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Business Model Reinvention: Impacts of Covid-19 on the Fitness Gym Industry

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Master (Msc) in International Management

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June, 2021



BUSINESS
SCHOOL

Department of Marketing, Strategy and Operations

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ABSTRACT

Fitness gyms are experiencing a particular turmoil due to the Covid-19 crisis. The fitness industry is at the heart of wellness and health and is one of the most affected by the pandemic since 2020 (Baron, 2021). The closure of gyms, the cancellation of memberships, and the advent of free online fitness classes are undeniable challenges to face. Fitness gyms must adapt quickly and understand the new needs of their customers. To this extent, fitness gyms need to rethink their business models to overcome this Covid-19 crisis. This research aims to understand the major impacts of Covid-19 on the fitness gyms industry, identify the main changes is and present a possible reinvention of a business model to guide fitness gyms in a post-pandemic era. A literature review has been completed, a survey conducted on social medias and in-depth interviews conducted with diverse fitness gyms professionals exclusively in France. The key findings that can be retained are that fitness gyms should now offer more flexibility, accessibility, and security to their members.

Keywords: business models, fitness gyms, Covid-19.

JEL: M10, L83, Z20

RESUMO

Os ginásios de fitness estão a passar por um tumulto particular devido à crise do Covid-19. A indústria do fitness está no centro do bem-estar e da saúde e é uma das mais afetadas pela pandemia desde 2020 (Baron, 2021). O encerramento de ginásios, o cancelamento de inscrições, e o advento de aulas de fitness online gratuitas são desafios inegáveis a enfrentar. As academias de fitness devem adaptar-se rapidamente e compreender as novas necessidades dos seus clientes. Nesta medida, os ginásios de fitness precisam de repensar os seus modelos de negócio para ultrapassar esta crise da Covid-19. Esta investigação visa compreender o grande impacto do Covid-19 na indústria dos ginásios de fitness, identificar as principais mudanças e apresentar uma possível reinvenção de um modelo de negócio para orientar os ginásios de fitness numa era pós-pandémica. Foi concluída uma revisão bibliográfica, um inquérito realizado em meios sociais e entrevistas aprofundadas com diversos profissionais de ginásios exclusivamente em França. As principais conclusões que podem ser retidas são que os ginásios de fitness devem agora oferecer mais flexibilidade, acessibilidade e segurança aos seus membros.

Palavras-chave: modelos de negócio, ginásios de fitness, Covid-19.

JEL: M10, L83, Z20

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Glossary of Acronyms:

HVLP	High Value Low Price
BMR	Business Model Reinvention
BMI	Business Model Innovation
PA	Physical Activity

I. INTRODUCTION

Fitness gyms sector is growing and increasingly competitive in Europe. According to the authors León-Quismondo et al. (2020) the increasing level of participation in physical activity during the last decades has led to a growing number of sports centers. This progress translates into more than 210,000 fitness centers worldwide, serving over 183 million members, and 63,644 clubs in Europe with 64.8 memberships.”

Nevertheless, the fitness sector is especially subject to various socio-democratic changes and affected by trends such as the increasing use of technology, accelerated by the Covid-19. By affected, it means that those changes could disturb their ability to be “financially successful” (Moustakas et al., 2020).

Furthermore, the Covid-19 crisis transformed consumers behaviour and needs. Governments decided to close fitness gyms to protect their members, put in place several safety measures such as lockdowns, quarantines, restaurant, schools, and shops closures etc. Those action plans impacted a lot of industries, especially the physical brick-and-mortar ones, like fitness gyms again. The Covid-19 crisis has been particularly challenging for industries like fitness gyms, this pandemic represents a real threat since fitness gyms became a “high-risk activity” in the eyes of customers instead of being associated with health and well-being (Ananthakrishnan et al., 2020). It is then interesting to study how firms are impacted by the crisis in three different periods: during the crisis, right after the crisis, and the “new normal”.

Furthermore, the growth of online businesses, free YouTube and Instagram videos of trainers, and fitness apps put traditional fitness gyms at risk. Many of them went bankrupt because they were not able to cope with the challenges of the crisis. Indeed, Covid-19 could be defined as a “global society shock”, GDP has fallen by 3,8% in the Eurozone, and from -4,7% to 5,8% in Italy, Spain, and France (Papadopoulos et al., 2020).

To better understand how fitness gyms cope with this kind of crisis, we should first distinguish the impacts of Covid-19 on business models. Ritter and Pederson (2020) present five meta-theoretical perspectives on business model, and one in particular helps establishing a diagnosis to make effective decision during a crisis: The Business Model Alignment. This tool is useful to describe and analyse four main constructs of business: Value Proposition, Value Demonstration, Customers, and their impacts on Capability. This Business Model Alignment ensures that the right customers are exposed to the right value demonstration and that customers buy the optimal mix of value propositions. To secure their business continuity and ensure their

performance by creating value for their customers, fitness gyms must rethink strategically their business model with digital transformation (Ritter and Pedersen, 2020).

Despite the global scenario and the various obstacles, fitness gyms have a role to play in this pandemic in ensuring the well-being of their members by enabling them to continue to be physically active. Rethinking, redesigning, and reinventing their business model is key to play that role.

The research objective is to present a possible reinvented business model, with the main aim of contributing to the fitness gym industry's reinvention to face the Covid-19 crisis. Hence, the research question that is going to be answered all along this research is *How can fitness gyms business models can be reinvented to face the Covid-19 crisis?* Aiming to answer to this research question, the author conducted a mixed research composed of a major qualitative approach made of 11 in-depth interviews of fitness professionals from 8 different fitness gyms in France. This qualitative research was supported by a quantitative research as a follow-up with the publication of a survey collecting 150 answers. This primary-data collection methodology offers the opportunity to analyse both fitness gyms and fitness gyms members' perspectives to respond to the research questions.

Regarding the structure of the present study, following this introduction section, a literature review is developed around two major domains, fitness gyms and business models. Then, in the methodology section the author reminds the research objectives and questions that will be answered across the mixed research approach and data collection description. After that, the collected data are analysed in the analysis section, aiming to be triangulated and confronted with the present literature review in the discussion and findings section. Finally, the last chapter reminds the key findings, as well as their contribution for practice, the limitations and strengths of the present research and proposes future research directions.

II. LITERATURE REVIEW

2.1 Fitness Industry and Fitness Gyms

2.1.1 Definition

According to the MPDI, the fitness sector is an industry characterized by knowing one of the largest increases in practitioners in the world (Baena-Arroyo et al., 2020). For some authors, fitness can be defined as “More than just going to a gym. It also involves an active, committed lifestyle entailing a wide range of experiences and expenditures.” (Conlon et al., 2019). Furthermore, in a context of a growing sector, “fitness centers have become the reference sports facilities, helping sport promotion among society and adherence to physical activity. Consequently, the fitness market has acquired greater complexity. The emerging business models, such as boutique or low-cost centers, are some examples of the process of professionalization and diversification.” (León-Quismondo et al., 2020).

In other words, fitness centers could be defined as “places that provide access to physical exercise equipment and services focused on physical exercise and personal wellness.” (Ananthakrishnan et al., 2020). According to Conlon et al. (2019), we can consider four main types of fitness centers:

- **Traditional Fitness Centers:** These may include a) full-service, “lifestyle” fitness facilities geared to more affluent shoppers; b) full-service high-value, low-price (HVLP) facilities, offering low-cost membership fees and group exercise, and located in either urban or suburban locations; and c) fitness floor only/low-price facilities that are self-directed, without group exercise, and skewing toward lower-income users. Users of these latter clubs may prefer a quick fitness experience, even if it supplements a more intense experience with boutique centers
- **Boutique Fitness Centers:** are smaller studios without a specialty segment. No size threshold is used here, but the category does pinpoint specific brands operating in the smaller spaces. They tend to charge higher membership fees than HVLP facilities, because of smaller class sizes, urban environments where rents are high and the one-on-one relationships that develop with instructors. Yet members are frequently willing to make the financial sacrifices to afford these experiences, as they often become a major part of their social networks.
- **Yoga/Crossfit/Spin/Dance:** likewise fall in the 1,600-5,000 square-foot range but are specialty studios.

- **Miscellaneous facilities:** are mid-sized centers not specifically identified as any other subclass and other types of fitness not specifically broken out, such as martial-arts studios and gymnastics (Conlon et al., 2019).

In order to better understand the different types of services and training specialties offered in those fitness facilities, they could be classified as followed:

- 1) **Group training**, or any workout involving more than five participants;
- 2) **High-Intensity Interval Training (HIIT)**, which requires short bursts of high-intensity exercise followed by short periods of rest;
- 3) **Bodyweight training**, or strength-training exercises that use the individual's own weight to provide resistance against gravity;
- 4) **Different forms of yoga**, including hot yoga, power yoga, and Yogilates;
- 5) **Personal training**, or fitness testing and goal setting in which a trainer works individually with a client; and
- 6) **Functional fitness training**, which trains the muscles to work together, and for daily tasks (Conlon et al., 2019).

This research will focus on traditional fitness centers and gymnasiums. Fitness gymnasiums are known for their “traditional facilities” (León-Quismondo et al., 2020) offering basic memberships and facilities to their members.

2.1.2 Fitness Industry Overview in France

The Fitness industry is growing every year in Europe, especially in Germany, United Kingdom and France. Those three markets keep attracting new actors in the industry. The fitness industry is key in the promotion of physical activity, and healthy lifestyle across the countries in Europe. For example, “this industry has known an increased number of facilities available. Over the last decade, fitness users have increased by 72% and almost 10% of all European adults are users of fitness services.” (Moustakas et al., 2020).

In 2020, France knows an increase in memberships by 3,3% to reach around 6,2 million, driven by the expansion of low-cost fitness gyms such as Basic-Fit (Deloitte, 2020). As a consequence, in France, the average monthly subscription price decreases every year nurturing a competitive landscape for fitness gyms (Roche-pault, 2018).

In the fitness sector in France, three main types of gyms coexist: the very high-end ones offering a maximum comfort on site to their members; the intermediate gyms representing what gyms were historically in France, and then the low-cost gyms that turned the market upside down a decade ago and continue to develop (for instance with Basic-Fit, Fitness Park etc.). As a growing market, experiencing the flowering of new clubs, gyms have every interest in adapting their strategy to the new demand and in standing out from their competitors (Lalouette, 2021). Indeed, the resulting increase in the level of competitiveness among fitness centers has become an important issue that managers and researchers need to deal with (Freitas and Lacerda, 2018).

2.2 Business Models

2.2.1 Business Models and Strategy

The concept of business model is increasingly used over the years to explain a company performance, and how it creates value for its customers. Nevertheless, this concept doesn't find a clear and unique definition. In fact, in the literature there are many definitions and assumptions about business models, sometimes wrongly confused with the term "strategy". As a matter of fact, strategy and business models can both "contribute to the performance of firms, both new ventures and extant firm seeking to respond effectively to changes in the competitive landscape or to revitalize moribund strategic plans" (Bigelow and Barney, 2020). According to Amit and Zott (2001) quoted by Bigelow and Barney (2020), the term business model represents "a new and unique concept and is not equivalent to strategy". Many definitions can be found in the literature, some of them are summarized in the following Table 1.

Table 1- Definition of the concept of business model (source: Elaborated by the author)

Author	Definition
Hame (2000)	"A business model is simply a business concept that has been put into practice. A business concept comprises four major components: core strategy, strategic resources, customer interface and value network. Intermediating between the components are three elements (customer benefits, configuration of competencies, and company boundaries) that link and relate the major components."
Girotra and Netessine (2014)	"Essentially a set of key decisions that collectively determine how a business earns its revenue, incurs its costs, and manages its risks".
Bigelow and Barney (2020)	"The business model construct may have some practical use-fulness to managers and entrepreneurs."
Bigelow and Barney (2020)	"Business model might mean how a firm plans on monetizing the economic consequences of its strategy"
Lanzolla and Markides (2020)	"An activity system that is centred on a focal firm and spans its internal/ external boundaries to bridge value creation with value capturing."

Thus, Lanzolla and Markides (2020) expose in their study on interdependencies that a “business model excels if it is built on interdependencies among value creating and value capturing activities that share certain characteristics”. These authors develop an example illustrating how a company can build a competitive advantage by making strategic choices about interdependent activities. In this example, they suppose a firm has numerous choices of possible business models. According to the authors, a strategy can be translated into a business model made up of three interconnected activities, they call them: A, B, and C. For example, A: Choice of customers to target; B: Choice of product; and C: Choice of distribution channel.

They assume that each activity (A, B, and C) has three possible levels of answers. For instance, the activity C can be answered by i) distribution through retailers; ii) distribution through the Internet; or iii) distribution through a direct sales force. Thanks to this simplified model with only three activities and three levels of response, we can find 27 possible combinations, thus 27 different business models. However, the authors point out that this is a simplified model. In the reality of companies, especially with the advance of digital technologies, there are many more activities, and levels of response for each. As a result, the number of potential business models is much greater. Therefore, it is interesting to understand how a company can define the system of interdependencies that can offer the greatest competitive advantage (Lanzolla and Markides, 2020).

Trying to answer the question of “how to build superior interdependencies”, Siggelkow (2011), quoted by Lanzolla and Markides (2020), has proposed that superior interdependencies are the ones that (1) provide tight fit among activities; (2) connect many current or future organizational activities; (3) act as central nodes in the system; (4) are resilient to change; and (5) provide strong external fit (as opposed to exclusively internal fit) which allows the firm to respond quickly to environmental changes”.

Diverse frameworks and tools have been developed to find a way to construct, organize and build interdependencies among activities in a business model. Osterwalder and Pigneur’s business model framework is one of the most famous of all. They define business model as the “rationale of how an organization creates, delivers, and captures value” (Osterwalder and Pigneur, 2013). The authors try to find a simple and shared definition and describe a business model through the Business Model Canvas. This tool is based on nine building blocks “that show the logic of how a company intends to make money”, and those nine blocks cover “four

main areas of a business: customers, offer, infrastructure, and financial viability” (Osterwalder and Pigneur, 2013).

According to Pigneur et al. (2015) a business model is like a “blueprint for a strategy to be implemented through organizational structures, processes and systems.” The nine building blocks in the Business Model Canvas are described as followed:

- 1) **Value Proposition:** It seeks to solve customer problems and satisfy customer needs with value propositions. They are based on a bundle of products and services that create value for a customer segment.
- 2) **Customer Segments:** An organization serves one or several customers segments. They are the groups of people and/or organizations a company or organization aims to reach and create value for with a dedicated value proposition.
- 3) **Channels:** They describe how value propositions are delivered to customers through communication, distribution, and sales channels.
- 4) **Customer Relationship:** They are established and maintained with each customer segment. They explain how customers are acquired and retained.
- 5) **Revenue Stream:** They result from a value proposition successfully offered to a customer segment. It Is how an organization captures value with a price that customers are willing to pay.
- 6) **Key Resources:** They are the most important assets required to offer and deliver the previously described elements ...
- 7) **Key Activities:** ... By performing a number of activities. They are the most important activities an organization needs to perform well.
- 8) **Key Partnerships:** Some activities are outsourced, and some resources are acquired outside the enterprise. It shows the network of suppliers and partners that bring in external resources and activities.
- 9) **Cost Structure:** It describes all costs incurred to operate a business model.

Furthermore, in comparison with strategy, a business model is kind of a practical and managerial tool, seen as a “firm’s activity system” (Bigelow and Barney, 2020). By that, we can extract from the literature that business models are “models” of “an organization’s core logic for creating value” according to Linder and Cantrell (2000), quoted by Prescott and

Filatotchev (2020). Whereas strategy takes into account the competitive environment (Seddon et al., 2003).

A business model can also be defined as “an abstract representation of some aspects of a firm’s strategy” (Seddon et al., 2003). It draws attention to the most crucial factors and suppresses details. This is the reason why many firms have the same business model, and that there is an unlimited number of business models one company can build based on one firm’s strategy (Seddon et al., 2003).

In order to emphasize the difference between business model and strategy, according to Porter (1996), a strategy defines a company’s long-term position in a competitive marketplace: “Operational effectiveness means performing similar activities better than rivals perform them.”. Magretta (2002) adds to this definition that “Business models describe, as a system, how the pieces of a business fit together. But they don’t factor in one critical dimension of performance: competition. Sooner or later—and it is usually sooner—every enterprise runs into competitors. Dealing with that reality is strategy’s job.”.

Girotra and Netessine (2014), quoted by Bigelow and Barney (2020), define a business model as “essentially a set of key decisions that collectively determine how a business earns its revenue, incurs its costs, and manages its risks”. This definition does echo with the definition of Casadesus-Masanell and Ricart (2011) which explains that “Whereas business model refers to the logic of the company – how it operates and creates and captures value for stakeholders in a competitive marketplace - Strategy is the plan to create a unique and valuable position involving a distinctive set of activities.” quoted by Bigelow and Barney (2020).

2.2.2 Business Model Reinvention

Business Model Reinvention (BMR) can often be confused with the term Business Model Innovation (BMI) that can be defined as: “the search for new logics of the firm and new ways to create and capture value for its stakeholders.” (Casadesus-Masanell and Zhu, 2013). According to Hamelink and Opdenakker (2019), quoted by Moradi et al. (2021), business model innovation includes “discovering and adapting different forms of value proposition, valuation, and value creation for the existing business, which is so vital for companies because it affects their competitive situation and their survival chance.”.

Johnson et al. (2008) refer to the key to create a “game-changing business model innovation” with four interactive elements:

- 1) The Creation of a clear Customer Value Proposition that visualizes a “critical job to be done”
- 2) The Design of a Profit Formula
- 3) The Identification of Key Resources and Processes needed to deliver the value
- 4) The Choice of Processes to Implement the value proposition in an economically viable manner (Johnson et al, 2008)

In a competitive framework, a company should be able to reinvent its business model to be successful and nurture its competitive advantage. Indeed, according to Zott and Amit (2013) and quoted by Bigelow and Barney (2020), managers will likely need to adjust their business model over time. It does echo to the authors Voelpel et al. (2004) who point that organizations should be able to “revise their business models to ensure that their strategies are viable in an ever-changing competitive environment”.

In other words, Hamel (2000) highlights the importance to adopt a “systemic” perspective, to “unlearn their traditional strategy mindset” to allow a “creative destruction” of its own business. This creative destruction aims to be more agile and proactive to face and compete in a new, uncertain, and changing competitive landscape, quoted by Voelpel et al. (2004).

Business Model Reinvention can be defined as the creation of a new business model capable of adapting to this changing and challenging competitive environment. By reinventing its business model, a company is being agile and solely responsive. Thus, reshaping an organization’s core strategy and dynamic capabilities is not enough to create a new business model, managers should also adopt a systemic thinking by “making sense of socio-cultural dynamics, and opportunity gaps, reinventing of customer value proposition(s), and reconfiguring the business network, and its value chain.”. The challenge for organizations is to find the best way to operationalize its new creation within the uncertainty, unpredictability, and rapid change in the business environment (Voelpel et al., 2004). The authors refer to four elements of a business model to consider when developing a new business model: customers; technology; business infrastructure (or business network); and profitability. Nowadays, customers are getting more and more powerful in the process of creating value. Since they are more informed than ever, their demand and needs are key in the creation of products and services. There are “no longer passive constituent of an industry but principal participant in creating and competing for value.” (Prahalad and Ramaswamy, 2000). Technology is a way for

companies to create opportunities and offer new and innovative products and services to their customers. Forming a strong and cooperative business infrastructure or “business ecosystem” allows companies to capture new opportunities to generate new products and services that could satisfy their customers’ needs and make them more competitive. Finally, a company should have enough profitability to sustain its actual business model and provide enough funds for experimenting a creating a new one.

BMR is based on those four dimensions composing the “Wheel of Business Model Reinvention”:

- a) Customer sensing referring to the ease of acceptance of a new value proposition.
- b) Technology sensing indicating the relative strength, direction, and impact of technology on new customer value and the business network.
- c) Business infrastructure sensing referring to the responsiveness of the traditional business network to reconfigure, or to the ease of a new business network configuration.
- d) Economic/Profitability sensing indicating the economic feasibility and profitability of the proposed model.

This tool allows to evaluate and operationalized a new business model considering environment changes and relance of possible new business models. The closer the results are to the outer limits of the figure (the larger the area), the more likely it is for business model reinvention. These four dimensions of business model reinvention interact in the wheel. The wheel illustrates the interactive (systemic) flow of the four dimensions in reinventing the business model. Companies are exploring ways to create value propositions for the customer with innovative products/services that satisfy the underlying generic needs. The proper technology must be in place to easily leverage efficiency and new customer value. The business system infrastructure, meanwhile, must be configured to enhance the customer value that has been created and is being delivered. Finally, all efforts undertaken must be economically viable and benefit everyone involved in the reinvention process, as well as the new configured value chains. Moreover, according to Hamel (2000), it is not enough to reinvent one's business model when there is a crisis, or a major disruption in one's competitive environment. A company must be agile and able to reinvent its strategy on a continuous basis. The starting point always being creating value for the customers (Voelpel et al., 2004).

2.3 Business Model for Fitness Gyms

2.3.1 The Fitness Gyms

The fitness club sector is continuously growing around the world, and depending on the type of fitness clubs, their structures and strategies differ. Fitness club's business model reveals how they create value to their customers, how they generate revenue, at what price they sell their services, the costs it represents and what type of customers they target. Understanding the business model of fitness centers provides an appreciation of the drivers and changes impacting this industry, especially since the Covid-19 pandemic.

First, it is crucial to highlight that “a fitness center or fitness club is service-intensive business.” (Freitas and Lacerda, 2018). Through the years, the number of fitness clubs has grown, and people tend to realize the importance of practicing a physical activity (Riseth et al., 2019).

Nevertheless, in France, people do not necessarily choose the fitness centers to practice a physical activity. Thus, this lack of promotion of fitness clubs represents an opportunity for clubs in France to attract new customers (European Commission, 2017). In addition to that, the Regional Office for Europe of the World Health Organization suggests that states should promote the importance of membership in fitness centers as a way to encourage the practice of physical activity amongst younger and more vulnerable demographic groups (Moustakas et al., 2020).

Aiming to attract new members, fitness centers should focus on attributes that people are looking for when subscribing in a fitness gym. According to León-Quismondo et al. (2020), the principal attributes are: a kind customer service; the existence of loyalty programs; enough tangible quality, and online marketing strategies. They also add that a fair fee and a maximum of 15 minutes trip to the fitness center should be guaranteed to be attractive.

In addition to the main goal of creating value for the customers, fitness professionals face another challenge which is the long-term engagement and the fidelity of their members. In order to increase this engagement, fitness clubs could develop adequate protocols and reliable procedures that could lead them to a stronger and more sustainable business. Moreover, in this challenge of long-term management of sport facilities, two of the most difficult tasks identified are dealing with people and having sufficient financial provision.” (León-Quismondo et al., 2020).

The fitness gyms business model is built around one major value proposition that is to engage their members and motivate them to “pursue an active and healthy lifestyle by exercising regularly over an extended period of time in their clubs” (Basic-Fit, 2018). The larger groups are taking advantage of their bargaining power and the opening of numerous sites to make economies of scale, particularly in sports equipment. Several investments are made in IT (Information Technology) to facilitate the administrative processes (registrations, contracts etc.) to hire less full-time staff. Most gyms minimize their number of employees by setting up rental contracts with fitness providers: nutritionists, ergologists and even sports coaches. The Gym Group Annual Report 2018 explains that most of their personal trainers are contracted for 12 hours, and, outside these hours, they will continue to run their business on a self-employed basis in our gyms and will pay a monthly rent to access the gym (TheGymGroup, 2018). Their strategy is to propose high value services at the lowest cost possible and minimize their maturation period. Moreover, some fitness clubs generate additional revenues they call “add-ons”, “in addition to base membership fees and joining fees, we generate revenue from a number of add-ons. Add-ons are additional fee-based services that can be added to a membership.” (Basic-Fit, 2018).

Table 2 presents a general business model canvas for the fitness gyms industry, based on the nine blocks proposed by Osterwalder and Pigneur (2013) and data collected on secondary resources.

Table 2 - Business Model Canva for low-cost Fitness Gyms before Covid-19 (source: Elaborated by the author)

<p>Key Partners</p> <ul style="list-style-type: none"> - Nutrition products and accessories providers - Personal trainers - Nutritionists - Franchises - Brand licenses <p>(TheGymGroup, 2018)</p>	<p>Key Activities</p> <ul style="list-style-type: none"> - Athletic Training - Group Class - Personal Training Plans - Operating Gym Access - Material sales (flocked items) <p>(Basic Fit, 2018)</p>	<p>Value Proposition</p> <ul style="list-style-type: none"> - Improve Health and well-being - Easy Access to Club Network - Affordable subscription fee - Possibility to train with a friend - Quality equipment (cardio, weights, benches) - Group classes - Personal coaching <p>(León-Quismondo et al. 2020; Basic-Fit 2018)</p>	<p>Customer Relationships</p> <ul style="list-style-type: none"> - Sense of community - Direct and indirect relationships between clients and trainers - Healthier lifestyle <p>(Basic Fit, 2018)</p>	<p>Customer Segments</p> <ul style="list-style-type: none"> - Juniors (16-19 years) - Young Adults (20-35 years) - Adults (36-59 years) - Seniors (+60 years) - People who have interest in fitness for losing weight, improving physical appearance <p>(Basic-Fit, 2018)</p>
<p>Key Resources</p> <ul style="list-style-type: none"> - Gym facilities - Personal trainers expertise - Cardio and Weight Equipment - Website builder <p>(Basic-Fit, 2018)</p>			<p>Channels</p> <ul style="list-style-type: none"> - Franchises - Brand licenses - Social Medias - Promotional deals - Marketing campaign - Website <p>(Basic-Fit, 2018)</p>	
<p>Cost Structure</p> <ul style="list-style-type: none"> - Rent of space - Personal wages - Cost of equipment - Insurance - Management/ utility expenses - Logistics costs of e-boutique - Marketing - Web and app maintenance <p>(TheGymGroup, 2018 ; Basic-Fit, 2018; Ananthakrishnan et al. 2020)</p>		<p>Revenue Streams</p> <ul style="list-style-type: none"> - Gym Memberships (long-term contracts) - Partnerships (local businesses, sport and health brands) - Nutritionists monthly rent - E-shop (equipment, accessories, nutrition) - Personal Trainers monthly rent <p>(TheGymGroup, 2018; Basic-Fit 2018; Conlon 2019)</p>		

2.3.2 Fitness Gyms facing the Covid-19

The health crisis related to the global pandemic has disrupted the lives of the people living in France, and around the world, especially during the 55 days of lockdown imposed on the population, from March 17 to May 11, 2020, as well as the closure of sports facilities that remained after this date, the pace of life and daily habits, including individual sports, were greatly modified (Baron, 2021). To better understand how fitness gyms cope with this kind of crisis, the impacts of Covid-19 on business models should be distinguished. Ritter and Pedersen (2020) identified two major impact types of business models dealing with a crisis: Resilient (antifragile; robust; adaptive, suspended) or Vulnerable (aided; retired).

It has been observed that since the Covid-19 pandemic, the fitness industry has focused its attention towards providing digital or mobile services. Because of the closure of fitness clubs and the compulsory limitation of direct social contact, many people resulted in experiencing for the first-time at-home fitness. Consequently, during lockdown, many fitness professionals and gyms began to provide their services exclusively online. During this pandemic, fitness clubs had to adapt and innovate more than ever to continue to create value for their customers by offering updated alternatives, but also to increase the penetration rate (León-Quismondo et al., 2020). The question could be: Is this trend going to last after the Covid-19? The literature tends to answer that “this technological shift is likely to continue after the pandemic as the benefits and risks of online training become ever better understood.” (Moustakas et al., 2020).

In order to secure their business continuity and ensure their performance by creating value for their customers, fitness gyms must rethink strategically their business model with digital solutions. Fletcher and Griffiths (2020) tend to show the “fragility of digitally immature organisations” revealed by the pandemic. In other words, to cope with VUCA, digital maturity is key to stay flexible during a crisis, and there are three major lessons that can be learnt thanks to their work. i) Organizations must improve their digital maturity, ii) less digitally mature organizations are more fragile, and iii) organizations with higher level of digital maturity are generally more flexible.

This pandemic is recognized for its needs of distance between people, distance working, distance learning, and distance relationships. Therefore, digital adoption is at its epicentre. Aiming to survive, digital adoption and transformation seem to be required for businesses. Likewise, Alao (2020) explains that “with the total or partial lockdowns that ensued the pandemic, some organizations that had the resources to survive had to devise means of

deploying technologies to reactivate activities across their value chains amid social distancing and stay-at-home policies. Not many organizations succeeded in doing that as they suddenly realized that their existing business continuity plans and risk management systems did not envisage the pandemic, hence the need for digital transformation for business survival.”.

Digital transformation is defined by Lucas Jr et al. (2013) as a transformation “precipitated by a transformational information technology”. According to Westerman et al. (2014) digital transformation entails significant changes in business processes, operational routines, organizational capabilities, as well as entry into new products, markets, or services, quoted by Ananthakrishnan et al. (2020).

In the framework of this sanitary crisis, technology can be reported as a “critical change driver” for the fitness sector, almost 80% of owners, operators, and gym managers report that online training and the use of technology are emerging trends in the European region (Moustakas et al., 2020). Moreover, an appropriate adoption of digital transformation leads to an increased competitiveness, productivity, and performance and secures business continuity (Papadopoulos et al., 2020). It should be done across all the organization levels, business model, and corporate culture. Digital transformation is not only about an offline business offering online products and services. As a matter of fact, the progress of technology to offer virtual fitness classes leads to a multiplication and diversification of offer to consumers, increasing the number of hours consumers can spend on exercising, and generating a larger variability of customer services (Baena-Arroyo et al., 2020).

III. METHODOLOGY

The methodology section of this research presents in depth the purpose of the study, its outline, the selected research techniques, and the way information is gathered during the scientific research process. This chapter will first present the research questions and objectives. Then it will cover the research approach adopted during the process, as well as the data collection procedures.

3.1 Research Questions and Objectives

Many industries are impacted by the Covid-19 and must adapt, react, and innovate to survive. The fitness industry is one of them, especially the fitness clubs. Impacts on business models are observed and studied in the literature (Alao, 2020; Ritter and Pedersen, 2020; Papadopoulos et al., 2020). Nevertheless, there is a lack of information in the present literature dealing with fitness gyms business model: a growing industry in Europe, disrupted by a pandemic since March 2020. Fitness gyms were suddenly forced to close, customers were locked-down, looking for at-home solutions to workout. There are many interrogations that remain unanswered in the literature. Fitness clubs business model had to be rethought and reinvented to adapt to the new needs of customers.

The aim of this research is to understand how Covid-19 impacted and still impacts the fitness industry, especially fitness clubs in France, and their members. This study intends to highlight how those fitness centers tend to reinvent their business models to overcome this crisis; how they react to the growing online competition and the changes in customers habits. This research aims to propose a reinvented business model to fitness gyms that could cope with those challenges and help them to stay competitive.

The key research question that is going to be explored throughout the present study is the following: *How can fitness gyms business models can be reinvented to face the Covid-19 crisis?*

Thus, the main research objectives this study tend to achieve could be exposed as following:

- a) **Objective 1:** Analyse fitness gyms business model before Covid-19. Observe the obstacles the pandemic represents for the fitness gyms industry.
- b) **Objective 2:** Identify the main efforts and changes those fitness gyms had to implement in order to adapt their business to the environment disrupted by the Covid-19.
- c) **Objective 3:** Present a reinvented business model canvas for fitness gyms, answering to the new needs and challenges of a post-pandemic, transformed and reinvented industry.

Based on the research question, aim and objectives, sub-questions are raised following the conduct of a literature review on the subject under study. Table 3 summarizes the links between the research objectives, the sub-research questions, and the literature review.

Table 3 - Summary table of sub-research questions, research objectives and literature review authors (source: Elaborated by the author)

Research Objectives	Research Questions	Literature Review authors
1. Analyse fitness gyms business model before Covid-19. Observe the obstacles the pandemic represents for the fitness gyms industry.	What were the first actions taken when the fitness gyms were forced to close? How did their members react? Did they lose many subscriptions? Did they freeze the levies during the lockdown?	(Freitas and Lacerda, 2018) (Basic-Fit, 2018) (Alao, 2020) (Baron, 2021)
2. Identify the main efforts and changes those fitness gyms had to implement in order to adapt their business to the environment	What did they change do keep their members? Did they offer new services like online coaching?	(Papadopoulos et al., 2020) (Moustakas et al., 2020) (Komaña, 2020)
3. Present a reinvented business model canvas for fitness gyms answering to the new needs and challenges of a post-pandemic, transformed and reinvented industry.	What changes must be implemented in the fitness gym business model? Is digital and distance coaching going to last after the sanitary crisis? Will the adjustments made during the Covid-19 crisis be maintained in the delivery of their services? What will change in the gyms when they reopen? What do they plan for the reopening?	(Moustakas et al., 2020) (Ananthakrishnan et al., 2020) (León-Quismondo et al., 2020) (Alao, 2020)

3.2 Research Approach

To answer to the problematic and new trend born from the pandemic, this research aims to understand how fitness clubs were impacted and reacted to this crisis by conducting an exploratory scientific research. In consideration of the sub-questions and research objectives understudy, a qualitative research was conducted. Indeed, this type of research “emphasizes the social and human dimension of research, locating their focus of interest in the ways in which individual perceive, experience, and make sense of the world” (Lanka et al., 2021).

As a primary data collection method, in-depth interviews with fitness professionals were conducted to have a deeper and clearer view of the reality of the business facing the Covid-19. Due to the Covid-19 restrictions, the interviews were not conducted physically, but through conversations by phone and videoconference. Those interviews aim to understand the measures and actions taken by those professionals, to collect and analyse their feedbacks, and raise awareness on the future of fitness in France.

Since fitness clubs are a service-intensive business, customers are at the heart of the business. This is the reason why a survey has been conducted to collect information about customers habits, needs, and point of view about fitness gyms facing the Covid-19 crisis. Erlandson et al. (1993) quoted by Lanka et al. (2021) explain that a “quantitative research aims to predict, measure, and control phenomena of interest by identifying relevant variables and measuring them”. The objective was to collect a larger-scale and representative sampling of people practicing a sport activity (more or less) to be able to generalize findings and complete the qualitative study conducted with fitness professionals through in-depth interviews.

By conducting a major qualitative study followed-up by a quantitative research in a sequential way, the author opted for a mixed methods research, defined by Denzin (1978); Jick (1979); Mingers (1997, 2001); Reichardt and Rallis (1994) quoted by Venkatesh et al. (2013) as “a combination of research methods, particularly triangulation of qualitative and quantitative data, to develop a deeper understanding of a phenomenon”. The authors confirm the choice of research for the present study by explaining that this type of mixed research “uses quantitative and qualitative research methods, either concurrently (i.e., independent of each other) or sequentially (e.g., findings from one approach inform the other), to understand a phenomenon of interest.” In other words, aiming to have the ability to “address both exploratory and confirmatory questions within the same research inquiry”, qualitative data are collected and are more heavily weighted, and quantitative data are used to complete and/or confirm the initial qualitative findings.

The samples selected for each research method are distinct. The qualitative research sample is composed of eleven fitness professionals (managers, personal trainers, gym owners etc.) located exclusively in France. These eleven professionals work in a total of eight different companies to get a global view of the gym sector in France in 2020-2021. Concerning the sample of the quantitative research, the size of the latter is larger as it gathers 150 people. The sample is diversified, with an average age representative of the target clients of the gyms under study and is composed of people who are active and/or interested in practicing a sport. The sample is exclusively composed of people living in France. The primary data collection took place over a period of one month, more than a year after the beginning of the Covid-19 crisis.

IV. DATA ANALYSIS

4.1 Data Collection Process

In the framework of a qualitative research design, in-depth interviews were conducted considering the research objectives and sub-questions. The interview protocol was created to set up a framework that was broad enough, but not overly extensive, to respond to the subject of the inquiry. The protocol as well as the interview guide allow guidance of the conversation with the interviewees in order to collect and analyse more methodically the harvested results. The interview guide was written in accordance with the interviewees' positions, the objective being to collect and examine their experience and opinion according to their job function and the fitness gym where they work. The Appendix 1 presents the interview guide used in the qualitative research process.

The sample of the inquiry is composed of 11 interviewees, selected through the researcher's personal network and through professional searches on social networks. The respondents were chosen based on their job position, number of years of experience in the fitness industry, as well as their current company. All the interviewees experienced the periods before and after Covid-19 to fully explore the impacts of Covid-19 on their business model and the way they offer their services to their members.

The interviews were conducted with fitness professionals located exclusively in France to understand the real stakes of the measures taken in France, in the light of the restrictions imposed specifically in this country. Indeed, since the beginning of the sanitary crisis, not all gyms have been impacted and restricted in the same way in each country. Regarding individual interview methods, all interviews were conducted by telephone or videoconference due to health restrictions. The interviews were first composed of a contextualization, to recall the subject of the study, the objectives of the research and the interview that was going to take place. Then the researcher briefly explained the interview plan composed of three parts: the interviewee and his/her experience in his/her company, his/her company facing Covid-19, and finally his/her perception of the future of fitness clubs after Covid-19. With these broad guidelines given, the researcher guided the interview with open-ended questions allowing the interviewee to freely elaborate and rebound.

Finally, it is important to note that the employers and companies in which the interviewees work were not informed of their participation in the research. Only one

confidentiality agreement was signed to guarantee the anonymity of the participant. The interviews lasted between 35 minutes and one hour and were performed during the month of May 2021, more than one year after the beginning of the pandemic.

In the framework of the quantitative research, the survey was posted on 3 social medias, targeting mainly people who practice a sport activity in order to give an opinion on their training methods which could have been impacted by the closure of the gyms and the lockdown. This survey is composed of short-questions and was online for one month to collect a maximum of answers. 150 people responded to the survey and correspond to the target audience of the gyms. The survey responses helped to confirm or deny the consistency and success of the changes gyms are implementing to continue to create value to their members.

4.2 Fitness gyms perspective

4.2.1 Characterization of the sample of the interviews

Interviewees are characterized according to the fitness club in or for which they work, as well as the position they hold in that same company. These fitness gyms are in turn characterized according to the average price of their subscription, the average size of their gym, or of the group to which the gym belongs, the number of clubs in France, and their status (franchisee, licensee, or independent). The participants of the inquiry are Gym Owners and Managers (license, franchise, independent) (55%) Personal Trainers (18%); Team Manager (9%); Implementation Project Manager (9%); and Head Trainer CEO (9%).

The name of the fitness centers and of the interviewees will not be shared on the present research, in order to preserve the anonymity of the source. In turn, a description of the fitness gyms and of the interviewees' functions will be presented in the Table 4.

Table 4 - Characterization of the sample of the study (source: Elaborated by the author).

Interviewees	Function	City	Gym description (subscription price, m ² , number clubs in France, status, equipment)
1	Team Manager	Bordeaux	19,90€/month, 1,500 m ² , 447 clubs in France, franchise
2	Personal Trainer (at a gym and independent)	Ile-de-France	19,90€/month, 1,500 m ² , 447 clubs in France
3	Manager and franchise owner	Essonne	29,95€/month, 300 m ² , 100 clubs in France, franchise
4	Head Trainer CEO	Bordeaux	Head Trainer manager, implemented in 17 Clubs, 70 coaches
5	Implementation project manager	Ile-de-France	29,95€/month, from 900 to 1,500 m ² , more than 220 clubs in France, license
6	Personal Trainer (at a gym and independent)	Bordeaux	19,90€/month, 1,500 m ² , 447 clubs in France, franchise
7	CEO and gym manager	Aurillac	Under quotation, now 69,90€/ month, independent
8	Gym manager and licensee	GAP	29,95€/month, 1,200 m ² , more than 220 clubs in France, licensee
9	Gym Manager and CEO	Pessac	65€/month, 200 m ² , independent.
10	Gym Franchisee owner – 5 gyms	Around Bordeaux	29,90€/month, 270 clubs in France, franchise
11	Co-Manager and Franchise owner	Mont-de-Marsan	19,90€/month, 700m ² , 100 clubs in France franchise

4.2.2 Interviews results analysis

The data from interviews were analysed using the software MAXQDA to classify the coded information retrieved from the transcriptions. Three major codes based on the three research objectives of the present study are created to collect and analyse the qualitative data. Each main code was divided into sub-codes corresponding to the interview questions. Since the interviews were conducted in France, with French-speakers fitness professionals, the following results were translated from French to English by the researcher. The objective of this analysis is to interpret the results of the 11 interviews conducted by the researcher, understand the issues and changes at stake in the fitness sector since the beginning of the Covid-19 crisis; present the fitness gyms' business model and differentiation criterion before Covid-19; the efforts produced by those fitness gyms to face the obstacles during the Covid-19, and expose the way those fitness professionals envisage and apprehend the post-pandemic era.

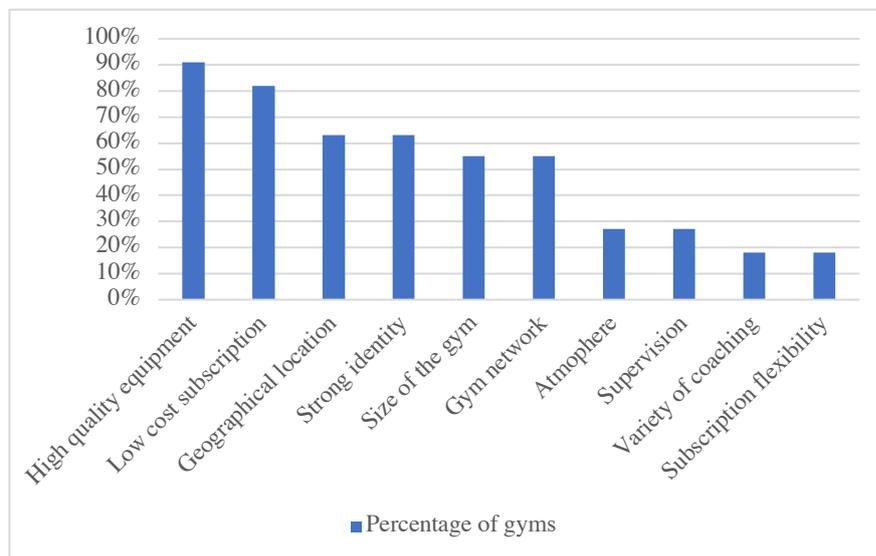
4.2.2.1 Fitness gyms before the Covid-19

In accordance with Ritter and Pedersen, (2020) and the research objectives, the interviews were focused on three phases of the crisis: before, during, and post-Covid-19; corresponding to the three research objectives of the present research.

The first part of this qualitative analysis deals with the period before the Covid-19, corresponding to the first part of the research objective of analysing fitness gyms business model before Covid-19. All things considered, those introductory questions give a better vision of what type of fitness gym is discussed in this study, as well as their target consumers.

One of the first questions to describe and understand the business model of those fitness gyms were: *How do you differentiate yourself before Covid-19? Why do people join your gym?* According to the Graph 1, the criteria that differentiate those fitness gyms and the reasons why people subscribe to their gym are: a low-cost subscription (82%); a high-quality equipment (91%); the geographical location (63%); the size of the gym (55%); a strong identity (63%); the gym network/ accessibility (55%); the atmosphere (27%); the supervision (27%); the variety of coaching (18%) and finally the flexibility of subscription (18%).

Graph 1 - Gym's differentiation criteria (source: Elaborated by the author)



In sum, this question allows the researcher to understand what the priorities are for the gyms, and it reveals that their major value proposition is to offer high value equipment and services at a low price, granting their members to have access to a gym closed to them.

The second question asked to the interviewee was the following: *What type of consumers do you target in your gym? How would you describe the habits of your members?*

Based on the answers the main customer segment those gyms target is 30-35 years old (22%) with a beginner level (13%). Moreover, the answers from the interviewees reveal that they tend to target every segment from 16 years old to 80 years old. Their members are diversified, and 20% of them are considered as “sleepers”, who pay but never come to the gym to train. The frequency of training depends from one club to another with members coming once a week and others who come three times a week. Nevertheless, those types of gyms do not target “hyper-frequenters”, but rather target “Mister and Miss Everybody” who will come train one or two times a week. The interviews also revealed that the class offerings differed between gyms: private classes, group classes, specific classes (HIIT, RPM, Pilates, Yoga) etc. that they offer as paid or free options to their members.

4.2.2.2 Fitness Gyms during Covid-19

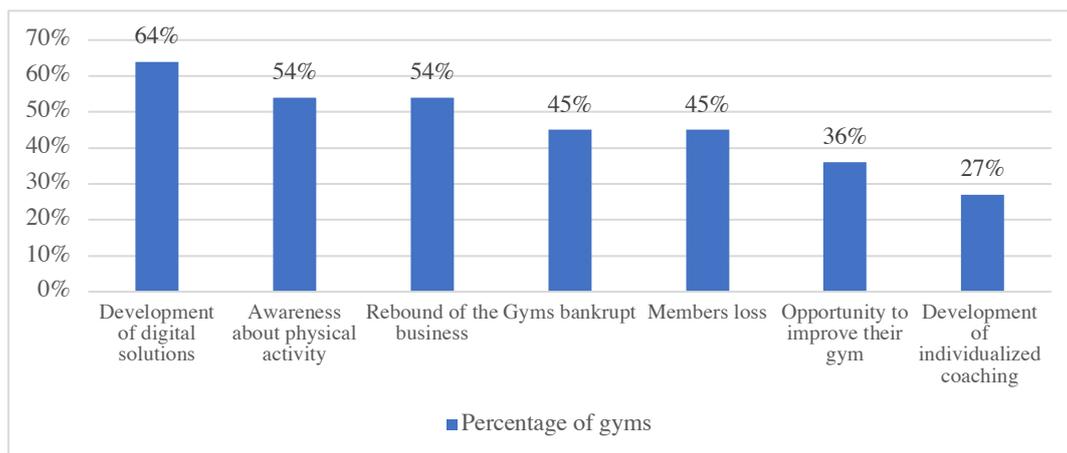
The second part of this qualitative analysis deals with the period during the Covid-19, corresponding to the second part of the research objective: observing the obstacles the pandemic represents for the fitness gyms industry, but also answering to the second research objective which is to identify the main efforts and changes those fitness gyms had to implement to adapt their business to the environment.

In order to identify the main obstacles of this Covid-19 pandemic on fitness gyms, the following questions were asked to the interviewees: *How does Covid-19 affect the way you offer your services to members? What are the main obstacles that Covid-19 represents for fitness centers?* The first and major obstacle the interviewees could identified is the closing of the gyms (100%) which was the first and immediate restriction imposed by the Government. Then, unable to provide access to the facility to their members, many gyms have paused direct debits from members. In other words, people remained members of the gym but did not pay anymore: the obstacle here is the suspension of levies (36%). Moreover, the gyms which opened for people with medical reasons (45%) also represented a crucial obstacle; as well as the loss of motivation of their members (27%). The results from inquiry taught us the increasing apprehension of the virus from gym members (27%); and the fear of commitment from prospects (18%). Other obstacles can be observed in the Graph 1 in Appendix 2, such as the need for change in their acquisition strategy and commercial process; the impact on their cashflows; the disruption of their forecasts and people investing in Home Gym. The obstacles were numerous for fitness gyms since this pandemic prevented any activity in an indoor area.

Thus, some gyms considered this period of crisis as a time for improvement and for the larger companies, the Covid-19 did not stop their expansion according to our interviewees (54%). During the interviews, some participants could report for example that “The group is in full expansion. So, for me, Covid-19 didn't really impact the company” (*Interviewee n°2 - Personal Trainer*); or “I'm lucky I wasn't too affected. It even gave me a plus in fact.” (*Interviewee n°6- Personal Trainer*). Indeed, this research reveals that the obstacles due to Covid-19 have halted many gyms, but we learn that despite the pandemic, some gyms are still expanding.

Throughout the interviews, respondents were able to explain how the Covid-19 crisis had impacted the fitness industry and more specifically gyms, answering the following question: *How can you evaluate the impact of this pandemic on your professional life?* The Graph 2 illustrates the impacts of the Covid-19 on fitness gyms, and on their professionals.

Graph 2 - Impacts of the Covid-19 on fitness gyms. (source: Elaborated by the author)



The inability to open their doors has caused gyms to lose some of their members (45%), and sometimes even resulted in their permanent closure due to bankrupt (45%). However, many of the interviewees see this crisis as an opportunity to improve their skills, renovate their gyms, and find new ideas to offer to their members (36%) just like an interviewee testified “For me, it is certain that there would not have been the Covid-19, we would not have changed the gym, we would not have repositioned ourselves even more, refocused.” (*Interviewee n°7-CEO*).

Coachs and managers have also noticed that this crisis has allowed people to realize the importance of practicing sports and has motivated many people to start (54%) as explained by an interviewee: “If Covid hadn't been there, they would never have been interested because of lack of time or motivation” (*Interviewee n°2-Personal Trainer*). This increase in awareness

goes hand in hand with the development of individualized coaching need (27%) as well as digital solutions to do sports at home (64%). Finally, most of the interviewees consider this crisis as a rebound factor for their business (54%) as one of the interviewees (*Interviewee n°3-Manager*) said: “For those who work well, there will be a huge rebound. Knowing that in France, in terms of market penetration rate, we are well below our neighbors.” Another interviewee (*Interviewee n°2-Personal Trainer*) confided that “I think that for many coaches it was complicated, but thanks to Covid we had a real rebound. There are many people who are interested in the sport now.”.

The next question asked does echo to these impacts since the researcher asked about the members loss. The following Figure 1 highlights the answers to the question: *Have you lost many members? Have you found new members since the health crisis?*

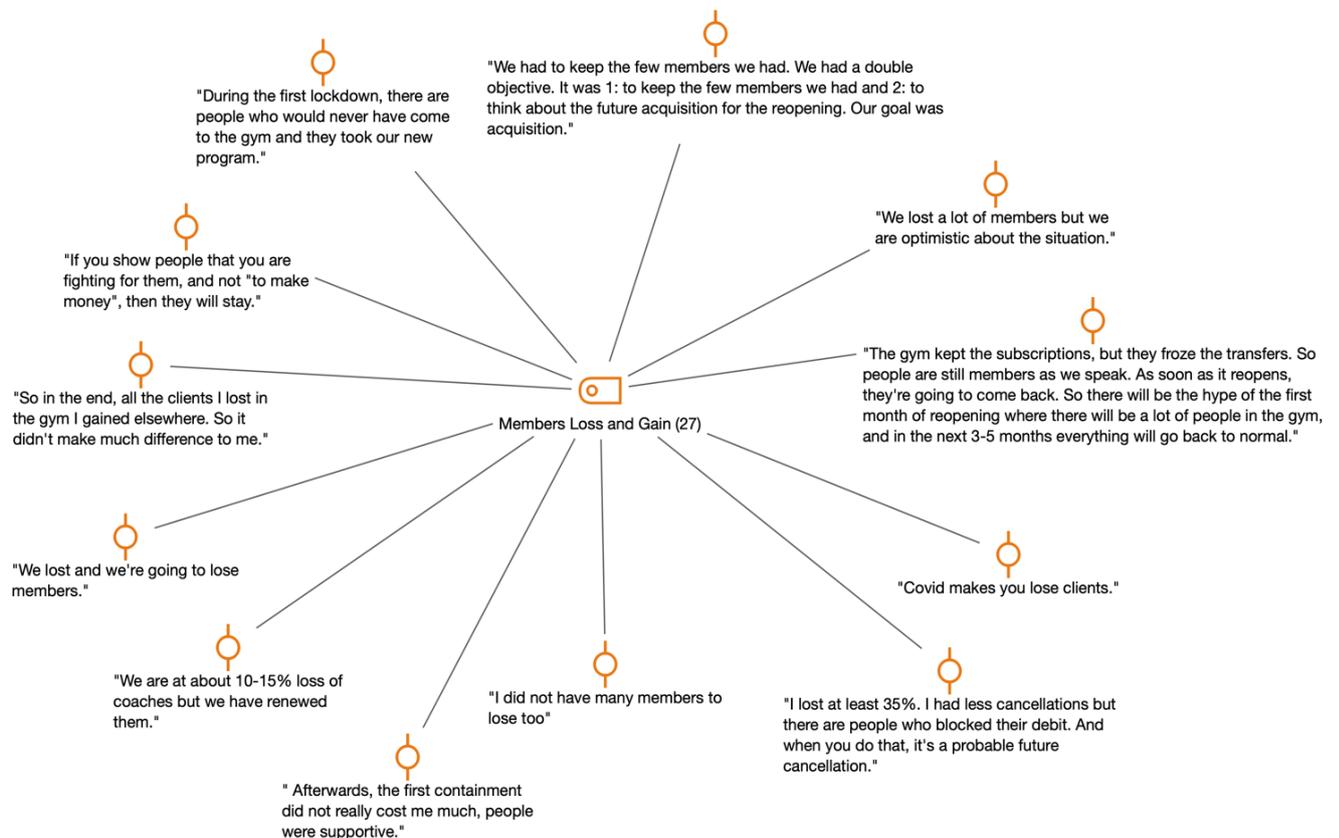


Figure 1 - Memberships in the gyms during the Covid-19. (source: Elaborated by the author, extracted from MAXQDA)

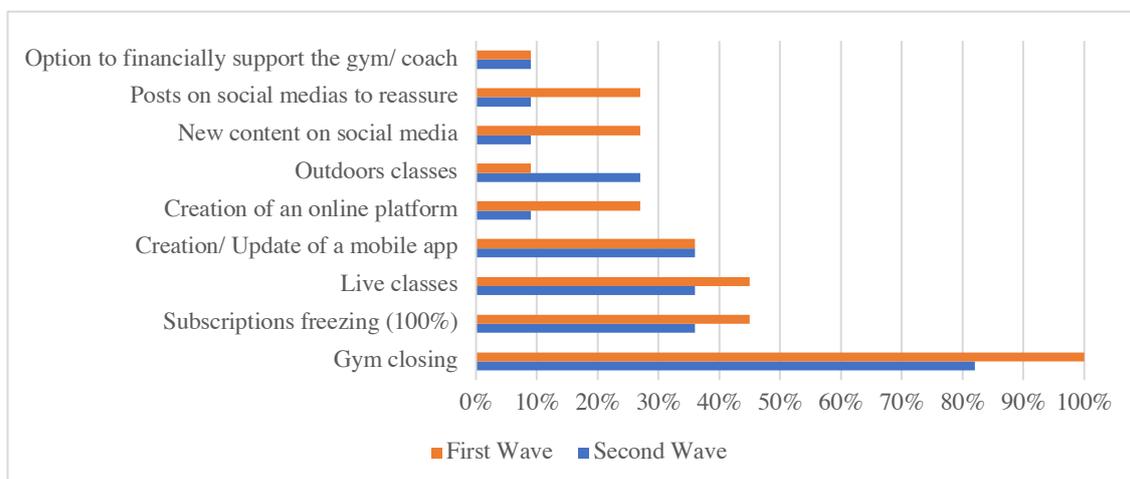
This map illustrates some quotes retrieved from the transcriptions, gathered based on the sub-code relative to the members loss and gain on the software MAXQDA. This tool reflects that the fitness gyms had different challenges and impacts dealing with their members. Some gyms lost many members because of Covid-19; some retained them with new programs; freezing their automatic withdrawals, and others did not lose many members thanks to their

support. According to the data, 45% of the interviewees related a 25-35% loss of their memberships because of the Covid-19 crisis, 36% succeed to keep their number of members stable, and only 18% of the respondents knew an increase in the number of memberships despite the Covid-19.

In addition, as observed while conducting the interviews, there is temporality in a crisis since the Covid-19 crisis is divided into two major waves. The first wave of Covid-19 lasted three months (from March 2020 to May 2020), and the first actions taken answered to a need to react quickly for the gyms, without any idea of the time it will last. The second wave of Covid-19 lasted several months, and gyms realized some changes and investment needed to be made to reinvent their business model to overcome a sanitary crisis, longer than they thought. Some actions are taken first in a context of urgency, but those changes may not be viable as a long-term solution. Nevertheless, some changes and solutions are kept as permanent new options offered to the members, for the post-Covid-19 era, and some of them were only temporary aiming to survive during the pandemic. Finally, the researcher collected the permanent changes made by those gyms, preparing for the post-pandemic scenario.

Dividing the changes and efforts made into two different periods allows the researcher to understand the temporality of this crisis, leading to a more relevant and viable reinvented business model. The following Graph 3 compares the first actions taken by the gyms when the Covid-19 crisis started in March 2020, and the actions taken during the second wave. This graph shows the answers from the following questions: *What happened in your company when the Covid-19 crisis started? What were the first steps taken? What has been done in gyms to reinvent their offer? To remain attractive and competitive, to survive? Do you now offer new services to meet the new needs of members? If so, which ones?*

Graph 3 - Comparison of first and second wave actions taken by the gyms during the Covid-19? (source: Elaborated by the author)



To summarize, the first actions that had to be taken as a direct reaction from the Government restrictions were : the closure of the gym (100%); the subscription freezing (45%); the creation or the update of a mobile app (coaching pre-made videos and programs) (36%); live classes (45%); posts on social medias to reassure (27%); offering new content on the gyms' social medias (content to present their gym, their team, their machines, exercises) (27%); the creation of an online platform (coaching pre-made and VOD videos and programs) (27%); and some offered the option to financially support the gym or the personal trainer himself (9%); or offered outdoor classes in limited group (9%). Some of those actions taken during the first wave have been kept by the gyms or developed by new ones during the second wave. According to the graph, most of the interviewed fitness gyms have been kept closed during the two waves, and they mostly continued to freeze the monthly levies from their members; they kept organizing live classes. Thus, during the second wave of Covid-19, they didn't create new mobile application (already created during the first wave); but they organized outdoors classes for their members for instance.

Moreover, aiming to adapt and reinvent their offers, some of the interviewees proposed additional actions during the second wage of Covid-19 that could be interesting in the development of a new and reinvented business model:

- A reservation system to limit the number of people in the gym (18%);
- Offering compensation packages for additional services (free coaching, train with a guest) (9%);
- A strict sanitary protocol (18%);
- Gym renovation, investments in new equipment (27%);
- Price reduction (18%);
- Offering a hybrid subscription (18%);
- Automation of the activity (18%);
- Creation of an online training center (for future employees, for consulting) (18%); and
- Offer new models of subscription (27%).

As an important part of the changes made by the fitness gyms to survive the Covid-19, the researcher asked the following question during the interviews: *People's habits have changed since last year, some people have started to practice a sport activity at home thanks to free Live on Instagram, YouTube or with free online programs. What do you think about this?*

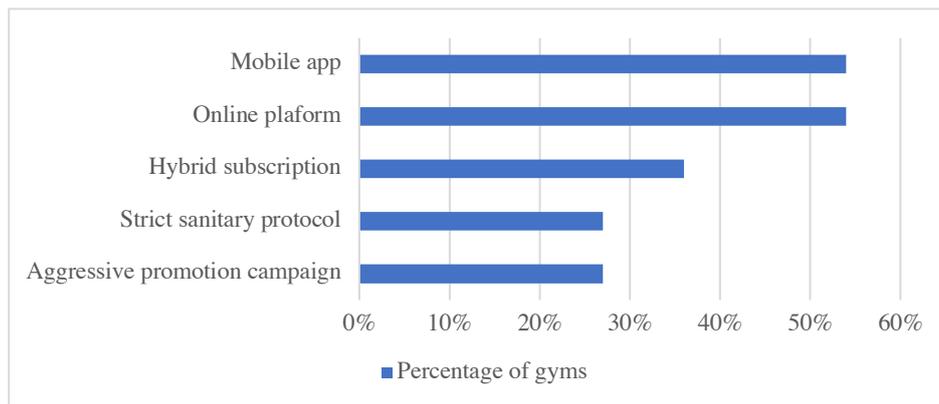
The Graph 2 in the Appendix 2 summarizes the main thoughts of the interviewees about this new way of practicing a physical activity and the trend of free programs online during the lockdown. According to fitness professionals' point of view, using digital solutions to continue to offer services to customers seems to be inevitable to survive as a fitness gym. Digital solutions could be beneficial since it motivates people to practice a physical activity (54%); and represents a great opportunity to catch new prospects as well (45%). In the framework of a hybrid subscription, it is a good "option" for those who do not have time to go to the gym when they want (45%). Nevertheless, according to the fitness professionals, those digital solutions have their limits when people lose their motivation because of a lack of personalization (36%); working out at home limits the margin of progress because of the lack of equipment (18%); and could even be dangerous without some professional guidance (18%).

The present research presents the actions taken by 11 interviewees working in eight different fitness gyms. Aiming to learn more about what happened in the other fitness gyms, the researcher asked the fitness professionals the following question: *What have you observed in competing gyms?* The Graph 3 in the Appendix 2 highlights the observations made by the interviewees about their competitors during this last year. This research shows that a significant part of gyms managed to adapt by offering other new services, whether outdoors or on video (54%); some gyms stayed opened to priority people with medical certificate (45%); and some gyms made aggressive offers to stay competitive. Unfortunately, in this Covid-19 crisis, a lot of fitness gyms permanently closed their doors because of a bad treasury management (bankruptcy) (18%); because they did not try to adapt (27%); or lost a major part of their members (18%). Finally, fitness professionals could also observe a global inaction from the competition during the pandemic (9%).

4.2.2.3 Fitness gyms perspective after the Covid-19

In addition to those results, the researcher tends to gather the five main changes that will be kept by the gyms after the Covid-19 to remain competitive. Consequently, the following questions were asked: *Do you think your company will continue to offer new forms of training to its members (videos offered on an app, a site, outdoor classes)? Or will it go back to the old business model: 100% presential?*

Graph 4 - Permanent changes to reinvent the gyms business model (source: Elaborated by the author)



The permanent changes made by the fitness gyms to improve their value proposition are the offering of a mobile application providing coaching pre-made videos and programs to the members (54%); the creation of an online platform (54%); but also the transformation of the subscriptions to include those options by offering hybrid and flexible subscriptions plans (36%) as planned for this interviewees' gym "With the same subscription, people will be able to go to the gym and then have access to videos and even online coaching." (*Interviewee n°4- CEO*); to cope with the collective awareness about the need for safety, the gyms will now provide a strict sanitary protocol (27%); and to regain and attract new customers they will deploy aggressive promotional campaigns (27%). These responses confirm that some of the changes were indeed temporary and will not be maintained due to the removal of restrictions and the reopening of gyms such as the subscriptions freezing; the option to financially support the gym with online funds; or the exclusive opening for priority persons with a medical certificate.

Then, the researcher asked the interviewees the following question: *If you had to choose the 3 main actions taken to survive and reinvent its business model and overcome this crisis: what would they be?* The data reveals that the main actions to reinvent the business model of a fitness gym are 1) the digitalization of coaching (72%); 2) the increase of communication with the members to reassure and build loyalty (27%); 3) making offers of subscription without commitment (27%) such as one of the interviewee explaining that "People used to go to a traditional gym, take a subscription by direct debit and it was renewed by tacit agreement every year. Except that now people won't want to commit themselves like that. If there is another Covid wave, how are we going to do it? In fact, we will allow people to come to the gym and they will pay what they consume. So, it will be on a billing basis. (*Interviewee n°7 – CEO*); then 4) personalization of coaching (27%); and 5) ensure health security (18%). The Figure 1

in the Appendix 2 illustrates additional answers from the interviewees about how they tend to reinvent their business model since Covid-19.

Finally, the interviewees have been asked: *What do you see as the future of gyms after Covid-19? What will change when the gym reopens?* The Graph 4 in the Appendix 2 illustrates what those professionals foresee about the future of gyms, after the Covid-19 crisis.

Most of the respondents declare that people will want to socialize and will go back to the gym at their reopening (63%) as exposed by an interviewee “In the month of September, a lot of people will go in the gyms and that people need to do physical activity but they especially need to socialize” (*Interviewee 7 – CEO*); they also believe that the gyms and the fitness sector will know a great rebound after the crisis with all the people who started to practice a physical activity during the last year and who will want to progress and have professional advice (54%). Moreover, they support that people will now pay more attention to the sanitary protocol and that it is a key point to consider while reopening (27%) as one of our interviewees said: “we already had very strict hygiene standards with plexiglass between each machine. I think that it will be even more, I think that people will be even more strict about hygiene” (*Interviewee n°10- Franchise owner*). The interviewees concede that in this crisis, some fitness gyms tried to adapt to survive and most of them will, but the ones which did not readjust their proposition will disappear (36%). As revealed by an interviewee, this need of adaptation will lead to the modernize the business: “In any case, regarding the final clientele, everyone will have succeeded in adapting. I think that the business will be more modern than before.” (*Interviewee n°4- CEO*). Indeed, despite the obstacles and negative impacts the interviewees testified about, they seem to be optimistic about the future of fitness gyms, after the Covid-19.

Through the interviews it is possible to understand what the obstacles were, the impacts and the changes made by the gyms during the various phases of Covid. The results from this inquiry highlight the temporality of a crisis like Covid-19 on companies deprived from offering their services to their members. This qualitative study conducted with fitness professionals has shown that new options will be offered to gym members such as a hybrid subscription, allowing them to come and train at the gym but also to take advantage of their mobile application or online platform to have access to exercises and coaching from home. For the gyms that are able to, a more flexible and non-binding membership would attract more members and completely rethink the way they train in the gym. During this year, people have become aware of the importance of physical activity for health and started to train, fitness gyms plan to attract those new prospects at the reopening with aggressive commercial offers.

4.2 Fitness gyms members perspective

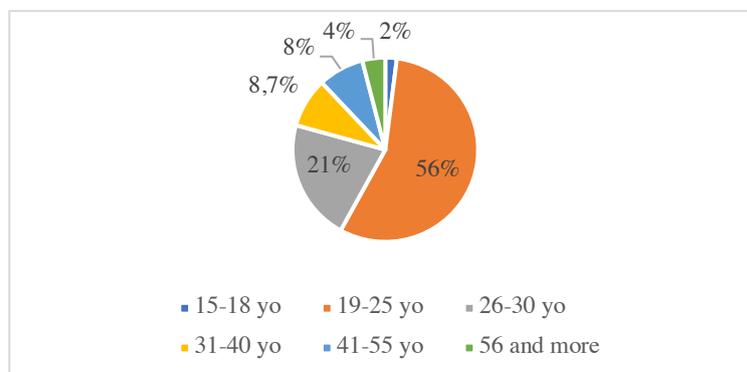
This section considers the perspective of people who practice a sport activity regularly, members of gyms or novices who started to practice a physical activity during the Covid-19 period. It is relevant to take into consideration the opinion and point of view of these people regarding the efforts made by these gyms to draw conclusions and present a reinvented business model as viable as possible for gyms after Covid-19.

4.2.2 Characterization of the sample of the survey

In the framework of the follow-up quantitative research, the researcher posted a survey on social medias to collect information, point of views and habits from people who practice a physical activity. The survey is composed of short-answered questions and collected 150 answers in a one-month period. The objective of this survey was to enrich the results and answers collected with the interviews. The Appendix 3 presents the survey guide used in the quantitative research process.

According to the results of the survey, in the 150 respondent, 65,3% are women and 34,7% are men which gives a mixed vision to the inquiry.

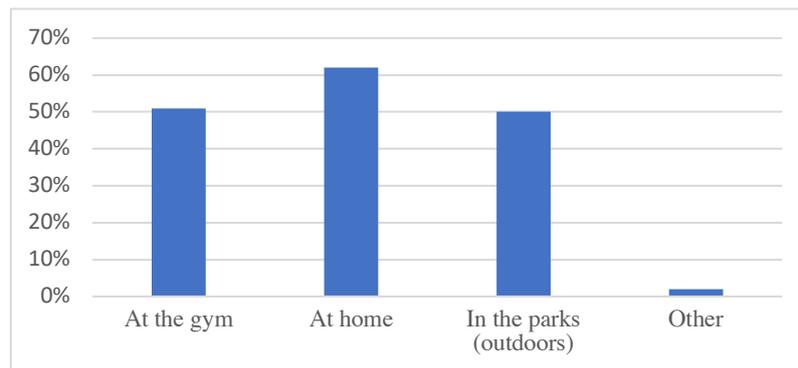
Graph 5 - Age of respondents (source: Elaborated by the author)



The Graph 5 shows that 56% of the respondents are between 19 and 25 years old. 21,3% between 26 and 30 years old. This information underpins that the respondents correspond to the main target of the gyms under study.

Moreover, 96% of the respondent do practice a physical activity. It is reliable to the inquiry since the researcher can collect their opinion about sport facilities closure and the impact of Covid-19 in their activities.

Graph 6 - The place where they practice a physical activity. (source: Elaborated by the author)



As stated in the Graph 6, 51% of the respondents practice at the gym and 62% answered they work out at home. This sample is consistent to relate what they observed during the last year of Covid-19 and talk more about their old and new habits in the practice of their physical activity.

4.2.3 Survey results analysis

The aim of this analysis is to describe and depict the results from the survey conducted with 150 respondents through social medias. This survey allows to have a better picture of how people who practice a sport and/or are members of fitness gym, lived the pandemic. This additional analysis represents an opportunity to confirm or not the success of the measures taken by gyms to continue to create value for their members. This survey is a way to understand and visualize what are the biggest difficulties for fitness gyms members to continue to train despite the closure of the gyms. This survey also addresses the emerging trends and methods of distance training, particularly through digital solutions.

The first part of the survey deals with the habits and the frequency of the respondents' physical activity. The idea behind this information is to reveal if the respondents can see a difference in their practice between the before and during Covid-19. Out of the 150 respondents, 147 answered about their frequency of training, and it reveals that the respondents are regular practitioners with a majority of: 2 to 3 times or more a week. This sample is then able to give a clear opinion about how the Covid-19 impacted their sport activity.

The next question reveals that 75% of the respondent already practiced a sport before Covid-19 and are aware of the old fitness gyms business model and set of offers. 23% of the respondent started during Covid-19 which gives the research the point of view of these new prospects gyms are going to target at the reopening.

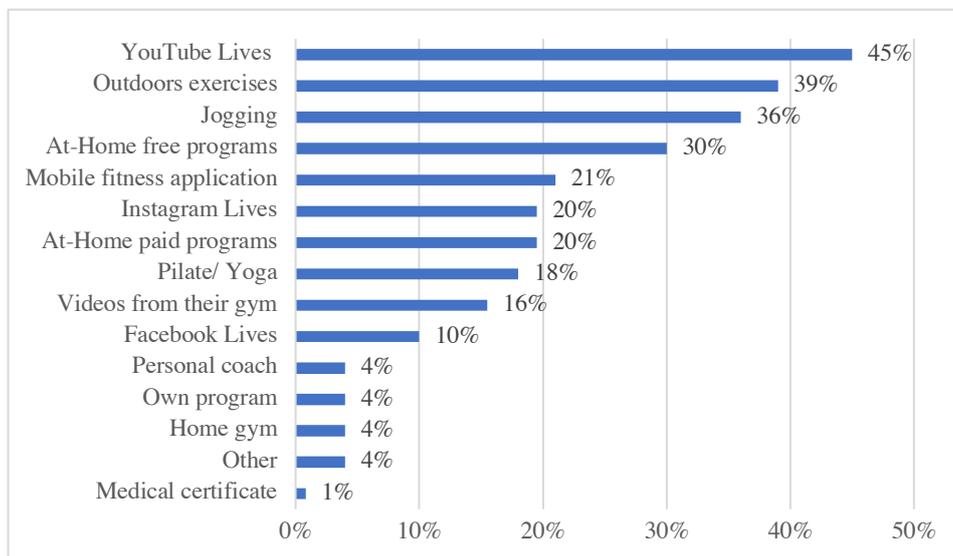
When the respondents were asked about the reasons why they started working out during the lockdown, for 55% it was because they finally had time and they had access to free programs online. This answer highlights that one criterion is of utmost importance in the practice of sports and that gyms must consider in their value proposition: accessibility.

In addition, 19% of the respondents started training with a free program on internet. This shows that since the Covid-19 crisis, an online offer can be a solution to attract prospects.

Afterwards, the researcher asked to the gym members what criterion they value the most in a fitness gym. The aspect they prefer in going to the gym is to have access to professional material; followed by having access to professional advice; then the “social” aspect of being member of a gym; and finally, the opportunity to go out of home.

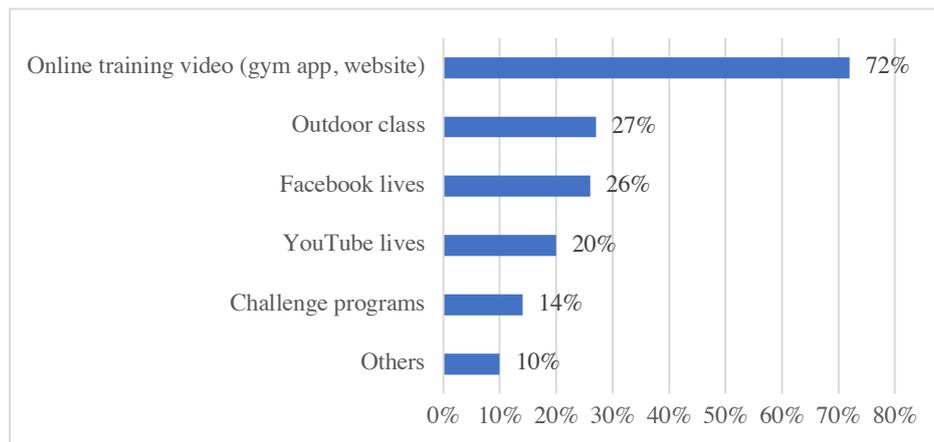
Thus, the selected sample is young, practices a regular sport activity and favours accessibility and access to equipment and professional support when they go to a gym. However, the restrictions due to Covid-19 forced fitness centers to close their doors for several months. The Graph 7 indicates what means were used to continue training and replace a gym.

Graph 7 - Methods to replace the fitness gyms while working out at home (Elaborated by the author)



They mostly replaced the fitness gyms with 1) YouTube lives and videos; 2) Outdoor exercises; 3) Jogging; 4) At-home free program; and 5) Mobile fitness application. It is also relevant to compare these results with the offers made by the gyms so that their members could continue to train despite the closure.

Graph 8 - What the gyms offered while they were closed (Elaborated by the author)



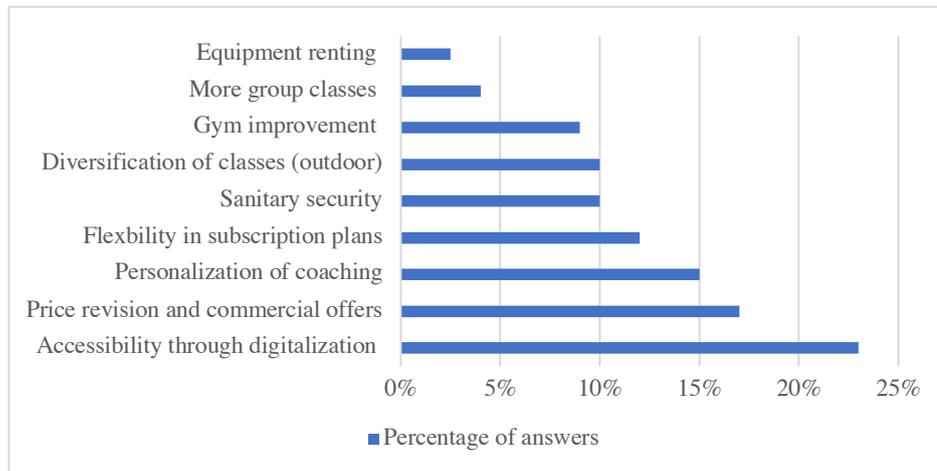
The Graph 8 shows that the respective gyms have indeed proposed suitable alternatives with online training video (gym app, website) (72%); outdoors classes (27%); Facebook lives (26%); YouTube lives (20%) and Challenge programs (14%). It could be observed that fitness gyms tried to create value considering their members preferences and based on the available resources (video equipment, mobile application, coaches to animate the video coaching).

In addition, people were locked up for several months and it is true that many of them started exercising, as noted earlier in the study. The concern now is to identify what aspects of at-home training respondents value to better comprehend the aspects from which gyms could be inspired to reinvent their offer after the pandemic. The results confirm that the biggest advantage is the easiness of access and the price (mostly free offers for online programs and videos).

Now that the reasons why people were working out at the gym and started working out at home are clearer, the question is whether respondents intend to go for the first time or return to the gym when it reopens. Results tend to show that they plan to continue working out at home even after reopening. The research also reveals that, upon the respondents, 62% will go back to the gyms at their reopening, and 74% plan to continue to train at-home despite the reopening. This information is interesting to weigh the importance for gyms to offer attractive and digital offers to attract new members at the reopening.

The Graph 9 illustrates what should be done to change and reinvent the gyms business model, according to the members.

Graph 9 - Gym members' expectations regarding reinvention of the offering. (Source: Elaborated by the author)



According to the present inquiry, gym members tend to expect new offers from the gyms to adapt to their new needs, born during the Covid-19. The graph reflects that the major change deals with the accessibility of training through digitalization. In other words, after the lockdown period, members got used to train at home and be able to train wherever they want thanks to mobile applications, online platforms, or live classes on social medias. Now that they know it is possible, they express a desire to keep benefiting from those new solutions with a hybrid subscription plan combining video coaching and in-hall access.

Moreover, when the respondents were asked about the changes fitness gyms should undertake, they are numerous to talk about the price and promotional offers. After a year of closing, members want some compensations and wait for aggressive commercial offers from the gyms (such as: free-coaching, reimbursement or deferral of the period paid during the closure, one month offered, train with a guest etc.) Then, members express their need of personalization of coaching and services in their fitness gym with easier access to personal trainer for instance, more explanation to use the equipment etc.

In addition to that, the survey answers reveal that fitness gym members are now looking for flexibility in their subscription plan enabling them to customize their options (digital/ not digital; outdoor/indoor; group class/ not group class; monthly membership/ yearly). This flexibility is important to those members who are more aware of their needs and who fear a potential new closure. Finally, this inquiry puts in light that the pandemic marked the members with the importance of sanitation and health. The results demonstrate that an exemplary sanitary

control is a criterion members will consider while subscribing to a gym. Other ideas revealed from the survey are to offer more diversity in the classes, especially the development of outdoor group classes, the improvement of the gyms providing more machines, space and coaches, wider time slots, and equipment rent.

This survey demonstrates that people have indeed developed a taste for sports during the lockdown and present a great opportunity for gyms to attract new prospects. In this logic, the figures show that most respondents will be present and will go to the gym when it reopens. However, this year will have allowed practitioners to realize that it is also possible to train at home and a part of them will indeed continue to train at home despite the reopening. These survey results also highlight the development of digital solutions in sports practice. These digital solutions will now tend to be an integral part of the gym's offer to meet a new need of customers: to be able to work out where they want, when they want.

V. DISCUSSION & FINDINGS

5.1 Obstacles the pandemic represents for fitness gyms

The results from the present research point out that the closure of gyms was the first and the major obstacle to continue to offer their services during the Covid-19. These results corroborate with the findings of Komańda (2020) who highlights that this pandemic did not only affect the fitness gyms owners and employees, but also the personal trainers. Moreover, this author explains that because of the deprivation of the opportunity to achieve revenues from the conducted activity, many entities would simply not survive the period of obligatory lockdown, for financial reasons. This information does echo with the results from the interviews about the affected cash flows and the importance for gym owners to manage this issue and adapt to survive. Indeed, Papadopoulos et al. (2020) expose in the literature that “the COVID-19 pandemic has had a negative impact on small businesses, substantially accelerating business failure and adversely affecting financial viability.”. These obstacles under study reflect a need for fitness gyms to adapt their offers to their changing environment. As explained by Voelpel et al. (2004) highlighting that organizations must be able to “revise their business models to ensure that their strategies are viable in an ever-changing competitive environment”. The present study adds to the field of study that some professionals define this crisis as an opportunity to develop and improve their activity resulting in the rebound of their business. This observation brings to the existing literature a broader vision of the impact of Covid-19 on fitness gyms, and thus to understand why some gyms did not manage to survive this crisis, and therefore to identify the efforts needed to avoid a potential bankruptcy.

The literature exposes the difficulty of the closure imposed on gyms, but the present study adds information about the gym members perspective about this closure, contributing to a change in their habits. Indeed, the members were not able to train as they used to, inducing the suppression of their subscription plan, therefore many gyms decided to suspend or “freeze” the automatic levies from their members to try to retain them. Furthermore, in this research it has been shown that the decision to “freeze” the levies was not straightforward for all gyms. Some could afford to freeze them immediately because they had the resources and support to survive without it. However, most gyms faced the same dilemma and had three choices, according to the study: continue to charge their members to keep generating revenues, risking that these members would unsubscribe and not return. Alternatively, they could reduce the amount they charge by offering new ways to train to compensate or decide to charge the total

amount and offer the charged period when the gyms reopen. This is confirmed by Komańda (2020) referring to the second option “It means that they offered their clients an automatic prolongation of a contract by the period of time during which the possibility of using services was suspended”. Nevertheless, there is very few research exploring this strategic dilemma about subscriptions. The present research highlights that the decisions made during the Covid-19 by the gyms should consider the post-Covid era, not only trying to survive the crisis but preparing for the future reopening. This study allows us to put the emphasis on the temporality of a crisis like Covid-19, considering the different actions taken according to the period and the needs it represents.

In addition, the interviewees, and the survey respondents both referred to the fear of commitment as an obstacle to subscribing in a gym after the Covid-19. In fact, the existing research discuss the different criteria for attracting new members in a gym, and the characteristics people look for in a gym such as a kind customer service, the existence of loyalty programs, tangible quality, and online marketing strategies (León-Quismondo et al., 2020). The present study introduces new characteristics that fitness gyms members consider such as the price, the personalization and coaching, diversity of classes, location, space and equipment, and cleanliness.

Moreover, the literature also exposes the issue of creating loyalty among members of gyms in the framework of an increasingly competitive sector (Lalouette, 2021). Nevertheless, very few results relate to the fear of commitment born during the Covid-19, which represents one of the main obstacles of gyms at the time of this inquiry. Indeed, this fear of commitment caused members loss in most gyms in France as the interviewees explained in the inquiry, since many members fear a potential new closure of their gym. In addition to that, it is relevant to remind that one major obstacle raised by the pandemic, and that gyms have never been confronted with, is the apprehension of the virus. Many authors related the fact that the Covid-19 represents for fitness clubs an “existential threat to their business model in that it suddenly represented a high-risk activity and not one that was associated with health and well-being.” (Ananthakrishnan et al., 2020). Those research corroborate with the results of the present study. Both professionals and members put the emphasis on this new condition of offering a safe environment to their clients. As evoked by Freitas and Lacerda (2018), “the cleanliness and the necessary disinfection protocols, they will continue being necessary for the post-COVID-19 era.”. Fitness professionals agree that ensuring a safe place so that their members do not feel endangered by the virus is key. A strict sanitary protocol (and/or label) is not an option anymore.

Gym's members confirm this information on the survey results, by insisting on their need of a strict sanitary protocol to ensure safety while practicing physical activity at the gyms reopening.

Finally, at the heart of this pandemic, social distancing, and people's consciousness regarding the importance of sport practice have resulted in the emergence of multiple digital solutions for gyms. As revealed in the present study, the Covid-19 was an opportunity for a great number of people to realize the importance of physical activity and resulted in a global consciousness that practicing a physical activity can also be done at home. Moustakas et al. (2020) also confirm that growing awareness but does not explain in depth how it affects gym members of prospects. There are numerous research about companies offering digital solutions to adapt, diversify their offer, and survive the Covid-19 crisis. The results from the present research corroborate with the findings of Baena-Arroyo et al. (2020), concluding that the inclusion of virtual fitness classes is leading to an increase in the offers available to consumers, expanding the hours that consumers can exercise and leading to a greater variability of customer services.”. According to the interviewees, digital solutions are a new way of training, if a fitness gym does not adapt and offer this new type of service, then it does not survive. They also add that those new solutions are great as an additional offer when people will go back to the gyms. Ananthkrishnan et al. (2020) imply and confirm the results by explaining that “digitally mediated interactions could expand the range of fitness options available to customers. The nature of the relationship between a gym and customers could be transformed. It allowed gyms to offer more content choices while reducing the cost of access to such services (same as entertainment with streaming etc.)”

The results from the survey conducted in this study reveal that according to fitness gyms members and prospects, digital is indeed a good way of working out but will never replace a gym. Indeed, digital solutions are not enough to keep the members motivated and loyal. Some respondents, just like many other people in France, used those digital solutions (mobile app, online platforms, live classes) as a starting point in their training since it was more accessible. Nevertheless, the present study reveals a crucial need from members for a personalization of the service offering which lacks research in the literature. Indeed, this growing need among the fitness practitioners could represent a new field of research for fitness professionals.

5.2 Main efforts and changes made by fitness gyms to adapt and overcome the Covid-19 crisis

In other words, there is already a consensus about the importance to digitalize its offers to survive a crisis like Covid-19 and create more value for its customers. It is accurate to assume that digital solutions are the key to overcoming a pandemic that restricts contact between people to a minimum and therefore meetings in indoor locations. Therefore, three out of the five main changes undertaken by sports gyms in this study are linked with digital service offer such as the creation of a mobile application providing coaching pre-made videos and programs to the members; the creation of an online platform; and the transformation of the subscriptions to include those options by offering hybrid subscriptions plans. Komańda (2020) explored this subject by adding that those “undertaken actions were related to maintaining relations with clients via social media and encouraging them to physical activity with the so-called challenges. The aim was to encourage and prepare the existing club members to undertake proper physical activity in the club after the epidemic restrictions have been lifted.”.

Nevertheless, the present study provides relevant contributions to managers and members of fitness gyms by adding the growing need of flexibility, accessibility, and security for customers since the Covid-19. As a matter of fact, this research demonstrates the importance for fitness gyms to adapt, not only by offering digital solutions to their members, but providing flexibility in their solutions. As exposed in the study, the main obstacle of the Covid-19 crisis is the fear of commitment from members, the fear of a new lockdown and a new closure of fitness gyms. People tend to want more flexibility in their subscription and their ways of training. According to the mixed research conducted by the author, fitness gyms members want to be able to train wherever they want, whenever they want. It disrupts completely the actual business model of fitness gyms, a brick-and-mortar business built on long-term contracts. The present study results resonate with the literature which exposes the idea of operating on a “pay-as-you-go basis” instead of the typical monthly or annual subscription plan (Conlon et al., 2019). Indeed, this idea was mentioned by one of our interviewees with the aim of giving maximum freedom to its members. It was also mentioned several times in the quantitative study that members would like to have more freedom in what they pay for and more variety in their subscription choices. However, this option is not available for all gyms and can be a “double-edged sword.” (*Interviewee n°7 – CEO*). Nevertheless, to offer more flexibility, this study shows that gyms can review their prices for monthly memberships for example and deploy attractive promotional campaigns.

Aiming to cope with the collective awareness about the need for safety, the fitness gyms had to revise their standards regarding the hygiene and sanitation of their establishments. There is some research on this new need for safety among gym members such as Komańda (2020) which explains that for example a list of certain guidelines is provided to enforce and ensure the safety of members. These guidelines range from the number of people allowed in the gym, to the disinfection protocol to be followed, to the distances between machines and other facilities. One participant in the qualitative study explained that he personally took the initiative to have an expert intervene to have a health label to reassure and attract new clients to his gym. These efforts are now essential for gyms, and this study will have revealed that communicating about safety will be key to the reopening of gyms.

5.3 Permanent changes fitness gyms must implement to survive the Covid-19

The present research exposes the diverse obstacles and impacts the Covid-19 crisis represents for fitness gyms. The temporality of a crisis such as Covid-19 suggests a need for adaptation from companies depending on the stage they are in. This research provides new insights about the actions taken by gyms depending on the period they are in and how they made their decisions based on the urgency and their resources. We have divided this crisis into two major waves, indicating that the decisions made in the shorter but more unexpected first wave were not the same in the much longer second wave. The research showed that some changes were temporary, and others would be permanent in the offering of gyms to their members. By collecting data about the permanent changes fitness gyms will implement, the research adds information on the existing literature dealing with the relevance of allowing a “creative destruction of its own business” by adopting a “systemic thinking” to reinvent a business model (Voelpel et al., 2004). Indeed, while the literature presents four main elements to consider: customers; technology; business network; and profitability, this research suggests permanent changes adopted by fitness professionals such as: the offering of a mobile application; an online platform; a hybrid subscription; a strict sanitary protocol and aggressive promotion campaigns. Those results are relevant with the literature since they corroborate with the four elements of the business model reinvention by applying them to the fitness gyms business. Moreover, the present study adds to the literature that fitness gyms members are now looking for accessibility through digital solutions; affordable prices and commercial offers; more personalization; a strict sanitary security; and flexibility in their subscription plans. Those results form a solid framework for the proposal of a reinvented business model.

5.4 Findings

As Baena-Arroyo et al. (2020) exposed, in the fitness sector, the competitive advantage is related to the differentiation strategies like low-cost fitness centers. They agree to say that the “characteristics defining low-cost fitness centers include: the ability to operate the entire club with a sole person as the staff; a gym-only proposition; heavy technology and web use; a price point set at a minimum of 50% lower than the industry average; and a facilities design which is very well cared for.” Those fitness gyms know a significant growth in Europe, but they had to face a pandemic questioning their entire mode of offering their services to their members.

The digital transformation could be an answer for fitness gyms to survive a crisis like the Covid-19 where gyms were imposed to close for several month. During the last year, an important growth in fitness mobile applications around the world was observed. These apps allow their members to keep practicing a physical activity, at-home, until the fitness gyms open again. According to a study from the Transnational Behavioral Medicine (2020), “wearables or PA smartphone applications (apps) may have helped individuals remain active during restricting circumstances of Covid-19, such as lockdown. Particularly, PA apps that do not require the adoption of new hardware have the potential to be cost-effective ways to promote PA, given that the users adhere to the use of the apps.” (Yang and Koenigstorfer, 2020).

Many of them have tried to adapt by offering new ways to train despite the restrictions such as online coaching, publication of programs and exercise tips on their online platform or mobile application etc. However, other gyms failed to survive as they lack the necessary resources to adapt and therefore survive the Covid-19 crisis. Indeed, the authors talk a lot about digital transformation as an answer, but members and gyms have shown that offering a mobile app is not enough, gyms need to adjust their subscription models, improve their facilities, and diversify their training and coaching methods.

Furthermore, fitness gyms are facing a growing need to reinvent their business model in order to survive, but also to improve their competitive advantage in a changing environment. With low-cost fitness centers, as a growth driver for fitness in France, and the emergence of specialized "boutiques" or "studios" that are multiplying in the country, the fitness sector should continue to grow over the next few years (Rochepault, 2018).

In furtherance of its survival in a disrupted sector, a company must indeed be agile and able to reinvent its strategy on a continuous basis. The starting point always being creating value for the customers (Voelpel et al., 2004).

Finally, it may be relevant to consider the interdependence of its activities. According to the literature, strong interdependencies between the activities of a business model would allow a greater competitive advantage (Lanzolla and Markides, 2020). Fitness gyms should indeed build interdependencies between their older and newest activities which are resilient to change; and make sure they provide a strong external fit to respond quickly to environmental changes such as a pandemic.

As part of the research objective, the present study is therefore about presenting a possible reinvented business model canvas, based on the nine building blocks, for fitness gyms.

This new business model tends to respond to the new needs and challenges of a post-pandemic, transformed and reinvented industry as illustrated in the Table 5. In this table, the modifications and new propositions that are advised according to the obtained data and research are presented in shaded areas. These shaded areas are used to ease the comprehension of the solutions provided before the advent of Covid-19 and the new solutions that are suggested in this study for future delivery in a post Covid-19 environment. Therefore, this reinvented business model is expected to help and guide fitness centers in the near future, although it does not guarantee their growth and sustainability.

Table 5 - Proposal of a reinvented business model for fitness gyms (source: Elaborated by the author)

Key Partners	Key Activities	Value Proposition	Customer Relationships	Customer Segments
<ul style="list-style-type: none"> - Nutrition products & accessories providers - Personal trainers - Nutritionists - Franchises - Brand licenses - Technology consultant companies (app and platform development) - Cleaning companies - Scientific committee (sanitary label) 	<p>Key Resources</p> <ul style="list-style-type: none"> - Gym facilities - Personal trainers' expertise - Cardio and Weight Equipment - Website builder - Mobile app and online platform 	<ul style="list-style-type: none"> - Improve Health and well-being - Easy Access to Club Network - Affordable subscription fee - Possibility to train with a friend - Quality equipment (cardio, weights, benches) - Group classes - Personal coaching - Flexible subscription plan (no commitment option) - Online training access 	<p>Channels</p> <ul style="list-style-type: none"> - Franchises - Brand licenses - Social Medias - Promotional deals - Marketing campaign - Website - Online platform - Mobile application 	<ul style="list-style-type: none"> - Juniors (16-19 years) - Young Adults (20-35 years) - Adults (36-59 years) - Seniors (+60 years) - People who have interest in fitness for losing weight, improving physical appearance
<p>Cost Structure</p> <ul style="list-style-type: none"> - Rent of space - Personal wages - Cost of equipment - Insurance - Management/ utility expenses - Logistics costs of e-boutique - Marketing - Web and app maintenance - Investment in digitalization (mobile application, online platform) - Cleaning and disinfection services 		<p>Revenue Streams</p> <ul style="list-style-type: none"> - Gym Memberships (long-term contracts) - Partnerships (local businesses, sport & health brands) - Nutritionists monthly rent - E-shop (equipment, accessories, nutrition) - Personal Trainers monthly rent - Gym Memberships (monthly contracts) - Platform and mobile application option memberships - Personal programs sales - Promotional offers (12 months subscription, 1 month free) 		

Based on the literature review, the in-depth interviews conducted with fitness professionals and the survey results from the fitness gyms members, the nine building blocks composing a fitness gym business model can be reinvented as followed:

- 1) **Value Proposition:** Fitness gyms should now propose more flexible subscription plans allowing their members to select what corresponds the most with their needs (digital/ not digital; outdoor/indoor; group class/ not group class; monthly membership/ yearly). They should also provide online training access to their members (or provide it for a fee to prospects) to offer the option to train no matter where they are.

- 2) **Customer Segments:** The customer segments do not need to be changed for the good progress of fitness gym business model reinvention.
- 3) **Channels:** Fitness gyms should now offer their services through digital solutions such as a mobile application or an online platform.
- 4) **Customer Relationship:** Fitness gyms should work on improving their member fidelity by personalizing offers, improving follow-ups, and offering rewards to the most loyal members.
- 5) **Revenue Stream:** Fitness gyms should develop new ways of generating incomes with attractive price for flexible memberships (monthly contracts); personal programs sales (developed by the gym and offered to members as an option); with their mobile application or online platform subscriptions (for instance, free for the members but sold for non-members); and with promotional offers generating potential future revenues.
- 6) **Key Resources:** Fitness gyms should improve and diversify their resources by developing digital solutions for their gym.
- 7) **Key Activities:** Fitness gyms should develop their online coaching activity to accompany their members everywhere they might be.
- 8) **Key Partnerships:** Fitness gyms should develop partnerships with technology consultant companies to develop a functional mobile app and an online platform to post training videos and live coaching; with cleaning companies to guarantee the maintenance of hygiene standards; and with a scientific committee to grant them a label recognizing that their gym complies with health standards and reassuring their members.
- 9) **Cost Structure:** Fitness gyms will have to invest in digital solutions as well as in their maintenance to ensure their proper functioning. Finally, they will have to increase their costs of maintaining hygiene, which has become more stringent than before.

As a fitness gym, in a post-Covid-19 era, it is then crucial to offer flexibility in the subscription plans to face the fear of commitment, offer accessibility through digital solutions to allow them to train at the gym and outside the gym, and ensure security to its members through a strict sanitary protocol.

VI. CONCLUSIONS

The objective of the present study is to present how fitness gyms business model can be reinvented to face the Covid-19 crisis. In order to answer this question, the author has analyzed the business model of gyms before Covid-19 in order to understand the real issues and challenges that this crisis has raised for this industry. Once the basic business model was understood, it was necessary to identify the main efforts and changes made by these gyms to continue offering their services to their members. By analyzing the two perspectives: the gym professionals' and the fitness practitioners, the author was able to report on the new needs and actions to be taken to continue creating value. Thus, the author was finally able to present a possible reinvented business model, with the objective of guiding gyms in the post-Covid-19 era offering flexibility, accessibility, and security to its members.

To conclude, after more than a year of pandemic, this study carried out in France has allowed us to report on the new trend of digital solutions to meet the growing need of accessibility for gym members and/or prospects. Many people in France have started to train from home thanks to mobile applications, video platforms and live classes offered by gyms and influencers. This wave of digitalization is key for gyms and those that did not adapt have hardly survived the Covid-19 crisis. In this regard, gyms should offer a hybrid membership, whereby members can continue to train at the gym but also from home to benefit 100% from their services and become more loyal. Besides, this study revealed the growing awareness about the importance of sports for well-being and health. Both observations are important for gyms to consider in order to attract new prospects, as they prepare for the post-Covid-19 period. By triangulating the findings from the literature review, qualitative and quantitative research, the author established the importance of flexibility and security for gym members, marked by the pandemic. It is now key to offer gym members flexible and non-binding memberships. If this option is not available, gyms will have to launch aggressive and attractive promotions to convince members to enroll. Finally, in terms of safety, when gyms reopen, it is vital for managers to ensure impeccable hygiene and health safety for members to avoid any hesitation due to the virus.

The study main strength is its mixed research method allowing the author to collect both gym members and fitness professionals' perspectives. The triangulation of the data collected during the study and the existing literature made it possible to propose a reinvented business model that is more reliable and realistic in the light of the Covid-19 virus, which is still affecting gyms in France at the time of this research's completion. Furthermore, the samples used for

both qualitative and quantitative research were quite representative and diverse in order to give a reliable reflection from the fitness sector in France in 2021.

The study main limitation is that the study was only conducted in France with a small sample of fitness professionals. The qualitative research was conducted with professionals from four main areas in France, where mobility and habits may differ from other cities in France, depending on whether it is more rural or urban area. This limitation could have influenced the answers from the interviewees and their members' needs. Moreover, the researcher was not able to interview professionals in senior positions in the largest groups to explore in greater detail future strategies and efforts to reinvent themselves. This inquiry studied the perspectives and ideas of professionals working in eight distinct companies. However, for the employees of the larger companies, it was mostly observation due to a lack of information on their behalf. Finally, this study was conducted exclusively in France and only reports on restrictions imposed in that country. Responses and actions taken may differ from one country to another, and the length of time their fitness facilities remain closed. Once again, this study evoked the temporality of a crisis and the actions taken in consequence. Depending on this temporality and the restrictions imposed in the country, the responses could be quite divergent.

Further studies could be directed to collect more diverse and numerous opinions and testimonies from fitness professionals with decisional power. Future research could expand the inquiry outside of France, in European countries to analyze and compare the new needs of fitness practitioners for the post-Covid-19 era such as the personalization of their services.

VII. REFERENCES

- Alao, B. (2020). Managing Digital Transformation Strategies for Business Survival amid Pandemics. *IJAEM*, 2(8), 626–634. <https://doi.org/10.35629/5252-0208626634>
- Ananthakrishnan, U. M., Chen, J., & Susarla, A. (2020). *No Pain, No Gain: Examining the Digital Resilience of the Fitness Sector During the COVID-19 Pandemic*. SSRN Electronic Journal. <https://doi.org/10.2139/ssrn.3740143>
- Baena-Arroyo, M. J., García-Fernández, J., Gálvez-Ruiz, P., & Grimaldi-Puyana, M. (2020). *Analyzing consumer loyalty through service experience and service convenience: Differences between instructor fitness classes and virtual fitness classes*. *Sustainability (Switzerland)*, 12(3). <https://doi.org/10.3390/su12030828>
- Baron, A. (2021). The physical and sports practice of the French under the sign of the first confinement (in French). *Injep Analyses & Synthèses*, N°45, pp 1-4.
- Basic-Fit. (2018). *Annual Report 2018*. <https://ar2018.basic-fit.com/Downloads/Basic-Fit%20Annual%20Report%202018.pdf>
- Bigelow, L. S., & Barney, J. B. (2020). What can Strategy Learn from the Business Model Approach? *Journal of Management Studies*, 84(12), pp1-10. <https://doi.org/10.1111/joms.12579>
- Creswell, J.W. (1994). *Research design: Qualitative and Quantitative approaches*. London: Sage Publications.
- Conlon, C., Myers, B., Cook, J., Virtue, K., & Friedman, J. (2019). *The Dawn of the Age of Omni-Fitness: Why Gyms, Health and Fitness Clubs are Becoming a Stronger Presence in U.S. Shopping Centers*. Industry Insights: Industry Sector Series, December 2018, 1–3.
- Deloitte. (2019). *European Health & Fitness Market Report 2019*. https://www2.deloitte.com/content/dam/Deloitte/pl/Documents/Reports/pl_kluby_fitness_Europe Active_Deloitte_EHFMR_2018_PL.PDF%0Ahttps://www2.deloitte.com/de/de/pages/consumer-business/articles/report-european-health-fitness.html
- Deloitte. (2020). *European Health & Fitness Market Report 2020*. https://www2.deloitte.com/content/dam/Deloitte/pl/Documents/Reports/pl_kluby_fitness_Europe Active_Deloitte_EHFMR_2018_PL.PDF%0Ahttps://www2.deloitte.com/de/de/pages/consumer-business/articles/report-european-health-fitness.html
- European Commission. (2017). Special Eurobarometer 472 - December 2017 “Sport and physical activity” Report. In *International Journal of Behavioral Nutrition and Physical Activity* (Vol. 15, Issue 1). [https://ijbnpa.biomedcentral.com/articles/10.1186/s12966-018-0756-3%0Ahttp://www.ncbi.nlm.nih.gov/pubmed/30547824%0Ahttp://www.pubmedcentral.nih.gov/articlerender.fcgi?artid=PMC6295091%0Ahttp://dx.doi.org/10.1016/S2214-109X\(18\)30357-7%0Ahttp://shura.shu.a](https://ijbnpa.biomedcentral.com/articles/10.1186/s12966-018-0756-3%0Ahttp://www.ncbi.nlm.nih.gov/pubmed/30547824%0Ahttp://www.pubmedcentral.nih.gov/articlerender.fcgi?artid=PMC6295091%0Ahttp://dx.doi.org/10.1016/S2214-109X(18)30357-7%0Ahttp://shura.shu.a)
- Erlanson, D. A., Harris, E. L., Skipper, B. L., & Allen, S. D. (1993). *Doing naturalistic inquiry: A guide to methods*. London: Sage Publications.
- Fletcher, G., & Griffiths, M. (2020). Digital transformation during a lockdown. *International Journal of Information Management*, 55(June), pp. 1–3. <https://doi.org/10.1016/j.ijinfomgt.2020.102185>
- Freitas, A. L. P., & Lacerda, T. S. (2018). Fitness centers: What are the most important attributes in this sector? *International Journal for Quality Research*, 13(1), 177–192. <https://doi.org/10.24874/IJQR13.01-11>
- Johnson, M.W., Christensen, M. C., & Kagermann, H. (2008). Reinventing Your Business Model. *Harvard Business Review*, December 2008, pp50–60. <http://web.b.ebscohost.com.libproxy.ucl.ac.uk/ehost/pdfviewer/pdfviewer?vid=1&sid=6a549f54-90aa-4d6f-b541-19ebe9ef5bdf%40sessionmgr103>
- Komañda, M. (2020). *Fitness Clubs Facing Covid-19 Lockdown*. 2020, 159–172. <https://doi.org/10.5604/01.3001.0014.8078>
- Lalouette, A. (2021, 21 october). *Fitness center, a model that is reaching saturation and is running out of steam, which growth vectors should be favored?* (in French) Square, 1–5. <https://blog.square-management.com/2019/10/21/salle-de-sport-un-modele-qui-arrive-a-saturation-et-sessouffle-quels-vecteurs-de-croissance-privilegier/>
- Lanka, E., Lanka, S., Rostron, A., & Singh, P. (2021). Why We Need Qualitative Research in

- Management Studies. *Journal of Contemporary Administration*. (Vol. 25, n.2. pp. 1-4).
doi.org/10.1590/1982-7849rac2021200297.enl
- Lanzolla, G., & Markides, C. (2020). A Business Model View of Strategy. *Journal of Management Studies*. <https://doi.org/10.1111/joms.12580>
- León-Quismondo, J., García-Unanue, J., & Burillo, P. (2020). Best practices for fitness center business sustainability: A qualitative vision. *Sustainability (Switzerland)*, 12(12).
<https://doi.org/10.3390/su12125067>
- LesEchos investir. (2020) *BASIC-FIT*. LesEchos investir. <https://investir.lesechos.fr/cours/profil-societe-action-basic-fit,xams,bfit,nl0011872650,isin.html>
- Magretta, J. (2002). Why Business Models Matter. *Harvard Business Review*. May 2002. pp. 86–92.
<https://hbr.org/2002/05/why-business-models-matter>
- Moradi, E., Jafari, S. M., Doorbash, Z. M., & Mirzaei, A. (2021). Impact of organizational inertia on business model innovation, open innovation and corporate performance. *Asia Pacific Management Review*, pp.1-8. <https://doi.org/10.1016/j.apmr.2021.01.003>
- Moustakas, L., Szumilewiz, A., Mayo, X., Thienemann, E & Grant, A (2020). Foresight for the Fitness Sector: Results from a European Delphi Study and Its Relevance in the Time of COVID-19. *International Journal of Environmental Research and Public Health*. 17(23): 8941.
<https://doi.org/10.3390/ijerph17238941>
- Osterwalder, A., & Pigneur, Y. (2013). *Business Model Generation: A Handbook for Visionaries, Game Changers, and Challengers*. Wiley.
- Papadopoulos, T., Baltas, K. N., & Balta, M. E. (2020). The use of digital technologies by small and medium enterprises during COVID-19: Implications for theory and practice. *International Journal of Information Management*, 55(June), 102192.
<https://doi.org/10.1016/j.ijinfomgt.2020.102192>
- Pigneur, Y., Osterwalder, A., Bernarda, G., Smith, A. & Papadacos, T. (2015). *Value proposition design: how to create products and services customers want*. Wiley.
- Prescott, J.E., & Filatotchev, I. (2020). The Business Model Phenomenon: Towards Theoretical Relevance. *Journal of Management Studies*, 58: 517-527. <https://doi.org/10.1111/joms.12610>
- Riseth, L., Nøst, T. H., Nilsen, T. I. L., & Steinsbekk, A. (2019). Long-term members' use of fitness centers: A qualitative study. *BMC Sports Science, Medicine and Rehabilitation*, 11(1), 1–9.
<https://doi.org/10.1186/s13102-019-0114-z>
- Ritter, T., & Pedersen, C. L. (2020). Analyzing the impact of the coronavirus crisis on business models. *Industrial Marketing Management*, 88(April), 214–224.
<https://doi.org/10.1016/j.indmarman.2020.05.014>
- RochePault, D. (2018). *Fitness, the first European sport activity* (in French). Resamania.
<https://www.stadline.com/marche-fitness-sante-2018/>
- Seddon, P., Lewis, G., Seddon, P. B., & Lewis, G. P. (2003). Strategy and Business Models: What's the Difference ? Pasific Asia Conference on *Information Systems*, July, 10–13.
<https://aisel.aisnet.org/pacis2003/17/>
- TheGymGroup. (2018). *The GymGroup Annual Report and Accounts 2018*.
<https://www.tggplc.com/media/92344/Gym-Group-Annual-Report-2018.pdf>
- Venkatesh, V., Brown, S. A., & Bala, H. (2013). Bridging the qualitative-quantitative divide: Guidelines for conducting mixed methods research in information systems. *MIS Quarterly: Management Information Systems*, 37(1), 21–54. <https://doi.org/10.25300/MISQ/2013/37.1.02>
- Voelpel, S. C., Leibold, M., & Tekie, E. B. (2004). The wheel of business model reinvention: how to reshape your business model to leapfrog competitors. *Journal of Change Management*, 4(3), 259–276. <https://doi.org/10.1080/1469701042000212669>
- Yang, Y., & Koenigstorfer, J. (2020). Determinants of physical activity maintenance during the Covid-19 pandemic: A focus on fitness apps. *Translational Behavioral Medicine*, 10(4), 835–842. <https://doi.org/10.1093/tbm/ibaa086>

VIII. APPENDICES

Appendix 1: Interview Guide

I. The interviewee experience and his/her company

1. What is your role, your position, your missions in your company?
2. How long have you been working in this company? In the fitness sector?
3. What type of consumers do you target in your gym?
4. How would you describe the habits of your members? How do they take advantage of your services? Their needs?
5. How do you differentiate yourself before Covid? Why do people join your gym?

II. His/her company facing the Covid-19

1. What do you think of the current situation? What has changed in your company? How does Covid-19 affect the way you offer your services to members?
2. What happened in your company when the Covid-19 crisis started? What were the first steps taken? The first reactions?
3. Have you lost many members? Have you found new members since the health crisis?
4. In your opinion, what are the main obstacles that Covid-19 represents for fitness centers? For the sector in general?
5. How can you evaluate the impact of this pandemic on your professional life? Has it changed the way you work? Do you have other assignments now? Remote assignments?

III. What has been done in his/her company to overcome this crisis?

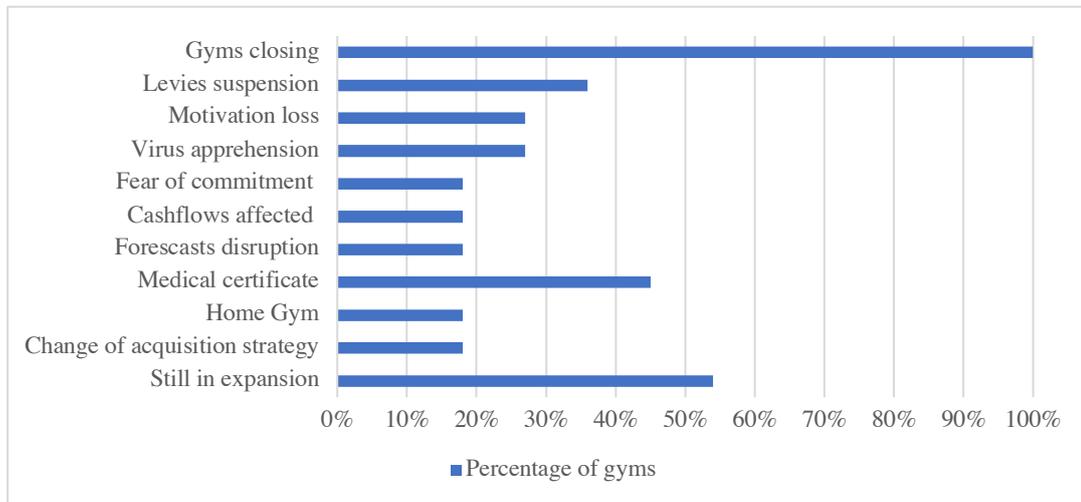
1. What has been done in gyms to "reinvent" their offer? To remain attractive and competitive, to survive? Do you now offer new services to meet the new needs of members? If so, which ones?
2. Do you think your company will continue to offer new forms of training to its members (videos offered on an app, a site, outdoor classes)? Or will it go back to the old business model: 100% in "presential"?
3. What have you observed in competing gyms?

IV. What does he/she think about the future of the fitness industry?

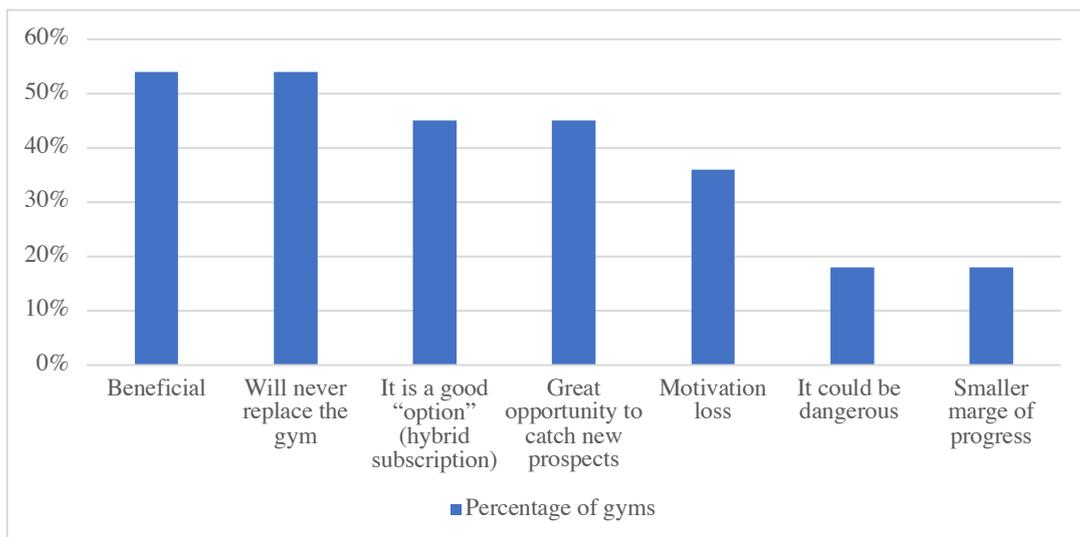
1. People's habits have changed since last year, some people have started to practice a sport activity at home thanks to free Live on Instagram, YouTube or with free online programs. What do you think about this? Has your company tried to attract them? If so, how?
2. What do you think about the effectiveness of these new training methods (at home, live, via an app)? Will it last after Covid-19?
3. If you had to choose the 3 main actions taken to survive and reinvent its business model and overcome this crisis: what would they be?
4. How do you imagine for the future of gyms after Covid-19? What will change when the gyms reopen?

Appendix 2: Results from the interviews

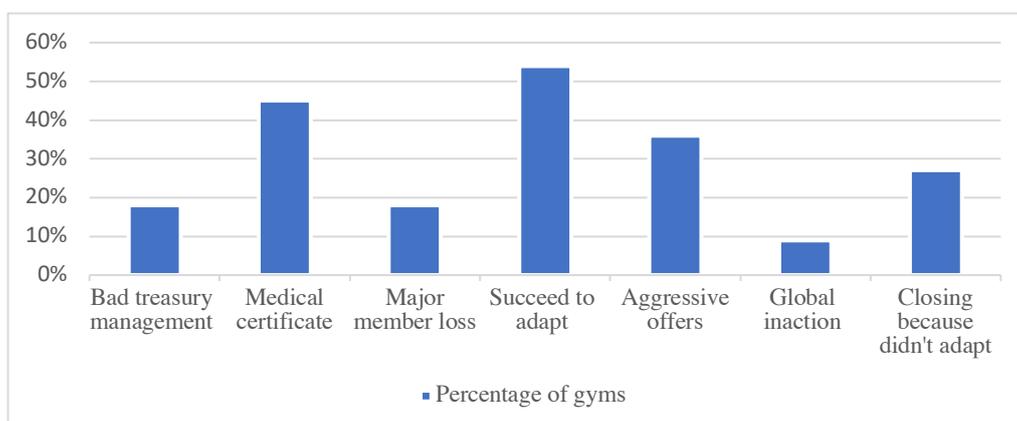
Graph 1 - Obstacles of the Covid-19 on the fitness gyms (source: Elaborated by the author)



Graph 2 - Opinion about digital solutions for remote workout (source: Elaborated by the author)



Graph 3 - Fitness professional observations about competitors (source: Elaborated by the author)



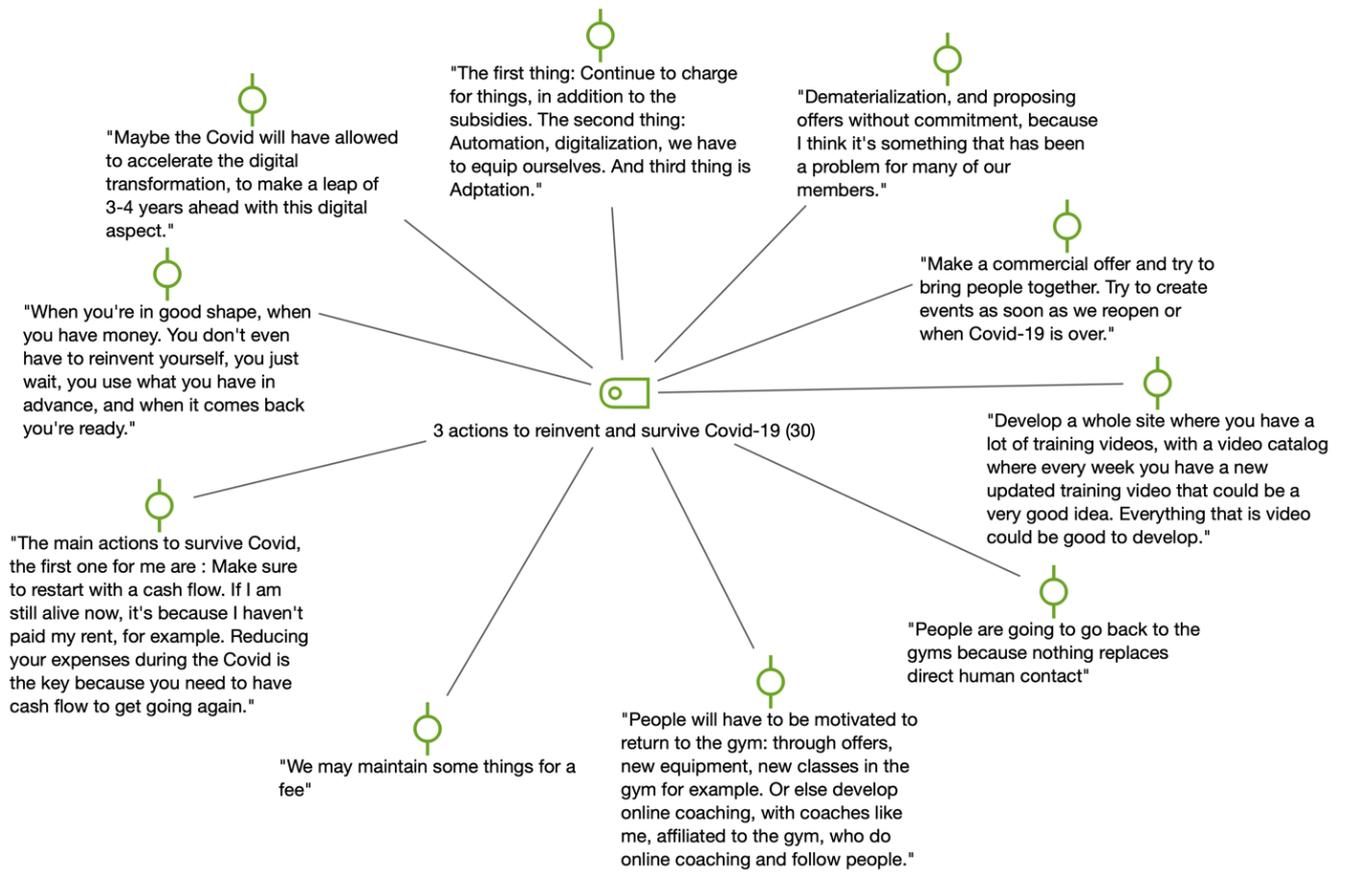
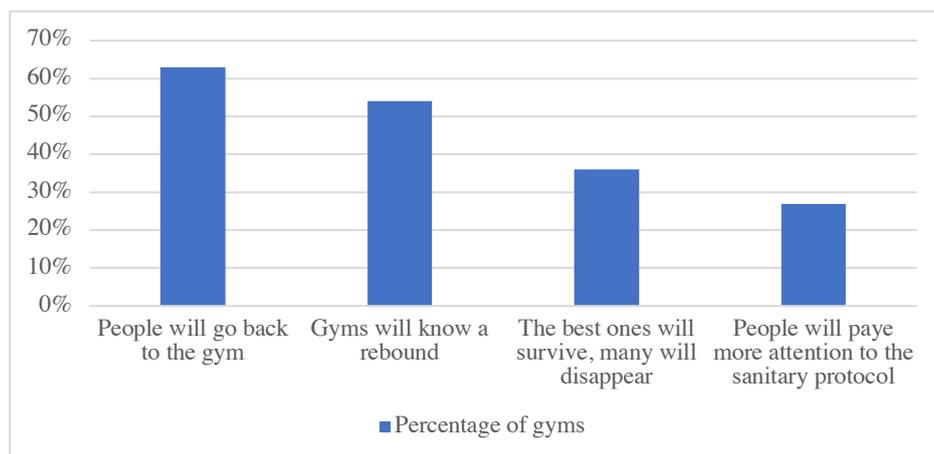
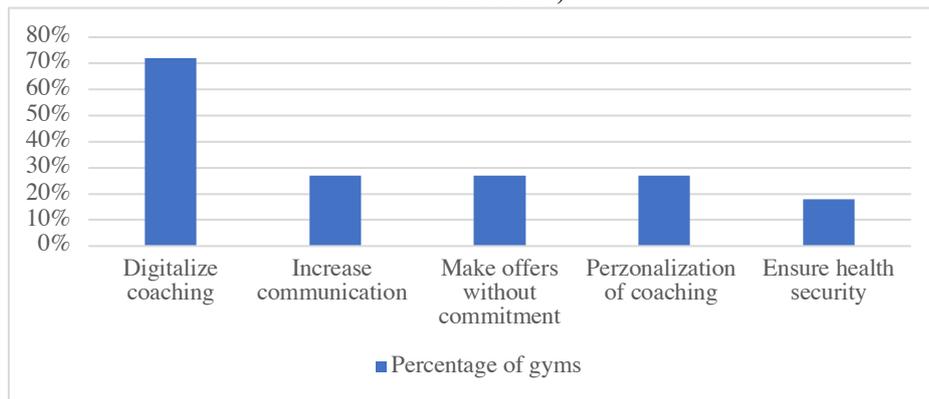


Figure 1 - Reinvention of the business model according to fitness professionals. (source: Elaborated by the author, extracted from MAXQDA)

Graph 4 - Perspective for the future of gyms (source: Elaborated by the author)



Graph 5 - Actions to reinvent the business model and survive the Covid-19 (source: Elaborated by the author)



Appendix 3: Survey Guide

1. Are you?
 - Man
 - Woman
 - Rather not tell

2. How old are you?
 - 15-18 yo
 - 19-25 yo
 - 26-30 yo
 - 31-40 yo
 - 41-55 yo
 - 56 and more

3. What do you do?
 - High School
 - Student
 - Employed
 - Unemployed
 - Retired
 - Other

4. Do you practice a physical activity?
 - Yes
 - No

5. If yes. How often?
 - Once a week
 - Twice a week
 - 3 times or more a week
 - Once a month
 - Twice a month
 - Sometimes during the year

6. Where?
 - At the gym
 - At home
 - In parks
 - Other

7. If you are a member from a gym, what do you like about going to the gym?
 - Having access to professional material (machines, weights)
 - It gives you the opportunity to go out of your home
 - the “social” aspect of being a member of the gym: you are “part of the team”
 - having access to professional advice
 - others

8. What do you miss the most since the gyms closed? (scale from 0 to 5)
 - Having access to professional material (machines, weights)
 - It gives you the opportunity to go out of your home
 - the “social” aspect of being a member of the gym: you are “part of the team”
 - having access to professional advice

- others
9. Did you keep working out since gyms closed?
- Yes
 - No
10. What did you do? How did you replace physical gyms? (HIIT, abs, Live, programs, challenges online)
- Personal coach
 - Videos from your gym
 - YouTube lives (free)
 - Facebook lives (free)
 - Instagram lives (free)
 - At-Home free programs (ex: 4 weeks summer body ready)
 - At-Home paid programs
 - Mobile fitness application (coaching videos)
 - Jogging
 - Yoga
 - Pilate
 - Outdoors exercises
 - Other
11. Did your gyms offer you other ways to work out?
- Yes
 - No
12. If, yes which ones?
- Online training videos you access with you member account on the gym website or app
 - Group class outdoors
 - Facebook Lives
 - Instagram Lives
 - YouTube Lives
 - Challenges (nutrition and exercises programs)
 - Renting a space in the gym for an hour (or more)
 - Others
13. Did you start to work out during the locked down?
- Yes
 - No, I was already practicing a sport
14. If, yes why did you start?
- I finally had time
 - It was now or never
 - I did a challenge on internet and it started like that
 - I followed free programs on Internet
 - Other
15. What do you like about working out at home?
- Easier to access
 - Cheaper
 - I can access to a lot of training that I just have to select
 - Others

16. What do you think about M-fitness?

- I think it is a good way of working out no matter where you are
- It will never be like going to the gym
- Other comments

17. Do you think you will go back to the gym after Covid-19?

- Yes
- No

18. Would you like to continue to work out at home when gym reopen?

- Yes
- No

19. What should be changed so that you go back to your gym? So that you continue paying for your membership?

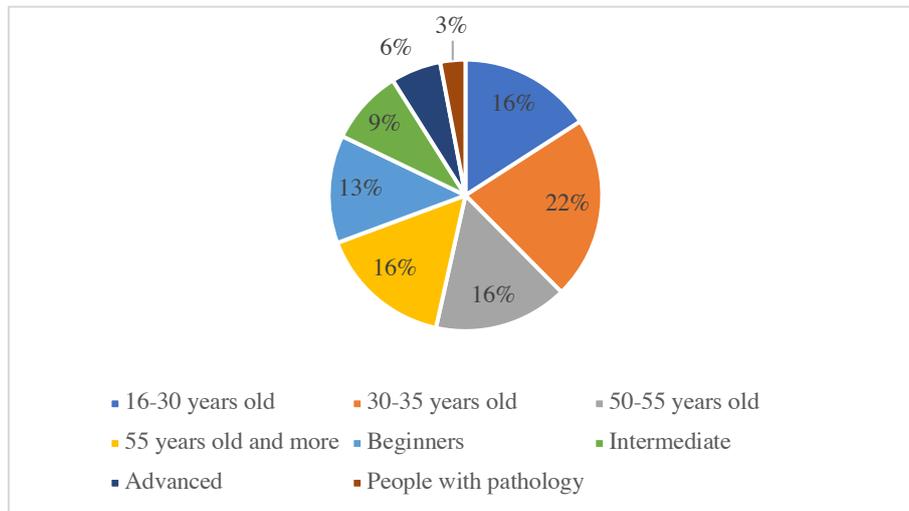
- Text

20. In your opinion how gyms can be reinvented to attract people

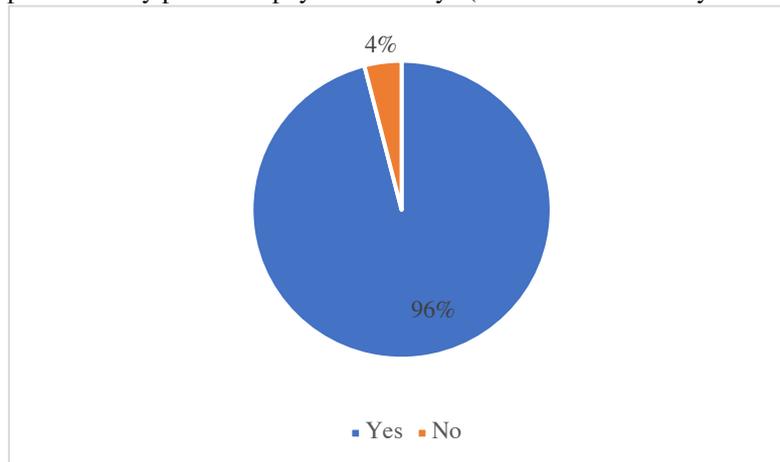
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Appendix 4: Survey Results

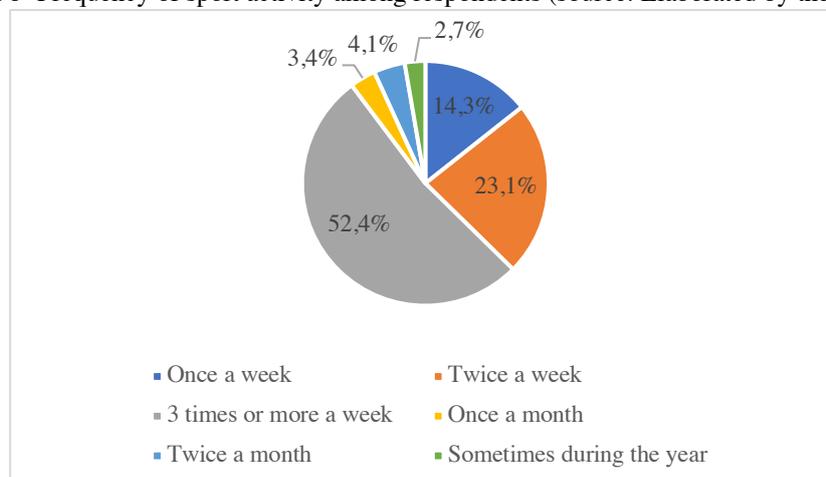
Graph 6- Target Members (source: Elaborated by the author)



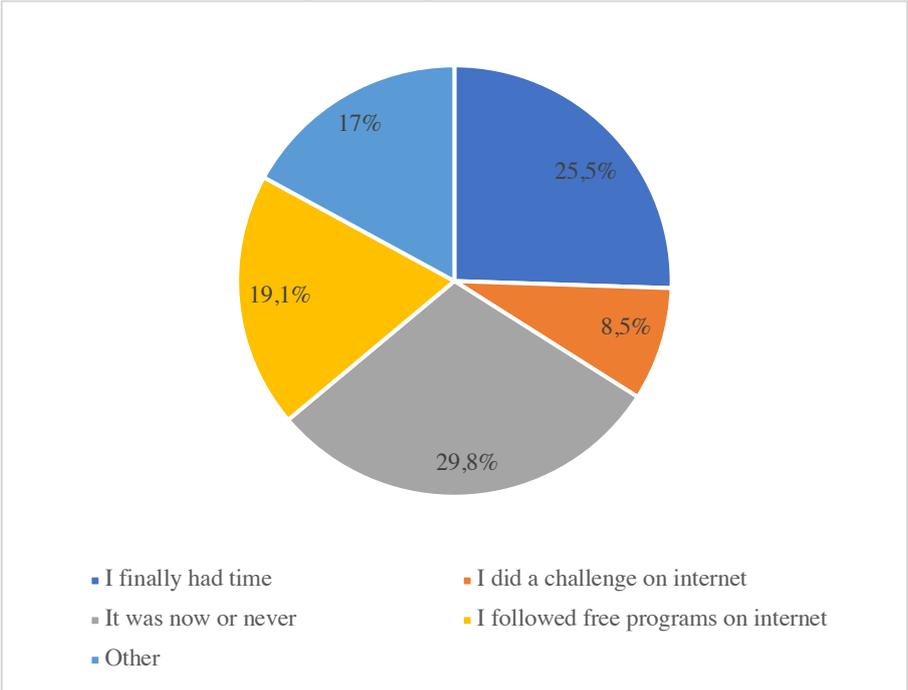
Graph 7- Do they practice a physical activity? (source: Elaborated by the author)



Graph 8- Frequency of sport activity among respondents (source: Elaborated by the author)



Graph 9- Reasons to start working out during the lockdown (source: Elaborated by the author)



Graph 10- Criteria they like about working out remotely (source: Elaborated by the author)

