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How transition towards market-orientated commercialization strategy enabled Oceanário de Lisboa to float through the disastrous impact of COVID-19 pandemic.

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Dissertation written under the supervision of Professor Ricardo F. Reis.

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Abstract:

Title: How transition towards market-orientated commercialization strategy enabled Oceanário de Lisboa to float through the disastrous impact of COVID-19 pandemic

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Dramatic decline in demand across visitation business due to self-isolation, reduction of purchasing power, general anxiety and uncertainty, imposed regulatory measures accompanying the sanitary crisis of COVID-19 pandemic resulted in an unprecedented shock for Oceanário de Lisboa. In this paper the case of the dynamic response of Oceanário de Lisboa from the macro perspective of market-orientation to sharp environmental misfit caused by the pandemic is presented.

The insight to the internal perception of the crisis, as well as decision making environment, organizational culture, managerial perspectives, and reasoning are gathered through interviews with people who have been directly involved in strategic decision making and guiding the company through crisis. Among the interviewees are Elsa Courela (Head of Marketing, Sales, and Education), João Falcato (CEO), and Miguel Tiago de Oliveira (Head of Engineering, Operations, and Quality Assurance).

The analytical approach to their contributions in combination with secondary data assessment are provided as guidance, suggesting some of the relevant theoretical concepts and frameworks to facilitate analytical and structured comprehension of the experience of Oceanário de Lisboa and consequent knowledge creation.

The case provides a comparison of commercialization strategy of the company, and the subsequent response to the external crisis. The nature of the resource base and operational model of the company was explored. From the internal perspective of core capabilities and rigidities, towards dynamic change in the market-perspective from more static and customer-led approach to the market towards more innovativeness and experimentation driven cultural elements was explored.

Keywords: Dynamic capabilities, Core Capabilities and Core Rigidities, Market-orientation, Innovativeness, Strategic resources.

Resumo:

Título: Título: Como a transição para uma estratégia de comercialização orientada ao mercado permitiu ao Oceanário de Lisboa flutuar durante o impacto desastroso da pandemia do COVID-19.

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A queda dramática da procura nos negócios de visitas a museus e similares devido ao auto-isolamento, redução do poder de compra, ansiedade e incerteza geral, medidas regulatórias impostas acompanhando a crise sanitária da pandemia de COVID-19 resultaram num choque sem precedentes para o Oceanário de Lisboa. Neste artigo é apresentado o caso da resposta dinâmica do Oceanário de Lisboa ao acentuado desajustamento ambiental causado pela pandemia na pers-petiva macro de orientação para o mercado.

O insight para a perceção interna da crise, bem como o ambiente de tomada de decisão, a cultura organizacional, as perspetivas de gestão e o raciocínio são obtidos por meio de entrevistas com pessoas que estiveram diretamente envolvidas na tomada de decisões estratégicas e na condução da empresa durante a crise. As abordagens analíticas dos seus contributos em combinação com a avaliação de dados secundários são fornecidas como orientação, sugerindo alguns dos conceitos e quadros teóricos relevantes para facilitar a compreensão analítica e estruturada da experiência do Oceanário de Lisboa e conseqüente criação de conhecimento.

O caso fornece uma comparação da estratégia de comercialização da empresa e a subsequente resposta à crise externa. Os modelos da base de recursos (resource base) e operacional da empresa foram explorados. Da perspetiva interna das capacidades fundamentais (core capacities) e fatores de rigidez, em direção à mudança dinâmica no mercado, foi explorada a perspetiva de uma abordagem mais estática e voltada para o cliente para o mercado em direção a mais inovação e elementos culturais orientados para a experimentação.

Palavras-chave: Capacidades Dinâmicas (Dynamic capabilities), Capacidades Fundamentais (Core Capabilities) e Fatores de Rigidez (Core Rigidities), Orientação para o mercado, Recursos estratégicos.

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1. Introduction

The experience of COVID-19 stimulated the wave of reflection in a multitude of academic tracks. In business studies in particular this crisis serves as highly relevant ground for the application of modern theory regarding strategic adaptability and resilience of organizations.

In this context, the case of Oceanário de Lisboa is a fascinating example of the way a non-ordinary (in its mission and vision, as well as in the nature of the service provided) organization was impacted by the external shock. It gives us a chance to analyze the impact of crisis on the internal processes of socially and environmentally oriented organization such as Oceanário, while sharing an insight into the managerial perspective on the adaptability of strategic course under extreme market conditions.

The cooperation of the companies in providing the valuable material for analytical approach to the case and subsequent academic reflection upon the processes described are key to collective learning and building resilience for facing future challenges.

The section to follow will provide the conceptual and theoretical background and contextualization. The third section is the main body of the case study containing the narrative of how the company adapted its strategy to deal with the impact of pandemic. The following section is the teaching note suggesting the way for this case to be administered to a strategy session through the prism of the concepts presented earlier. The final section summarizes and concludes the dissertation while also accenting certain limitations of this work.

□

2. Research Note

2.1 Strategy and adaptability in fast-paced environments

Great body of literature has been produced exploring the nature of success and failure in business, from the deterministic view of external environment as the driving force of organizational outcome (Levinthal, 1991) to the opposing account of managerial reactional talent as a decisive factor (Hambrick and Mason, 1984). With cognition driving reevaluation of economic theory, the exploration of managerial capacity to redirect the strategic course of an organization was challenged through the consideration of bounded rationality (Simon, 1979) and resistance to structural and cognitive inertia. (Hannan and Freeman, 1984).

In one way or another, until recently, academic community has searched for causes of competitive advantage either in business-specific individual characteristics of a firm, under the assumptions of Resource Base Theory (Barney, 1995), or in the conditions of external environment such as industry characteristics (Porter, 1980).

In line with the Resource-Base theory, D. Leonard-Barton (1992) suggests that the changes and developments of a company that draw on its historically developed set of hardly replicable, core resources and capabilities of an organization are the ones more likely to result in success. On the other hand, the author draws our attention to the other side of this concept, or core rigidities, emphasizing the risk of disruption given the change lies far from the previous source of competitive advantage (Barney, 1995).

In the recent literature, this perspective of core resources and capabilities as an intrinsic organizational gauge-line, that helps a company succeed if the adaptation requirements of external environment are aligned with its internal potential is challenged as insufficient, considering that the growing pace of competitive environment renders sustainable competitive advantage based on “entrenchment” rare and short-lasting.

Therefore, the predominant place with regards to business adaptability has shifted from core resources and capabilities as a central determining factor to the notion of dynamic capabilities, a term first introduced by David J. Teece and Gary Pisano in 1994, as “the subset of the competences and capabilities that allow the firm to create new products and processes and respond to changing market circumstances.”

Since then, substantial attempts were made to reiterate and re-think this definition, considering additional relevant dimensions. In this paper I will approach the case through the definition of

dynamic capabilities proposed by I. Baretto (2010), and elaborated on the basis of exhaustive revision of literature in an attempt to consolidate all substantial progress and relevant criticism:

“A dynamic capability is the firm’s potential to systematically solve problems, formed by its propensity to sense opportunities and threats, to make timely and market-oriented decisions, and to change its resource base “.

Each of the four dimensions, falling under consideration of this approach, namely sensing, timely reaction, market-orientation, and flexibility in terms of resource reconfiguration, may come forward relative to the nature of impact exogenous shock is to have on an organization, yet remain interrelated. Therefore, this definition highlights the irrelevance of considering only one of the dynamic capability-generating pillars in isolation but calls for a view on their contextual interrelatedness.

2.2 The role of pro-active market orientation

The concept of market orientation as we will approach it was defined by J. C. Narver and S. F. Slater in 1995 and is building up on multiple previous attempts of formulation. They propose a twofold nature of market-orientation, defining it as “...the culture that (1) places the highest priority on the profitable creation and maintenance of superior customer value while considering the interests of other key stakeholders; and (2) provides norms for behavior regarding the organizational development of and responsiveness to market information”.

The importance of market orientation as one of the key pillars dynamic capabilities of a firm were explored by B. Menguc and S. Auh, (2006). Based on a model developed by J. C. Narver and S. F. Slater (1990), they explored the market orientation and suggested that the organizational culture of market-orientation is not enough for a business to drive superior competitive advantage over time, and the decisive role is played by business innovativeness, or innovation-oriented behaviors that result from the culture of market-orientation. This study demonstrated that innovativeness, as the willingness of an organization to embrace novelty and resist inertial forces of old habits enhances performance by enabling organizations to surpass consumer expectations. A simple set of (best-)practices focused on establishing market-oriented culture within an organization, which often are shared by majority of organizations without innovativeness did not necessarily lead to superior performance. Along the line David J. Teece (2007)

argues that the notion of dynamic capability implies shaping the marketplace through innovative and entrepreneurial mindset, which goes beyond defensive control over a resource or permanent reliance on one-time success of an invention.

3. The Case

3.1 Introduction

The visitor satisfaction index has vanished from the pages of Oceanário de Lisboa 2020 annual report, after being displayed consistently for the past 3 years at an average of 89%. And it is no coincidence, as the pages of the same report bear another truly frightening dynamic, a 63% year-on-year reduction in the number of visitors, and a proportional 68% fall in operating income. For the first time in its history, Oceanário de Lisboa bore losses. Overall, the pandemic experience of the company is quantified as a loss of 5.1 million euros in 2020, and 2.7 million euros in 2021.

The complex impact of COVID-19 pandemic has come around as critical for the company and stimulated significant change not only in the ways of addressing the market, but also in perception of consumer and of itself. Considering the complexity of the shock, it is important to recognize that besides the implementation of simple solutions, such as immediate hygienic measures, we may observe other levels of change, including conscious strategic changes on a macro level, and micro-level changes in individual practices and behaviors, nevertheless affecting the course of organizational development from within. (Barney, 1995).

So, what did this experience mean for Oceanário de Lisboa? A momentary disturbance? A bucket of cold water followed by a dry up and return to “normal”? Or was it, in a way, a turning point, setting the new course for change?

3.2 Industry dynamics

Public aquarium industry today finds its mission in driving the sustainability of human behavior. The web-page home screen of Oceano Azul Foundation (to which ODL belongs), for instance, describes the role of the aquarium in quite a concise manner: “Our window to the underwater world”.

The public aquariums of today commit themselves to objectives far beyond the idea of creating a popular environment for entertaining interaction of human with life underwater, even though this value remains central to their financial and operational sustainability. Overall, in the past few decades public aquariums (and zoos) have transformed into educational and conservational institutions. Integration within the global network of agents working towards the preservation

of marine ecosystems allows them to coordinate their efforts and mutually benefit from shared knowledge and stakeholder support. This transformation is coupled with a rapid expansion of public aquariums around the world. More than a hundred new exposition facilities were opened globally since 1990, according to the data from World Association of Zoos and Aquariums as of 2009 (see appendix: Table 1).

The contribution to environmental sustainability zoos and aquariums are positioned to make is leveraged by their biological and engineering expertise, as well as the know-how in terms of life conservation. The social impact, however, begins with the glimpse under the blue curtain of the world's ocean they provide to the public at large. Moreover, these institutions take part in the on-site conservational projects, contributing financially as well as with their expertise in biology of marine species.

Alongside the transition towards social and environmental impact, public aquariums worldwide are integrating with corresponding stakeholders, forming wide clusters beyond national boundaries. Such often include conservationists, researchers, local communities and municipalities, trade associations and individual collectors/enthusiasts, touristic companies etc.

The scale of the impact a public aquarium may have on social behavior of people can be expressed in the figures of annual visits around the world. In 2009 this number amounted to around 150 million globally (see appendix: Table 2). Such potential for impact is recognized by public aquariums themselves as reflected in their vision and mission statements, but also by their stakeholders, ready to provide support and contribution to the common goal.

Nevertheless, expository services remain at the core of the business model for a public aquarium, being a primary source of revenues, and ensuring long-term subsistence and profitability.

3.3 The history of public aquariums

Following the age of enlightenment emerging from the culture of curiosity and naturalistic exploration, enhanced by the technological breakthrough, the 19th century brought about the first institutionalized public aquarium, opened in 1853, as a part of London Zoo. It was designed and projected by Philipp Henry Gosse, marine biologist and naturalist, who was also the one to introduce the word "Aquarium" in his eponymous book a year later.



Inside the first Aquarium, London Zoo, Regent's Park, London.

Source: www.hankeringforhistory.com

From then on, the popularity of a glimpse into the hidden underwater wonders without having to leave your city has grown and more institutional public aquariums were established around the world both within the zoos and as independent institutions.

The twentieth century has brought about a change in the perception of the environment around us. Emerging awareness of human impact on the state of nature and fragility of ecosystems has formed a new perspective towards animal captivity, the role of zoos and aquariums, and the importance of conservational practices (Andrews, 2018).

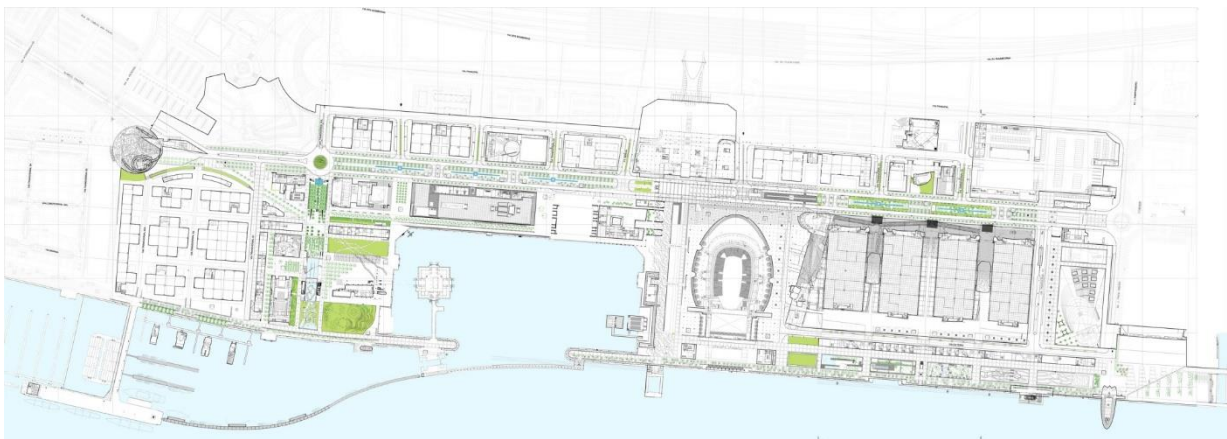
At the same time, the technological development of both engineering (such as new filtration techniques and structural innovations) as well as biological research have led aquarium industry to reach greater scales and sophistication in terms of size and diversity of biomes created. Increasing complexity and originality of expositions attracted more and more visitors globally.

Today, as the sustainability norms have become embedded in all aspects of our day-to-day life, the role of public aquariums is generally recognized in their mission, where greater emphasis is made on education, promotion of sustainable behavior towards marine ecosystems and conservational efforts.

3.4 Company overview

History

Oceanário de Lisboa is a comparatively young player in the industry. The story of the company begins in 1998, when Oceanário de Lisboa opened its doors as part of Lisbon World Exhibition, dedicated to the importance of marine ecosystems for the well-being of life on our planet. This remarkable event centered around the subject of “*The Oceans: A heritage for the future*” welcomed more than 10 million visitors over the course of around 4 months at Santa Maria dos Olivais county of Lisbon. The preparation for hosting the exhibition completely transformed this peripheral zone east of Lisbon into an urban center which up until today can be considered a popular destination among tourists and local visitors.



Parque das Nações, Santa Maria dos Olivais, Lisbon.

Source: www.risco.org

The iconic construction of Oceanário de Lisboa, which at the time was known as “The Oceans Pavilion” was one of the central attractions and opened to the general public shortly after the end of the exposition. Ever since for many it symbolizes the strong historical and cultural connection between Portugal and the ocean, while its values centered around the preservation of biodiversity, and the sense of duty to protect nature are growing in relevance. Essentially, the becoming of ODL in the context of this event meant that its starting point is found in the wake of sustainability awareness, with its mission and culture clearly defined from birth.



“Oceans building”, Oceanário de Lisboa

Source: author

Miguel Tiago de Oliveira, marine biologist and the head of operations and quality control of Oceanário de Lisboa has been part of the company since its establishment in 1996. He describes the transition and transformations it has gone through in four stages.

I. The becoming of Oceanário de Lisboa

The first stage can be seen as the becoming of Oceanário de Lisboa as an independent institution between 1997 and 2003 approximately. This was the period of active learning and intensive innovation from biological and organizational perspectives. The emergence of large aquariums around the world was characterized by moving away from the conventional way of keeping the animals, with homogeneous composition of species within the tanks, and often displaying only the animals native to the region where the aquarium was located. Oceanário de Lisboa was among the pioneers of diversifying the ecosystems and carefully constructing heterogeneous environments, while learning to increase the diversity of species in different regions of the world.

As a result, Oceanário gained its international recognition in the scientific circles and throughout the zoos and aquariums community. In addition, this period can be characterized by the institutionalization of the company and the transfer of knowledge from individual specialists to the organization, making it replicable and available for future generations of employees. This

period of “youth” was the one of self-organization and rapid development but was still characterized by relative closedness towards the public.

II. Course on profitability

The next stage emerged in 2002-2003, around the view that without being profitable, the mission of the company cannot be fulfilled. “*If you don’t have money, you are only surviving, so there is no mission*” - explains Miguel. Although Oceanário was state owned, at that stage the company was already setting their own ambitious performance objectives beyond the ones set by their public owners.

III. Focus on visitors’ satisfaction

The third stage, identified by Miguel, arrived as the organizational perspective of Oceanário switched from having animals at the center of the company’s operational focus towards a more client-oriented model. “*Before, biology and engineering were our main processes*”, Miguel explains, “*with the change, they became our support processes*” (see appendix: Picture 1). Although at the core the wellbeing of animals remained of the absolute importance, the main operational priorities switched to client-related processes, such as visitation, education, client satisfaction. The change took place as the company realized that its mission was about changing people on top of saving animals. This was the first major step towards the becoming of Oceanário de Lisboa as a conservation center in line with the major global trend.

IV. All on conservation

The fourth and current phase came with privatization of the company in 2015 and can be characterized by the change in the allocation of profits. Prior to the prioritization, the profit was returned to the state, rendering Oceanário with no control over the allocation of turnover. From privatization onwards, the company got the ability to channel its net results towards conservation and educational activities, aligning itself further with its mission.

Mission & Vision

Vision	Ocean conservation is a responsibility shared by all.
Mission	To encourage people to learn more about the ocean and make all citizens aware of their duty to conserve their natural heritage, by changing their behavior.

João Falcato, the CEO of Oceanário de Lisboa since 2006 began his career at the company at the very becoming of it as a public aquarium. *“From the beginning my vision was the purpose and turning Oceanário into a mission-driven company with a clear goal...”* – explains João, *“everybody needs to feel that by visiting [ODL] they are contributing to ocean conservation.”*

From the objective of changing people behavior, therefore, the emphasis is additionally made on the social component through educational efforts and the excellence of the service provided.

Business model

The business model of Oceanário, just like any public aquarium or zoo is grounded on the aquarium visits. João Falcato, the CEO of the company explains: *“The business of visitation is based on two main things: the number of clients you get and the amount of money they will leave here.”* This ratio is what can be referred to as *euro/visitor*. A measurable indicator of an average visitor’s willingness to pay for the overall visitation experience.

Oceanário operates in a cluster of social and environmental establishments united through their sustainability efforts. The company identifies two tiers of relevant stakeholders: macroenvironmental or indirect stakeholders, and microenvironmental (direct). The relevant macroenvironment of Oceanário de Lisboa includes stakeholders such as education system, scientific and academic community, NGOs, state and regulators, the environment. The microeconomic or direct stakeholders, as identified by the company, include clients, employees, suppliers, donators, competitors etc.

An example of a vast network participation of Oceanário de Lisboa is its membership is Associação Portuguesa de Zoos e Aquários on the national level, The European Association of Zoos and Aquaria on a European level, and (World Association of Zoos and Aquariums on a global scale.

Model of operations

Operational processes of Oceanário de Lisboa are grouped into three categories (see appendix: Picture 1):

1. Strategic planning.
2. Business processes.
3. Business support processes.

All of the above exist in the environment of compliance and legitimacy-based relationships with its direct and indirect stakeholders mentioned above.

Strategic planning refers to the elaboration of internal policies or governance model, development of long-term objectives and business strategy based on the process information and performance.

Business processes are structured in terms of the company's key areas of operations and resource deployment:

- Visits
- Education
- Conservation
- Complementary processes
- Research

Business support processes are segmented based on the key process areas for successful business deployment including Biology, Engineering, Guest experience, Communication, Finance, HR, Sales, and Supervision/IT.

Additionally, it is worth noting that additional area encompassing all of the three main process categories mentioned above is Risk and Compliance.

Key resources

According to João Falcato, certain resources of Oceanário serve as sources of sustainable competitive advantage to the company. These include the building itself (the legacy of Expo'98), which in order to be implemented today would require a private party to raise heavy investment

funds assuming such would prove to be a profitable one. Additionally, such capital intensity implies sophisticated architectural and technological equipment in place.

Unique know-how of creating marine exhibitions was named by João as another significant source of competitive advantage. The knowledge gathered by Oceanário from foreign consultancy as of beginning of its operations, as well as in different parts and enrooted through more than two decades of operations in the areas of marine animal exhibitions, public aquarium maintenance, etc. present a steep learning curve if it was to be independently replicated.

The main operational expenses, according to João, include human resources, rent of the building, and energy. For the pre-covid period the levels of consumption grew at a relatively slow pace (see appendix: Figures 2, 3, and 4) which can be attributed to continuous technological expansions, such as additional control systems and climatized areas. Increasing proportionately to the numbers of visitors kept the costs per visitor relatively stable.

Revenue streams and cost structure

The principal source of revenue of Oceanário de Lisboa is the visitation of their public aquarium, as well as special events the company organizes on site, such as guided tours, birthdays, or even a chance for children to spend a night by the aquarium to the meditative silent presence of various marine inhabitants.

As reflected by the income statement of the company's 2019 annual report, 86,4% of revenues of Oceanário de Lisboa came from the services they provide, including visits and event organization. Revenues from the gift shop in 2019 make up 11,7% of the total income according to the company's annual report.

Subsequent reallocation of revenues towards conservational and educational endeavors allowed ODL to pursue its mission of conservation in addition to leading its visitors towards a more sustainable behavior. For instance, the financial support ODL provided to conservational and educational projects from 2017 to 2029 totals to more than 3M EUR euros as reflected by the company's 2019 annual report.

The cost side of Oceanário reflects relatively high capital intensity constituted by the complexity of installations, specialized equipment etc. while on the other hand, a need in qualified and specialized labor, ensuring continuous support of animal wellbeing. The highest costs as of

2019 were constituted by depreciation and amortization (14,4% of total expenditures), staff costs (19%), and procurement of supplies and outsourcing activities.

3.5 Market Overview

Market Segmentation

By age

The composition of visitors by age groups remained stable throughout the years. The market of ODL has been mainly constituted by adults. Over the past decade, the share of adults among the visitors consistently accounted for slightly more than 70%. Children, in turn, accounted for 22%, and the share of elderly people remained around 6%, before the pandemic. After pandemic, the share of elderly visitors decreased. Such decrease can be hypothetically attributed to the higher risk the visit of public places presents for older people in the context of COVID-19 pandemic (see appendix: Figure 4).

Foreign tourist and Portuguese segments

Exploring the composition of visitors based on their status of either tourist or local citizen reveals that in the period between the years of 2013 to 2019, on average 63% of Oceanário visitors are tourists (see appendix: Figure 5). Moreover, the data suggests, that the gradual growth in visitors until the crisis is due to the tourist segment of the market.

When looking into the composition of tourist visitors by nationality as of 2019, we will notice a relatively even distribution among the countries present (see appendix: Figure 6). Most foreign visitors represent European countries with the exception of Brazil, which alone constituted 12,2% of total visitors.

Based on the company observations, from the tourist footfall in Lisbon in the five years preceding COVID-19 pandemic, the company was capturing on average 22,3% (see appendix: Table 3). With the overall decrease in tourists in Lisbon of more than 77% for the two consecutive years of 2020-21, the proportion of ODL visitors among them decreased as well.

Tourism segment in Portugal and the impact of pandemic

Tourism is one of the most significant economic sectors in Portugal. The surplus from travel and tourism services has been a growing source of wealth for the country. In 2019 the total number of overnight stays by international visitors amounted to 14,7 million, with absolute peak in August (1,26mn) and the lowest during the month of January/December (0,5 – 0,55mn) (see appendix: Picture 2).

With the arrival of pandemic to Europe and the associated regulatory measures, the total number of overnight stays in Lisbon dropped by 77,5%(see appendix: Picture 3). The graphic on figure 7 of the appendix visualizes well the shock of the pandemic, and the disturbance to the seasonal variations in overnight stays.

Nature of the Competition

The competition in the public aquarium business must not be perceived narrowly. Due to the environmental and social orientation of the business the direct actors in the public aquarium industry do not adopt directly competitive mindset towards each other, but rather the one of collaboration and openness.

Another aspect of the company's perception of the industry is the one of sharing both positive and negative experience of the visitors. “...we benefit from the quality of others – if you visit the Barcelona aquarium and you like it, when you visit Lisbon you may visit us – if you do not like it you will not.” – explains João.

The beneficial perspective to adopt in this case is to broaden the understanding of the matter to view the company as competing not for the direct market share in the public aquarium industry, but rather for the wider notion of potential visitor mind. “We are competing with other attractions in Lisbon, but also with cinema, shopping, the beach and, more and more we compete with the couch, as people are staying home.” – the CEO explains.

3.6 Commercial strategy before the crisis

Customer research and information channels

According to the Integrated Oceanário Management system manual, the company's perception of its external environment is continuously maintained through various channels, including the monitoring of queues, monthly contact center reports, security report, live monitoring of visitor's satisfaction, map of complaints.

A more detailed insight into the visitor's sensations is collected via yearly customer satisfaction report. It contains customer feedback, collected via the corresponding survey, on aspects such as the visitors' satisfaction with temporary and permanent expositions, satisfaction with the cost of the service, waiting time of buying the ticket etc. The information collected is the one used to calculate the overall customer satisfaction index and provides insight into the visitors' points of delight and pain. An example of the information provided by the customer satisfaction report may be found under (see appendix: Figures 8 and 9).

Tourist segment

Commercial strategy of Oceanário de Lisboa before the pandemic in its essence was directed towards the foreign tourist segment as the absolute majority visitors until 2019.

The approach to potential foreign visitors began even before they arrived to Portugal through various digital channels, in countries whose citizens were more frequent guests in Lisbon, such as Italy, Germany, France, UK etc.

There three main commercial channels Oceanário de Lisboa: *agencies* that organize programs for groups of local and foreign visitors, *digital platforms* as an online marketplace for ticket distribution, and *hotels* which may sell tickets or distribute vouchers, while being the ambassadors, projecting Oceanário as the “must visit” destination Lisbon has to offer.

Local segment

In 2011, the company introduced an expansion. The new building was added entitled “Edifício do Mar”, or the “Sea Building”. The main objective of this expansion was to be able of hosting temporary exhibitions consequently diversifying the expository offering. This was a strategic

step aimed at reviving the Portuguese demand for a visit. “...in order to be able to have the possibility to create a reason for Portuguese to come back with small investment of 1-2 million” – explains João.

Along this rationale, Oceanário is aiming to create cyclical demand fluctuations around the renewal of experience for local visitors. Such approach involves long-term planning (2,5 years) and is aiming to generate cycles of 30 months with a peak at the opening, maturity over the second year, and decline of visitors thereafter. The highest peak of agitation is expected once the closure is announced at the end of the second year, and for the last six years of the current investment cycle the next exhibition is to be prepared.

“Portuguese people are proud of Oceanário, knowing that they have an aquarium classified as the best in the world by Tripadvisor¹”, Elsa Courela, head of marketing, sales, and education at Oceanário de Lisboa, “but it’s not easy to invite Portuguese people very often”. According to the yearly customer satisfaction survey of 2021, reflecting mostly the feedback of local visitors (83% of respondents), for the majority (43%) the last visit was more than four years ago, while 23% of respondents made their last visit between one and four years ago (see appendix: Figure 9).

Therefore, considering the time-constraints to diversify the expository offering, which nevertheless requires meticulous and costly maintenance, the overall commercialization strategy was and remains focused on attracting one-time foreign visitors. “We never needed to be commercially aggressive” – explains João, “we were always premium-positioned”. João further points out that among all the visitation equipment in Portugal, Oceanário has the highest number of Portuguese visitors: “with 400 - 500 thousand Portuguese visitors we are the most visited attraction by Portuguese in Portugal.”

From three tickets to one: unification of experience

From the launch of temporary exhibitions ODL offered three types of visits to its visitors. A ticket for permanent exhibition only, one for temporary only, and one for both. Once it become

¹ Oceanário de Lisboa was elected as the best aquarium in the world according to Tripadvisor three times: in 2015, 2017, and 2018. (www.tripadvisor.com)

evident that only 2% of visitors purchased an only temporary exhibition ticket, while the complexity of selling three different types of tickets was high, it was decided to abandon the temporary visit.

Next problem faced by ODL was the feeling of segmented visit, since the temporary exhibition and the permanent one was located in different buildings separated by an open-air atrium space. Therefore, between 2016 and 2019, Oceanário invested around 12million EUR into complete reconstruction of the intermediary space, including the shop and the restaurant. *“30% of what you remember from one institution is the last place you have been in. In our case it was a shop, so we really needed to upgrade this experience”* - João explains.

Finally, in December 2019, decision was made to keep only one ticket. *“You buy one ticket, and you are permanently in experience”* – João.

In January 2020, Oceanário opened a new experience called “ONE”, located in the space between the “Oceans building” and the “Sea building”. João Falcato: *“The project is an art installation by Maya de Almeida Araujo, that through an immersive video experience transmits the need for everybody to understand that Ocean, its living beings and humans are only ONE”*.

In an annual report of 2019, though already recognizing the extent of uncertainty cause by the virus, ODL emphasizes that “ONE”, along with aggressive commercial strategy targeting tourists will be the central pillars of the company’s short-to-medium term commercial tactic. The plan was not meant for realization due to the devastating impact of the COVID-19 pandemic. *“...after a huge investment into a new attraction [“ONE”] ...we had to close. It was not a very nice experience.”* – comments João ironically.

3.7 Response

First steps

As the first news of the pandemic began reaching the members of Oceanário de Lisboa, the perspective was largely guided by the existing experience of previous sanitary crises. *“We just follow the same recipe”*, says Miguel. Contingency plan was updated and enacted, which included detailed guidelines of response to the cases of contamination and/or suspicion of such. Every division was provided with clear objectives and guidelines to follow in line with prioritization of employee wellbeing, animal wellbeing, and continuity of essential processes.

“It was clear from the early on, that we had no idea what was coming, and we had to be fast”, explains João, *“we normally did this in two months - now we will do it in one week”*.

The risk was augmented by dependence of operations on narrow specializations of some employees in sustaining the wellbeing of animals and operating corresponding equipment. *“If we have it [COVID-19] in the biology team or engineering team, how can we deal with this?”*, says João, *“...if suddenly we don’t have people to feed the animals the whole company will break.”* Therefore, the plan for action included an organization of employees into separate working groups and stipulated specific emergency replacements in case of contamination on site.

When it comes to the extent of awareness regarding the fore coming threat, several sources of information can be identified. According to Miguel, news and public organizations served as an obvious source of information yet perceived from a critical standpoint. The higher importance to the company comes from the free information sharing within the international stakeholder network of aquariums and zoos. The collaborative culture characterizing the industry reduced the factor of competition as a barrier to open communication and contributed additionally to the anticipation of potential threats and response measures.

Moreover, the company benefitted from the large international network of the owner foundation and corresponding internal communication. The access to free flow of information within the broad stakeholder networks allowed ODL to develop the action plan based on the crisis groups and leveraged by previous experience of sanitary crises, and act upon the information in a timely manner. *“Most of the time our measures were ahead of state measures”*, Miguel explains.

Nevertheless, none of what dependent on the company could be enough to offset the impact of dramatic fall in the number of visitors. From February 2020, right before the expected seasonal rise in revenues, the usual trend was compromised for the next two years (see appendix: Figures 10 and 11).

The big ship

In May 2020, for the first time in its history, Oceanário de Lisboa had to close its doors to the public. To minimize the damage from the disappearance of demand, the costs were reduced as much as possible. Nevertheless, given the that the top priority was attributed to the wellbeing of staff in sanitary and financial terms, layoffs were completely avoided even though the state provided support to do so.

Next, animal wellbeing had to be ensured, which in turn required the continuity of operations crucial to maintaining the life of the exposition. This becomes evident when we look at the financial report section of 2020 annual report demonstrating that for a 66% decrease in ticket office income, the costs of supplies and outsourcing activities could only be contained by 28%. “*The big difference between us and the theatre, is that when there is no public, the theatre shuts the lights, sends people home, cuts the power...I cannot do that.*” – explains Miguel.

Along with the functions of accommodation of the public the company delayed many of its planned renovation projects. Every component necessary to running the operations, such as animal treatment, equipment maintenance, security services, cleaning etc. had to be maintained. Ironically, now that the employees were indeed left in Oceanário all by themselves, the prospects of it did not seem reassuring. “*We are a big ship that is hard to turn*”, says João.

This specificity is further reflected by the disproportionate decrease of operational expenses (see appendix: Figures 1, 2, and 3). For instance, visualizing the consumption of kWh electricity per visitor, as of 2020 reads 155,8% increase from the previous year.

What the combination of these factors meant for Oceanário is a loss of more than 5 million euros as of 2020, and further 2,7 million as of 2021. An impossible gap to reverse with operational capacity. The last pages of the company’s annual report for 2020 contain a section of the prospects for the upcoming year. This time the somewhat optimistic tone of the previous year was replaced by the recognition of true uncertainty. The main factors, decisive of the scale and severity of the shock, were identified: the duration of keeping doors closed for the visitors, the duration of capacity limitations imposed, and the proximity of tourism returning to Lisbon. The last sentence of this section reads: “It will be essential to *contain costs* as much as possible and ensure that all revenue generating *opportunities* are maximized”.

Keeping in touch with the market

In order to maintain as much as possible the contact with its customer base, the company engaged in several projects aimed at continuous delivery of value in the new market conditions.

For instance, to ensure the continuity of contact with the customers Oceanário organized and promoted online content including interactive online visits, and online shop. Although from

turnover perspective, these undertakings did not have any significant impact, they were important from the perspective of maintaining the connection with the customer, acquiring new skills, and fostering transversal cooperation between the different teams within Oceanário.

“For the first time the different teams from the different areas of Oceanário were really close in preparing these different programs”, Elsa comments, “we really improved the quality of the relationship between us”.

Promotional campaigns

The critical disappearance of demand has pushed Oceanário de Lisboa to resort to unprecedented measures. In response to the gargantuan shift in the market composition, the company rolled out a series of promotional campaigns addressing the Portuguese market segment. Decision came as the pressure of the empty corridors met the green light received from the ownership to make the most out of this critical period considering unavoidable losses. *“If we lose one million less or one million more – we don’t care, let’s learn”, - João comments, “this was the comfort we got from the top.”*

However, this step into the unknown was not received unanimously by all members of the discussion. *“There was a big internal conviction that what is free or what is cheap is not respected”* - explains Miguel.

Discussion took place within the executive committee on whether the decrease in prices was acceptable, considering the high value of maintaining the faultless conditions for the life within the Oceanário as well as the image of excellence maintained throughout the history of the institution.

Nevertheless, decision was made to proceed with the development of campaigns. *“We had no alternative”* - explains Elsa, *“It was crucial to create conditions to bring Portuguese to visit or re-visit Oceanário”*. According to Elsa, the company acknowledged the difficulties consumers have suffered economically in the face of layoffs, and morally due to impending uncertainty, discouraging engagement in cultural and entertaining activities.

The company engaged in active experimentation involving three main variables: *the target markets, the prices, and the timing of visits*. Hypotheses regarding the price-sensitivity, and correct time to address various customer segments were elaborated and carefully touched upon.

Campaigns carried seasonal patterns. Throughout the year of 2020, six monthly promotional campaigns were launched from June to November, each aiming to appeal to a specific customer segment during the period perceived as most relevant. The table below contains the summary of all the promotional campaigns developed throughout the years 2020-2021.

Period	Campaign name	Campaign description
June 2020	Junho, Mês da Criança	Free ticket for children below 12 years old for one adult ticket purchased
July 2020	Julho é no Oceanário	€5 entry ticket for people under 18 years old
August 2020	Viva o Oceanário em Agosto	Adults get a 21% discount (€15 instead of €19)
September/October 2020	#Agarra o momento	For people under 25 years old for the tickets are offered at €5
October 2020	Happy Hour	Adults over 26 years old could visit Oceanario for €13, between 17:00 to 19:00
November 2020	Flash	Tickets for the first trimester of next year are offered in advance for €8 followed by a further reduction to €7
November 2020	Especial Novembro	€13 for an entry for all visitors above 13 years old
December 2020	Manhãs para toda a família	Campaign which offered a family of two adults and young people/children below 18 to visit the exhibition for €35 in total
December 2020	Presentes sempre diferentes	Oceanario offered 3 types of gift cards, including a visit combined with a ride on the Telecabin neighbouring the aquarium for €11,60, yearly membership granting unlimited access for €35, and a guided visit for 2 people for €75
January 2020	Happy Hour	€10 for people below 30 years old, between 17:00 and 19:00
April 2020	Happy Hour	€14/ticket for all ages, between 17:00 and 19:00
May 2020	Há quanto tempo não vens com os teus pais ao Oceanário?	€15 for an entry, targeting young people, encouraging them to bring their parents
July 2021	Mês dos avós	The month of grandparents, €10 for people over 65 years old
November 2021	Happy day	€10 for an entry on Wednesdays only and only for tickets purchased online
November 2021	Oceanário de Lisboa ofereça mais tempo juntos	Package deals, €26 for 2 people, €49 for 4 people

An example of a campaign that proved to be successful in its impact on the target addressed, is the one of September-October 2020. According to Elsa, the idea of reaching out to young people during this period followed the following hypothesis: this was the time young people came back from their vacations with family and friends (which in Portugal are typically organized in July/August); however, the academic year only due to begin. *“We believed it was the right moment to “talk” to this specific target”*- says Elsa. Campaign resulted in 147 thousand visitors arriving throughout the two months. *“It was amazing to look out of the window and see big groups of young people...”*, says Elsa.

Another example of a successful campaign performed is a Happy Hour campaign. according to the analysis performed by ODL, the Happy Hour campaign which began on Friday 16th of October resulted in a 43,9 % increase in the number of visitors when compared to the Friday of a previous week (see appendix: Figure 13).

3.8 Result

Main Takeaways

The disappearance of demand on the side of foreign tourists has well shaken the business reality of Oceanário de Lisboa. The commercial machine sharp for striking the hears of one-time foreign visitors was steaming in idle. The critical condition of losing touch with the market ground motivated shareholders to give freedom to top management to adapt pro-active and innovativeness-driven business mindset. “[*Freedom to experiment*] has to be top-down” – explains João, “*I would not have risked if my boss didn’t say: go, do it!*”

The management of Oceanário de Lisboa, in turn, used this opportunity to adapt a more granular approach to the local market segment. Drifting away from the previously unshaken idea of “price equals quality” towards a more targeted, invitational approach, and addressing more specific segments within the pool of local visitors allowed the company to enroot itself further into the soil of its local market. Besides temporarily increasing the willingness of Portuguese visitors to pay the full price of the visit through cyclical exhibitions, ODL realized its ability to fill the gaps in seasonal fluctuations of demand on the basis of perceived lifestyles.

Consequently, the campaigns which have proven to be a successful composition of the three forementioned variables, remained as part of ODL’s current commercial strategy. “*We have a routine that works now ...September-October in under 25, always...under 25 like to visit late, so we know its Happy Hour...November-December is families... March is the senior month...Starting from Easter no more campaigns until September...*” – explains João Falcato, while acknowledging that continuous learning is to be in place.

The impact of campaigns on local demand was carefully measured and analyzed. Although the impact they had on turnover did not compensate for the overall losses the company suffered, the knowledge of the market retained from it was incorporated into the permanent commercial strategy of ODL. “*The results were good, but still not good enough for us not to lose a huge*

amount of money in 2020/21”, comments João, “what it allowed us is to be completely prepared for 2022”.

Indeed, the given liberty to exercise courage, or “an opportunity to risk”, as João refers to it, and engage in novelty against the current of inertial forces fostered learning. *“It’s easy to be afraid and just do what you do with less”*, João explains, referring to the cost cutting and passive expectation of market return, *“It [the normal] will come back, but it will come back completely different. You have to risk and be open-minded to learn”.*

Other projects

The activation of search for new revenue sources besides the re-invention of the approach to local customer segment, brought to light new projects, external to the walls of the Oceanário buildings.

Seastainability is one of the new educational projects targeting corporate clients and designed to bring knowledge to the companies in Portugal and abroad. Among the benefits of this program were low publicity costs while at the same time ability to reach broad audiences of today’s impact makers. The program includes educational workshops and activities around the subjects of sustainability, climate change, and marine debris.

Another source of revenue explored by ODL is *Tagus Dolphins*. A project in collaboration with Terra Incógnita sailing academy, which invites people to go on an exploration of biodiversity of the Tagus River in search of encounter with the dolphins. Leveraging on its knowledge of local biodiversity Oceanário creates additional value for participants by providing the script on biodiversity for the guide of the tour to share with the participants.

Expanding the points of sale of the shop is yet another commercial development of Oceanário. The idea is to expand the points of sale of Oceanário-original and sustainable products. Besides the local ODL shop at the aquarium site, the products are already available for purchase at the Humberto Delgado airport of Lisbon. Additional points of sale in other locations are under way. *“...if it works, we may have an autonomous business out of this”* – João Falcato explains.

Due to the halt in conservation projects ODL has been financing previously, the company decided to turn towards exploring its internal capabilities for ex-situ (or away for the natural site) conservation. New equipment was acquired and teams specializing on breeding species were formed. Oceanário began to engage itself in building breeding programs and developing

knowledge on conservation anticipating the menacing perspective for the future of our oceans and unavoidable disappearance of species in nature.

Good example of exploring new market opportunities while having strong consideration for environmental impact is the “Manta conservation experience” project. A niche experience for wealthier customers presents an opportunity for those interested to participate in a true conservation project. The main takeaway, however, is that due to high organizational complexity, and no potential for scaling and replication considering the risk of harming nature the project did not prove to be of high potential.

3.9 Conclusion/Case summary

To conclude, Oceanário de Lisboa came out of severe and complex crisis provoked by COVID-19 outbreak stronger than before. With the return of the visitors the company faced the healthy market enriched by new skills, stronger internal collaboration and efficiency, and more innovation-driven approach to the market.

Having been granted the ability to experiment with the market, considering unavoidable financial losses, the management embraced the risk of trial and error. The crisis stimulated the search for new ways of connecting with and delivering value to visitors and can be characterized as a period of diverging from the old way of doing business and intensive learning.

In the condition of inflexible resource base, the company recognized the necessity to actively look for new sources of revenue besides limited cost-reductions and creating new ways of connecting to the market instead of passive head in the sand approach.

Experimentation with promotional campaigns has led to an integration of dynamic pricing strategy which responded in a more granular way to the seasonal and temporal visitation preferences of local customer segments. The reduction in price motivated Portuguese visitor with lower willingness to pay with regards to permanent exposition, to visit again. The most successful campaigns as combinations of seasons/time, segment, and price variables are now integrated into the standard commercialization strategy of Oceanário de Lisboa.

In addition, creating more value outside of the public aquarium through partnerships and new market-segments allowed the company to explore additional sources of revenue while extending its reach in line with the mission of impacting people’s behavior.

Although the long-term strategy with environmental mission at the core did not change, the company finds itself at the cross-roads in terms of the means of pursuing this mission. The last investment cycle ended in 2019, while the new one (an expansion of the site) got scrapped due to the crisis. The core principles for the future developments are outlined by João Falcato in the following way: they have to be *science-based*, they must create *emotional involvement*, they have to *spread knowledge* of and stimulate engagement in *conservation*.

As the company is now preparing to embrace the new challenges such as the rise in energy prices caused by the sanctions against Russian energy exports, tighter monetary policy fueling rise in the costs of borrowing, the effect of inflationary pressure on disposable income etc. it is highly important to solidify the experience described to face the upcoming challenges from the position of resilience.

4. Teaching Note

4.1 Synopsis

The zoos and aquariums industry being relatively recent phenomenon has nevertheless undergone significant transformations, especially in the last two decades. Given that the initial value created is revolving around the sensitive exposition of wildlife, the industry has been greatly exposed to the eco-centric transition in social perspective of human-nature relationship. Consequently, the nature of the industry players' relationship has changed from competitive towards collaborative, with environmental sustainability at the core. Public aquariums, moved from competing for the visitor's wallet, to competing for the visitor's leisure time as the means of leveraging on curiosity and satisfaction with the visit to influence human behavior with regards to the oceans.

Oceanário de Lisboa was born on top of this trend, out of the values elaborated by 1998 World Expo. The company went a long way and evolved while guided by their mission and vision. Whilst attributing absolute importance to the animal welfare, the central operational efforts now aim at visitor's satisfaction as the driving force of influencing behavior. After more than 20 years of steady growth, reliant primarily on demand from foreign tourists, COVID-19 pandemic emptied the corridors of ODL. The company had to challenge its status quo, overcome the gauge-line factor of past-success, release commitment to past decisions in the new context by making unprecedented decisions, and learn extensively consequently.

This case is meant to describe such experience in relevant details to allow for analytical approach and an application of recent strategic management theories for the sake of extracting scalable knowledge of business management in crisis.

4.2 Pedagogical Objectives

The objective of this paper is to support the students in their application of theoretical knowledge of business strategy acquired in auditoriums. By providing the teaching material inspired by the real experience of a non-ordinary business going through the external shock caused by COVID-19 pandemic, the case gives insight to the impact of the pandemic on an organization, and the perspective of crisis from within allowing for the application of modern theoretical frameworks of business, such as dynamic capabilities, and more specifically the impact of innovativeness-driven market-orientation.

4.3 Target Audience

The target audience of this case study are the bachelor's and master's students in business administration, and various management and executive programs with incline towards strategic management, strategy consulting, marketing strategy, and cultural management.

4.4 Teaching Approach

The expected approach to this case study requires students to take the role of an external strategic management consultant hired by Oceanário de Lisboa. During the first session of case introduction, the following context should be outlined to the students.

*The change in **external context** and the subsequent **impact of COVID-19** pandemic stimulated variety of experimental responses by Oceanário de Lisboa. The company is seeking professional advice on how their learnings can be organized and aligned with their **business strategy**. You have been hired by the company as an external consultant to recompile, and structure the **key takeaways** from this experience, and to **advise** the company on adjustments (if any) to their business strategy as well as identifying potential blind spots. The adoption of **dynamic view** perspective is expected.*

The students are expected to read the contextual set up carefully and find keywords which will help them identify the right approach to the case. Depending on professor's preferred approach, this can be done either individually, or in a form of group/class discussion. Individuals or groups should then be invited to present their logic to the class with subsequent questions from the audience, chaired by the professor, and aimed to challenge presenters' thinking and develop the optimal path collectively.

Below is the recommended sequence to follow. However, it is worth noting that these guidelines are indicative. The nature of this exercise implies that all creative approaches to solving the case should be welcomed, given that the students provide educated justification for their reasoning.

Provide an overview of the external and internal context of Oceanario de Lisboa using SWOT.

The first keywords (or a key-phrase) are *the external context*. The students are expected to apply one or more of the external environment analysis tools to structure the information available in the case and make sense out of the exogenous change experienced by the company.

An effective and exhaustive tool recommended for application is a SWOT analysis. The student is expected to identify and structure the information of external factors in relation to the business, while also recognizing the internal strengths and weaknesses of the company. It is an effective tool to understand the strategic fit of the business with its external environment as a starting point.

Identifying Core capabilities and Core rigidities using the Knowledge-Base View.

This section is aiming to challenge the students to structure the information provided regarding the pre-COVID strategy of the company to build a clear understanding of its position at the moment of exogenous shock. In addition, the students should be advised to apply the D. Leonard-Barton's four dimensions of *core capability* (1992), to identify the source of relative success of Oceanário before the shock. This approach would allow students to make a distinction between the upside of core capabilities as well as identify potential limitations (rigidities) of the company.

Discuss the impact of COVID-19 on Oceanário de Lisboa using Dynamic View perspective.

At this stage the students are expected to *discuss* and *evaluate* the impact COVID-19 pandemic has had on the company. The recommended framework to use at this stage is the dynamic view of the company elaborated by professor I. Baretto. It allows students not only to visualize both sides of ODL's strategic model: resource base and market reach, as well as the core capabilities connecting the two, but also to demonstrate the impact of the crisis on both the resources availability and the market size.

Summaries key-takeaways using the four dimensions of dynamic capabilities.

In this section, it is expected that students summarize the information provided regarding the main takeaways the company derived from its experience and on this basis to evaluate the propensity of the company to systematically solve problems via the four dimensions aggregated by I. Baretto (2010):

- Propensity to sense opportunities and threats
- Propensity to make time-oriented decisions
- Propensity to make market-oriented decisions
- Propensity to change the resource base

Along the orientation of the exercise on the second dimension of market-orientation, the students are expected to analyze the case from the perspectives of customer-led and market-oriented approaches elaborated by S. F. Slater and J. C. Narver (1998).

Provide three recommendations to Oceanário de Lisboa for their commercialization strategy.

In this final section, the students are expected to elaborate recommendations, through assimilation of their answers to the previous questions. This section is aiming to stimulate creative approach to problem solving and imitate the situation of a real-life problem-solving experience in consulting. The students are expected to present possible scenarios for the future and based on their educated predictions, using the information and data provided with the case study, to elaborate sustainable recommendations for improving the dynamic nature of the company and the market-orientation strategy specifically.

4.5 Analysis and discussion

External context: SWOT analysis

Looking at the relationship of external environment and internal environment of ODL, the opportunities and threats can be identified based on potential impact on the company. On the other hand, from the internal perspective, we are to assess the strengths and weaknesses of ODL that can be either leveraged or compensated for in order to avoid adverse external forces and capitalize on opportunities.

Internal factors	Strengths <ul style="list-style-type: none"> ▪ Popular location among tourists and locals; ▪ Technological and biological know-how; ▪ Symbolic brand identity representative of special connection of local population to the ocean; ▪ Original and hardly replicable aquarium facility (high capital intensity); ▪ Participation in large national environmental foundation; strong national and global stakeholder networks; ▪ Perceived sustainability 	Weaknesses <ul style="list-style-type: none"> ▪ Great exposure to fluctuations in international tourism; ▪ Limited capacity to diversify the main exposition (long time to market); ▪ Low flexibility of resource configurations and scaling of operations; ▪ Dependence on highly specialized labor; ▪ Emerging complexity of customer segmentation ▪ Limited capacity to meet the growing demand;
External factors	Opportunities <ul style="list-style-type: none"> ▪ Growing environmental concern among social, commercial, governmental bodies; ▪ Growing need for mitigation of adverse impact on marine ecosystems caused by human activity; ▪ Strong connection and pride among local population; ▪ Post-covid peak of tourism activity and higher willingness to pay; ▪ Accelerated project delivery and improved internal working dynamic; ▪ Enhancement of digital capabilities; 	Threats <ul style="list-style-type: none"> ▪ Developments of new digital experiences keeping people at home; ▪ Lower mobility ▪ Dilution of premium positioning due to the integration of seasonal price reductions; ▪ Dramatic increase in energy prices due to sanctions against Russian energy exports ▪ and Consequent decrease in disposable income locally and abroad.

Strengths

One of the main the strengths of Oceanário de Lisboa is its national and international recognition. Years of excellence ass one of the core values following the gaining of prominence as an

innovation-oriented modern aquarium have not only tied the Oceanário brand to the touristic image of the city of Lisbon, but also have made it the object of pride for many Portuguese. This connection contributes to strong brand recall in the minds of local people as well as creating awareness for foreigners planning their voyages to Lisbon prior to their arrival.

Global efforts towards environmental preservation gives ODL access to large and diverse stakeholder network on a national and international levels. This participation gives the company access to the implied resource, information, and knowledge sharing, important for informed and timely decision making.

Weaknesses

Among the most evident weaknesses of the company is its extensive dependence on the stability of tourist inflow given the share of overall visitors it constitutes. COVID-19 pandemic has made this risk ever evident. Moreover, low flexibility in terms of operational (such as layoffs of specialized labor) and cost-cutting response to the disappearance of demand results in limited ability to release and reconfigure resources and limited minimization of loss.

In addition, very high complexity of creating life exhibitions contributes to higher time-to-market, which in turn requires careful planning and lower capacity to quickly adapt the service to the changes in external environment. Besides sudden drops in demand this risk extends to growth in international tourism and potential inability to capture full market value due to limitations of scaling up.

The development of ODL as most public aquariums is characterized by a transition from biological/engineering orientation towards a commercial one. Consequently, the granularity of knowledge regarding the target visitor segments' characteristics is still emerging (as the experience of promotional campaigns has demonstrated).

Opportunities

The concerning (to say the least) dynamic in the state of marine ecosystems globally increases the importance of biological and engineering knowledge, as well research capabilities to which ODL has potential of becoming a hub. Moreover, increasing social, regulatory, commercial efforts to reverse destructive behavior emphasizes the relevance of organizations such as ODL.

Moreover, high brand loyalty of local population constitutes significant unrealized potential, as promotional campaigns once again have demonstrated. Considering the enhanced digital literacy, improved internal working dynamic and consequent efficiency ODL can further diversify its projects to appeal to local visitors at a higher frequency on top of the cycles of temporary exhibitions.

Threats

Among potential threats we may mention the concern raised internally that on a long-term promotional campaign might negatively affect the perception of the company as premium service provider.

Moreover, the temporary reduction in mobility as well as accelerating developments of entertainment technology might contribute to people staying at home more, rather than visit cultural and educational expositions.

Overall, it is important to consider the long-term effects of pandemic on clients' behavior. There remains a high degree of uncertainty in the development of trends accelerated/initiated by pandemic once the post-pandemic agiotage of visitations comes to an end.

In addition, just as demand has nearly reached its pre-pandemic levels, the new external pressures are under way in the face of the rising energy prices and consequently increasing costs eating into the profits of the company as well as disposable income of its visitors.

Identifying core capabilities and core rigidities of ODL: Knowledge-Base View

According to D. Leonard-Barton's view (1998), there are four dimensions to what can be considered a core capability strategically differentiating a company from its competitors and consequently driving its competitiveness. From the knowledge-base view he adopts, these dimensions will help us identify the core capability of ODL and evaluate its robustness relative to the changes in external environment with orientation on the marketing and new product development.

Dimensions	Core capability	Core rigidity
1. Skills and Knowledge	Strong historic knowledge base grounded on Biology; Engineering; Conservation; Education.	Non-dominant roles in customer relationship and hospitality.
2. Technical Systems	Sophisticated and intensive visitation and animal care equipment.	Limited capacity to renew and replace the physical systems in place due to the necessary continuity of operations. Limited capacity for temporary installations.
3. Managerial Systems	Leadership incentivizing profitability, with education and conservation roles at the core. Management of biology background.	Lower relative resource allocation to customer-experience and market-related research projects.
4. Values and Norms	Care for the ocean; Environmental responsibility; Conservation practices.	Emerging entrepreneurial culture.

Skills and Knowledge base

The primary skills and knowledge of Oceanario de Lisboa at the earlier stages of its development are biology and engineering. Along the way of gradual transition from product centric towards customer centric approach to the market, financial literacy, marketing, and communication have also become essential to the fulfillment of the social mission taken on by Oceanário de Lisboa.

Given the high degree of biological specialization required to monitor and maintain the well-being of different species in captivity, the exposition of high biological and technological complexity created with the equipment of ODL is hardly replicable.

Although the historical predominance of biological, engineering, and educational expertise within the company contribute to its core capability and make up its sustainable competitive advantage, the company can find it more challenging to accumulate comparable pool of knowledge and skill in the areas such as customer relationship management and hospitality element of visitation.

Technical system

The evident technical element of the company's core capability includes unique aquarium installations, and visitation equipment, as well as animal care systems in place. The development

and accumulation of these technical capital is a result of long-term engineering and biological development and innovation and therefore are hardly replicable from the perspective of cost as well as expertise required for construction and operation.

The hardly replicable technical installations of Oceanário de Lisboa on the other hand may be regarded as core rigidity which is especially visible in the time of the crisis. The need in continuously maintaining the equipment operational presents an obstacle to reconfiguration of resources, replacements/upgrades.

Moreover, the technical sophistication of installations renders temporary exhibitions more time-consuming to deliver to market.

Management system

The management of ODL is encouraging the knowledge creation and allocation towards innovation in the areas of ocean conservation, and education. Profitability in turn is regarded by the management as a natural consequence of good and efficient management and a source of financial sustainability fueling the conservational efforts of the company.

While being crucial to the fulfillment of its mission, these traits of managerial system of Oceanário may be regarded as source of rigidity, considering the alternative of allocating resources towards innovation-driven and market-oriented approach to the creation of visitor's experience (opportunity cost).

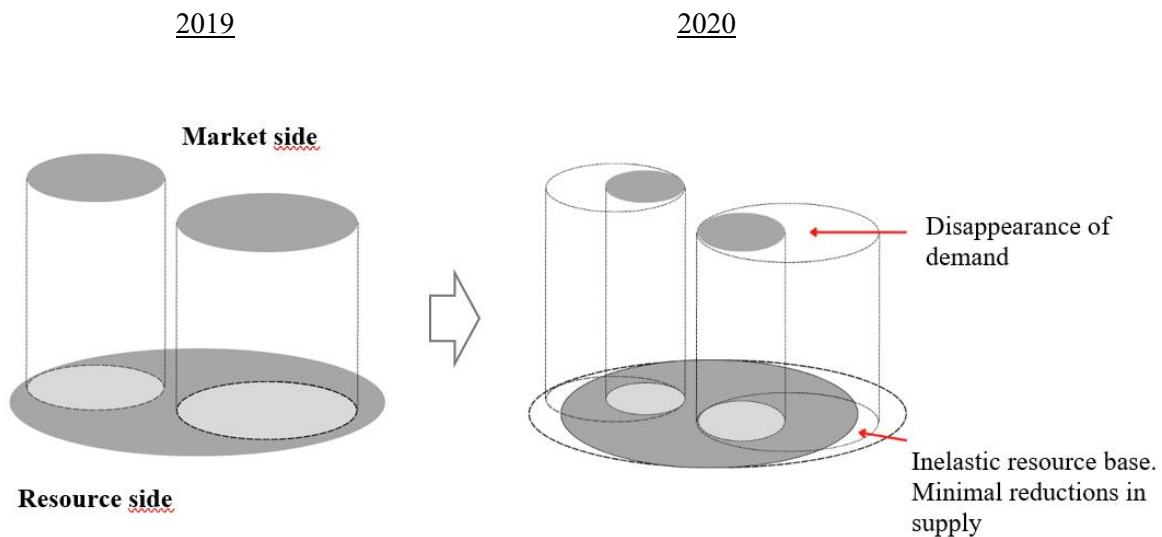
Values and Norms

Having emerged from the message conveyed by the Expo 1998: "The oceans: a heritage for the future", the differentiating factor for the visitation business of ODL is the presence of strong organizational values centered around the wellbeing of animals, responsibility for the ocean and perception of it as the natural heritage and foundation for environmental sustainability of our planet.

The commercial focus of ODL having emerged posterior, nevertheless became central to its operational practice with focus on customer satisfaction. However, the core value characterizing organizational behavior of Oceanário as the market player is the one of biological know-

how working towards animal and environmental well-being. Consequently, the company avoids commercial opportunities that do not align with these values.

Impact of COVID-19: Dynamic View



Source: author.

* The scales serve indicative purposes and do not represent the actual volumes or rates of change.

Based on the framework proposed by I. Baretto (2010), the dynamic view of the misfit with the new conditions of external environment imposed by the crisis can be perceived from two dimensions: resource base, and the market dimensions.

Based on the information provided in the case, we may visualize the decrease in the available market share, as well as the unproportional decrease in the availability of resources and operational scale. This visualization helps us recognize the specificity of public aquarium/zoo business, in which case the installations are not there uniquely to provide the service to the visitor per se, but to ensuring there are impeccable conditions for the animals prosper.

During the closure, the cost reduction mostly came from the release of resources needed for the accommodation of visitors and the corresponding staff, while all the exposition-related systems remained intact. Although this inelasticity of resource reconfiguration contributed to financial losses suffered during the crisis, on the other hand it served as the driving force for augmented innovation-oriented and experimental activation of resources.

Besides maximizing profit through promotional campaigns targeting local customer segment, new revenue sources were explored on the market side through innovative projects like “Seasustainability”, “Taugus Daulphins”, and “Manta conservation experience”.

Considering this relative inability of releasing resources on a short-term, it was crucial for damage minimization to find new ways of delivering value to the market, may it be through digitalization, new value creation, or temporal targeting of various age groups through promotional offerings.

Key Takeaways: Market orientation

To evaluate the propensity of ODL to systematically solve problems as core of dynamic capability of the firm proposed by I. Baretto (2010), we need to assess each of the four dimensions it includes: capacity to sense the external opportunities and threats (D1), capacity to make timely decisions (D2), the ability to act in market-orientated mindset (D3), and the capacity to reconfigure resources (D4). Next let us assess each of these dimensions one by one using the qualitative and quantitative information from the case and qualifying them as either Low, Medium, or High.

Propensity to systematically solve problems		
Dimension	Grade	Description
D1	High	Connection with the vast global network of conservation institutions and low degree of competitiveness foster open exchange of information among the industry players.
D2	Medium	Ability to act in anticipation of regulatory measures. Campaigns introduced when needed to revive demand. Accelerated internal working dynamic in time of crisis. Long time-to-market of temporary expositions.
D3	Medium	More customer-led rather than market-oriented approach with surveys and customer feedback as the main source of visibility. The exogenous shock stimulated a period of active experimentation and entrepreneurship.
D4	Low	The strict necessity to continuously ensure the wellbeing of fragile ecosystem created within Oceanário makes the configuration of inputs such as nutrition supplies, energy consumption to power the equipment, specialized staff, and other resources much harder to release and/or reconfigure. The nature of the exposition does not allow ODL for flexible scaling in response to the change in demand.

Based on the descriptions provided by S. F. Slater and J. C. Narver (1998), the differentiating characteristics of market-oriented business from the customer-led one implies the continuous processes of active exploration of the market in search for latent needs in order to generate value. In addition, these processes involve anticipation of customers' needs and desires and continuous experimentation.

Based on the case, the students are expected to recognize, that the pre-covid strategy of Oceanário de Lisboa can be characterized as rather customer led. This was visible from the clearly defined strategic approach to the two main market segments with two static commercialization strategies, one fitting each segment. The research mainly conducted in a form of surveys and generating the information reflecting the short-term landscape based on the perception through the eyes of the visitors. The example of this approach is the customer satisfaction report conducted on a yearly basis or monitoring of complaints.

What is important to highlight is the transition stimulated by the disappearance of demand during the period of pandemic. We may observe the transition in certain aspects of market approach from customer-led to market-oriented, specifically with the introduction of promotional campaigns. The experimentation process was activated which brought about a new depth in the understanding of local customer segment and the consequent ability to increase the value for specific groups of customers. Moreover, a need to actively seek new revenue streams fostered the adaptation of innovativeness-driven elements of organizational culture.

Recommendations

This section is aiming to stimulate creative approach to problem solving and to provide the students a certain degree of freedom in coming up with informed and educated recommendations regarding the company's strategic development.

Among the recommendations, we may include the continuation of knowledge acquisition regarding the market segmentation to tap on the potential for adapting the visitation experience not only to demographic characteristics of the visitors, but also to psychological, and behavioral personae.

Moreover, gaining additional insight into the lifestyles and behavioral patterns of the visitors would allow ODL to focus on market segments with the highest potential for positive impact.

A sustainability index of visitor's lifestyle could be developed, or an existing one applied to gain further understanding of the market with relevance to ODL's social mission.

The organization of internal market research lab would help the company formalize the innovativeness processes activated during the crisis with a focus on gaining further knowledge and developing superior value based on experimentation. Leveraging on the empowerment and impact making, ODL can attract young marketing and data scientists to cultivate novelty and continuous search with regards to the customer as elements of market-oriented organizational culture.

5. Conclusion/Limitations

To conclude with a summary of this academic paper, the case of Oceanário de Lisboa is covering the managerial perspective of the way the company has reacted and learnt in the context of COVID-19 pandemic and consequent disappearance of demand for its visitation facilities. As a mission-driven business, the case provides an interesting perspective on developing new market opportunities while maintaining the balance between the animal wellbeing, visitors' satisfaction and conservational efforts. This aims to provide the students with real-life example of adaptive behavior and serve as the base ground for the application of relevant theoretical concepts acquired in a classroom.

Nevertheless, it is relevant to keep in mind various known limitations of this case. For instance, only the internal and only the upper management perspectives were acquired during the interviews. Integrating customer perspective of managerial decisions would enrich the case with the insight into the external perception of Oceanário de Lisboa. Furthermore, integrating the employees' perspective would provide for an additional dimension of internal organizational dynamics.

Another limitation of this case is in the absence of a reference point, such as another example of the company in the zoo/aquarium business. A comparative case would put the experience of Oceanário into perspective.

Lastly, due to an extent of ambiguity present around the concept of market-orientation, it is challenging to quantify the impact of adopting such organizational culture on performance while isolating other factors, therefore this study is focused rather on conveying qualitative characteristics of moving to a greater extent of market-orientation.

6. Appendix

Table 1: Number of new stand-alone aquariums opened around the world (2000-2009).

Geographic Region	New Aquariums since 2000
Europe	15
Japan	13
North America	17
China	22
Australia / New Zealand	0
Middle East	2
Africa	1
Rest of world	70

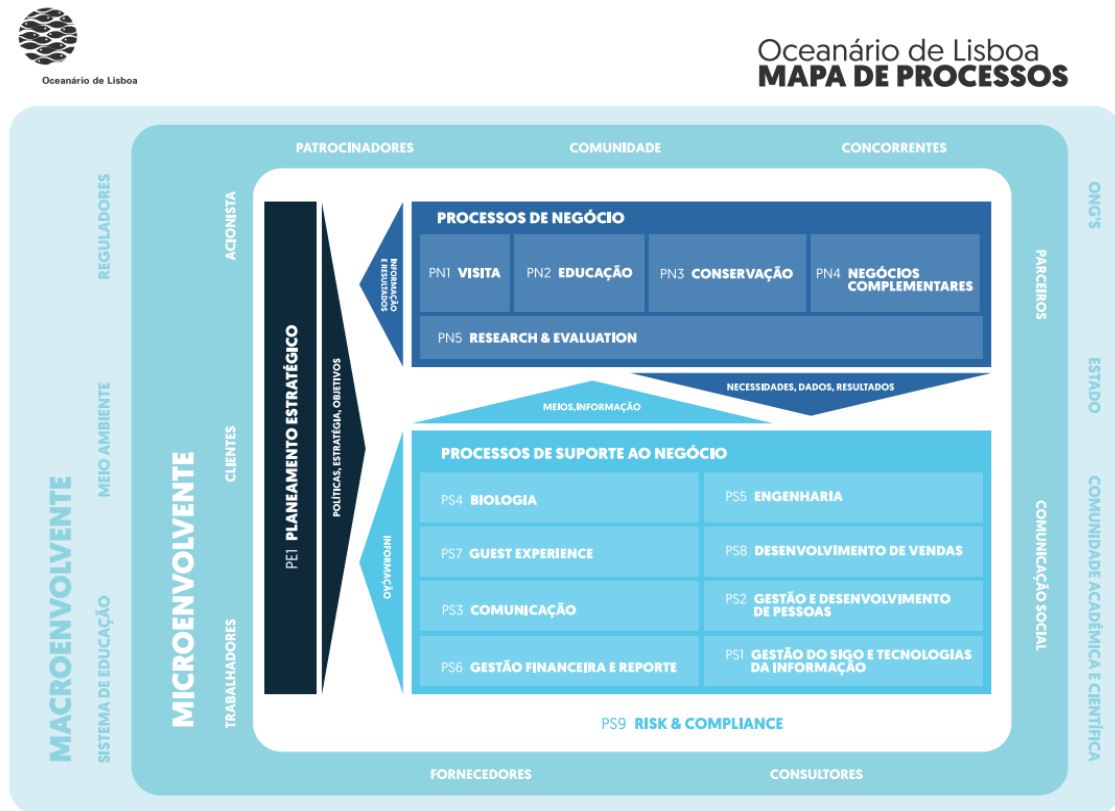
Source: WAZA, 2009

Table 2. Approximate yearly number of visitors to public aquariums by country (2009).

Geographic Region	Visitors to Stand-alone Aquariums (millions per annum)
China	*20 000 000
Japan	32 600 000
United States of America	42 500 000
Australia / New Zealand	4 000 000
Europe	20 000 000
South Africa	1 200 000
Canada	2 200 000
Total	~150 000 000

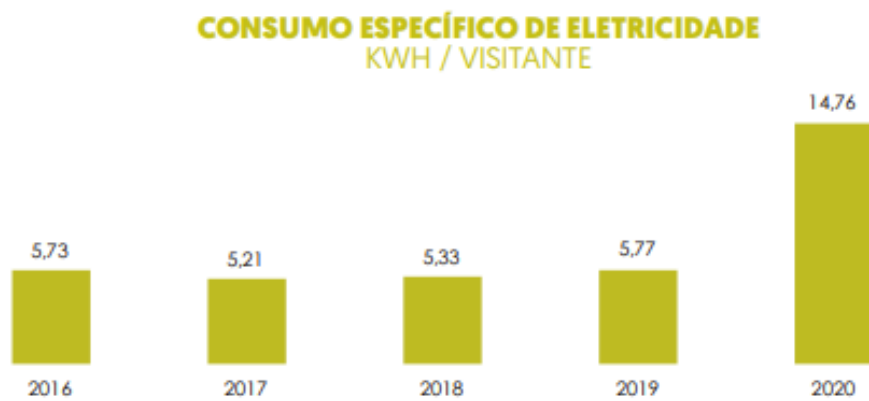
Source: WAZA, 2009

Picture 1: Process Map of Oceanário de Lisboa.



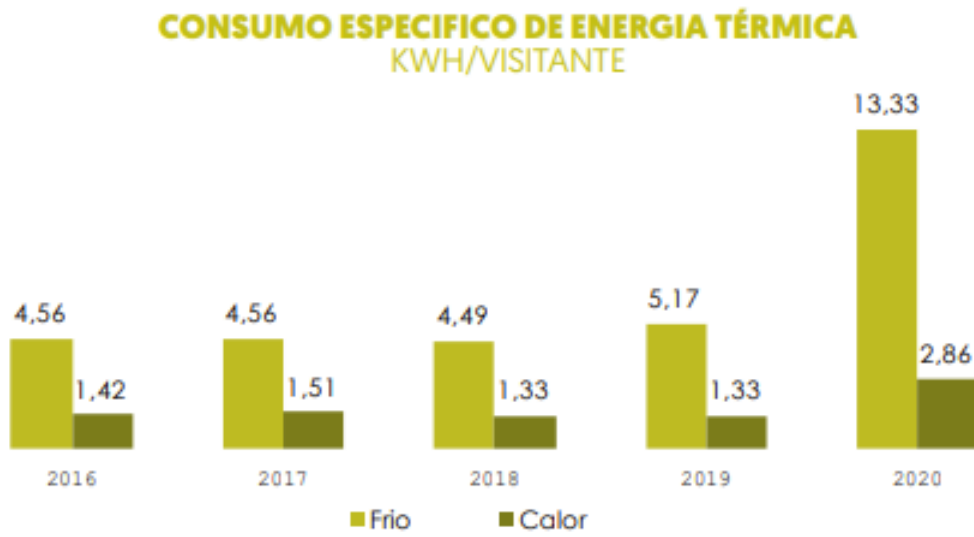
Source: Oceanário de Lisboa

Figure 1. Consumption of electricity per visitor.



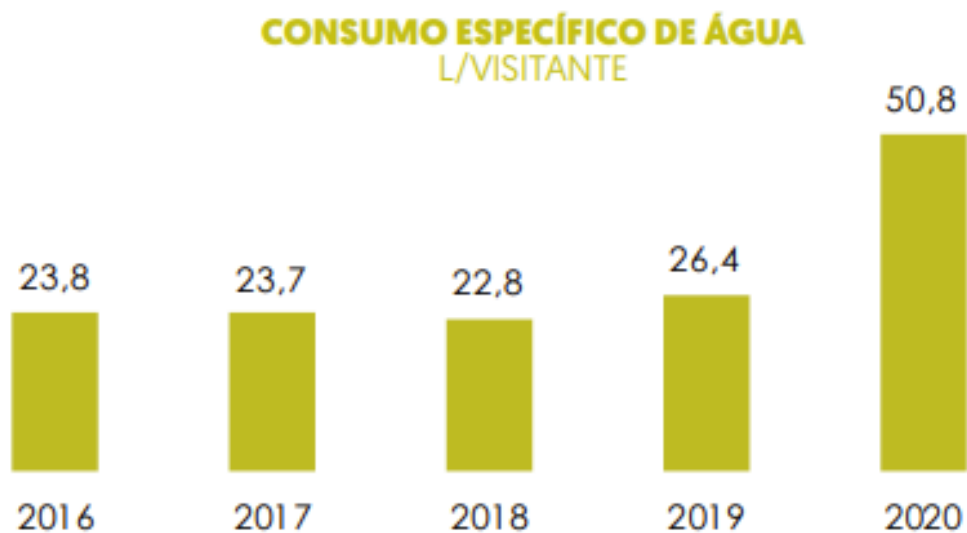
Source: EMAS 2020

Figure 2. Consumption of thermic energy per visitor.



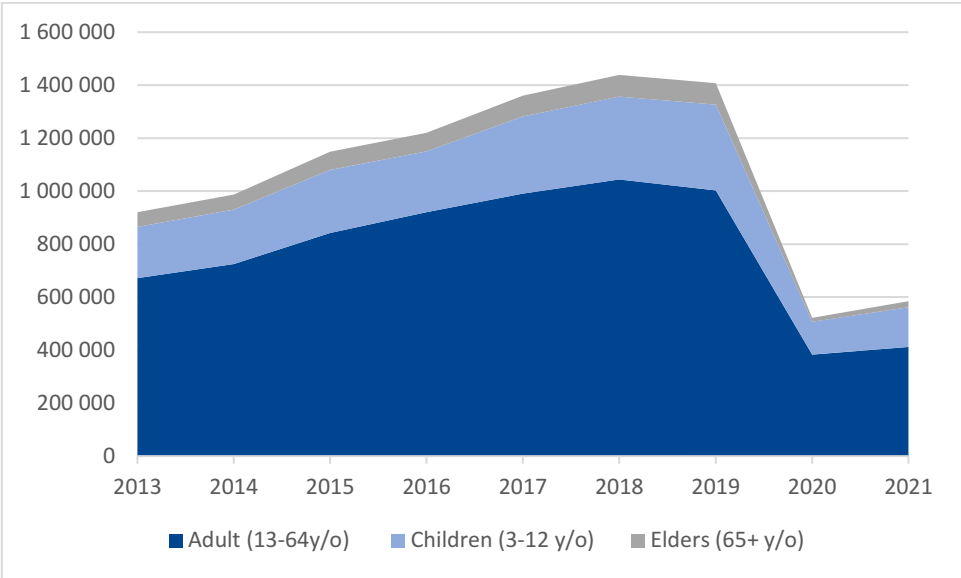
Source: EMAS 2020

Figure 3. Consumption of water per visitor.



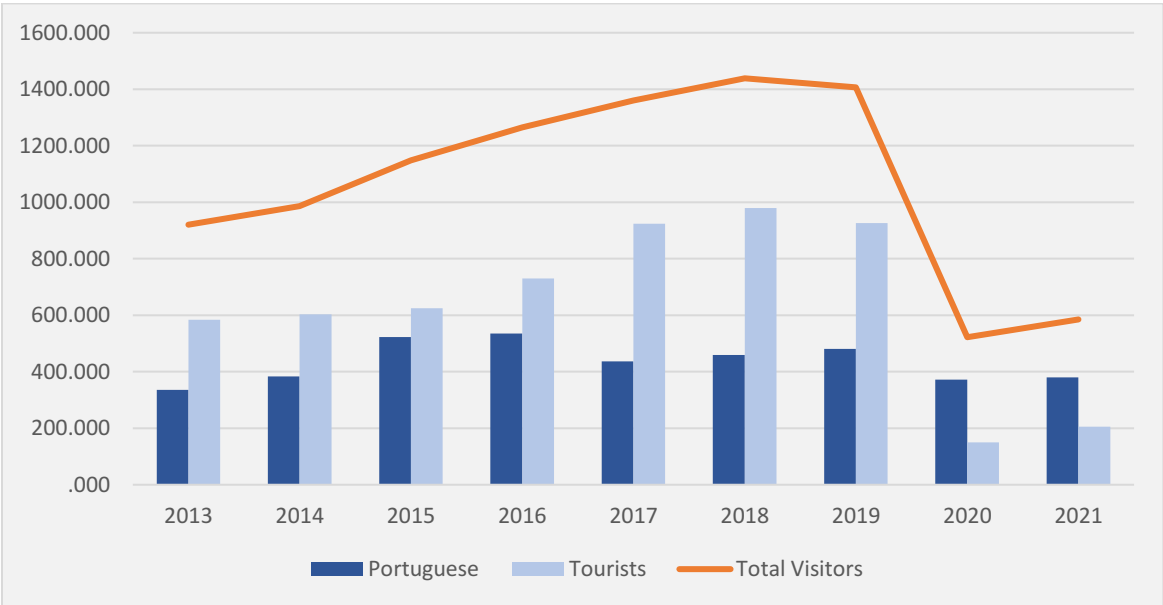
Source: EMAS 2020

Figure 4. Variation customer composition by age-groups.



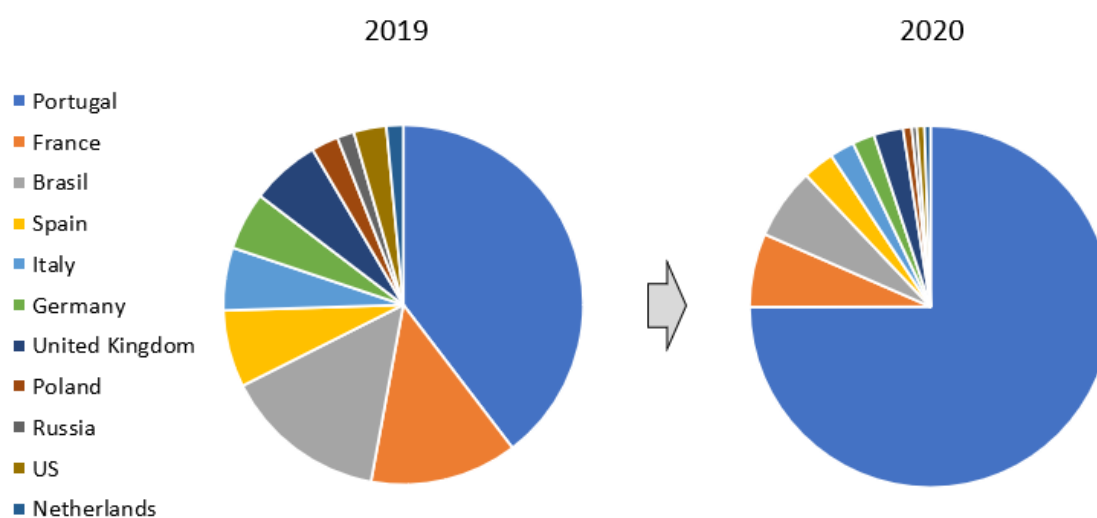
Source: Oceanário de Lisboa

Figure 5. Yearly variation of visitors: Portuguese vs Tourist segments.



Source: Oceanário de Lisboa

Figure 6. Composition of ODL visitors by nationality: 2019 vs 2020



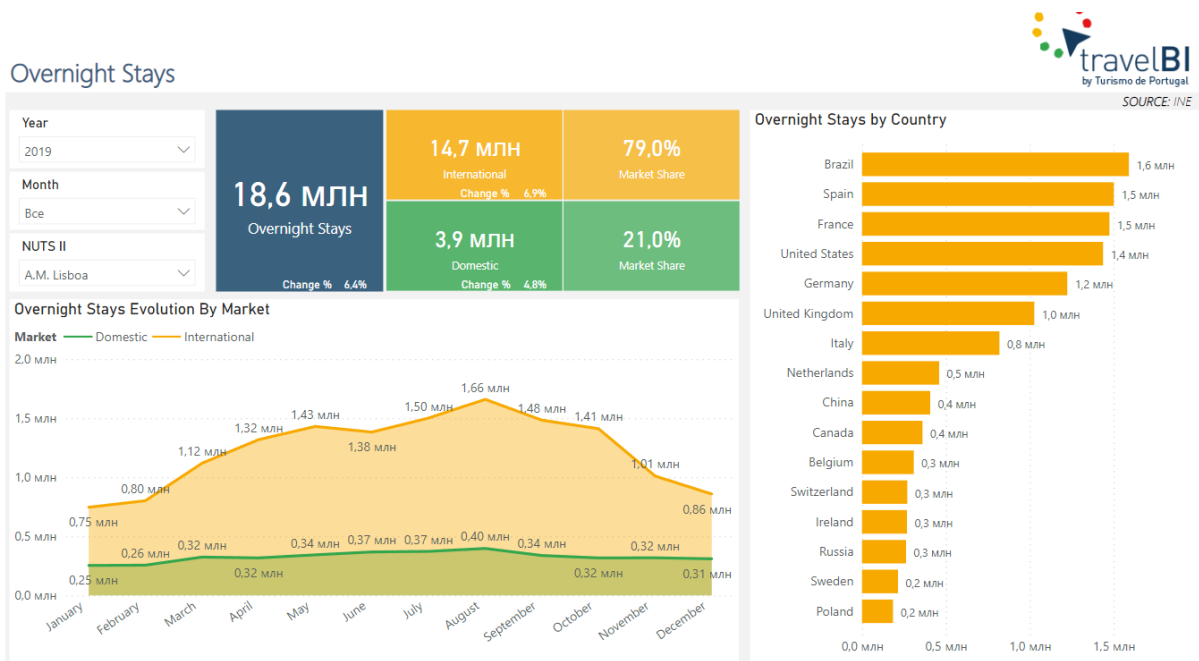
Source: Oceanário de Lisboa

Table 3. Yearly share of total tourists in Lisbon visiting Oceanário de Lisboa.

Year	Tourists in Lisbon	% Change	Tourists visited ODL	% Change	Captured by ODL
2013	2 276 895		593 175		26,1%
2014	2 617 301	15%	610 513	2,9%	23,3%
2015	2 800 849	7%	680 321	11,4%	24,3%
2016	3 459 048	23%	730 189	7,3%	21,1%
2017	4 064 561	18%	923 600	26,5%	22,7%
2018	4 294 570	6%	979 550	6,1%	22,8%
2019	4 699 887	9%	925 921	-5,5%	19,7%
2020	1 060 576	-77%	150 241	-83,8%	14,2%

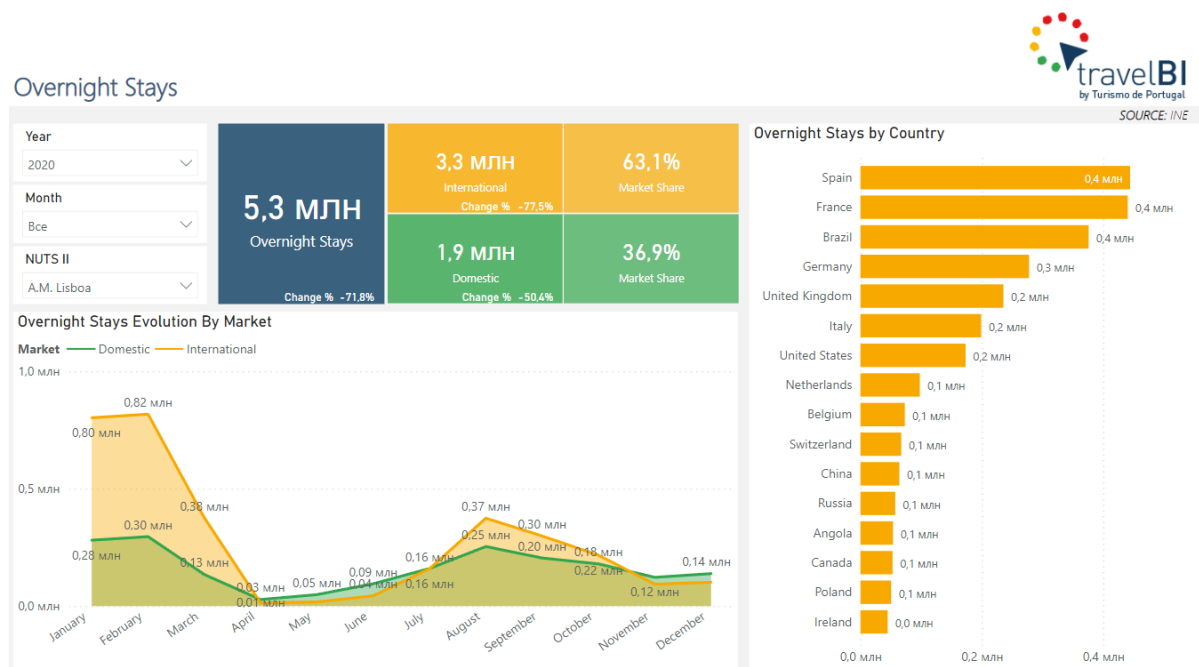
Source: Oceanário de Lisboa

Picture 2. General statistics of overnight stays in the Lisbon area as of 2019.



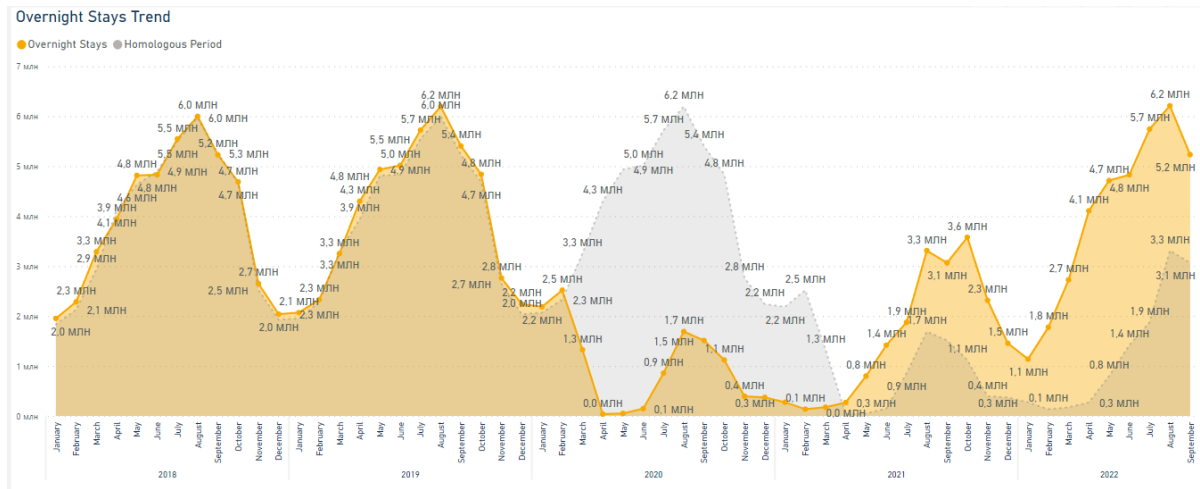
Source: Turismo de Portugal

Picture 3. General statistics of overnight stays in the Lisbon area as of 2020.



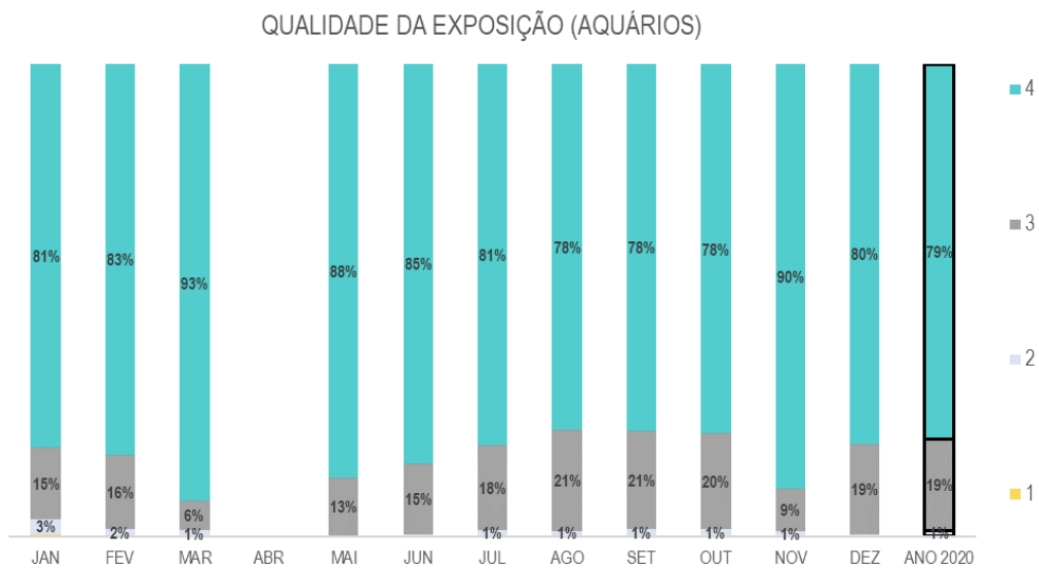
Source: Turismo de Portugal

Figure 7. Seasonal variation of Overnight stays in Portugal.



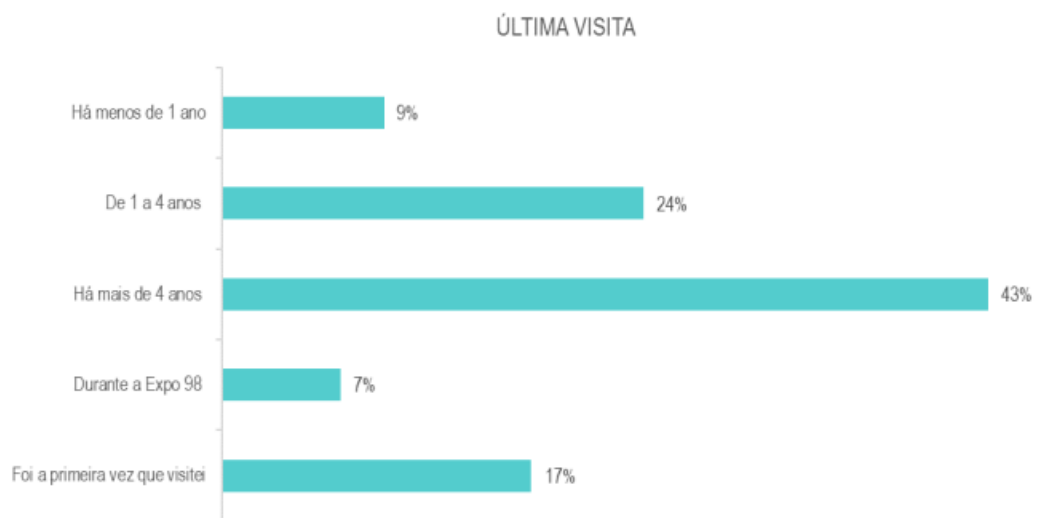
Source: Turismo de Portugal

Figure 8. Results of 2020 customer feedback survey: perceived quality of the exposition. (4 – very good; 1 – poor).



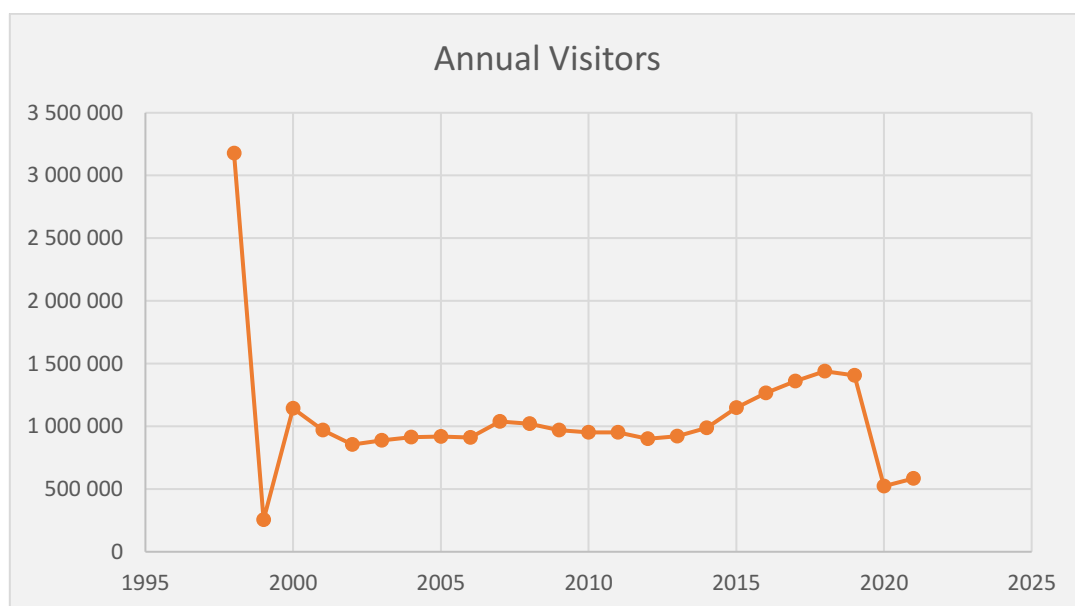
Source: RELATÓRIO AVALIAÇÃO de SATISFAÇÃO 2020

Figure 9. Results of 2020 customer feedback survey: last visit.



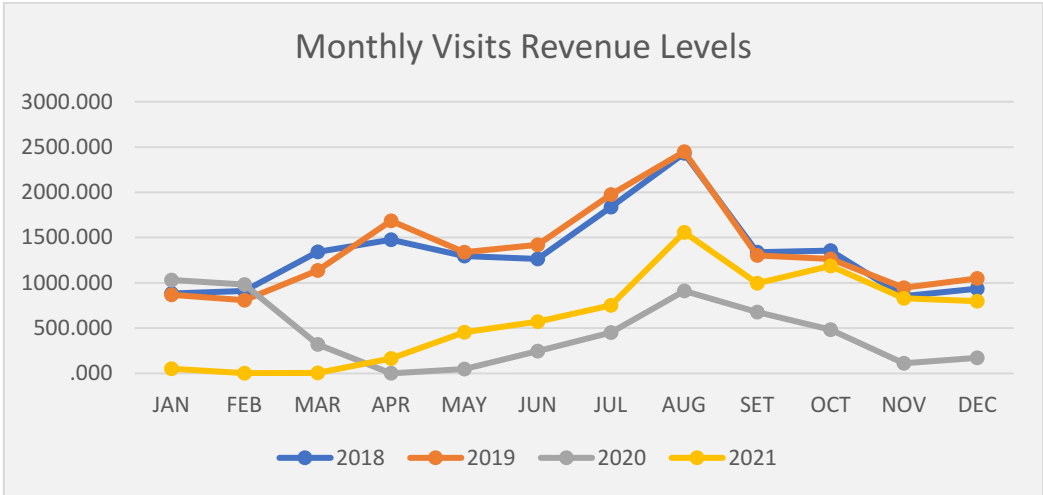
Source: RELATÓRIO AVALIAÇÃO de SATISFAÇÃO 2020

Figure 10. Yearly variation of annual visitors of Oceanário de Lisboa.



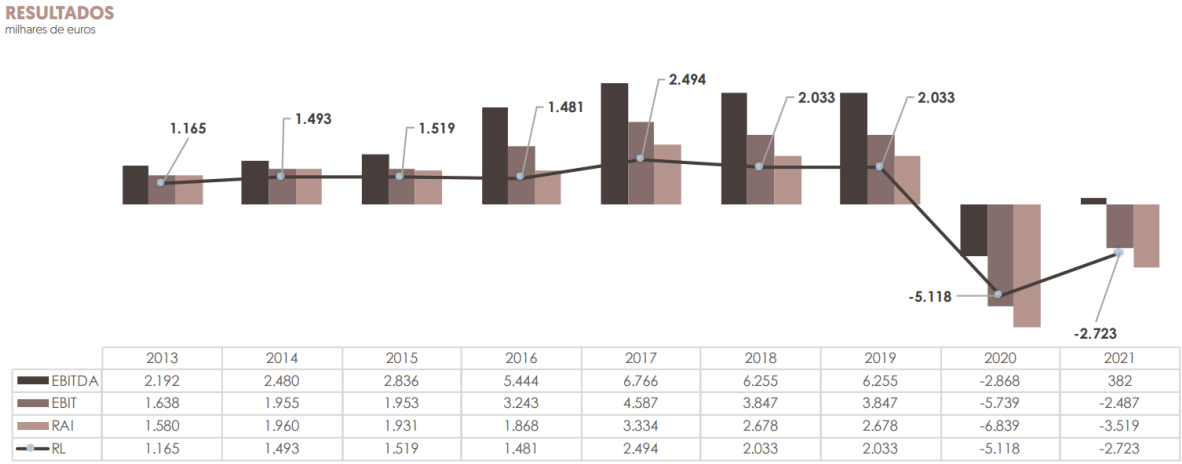
Source: Oceanário de Lisboa

Figure 11. Monthly variation of revenues from visitation for the years of 2018-2021.



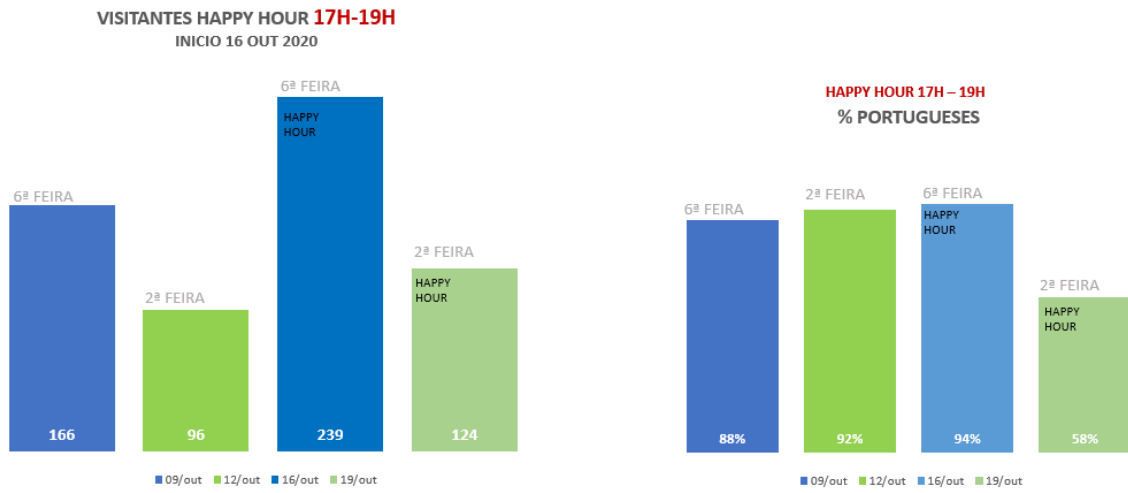
Source: Oceanário de Lisboa

Figure 12. Yearly comparison of financial performance of Oceanário de Lisboa



Source: 2021 Annual report.

Figure 13. Impact of “Happy Hour” promotional campaign.



Source: Oceanário de Lisboa

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