as follows. The four main dimensions included *marketing mix management* (including product, price, distribution, and promotion), *organizational resource management* (including human capital management, financial resource management, and organizational knowledge and information management), *process management* (including production and operations management and management supply chain), and *strategic action management* (including business model review and social responsibility). The sub-dimensions of these four categories are described below.

3.2.1. Marketing Mix Management

Marketing mix is defined as a set of controllable marketing tools that a business uses to generate a favorable response and increase sales in the target market. The set of tools includes four P's (4P), including Product (goods or services offered), Price (the cost that the customer pays for the product or service), Place (where the product or service is provided or delivered), and Promotion (sales and advertising policies) (Kotler, et al., 2019). If these four marketing tools have a coordinated and regular approach, they will motivate customers and increase sales. In other words, the right product at the right price with the best distribution and the use of the right communication and advertising techniques all together create an overall business perspective for customers. Therefore, 24 sports business resilience strategies based on the 4P model of marketing mix are extracted as follows (Table 3).

Table 3. Sports Business Resilience Strategies From the Perspective of Marketing Mix Management

Dimension	Resilience strategies
Product	<ul style="list-style-type: none"> • Increasing a variety of products and services with rapid innovation based on customer needs (such as immune-boosting products, personal protection products, disinfectants and detergents, etc.) • Producing and developing various applications for home sports (such as creating virtual sports clubs, virtual coaching, etc.) • Replacing and increasing the production of homemade sports equipment (such as weights, fitness sticks, dumbbells, treadmills, and stationary bikes) • Developing virtual and web-based services and training (such as sports counseling, health and fitness counseling, nutrition counseling, etc.) • Replacing individual sports services and products instead of group sports services and products where these individual sports can also be done at home (such as aerobics, fitness, yoga, Pilates, TRX, etc.) • Developing sports and exercises to deal with stress (such as yoga, aerobics, etc.) • Designing, developing, and personalizing health-related applications (such as programs for weight measurement and recording, vital signs, nutrition, and exercise level of users, etc., similar to the Google Health application)

Table 3. Sports Business Resilience Strategies From the Perspective of Marketing Mix Management

Dimension	Resilience strategies
Promotion	<ul style="list-style-type: none"> Establishing and maintaining communication and continuous interaction with customers through various channels (e.g., telephone, text messages, email, and social networks) even in situations where it is not possible to provide goods or services to them Following up on clients' fitness (especially for sports clubs) and providing recommendations for their health, exercise plan, and nutrition Designing creative marketing campaigns and projects to introduce the company to the potential and new customers Improving after-sales services (e.g., training at home, repairs, after-sales service at home, etc.) Using information-driven advertisements, especially in connection with the personal protection protocols to avoid spreading COVID-19 Increasing the motivation of customers to use sports products and services (e.g., maintaining health, maintaining fitness, etc.) and follow their progress Reducing street and billboard advertising and increasing advertising in cyberspace, especially on the social networks Developing sales promotion programs (e.g., lotteries and prizes, bulk shopping gifts, free delivery, promotional gifts, etc.) Re-segmenting the target customer community and paying attention to customer expectations in different market segments Prioritizing services and products with a focus on key customers (loyal customers)
Price	<ul style="list-style-type: none"> Developing smart pricing policies to sell more goods and services (e.g., group sales, time-dependent sales, sample and general discounts, various sizes and quality of products and services, etc.) Showing flexibility in payment methods (e.g., installment sales) Making efforts to reduce product prices and investigate the possibility of implementing a penetration pricing policy Extending membership expiration dates or after-sales services
Place	<ul style="list-style-type: none"> Increasing and creating new distribution and sales channels for products and services to have easy access to customers (e.g., launching an online store, etc.) Focusing more on face-to-face home services and online (or offline) services in virtual networks (e.g., virtual training and consulting services, sending clips, video conferencing, etc.) Providing rental or leased removable gym equipment for home use by customers (e.g., weights, ropes, fitness stretches, and other removable equipment)

3.2.2. Organizational Resource Management

Organizational resources include all the human, knowledge, and financial assets and capabilities of an enterprise that helps the organization implement its strategies, achieve its organizational goals, and increase its efficiency and effectiveness (Albrecht et al., 2018). In times of COVID-19 crisis, the intelligent management of organizational resources can ensure the survival of the business. Human resources are the most important capital of the organization that is able to create new and innovative values for the organization (Terziev, 2018). Organizations cannot use their other resources properly without professional, committed, and loyal people (Jawaad et al., 2019). In addition, knowledge management and organizational information – including access, acquisition, and creation and sharing of knowledge – are the most basic resources of an organization that play a very important role in gaining a competitive advantage for any organization (Nghah & Wong, 2020). Financial management also refers to the management of the company's resources and expenses efficiently and effectively. The financial system includes monitoring operational financing items like expenditures, revenues, accounts receivable and payable, cash flow, and profitability (Chandra, 2008).

The COVID-19 crisis has reduced demand, and as a result, reduced sales for many businesses. Thus, in such circumstances, the cash flow on which the lives of businesses depend has become problematic, and this situation has necessitated a focus on financial resources management and financial discipline. Fast cash flow for the most vulnerable businesses can keep employees on the payroll and keep businesses stable while retaining customers. It is important to emphasize to business owners and entrepreneurs to review their strategies in managing organizational resources and finding innovative solutions to maintain physical and mental health, maintain human resources, make effective use of organizational

knowledge and information, and maintain liquidity. In Table 4 below, 44 strategies for sports business resilience from the perspective of organizational resource management are listed.

Table 4. Sports Business Resilience Strategies From the Perspective of Organizational Resource Management

Dimension	Resilience strategies
Human capital management	<ul style="list-style-type: none"> • Maintaining the physical health of employees through the implementation of healthcare and prevention guidelines and protocols • Providing personal protection goods for all employees • Planning for minimum staff attendance by implementing telecommuting programs and video conferencing meetings • Maintaining the mental health of employees by creating a positive thinking atmosphere, and emphasizing the temporary nature of the crisis and the future return of employees to the workplace after the establishment of normal conditions • Strengthening motivational programs for employees to improve their sense of cooperation and loyalty • Informing and clarifying the plans and actions of the organization in order to manage the crisis • Continuing the staff employment until conditions change • Supporting vulnerable employees (especially those with underlying illnesses) and those affected by the COVID-19 crisis • Avoiding the exaggeration about the difficulties • Reducing staff trips in and out of the city • Foreseeing replacement planning for people with COVID-19 disease • Determining the performance evaluation criteria of employees in the telecommuting period • Reducing work hours and implementing floating and flexible working hours • Paying employees' salaries and benefits as much as possible • Presenting special care and prevention training to employees in the workplace • Presenting specialized training required for employees to work remotely and training them for virtual services • Rewarding employees for the implementation of adaptive programs in crisis situations (e.g., developing content to provide e-learning services, e-coaching, etc.) • Taking innovative measures to retain employees instead of downsizing (e.g., paying part of a salary, temporary pay reduction, etc.)
Knowledge and information management	<ul style="list-style-type: none"> • Conducting structured marketing research to identify key variables and new patterns of consumer purchasing behavior during COVID-19 outbreaks • Using data mining of recent customers' buying behavior patterns and reducing forecast periods to predict actual customer demands • Constant monitoring of the best marketing practices in the industry and benchmarking the best practices and actions • Encouraging staff to provide practical and innovative suggestions related to increase resilience and crisis management • Reviewing and implementing employee suggestions in the shortest time for adapting marketing mix and business processes • Establishing two-way communication channels and networks between all members of the organization to transfer knowledge and enhance experiences • Using the opportunity to strengthen the general and professional skills of employees through in-service training • Appropriating investment in ICT infrastructure in order to take advantage of the capabilities of virtual businesses • Recording experiences learned from effective business actions in crisis situations to improve and strengthen the business and increase resilience for future crises • Recording innovative solutions, efforts, and successful experiences of the organization to rebuild its business in the face of crisis
Financial resource management	<ul style="list-style-type: none"> • Implementing cost management and reducing unnecessary costs by taking a strict approach to expenditure • Managing cash flow and ensuring financial discipline • Stopping investment in low-demand products or services • Creating and replacing non-financial incentives with financial incentives • Allocating financial resources to scarce and vital raw materials • Attracting new investors • Reviewing and controlling the cost of processes, human resources, and overhead costs • Selling surplus property and returning it to the financial cycle • Evaluating commitments, reviewing agreements, renegotiating, and modifying suppliers (or customers) contracts according to the circumstances of the COVID-19 crisis • Taking advantage of crowd funding strategies and fast credit facilities • Taking the government assistance business loans • Prioritizing the implementation of business development plans and stopping long-term and insignificant projects • Repaying debts and bills using a delayed approach (if possible) to maintain the level of liquidity • Receiving credits and receivable accounts using an accelerated approach (if possible) to increase liquidity • Receiving funds or loans from the banks and financial institutions • Giving discount to the customers in cash purchase to increase liquidity

3.2.3. Process Management

The spread of the Coronavirus has led to serious damage to business processes, including production process and operations as well as supply and supply chains (Ivanov & Dolgui, 2020). Supply chain is defined as a system of organizations, people, activities, information, and resources involved in moving a product or service from supplier to customer. Supply chain activities involve the transformation of natural resources, raw materials, and components into a finished product that is delivered to the end customer. These rely on a network of organizations that are involved – through upstream and downstream linkages – in the different processes and activities that produce value in the form of products and services delivered to the ultimate consumer (Kain & Verma, 2018). The purpose of supply chain is to satisfy customer requirements as efficiently as possible (Martins & Pato, 2019).

Improving the main processes of sports businesses (including production and operations management processes and supply chain management) can make the business more stable and resilient. Table 5 lists 13 strategies to these processes based on expert viewpoints.

Table 5. Sports Business Resilience Strategies From the perspective of Process Management

Dimension	Resilience strategies
Production and operations management	<ul style="list-style-type: none"> • Reviewing production and operations process with an emphasis on the safety and health policies and guidelines • Implementing lean-agile strategies to eliminate waste from the manufacturing process to improve efficiency, effectiveness, and profitability • Reducing production or changing the product in sectors with difficulty in supplying raw materials • Establishing precautionary stocks for goods that may be more popular to prevent the loss of current customers
Supply chain management	<ul style="list-style-type: none"> • Identifying risks and monitoring supply chain information • Investigating the possibility of merger with other upstream and downstream companies in the supply chain • Using just-in-time (JIT) strategy to supply raw materials and coordinate with suppliers to accelerate the delivery of raw materials • Finding alternative transportation and logistics solutions to prevent downtime • Considering access to new or alternative suppliers, especially local suppliers • Providing financial and non-financial support to supply chain partners • Maintaining continuous cooperation and communication with business partners to be aware of production and distribution conditions and thus reduce supply chain barriers • Identifying alternative raw materials • Sharing information and knowledge of crisis management in the supply chain through the creation or integration of new and extensive databases to fill the information gap

3.2.4. Management of Strategic Actions

Strategic thinking has been stated as an important part of every manager's job (Abraham, 2005). Strategic thinking extends to both the formulation and execution of strategies by business leaders and the strategic performance of the total enterprise. It includes strategic analysis, strategic planning, organization and control, and even strategic leadership (Aaltola, 2019). Strategic thinking means finding alternative strategies and business models to create customer value. Furthermore, it has been suggested that the more an organization has people thinking strategically, the more readily it can respond to changes in the business environment (Tavakoli & Lawton, 2005). In addition to quantitative and numerical analysis, strategic thinking emphasizes an entrepreneurial, creative, and nonlinear approach. In times of COVID-19 crisis characterized by changing customer, employee, and stakeholder

expectations, this type of thinking is seen as the core element for creating a competitive advantage in order to adapt to changes and provide appropriate responses. Table 6 presents 13 strategies to increase the resilience of sports businesses from the perspective of strategic action management.

Table 6. Sports Business Resilience Strategies From the Perspective of Strategic Action Management

Dimension	Resilience strategies
Redesign Of business model	<ul style="list-style-type: none"> • Discovering new opportunities while taking advantage of current benefits based on crisis experiences • Modifying and redesigning the business model according to the opportunities created in other businesses (e.g., healthcare products and services and personal protection equipment) • Changing the value propositions of the business model in line with current customer expectations • Changing the business model and providing new services adapted to the customer's needs (e.g., developing an e-commerce business) • Downsizing and making the business agile (e.g., transferring part of its shares to upstream, downstream, or peer companies with more liquidity) • Examining the entrepreneurial exit strategy for businesses whose supply, production, and supply chains have been completely destroyed and there is no possibility of return • Exploring the possibility of forming strategic alliances (partnership) with other business supply chains (although many businesses have lost customers, but the experience of their production lines or distribution network can serve as a platform for providing services to others that have flourished since the beginning of the COVID-19)
Social responsibilities	<ul style="list-style-type: none"> • Maintaining customer trust by avoiding crisis abuse for short-term profits (e.g., price increases, hoarding, non-compliance with obligations, etc.) • Participating in charitable and non-profit affairs (e.g., free distribution of personal protection goods), changing some services and products in order to reduce the spread of Coronavirus (e.g., changing sportswear production line to mask production line, changing sport supplements production line to disinfectant production line, etc.) • Providing sports halls, places, and dormitories to the Crisis Management Headquarters to be used for quarantine and treatment of patients if necessary • Supporting other Corona-affected businesses (e.g., postponing customer debt payments, etc.) • Reducing traditional advertisement and allocating funds to develop public awareness of Coronavirus • Preparing educational brochures and publishing them free/online

4. Discussion

Although recognized as a global crisis, the COVID-19 pandemic and the resulting emergency can be an opportunity to increase business resilience. Business resilience means the structural and systemic capacity of the firm to withstand crises in critical situations (Guimarães, 2018). Flexibility and adaptability have become an important necessity for all businesses in today's highly changing environment and the need to create a strong attitude towards it is strongly felt by all businesses. The results of studies show that technical factors have had the greatest impact on the adaptation of the sports industry to the COVID-19 pandemic (Aghazadeh et al., 2020). Technical factors can improve the current and future state of the sports industry by creating databases, flexibility in production and services, resolving problems and shortcomings in production and services, strengthening the sales infrastructure, providing in-person services, and anticipating potential future needs. Boukas and Ziakas (2013) have pointed out that flexibility in the production line is one of the ways to get industries out of problem in times of crisis. It seems that technical factors can improve the situation of the

sports industry following the COVID-19 pandemic by paying simultaneous attention during and after the crisis.

In this research, an attempt was made to provide strategies for sports businesses in the COVID and post-COVID crises with a qualitative and comprehensive approach. Thus, four main strategies to increase the resilience of these businesses are presented, which are discussed below.

From the perspective of the marketing mix, the main emphasis is on identifying innovative opportunities to develop new and alternative products or services in the context of the current supply chain to meet emerging needs. Thus, the main tools of sports business resilience are communicating with customers, retaining existing customers and attracting new ones by developing new products based on demand, using various smart pricing strategies, allowing customers easy access to services and products, and using innovative promotion and incentive policies to attract and retain maximum customers. Many of these marketing strategies are based on a marketing mix based on the production and delivery of individual (rather than group) and offline/online (rather than face-to-face) products and services in order to maintain the market share of the sports industry. The COVID-19 crisis and the resulting pressure have been the best opportunity to overcome the inherent inertia of businesses, move to digital businesses, and put all services online. Even now, the global community is rapidly adapting to creating online content tailored to different tastes. Many sports business innovations based on artificial intelligence (Mataruna, 2020) and new experiences in sports, such as the virtual coaching experience (Kelly et al., 2020), have been among the innovative tools of sports business resilience.

One of the problems with sports businesses is the low utilization of virtual and web services. Virtual media have a lot of capacity that can well meet the needs of a large part of the sports audience. However, working in a virtual environment – like any other activity – requires proper awareness and information in order to take advantage of the existing capacities in this sector. Thus, media professionals and activists with basic training can facilitate virtual activities for sports businesses.

From the perspective of organizational resource management, the first step is to maintain the physical and mental health of human resources by relying on the prevention of the spread of Coronavirus and supporting employees in order to maintain and retain employees (especially the key ones). The next step is to train and use the capabilities of employees to develop web-based businesses and maintain their work motivation, including measures to make sports businesses more resilient in the field of human resource management. In the domain of organizational knowledge and information, the constant monitoring of the experiences of others along with taking advantage of innovative suggestions from employees can be useful in increasing the prosperity of the business. In addition, it is important to record lessons learned from the effective actions of one's business and other business partners in times of crisis to improve and strengthen the business after the crisis and to be resilient to similar situations in future crises. Finally, managing organizational costs by ensuring strategies to reduce costs and maintain liquidity can ensure the resilience of sports businesses in times of crisis.

From the perspective of process management, restructuring the production and operation processes and creating a supply chain and entrepreneurial supply are among the most important solutions for supply chain production. Entrepreneurial supply chain means paying attention to innovation and growth in all links of the supply chain. Tendency to innovation and activism (as opposed to passivity) is risk-taking characteristics in supplying chain design and implementation. Communication capitals and the ability to coordinate between supply chain actors are the characteristics of this approach to the usual supply chain. Under normal

circumstances, these innovations lead to the growth of businesses, and in the current crisis, they lead to their resilience and survival. Businesses need to focus on demand (customer) management instead of focusing on supply-oriented thinking to rebuild their damaged supply chains. These businesses must use demand management through effective communication with customers and based on their new patterns of behavior in order to plan for the supply chain of raw materials and the production and supply of their final product (or service).

From the perspective of strategic and entrepreneurial thinking, with an emphasis on a systemic and holistic perspective, the main funding strategies for sports businesses include innovating or redesigning the business model with a new value proposition design approach to exploit the facilities, using the knowledge and experience accumulated in the current supply chains, and rotating the business and providing new and necessary services in this period of time. Increasingly, globalization and the adoption of a market economy have made innovation fundamental for the success of professional sport organizations (Smith & Christine Green, 2020). Evidence shows that during this period, a shift of attention has taken place from championship sports to public sports. Sports organizations have a duty to bring the sports industry out of the crisis by accurately identifying the advantages and disadvantages of these conditions, holding effective meetings on the main issues, and thinking together to design practical and creative strategies. Given that the scale of the crisis varies in different parts of the world, it is better to localize the applied strategies. In addition, fulfilling social responsibilities will help sports businesses improve their brand image and increase the effectiveness of their marketing efforts, and will place these businesses in the category of reputable, community-oriented, and philanthropic businesses in the future.

5. Conclusions

Undoubtedly after the end of the COVID-19 crisis, businesses that have used innovative, entrepreneurial, and responsible strategies to strengthen themselves and redesign their business model not only survive this crisis, but are more resilient and stronger than the era before COVID-19. Therefore, The COVID-19 era can be an opportunity to strengthen and empower the workforce, use new technologies to develop international-scale business, develop strategic collaborations and alliances with trading partners, transit towards e-commerce-oriented business models, and improve the brand image through social responsibility. Similarly, adopting integrated and systemic resilience strategies, the sports businesses can reduce vulnerability and risk and at the same time increase the capacity to adapt to sustainable global development programs, especially in developing countries.

According to Barcelona et al. (2015), it is essential that all businesses and sports venues have a crisis or emergency management plan to be less prone to financial and infrastructural damages in times of crisis. However, a large part of the planning – in particular the transfer of facilities to sports businesses – is in the dominion of government activities. According to the available evidence in this regard, there is no practical and coherent planning, even after several months of the COVID pandemic. Therefore, planning to solve the economic problems of sports businesses obviously requires time to gather information and plan. In addition, sports business owners expect that in such a situation, appropriate facilities will be provided for taxes such as VAT (which is levied on a quarterly basis).

Given that many owners of sports venues in Iran, such as swimming pools and halls, are state-owned or quasi-state-owned, negotiating a reduction in rent or offering a discount can help improve the situation for sports business owners. On the other hand, the issue of financing is the main challenge facing all sports businesses, and the provision of financial facilities by the government is one of the most popular options.

Regarding the problems related to the business of sports coaches and business owners, unemployment insurance and the inclusion of sports jobs in the official job's category supported by the Ministry of Labor, it is necessary to provide them with insurance. Also, in similar circumstances, they do not need other labor markets for their livelihood. In addition, the owners of many sports businesses might be offered some opportunities to earn money. Even the permission for a limited use of sports venues under health guidelines can be a great help in getting sports businesses back into the realm of revenue.

Finally, it should be noted that the spread of COVID-19 around the world has had its own problems and challenges, and it is certain that it will bring about changes with short-, medium-, and long-term effects. Therefore, the resumption of sports businesses depends on the return of trust and health to the communities, and if a careful assessment is not made in this regard, serious damage to the material and human resources in this sector might not be far from expected (Parnell et al., 2020). Neglecting sports businesses in the current crisis can lead to a waste of material and human resources in the sports sector. Due to the psychological problems caused by the COVID-19 crisis, sports environments are among the best environments suitable for recovering and improving mental states. Therefore, it is necessary for the owners of sports businesses to benefit from the appropriate services and facilities as soon as possible for the durability and permanence of their activities.

The way sports businesses will operate in the post-COVID environment might be very different from the past. As a result, sports managers need to focus a lot on the starting point, industry, and fitness as the COVID pandemic subsides, because at this time, many athletes and even the staff of sports clubs are struggling with many problems, not only financially but also socially, psychologically, and emotionally. Therefore, it is very important to pay attention to this issue.

Given the importance of ongoing research in these situations, it is suggested that researchers might do more research on the following issues:

- Assessing the financial impact of the COVID-19 Pandemic in Iran;
- Looking for appropriate solutions to overcome the crisis in the sports industry;
- Seeking creative solutions to return to work in sports venues and sports competitions;
- Developing a framework for activities in the sports industry in the post-COVID era.

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