



Lisbon School
of Economics
& Management
Universidade de Lisboa

MASTER DEGREE IN
MANAGEMENT AND INDUSTRIAL STRATEGY

MASTER FINAL WORK
INTERNSHIP REPORT

DEVELOPMENT OF A MARKETING PLAN IN A NONPROFIT
ORGANIZATION WITH LIMITED RESOURCES: BIOMIMICRY GRANADA

BERNARD MARCHAL

JULY – 2024



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JULY – 2024

Acknowledgments

I would like to extend my deepest gratitude to all those who have supported and guided me throughout the completion of this master's internship report.

First and foremost, I am profoundly thankful to my academic supervisor, Nuno Fernandes Crespo, for his invaluable guidance, encouragement, and insightful feedback, which were crucial in shaping this work.

I owe a debt of gratitude to my internship supervisors, Theresa Millard and Matt Neimann, whose mentorship and expertise were instrumental in my learning and development during this period. Their unwavering support and constructive criticism have been immensely helpful.

Special thanks to my colleagues Abraham Ortega Rebozo, Juan Pablo Giraldo, Alejandro Serna Gonzalez, and Luis Marques Lopez. Their camaraderie, collaboration, and support have made this journey both productive and enjoyable.

I am also grateful to all the individuals who participated in my interviews. Your willingness to share your experiences and insights has significantly enriched my research.

To the friends I met in Granada, thank you for your friendship and for making my time there memorable and enriching.

Finally, I would like to express my heartfelt appreciation to my social and familial network. Your constant support, encouragement, and belief in me have been my anchor throughout this journey.

Thank you all for your invaluable contributions to the completion of this work.

Abstract

Non-Profit Organizations (NPOs) are in almost each city and even villages. But often people that work on those organizations are busy enough volunteering for them, and don't take the time for caring for their efficiency level, or to develop a global strategy for the company.

This Master Final Work was realized inside of Biomimicry Granada, a small NPO working in biomimicry. It focuses on improving the marketing management of small NPOs with limited resources. The objective is to build a marketing plan and to look where are the element limiting the marketing performance of the organization and what improvement can lead towards better efficiency and bring success.

The question of this research is: "How to develop a marketing plan for a NPO in the Biomimicry sector?".

The investigation starts with deep market research that, due to the specificity of the topic, met some challenges. It uses interviews, brainstorming, meetings, field observation, design thinking, to get the relevant data. It then tries to bring clues on marketing strategies that could fit the resources available.

The full result depicts a marketing plan, but also a timeline presenting all the service improvements proposed for the next 5 years, and the suggested development of new services.

The findings point out similarities with prior research concerning the lack of investment in marketing by small NPOs. It displays parallels with studies that show that management knowledge is not taken very seriously and can be improved.

This report provides insights to help the company with future marketing activities by building a solid long-term marketing plan.

It contributes to the understanding of what can be problems in small NPOs and generates valuable content for the sector.

Keywords: Management, marketing plan, marketing management, biomimicry, non-profit organizations, marketing strategy.

Resumo

Organizações Sem Fins Lucrativos (OSFL) estão presentes em quase todas as cidades e até mesmo em aldeias. No entanto, as pessoas que trabalham nessas organizações frequentemente estão demasiado ocupadas com o voluntariado, e não dedicam tempo para se preocupar com o nível de eficiência da organização ou para desenvolver uma estratégia global para a organização.

Este Trabalho Final de Mestrado foi realizado dentro da Biomimicry Granada, uma pequena empresa sem fins lucrativos que atua na área de biomimética. O foco é melhorar a gestão de marketing de pequenas organizações sem fins lucrativos com recursos limitados. O objetivo é elaborar um plano de marketing e identificar os elementos que limitam o desempenho de marketing da organização, além de sugerir melhorias que possam aumentar a eficiência e trazer sucesso.

A questão de investigação é: "Como desenvolver um plano de marketing para uma organização sem fins lucrativos no setor de biomimética?".

A investigação começa com uma pesquisa de mercado aprofundada, que, dada a especificidade do tema, encontrou diferentes desafios. Utiliza entrevistas, *brainstorming*, reuniões, observação de campo e *design thinking* para obter os dados relevantes. A pesquisa tenta, então, fornecer pistas sobre estratégias de marketing que possam ser adequadas aos recursos disponíveis.

Os resultados apresentam um plano de marketing, além de um cronograma com todas as melhorias de serviços propostas para os próximos 5 anos, além do desenvolvimento sugerido de novos serviços.

As descobertas apontam semelhanças com pesquisas anteriores sobre a falta de investimento no marketing de pequenas OSFLs. Revelam paralelos com estudos que mostram que o conhecimento de gestão não é levada a sério e pode ser aprimorada.

Este relatório oferece *insights* para ajudar a organização em futuras atividades de marketing, como a construção de um sólido plano de marketing de longo prazo. Ele contribui para a compreensão dos problemas enfrentados por pequenas OSFLs e gera conteúdo valioso para o setor.

Palavras-chave: Gestão, plano de marketing, gestão de marketing, biomimética, organizações sem fins lucrativos, estratégia de marketing.

Contents

Acknowledgments	i
Abstract	ii
Resumo	iii
Contents	iv
Acronyms and abbreviations	vi
List of Figures	vi
List of Tables	vi
1 Introduction	1
<i>1.1 Background</i>	1
<i>1.2 Introduction of the research question and of the problem</i>	1
<i>1.3 Relevance of the study</i>	2
<i>2.1 Marketing plan</i>	3
<i>2.2 Marketing plan in Non-Profit Organizations (NPOs)</i>	4
<i>2.3 Marketing strategies for non-profit companies</i>	6
<i>2.4 Biomimicry</i>	8
2.4.1 <i>Concept</i>	8
2.4.2 <i>Trend – Opportunity</i>	8
3 Company and internship overview	10
4 Research methodology and analysis	11
5 Marketing plan	12
<i>5.1 Internal goals and values research</i>	12
<i>5.2 Market research</i>	13
5.2.1 <i>Activities of BG</i>	13
5.2.2 <i>Resources of BG</i>	13

5.2.3 <i>SWOT analysis</i>	14
5.2.4 <i>Competitive advantage and core competences</i>	16
5.2.5 <i>Market share</i>	16
5.2.6 <i>Interviews and demand research</i>	17
5.2.7 <i>Competition analysis</i>	18
5.2.8 <i>Competition influence</i>	20
5.2.9 <i>Challenges to enter and to stay in the market</i>	20
5.2.10 <i>Partnerships and collaborations</i>	21
5.2.11 <i>Trends and factors influencing the external environment, dynamics</i>	21
5.3 <i>Pertinence and improvement on the services offered</i>	22
5.3.1 <i>Biomimicry 101 past situation</i>	22
5.3.2 <i>Biomimicry 101 new situation</i>	24
5.3.3 <i>GREEN past situation</i>	25
5.3.4 <i>New GREEN situation</i>	27
5.3.4 <i>Sustainable trainings situation</i>	27
5.4 <i>Research of marketing strategies</i>	28
5.4.1 <i>In general</i>	28
5.4.2 <i>For sustainable trainings</i>	29
5.4.3 <i>For GREEN</i>	29
5.5 <i>Responsible traveling solutions</i>	31
5.6 <i>Marketing plan's timeline</i>	32
6 <i>Conclusion</i>	34
6.1 <i>Main contributions</i>	34
6.1.1 <i>Strengthening of previous work</i>	34
6.1.2 <i>New personal contributions</i>	35

<i>6.2 Limitations and future research</i>	36
<i>6.3 Evaluation of the internship</i>	36
References	38
<i>Annex 1</i>	42
<i>Annex 2</i>	44
<i>Annex 3</i>	45
<i>Annex 4</i>	45
<i>Annex 5</i>	49
<i>Annex 7</i>	55

Acronyms and abbreviations

BDT	Biomimicry Design Thinking
BG	Biomimicry Granada
CEO	Chief Executive Officer
GSTC	Global Sustainable Tourism Council
KM	Knowledge Management
NPO	Non-Profit Organization

List of Figures

Figure 1 - SWOT analysis.....	14
Figure 2 - Marketing plan's timeline.....	34

List of Tables

Table I – Category of services and number of “biomimicry companies” offering them.....	19
Table II – Category of services and number of “biomimicry companies” offering them.....	19

1 Introduction

1.1 Background

There are Non-Profit Organizations (NPOs) everywhere and very few research about those. They contribute to a lot of different domains. Few studies have been conducted by proving their importance, and there is even less about how to improve the efficiency or the effectiveness of those organizations. Research often focusses about profit and profit organizations, but the literature shows that more and more people now are also interested about NPOs.

The scarcity of resources of NPOs which could be one of the reasons behind the lack of interest of researchers around this subject, is the very reason why NPOs search for excellence and need very high efficiency (Lettieri et al., 2004).

NPOs can belong to very different industries. It increases the difficulty of finding a universal key to all NPOs' problems. Instead of searching solutions that we would be able to apply to all NPOs, which is very difficult, it is maybe easier to investigate guidelines helping specific types of NPOs (Lettieri et al., 2004).

In Granada, a small NPO is working in biomimicry. Biomimicry is a domain niche which makes the documentation about NPO working in biomimicry very difficult to access to, or inexistent. Biomimicry is also a subject that catch more and more attention, and that has been proven valuable.

It seems that research about NPOs' management and on the management of Biomimicry companies is scarce. This research combines both aspects, since we will study the management of a NPO in the biomimicry industry.

1.2 Introduction of the research question and of the problem

The first research question is formulated as: "What are the solutions to improve NPOs management?".

It is known that often NPOs don't have resources to pursue market research and proper marketing management. Without a solid understanding of the market landscape and customer needs, companies may find it challenging to position their solutions effectively (Bulla & Starr-Glass, 2006).

Here by convenience, only the case of Biomimicry Granada (BG) will be explored. BG is a small non-profit biomimicry organization with very limited resources based in Granada.

Biomimicry is a very niche sector that is unknown from most of the people/industries and the big public. There is then a supplementary difficulty to find clients.

Align with the generalization identified by Bulla & Starr-Glass (2006), BG doesn't have anybody working on the marketing side of the company. So far, lacking the time and money to do proper research on what to target, they just accept here and there work opportunities or collaborations that don't necessarily pay well or pay at all, and that are not necessarily aligned with their goals.

The research question is then transformed into: "How to develop a marketing plan for a NPO in the Biomimicry sector?".

Another major problem is that the company didn't define their goals and values. Before being able to work properly on the actual marketing direction, work was done to specify properly the goals and values of the company.

1.3 Relevance of the study

NPOs are more and more important in the modern world because of the increase of social demand (Moreno-Albarracín et al., 2021). In certain countries, they contribute significantly to social development (Strydom & Stephen, 2014). And in general, NPOs help the society (Enckell, 2016).

There is a need for management research around NPOs (Kong, 2008; Plaisance, 2021). More than just management, Iltis (2014) says that there is a requirement of acknowledging how interesting non-profit marketing is. He also writes that the use of marketing for NPOs is only at its beginning and not yet established in the literature. Complementarily, several authors (Izquierdo & Samaniego, 2007; Gainer & Padanyi, 2005; Herman & Renz, 1999; Homburg et al., 2002; Morgan et al., 2002; Sheth & Sisodia, 2002) demanding for the evaluation of marketing strategies performance inside of NPOs.

NPOs are not only important but also the interest of research on marketing management or efficiency around them is big (Moreno-Albarracín et al., 2021; Strydom & Stephen, 2014; Enckell, 2016; Kong, 2008; Iltis, 2014; Izquierdo & Samaniego, 2007).

Within marketing management, the phase of marketing planning is particularly important. As referred by Mc Donald (2007, p. vi), “effective marketing planning lies at the heart of a company’s revenue-earning activities”.

Concerning biomimicry, it is known that it is new but growing sector (Alabdulatif & Thilakarathne, 2023; Bayhan & Karaca, 2019; Blanco et al., 2021; Hwang et al., 2015; Lurie-Luke, 2014; Markets, 2023; *Medical Biomimetics Market Size And Share Report, 2030*, 2024; Nagel et al., 2016; Rovalo et al., 2020; Taylor Buck, 2017), that it is in-vogue (Rovalo et al., 2020; Alabdulatif & Thilakarathne, 2023) where the opportunities are also high (*Biomimicry 3.8 - Innovation Inspired by Nature*, 2024). For these reasons, this is an interesting sector to study.

2 Literature review

2.1 Marketing plan

Marketing plans have become essential for companies, especially as they navigate an increasingly complex and competitive environment (Iltis, 2014; McDonald, 2007). Research has demonstrated that marketing plans can significantly improve commercial success (McDonald, 2007), making them crucial for an offering’s overall performance (Chernev, 2020). In addition to fostering success, marketing plans help reduce time, costs, and unprofitable activities (Trishkina, 2014).

A well-structured marketing plan provides a clear summary of key market trends and target segments, outlining the value sought by each segment. It not only maps out strategies to deliver superior value compared to competitors but also eliminates barriers to achieving the company’s vision. By prioritizing marketing objectives and strategies, it aligns efforts with financial goals (Enckell, 2016; McDonald, 2007). Importantly, the marketing plan is developed after clearly defining the company’s goals and direction (Chernev, 2020).

The marketing plan serves as a vital tool for various stakeholders, including marketers, top management, non-marketing departments, and subordinates. It helps to identify competitive advantages, address emerging opportunities and threats, enforce a structured approach, and prepare the company for change. It also fosters specificity in decision-making, enhances communication among executives, and reduces internal conflicts. Furthermore, it aids in better resource allocation,

securing support, gaining commitment, and establishing clear objectives and strategies (McDonald, 2007). By compelling managers to undertake detailed analyses of actions, the plan acts as a practical guide for more informed decision-making (Chernev, 2020).

Marketing planning fosters a market-focused orientation throughout the organization (McDonald, 2007). Research has consistently shown that market-oriented companies outperform those that are not (Harmsen & Jensen, 2003; Aghazadeh, 2015). Aghazadeh (2015, p. 129) emphasizes that “organizations must identify market needs, wants, and demand, present desired products, and create value for customers in a way that leads to satisfaction and loyalty.” This highlights that a market-focused orientation aims to understand and fulfil customer needs effectively.

For a marketing plan to succeed, it must align not only with the company's goals and capacities but also with customer needs. Many economic failures have occurred due to companies offering products or services that were misaligned with customer demands. On the other hand, long-term success is closely tied to delivering value that meets customer expectations (McDonald, 2007).

Marketing decisions must consider both the organization’s internal context and the broader industry environment. It is crucial to respect the company’s long-term direction, while balancing its capabilities—whether in terms of resources, manpower, finances, or technology—with the needs of the market. The objective is to maximize opportunities and minimize threats (McDonald, 2007).

For first-time marketing planning, it is ineffective to start with short-term plans and extend them later. Instead, it is recommended to develop a strategic marketing plan first, which typically spans three to five years. From this strategic foundation, tactical plans can then be created (McDonald, 2007). These marketing plans may focus on either existing products/services (existing-offering marketing plans) or new ones (new-offering marketing plans) (Chernev, 2020).

2.2 Marketing plan in Non-Profit Organizations (NPOs)

Marketing plans are valuable tools not only for profit-driven companies but also for NPOs (Iltis, 2014). In fact, marketing management is seen as essential in both contexts (Iltis, 2014). For

NPOs, marketing plays a critical role in increasing efficiency, competitiveness, and public trust (Enckell, 2016).

While marketing goals vary between companies, for-profit businesses often focus on long-term profitability. In contrast, NPOs have more diversified, often non-financial, objectives. This makes it more challenging to craft an effective marketing strategy, as their goals can be harder to quantify. Additionally, many NPOs rely on volunteers, sometimes only temporarily, further complicating the marketing process (Enckell, 2016).

Marketing programs for NPOs are also more difficult to develop because they typically offer services rather than products. Services are often temporary, inseparable from the provider, and subject to variation. This intangibility makes defining marketing strategies more complex (Enckell, 2016).

Pricing, too, is more complicated for NPOs. While they need funding to operate, they are founded on non-profit principles. To set appropriate pricing, NPOs must first define their goals (Enckell, 2016). There are several pricing options available:

- Surplus maximization aims to maximize revenue through pricing optimization.
- Cost recovery sets a price that covers the total costs incurred in producing or delivering a product or service. It sustains operations while aligning with their mission rather than maximizing profit.
- Market size maximization sets prices low enough to attract the largest possible number of customers or users, thereby expanding the market size. The objective is to increase market penetration and create brand awareness.
- Social equity pricing sets prices based on the principle of fairness, accessibility, and inclusivity. Often involves segmenting customers and charging prices based on their ability to pay (Enckell, 2016).

Marketing plans should be aligned with the company's goals, objectives, and organizational structure (Enckell, 2016). Two studies present similar structures for NPO marketing plans. Iltis (2014) proposes six steps: i) identifying the market through external and internal analysis, ii) setting market segmentation, iii) targeting, iv) positioning, v) setting marketing objectives, and vi) implementing the marketing strategy. Meanwhile, Enckell (2016) outlines a seven-part plan: i) identifying the goal, ii) analysing the situation, iii) defining the target audience, iv) setting

marketing objectives, v) developing the message, vi) measuring and evaluating results, and vii) assessing the benefits of the marketing plan.

Both frameworks emphasize the importance of identifying the NPO's goals and objectives before developing the marketing plan and ensuring alignment with them. They also stress that the marketing plan should be created with input from the entire organization, as it affects every department. Enckell (2016) further highlights the importance of evaluating the feasibility of the goals based on internal and external analyses, using the SWOT analysis as a vital tool for this assessment. SWOT helps to evaluate both the organization's internal processes and the impact of external factors on its operations.

In both approaches, targeting is used to identify consumer needs, desires, motivations, and interests, before planning implementation. The marketing objectives, aligned with the target audience, then shape the marketing strategy. Both studies highlight the importance of tailoring messages to the audience and developing clear measurement techniques to assess outcomes. Enckell (2016) suggests tracking internet visibility through metrics such as website views, social media followers, and the number of shared posts to measure online impact.

2.3 Marketing strategies for non-profit companies

When discussing management strategies for NPOs, there is a significant gap in research, also in defining the foundational concepts (Kong, 2008). This lack of research extends to marketing strategies for NPOs. It's important to recognize that even when two companies adopt the same marketing strategy, the outcomes can vary. Success depends on factors such as human resource management, organizational structure, workforce motivation, and company culture (Iltis, 2014). Many NPOs also fail to prioritize staff training, which further complicates their marketing efforts (Lettieri et al., 2004).

Marketing strategies for NPOs can be shaped by several factors, including market trends, the external environment, market segments, and the life cycle of the organization (Iltis, 2014). According to Izquierdo & Samaniego (2007), marketing orientation plays a crucial role for some NPOs. Additionally, since NPOs often rely on public funding, they are subject to public scrutiny, and people want transparency on how their money is spent. Therefore, NPOs must be prepared to be judged, which should be considered when planning their marketing strategies (Enckell, 2016). However, unlike for-profit organizations, the notion that “the customer is always right” does not

apply to NPOs. The customers' opinions might conflict with the NPO's mission, which creates a unique challenge (Enckell, 2016).

Knowledge Management (KM) is another critical aspect of NPOs, as it serves as a key resource for achieving sustainable strategic advantage (Kong, 2007). KM can foster greater engagement, strengthen organizational values, and enhance operational efficiency, resource allocation, and coherence. However, research on KM in NPOs is scarce, particularly regarding its design and implementation (Quink, 2008; Lettieri et al., 2004). Improving KM within NPOs involves defining flexible education targets, having committed top managers, fostering a trust-based culture, and encouraging creativity and communication efficiency, and not searching for fast profit (Lettieri et al., 2004). A seven steps looping process for KM strategy was developed (Lettieri et al., 2004): knowledge acquisition, codifying the knowledge, store the knowledge, retrieve the knowledge, diffuse and present the knowledge, apply the knowledge, and create new knowledge. KM requires long-term thinking; otherwise, neglecting this aspect can hinder its effectiveness. Non-specific knowledge in NPOs is often overlooked and not converted into practical applications.

Promotion remains an essential marketing tool for NPOs, much like it is for for-profit companies (Enckell, 2016). Promotion allows NPOs to inform the market about their services and highlight their advantages. Common promotional tools include advertising, sales promotions, publicity, public relations, personal persuasion, direct marketing, and internet marketing. However, before selecting specific tools, an NPO must clearly define its objectives and priorities while being mindful of its marketing budget (Enckell, 2016).

In today's digital age, internet promotion is especially beneficial for NPOs due to its widespread use. In some countries, over 80% of the population aged 16 to 89 are internet users (Enckell, 2016). Having a well-designed website and active social media presence is essential for NPOs. A good website should be informative, user-friendly, and offer feedback options and relevant links. There are also free tools available to track customer satisfaction and interests (Enckell, 2016).

Social media, in particular, plays a pivotal role in NPO marketing. It facilitates the creation of networks and has a low cost while offering wide, accurate coverage. Social media has surpassed traditional forms of advertising such as newspapers, TV, and posters, and its popularity continues to rise (Enckell, 2016).

Direct marketing is a highly cost-effective strategy for NPOs. This includes telemarketing, phone calls, direct mail, internet marketing, and emails. Direct marketing can be used to raise funds, communicate with audiences, change engagement, enhance partnerships, and communicate with collaborators (Enckell, 2016). Combining direct marketing with social media offers NPOs numerous opportunities to connect with their audience efficiently and affordably (Enckell, 2016).

In summary, while NPOs face unique challenges in developing marketing strategies, a thoughtful approach—integrating KM, targeted promotion, and leveraging digital tools—can significantly enhance their effectiveness and public engagement. By considering their specific goals, organizational structure, and audience needs, NPOs can create tailored marketing strategies that align with their mission and increase their impact.

2.4 Biomimicry

2.4.1 Concept

Using nature as an inspiration for innovation is known as biomimicry. Under this method, biologists, who are qualified concerning biological systems, work with engineers, to merge different science (Alabdulatif & Thilakarathne, 2023). Nature has historically offered answers to a wide range of difficulties that engineers have encountered. We can come up with tasteful, environmentally friendly solutions by looking to nature for inspiration. Since 1998, biomimicry has made it possible for scientific and engineering teams to collaborate to make efficient, environmentally friendly technologies through design and development. Submarines, fighter planes, bullet trains, and contemporary automobiles are a few examples. These designs, which draw inspiration from nature, are now ingrained in daily life (Alabdulatif & Thilakarathne, 2023).

2.4.2 Trend – Opportunity

The literature supports the fact that Biomimicry is a growing sector that catches more and more the attention.

The majority of the literature indicates that biomimicry is an expanding market with a vast array of potential applications, and many of these applications remain undiscovered (Alabdulatif & Thilakarathne, 2023; Bayhan & Karaca, 2019; Blanco et al., 2021; Hwang et al., 2015; Lurie-Luke, 2014; Markets, 2023; *Medical Biomimetics Market Size And Share Report, 2030, 2024*;

Nagel et al., 2016; Rovalo et al., 2020; Taylor Buck, 2017). Like Rovalo (2020), diverse authors state that biomimicry is a growing industry.

There's a growing interest and awareness among businesses and individuals alike (Rovalo et al., 2020).

The biomimetic materials market size generated \$37.9 billion in 2020, and is projected to reach \$65.9 billion by 2030, with a compound annual growth rate (CAGR) of 5.7% (*Biomimetic Material Market Growth Projection 2021-2030*, 2024). While the medical biomimetic market size generated \$29.21 billion in 2021 and is projected to reach \$57.7 billion by 2029, with a compound annual growth rate (CAGR) of 6.7% (*Medical Biomimetics Market Size And Share Report, 2030, 2024, and Markets*, 2023).

As the biomimicry market continues to expand, it presents significant economic opportunities, driving job creation and GDP growth worldwide. Estimates suggest that between 2005 and 2008, the market size for products and construction projects that applied biomimetics was estimated to be above \$1.5 billion. By 2025, industry analysts project that products and services in biomimicry will increase to \$1 trillion in market size. In the US alone, it is expected to have a \$35 billion market with over 1.6 million new job opportunities (Hwang et al., 2015)

The biomimicry market is witnessing an evolution propelled by groundbreaking research and an increasing number of bio-inspired design successes. Since the late nineteen-nineties, the field has experienced a surge in innovations cited worldwide, indicative of a growing interest and investment in biomimetic technologies (Rovalo et al., 2020).

Additionally, advancements in biocybernetics, nano biomimetics, and convergence highlight the multifaceted nature of biomimetic research, spanning robotics, sensors, signals and information processing, nanotechnology, molecular self-organization, material sciences, communication technologies, and cognitive sciences (Rovalo et al., 2020).

Bio-inspired Internet of Things becomes increasingly integrated into daily life, ethical and social considerations come to the forefront. Addressing issues related to bias, fairness, accountability, and transparency is essential to ensure responsible deployment and mitigate potential social impacts (Alabdulatif & Thilakarathne, 2023).

Bio-inspired design is trendy. It is already known for material design, but it will certainly touch all kinds of designs soon following the explanation of Irene (professor in a design superior school) during the interview I did (Irene, 18th April 2024).

3 Company and internship overview

BG was conceived in 2017. The founders are Theresa Millard, Matt Neiman, Luis Calle Sanchez, and Chris Gauthier. Theresa reoriented her life after participating to a course of *Biomimicry 3.8* that changed her vision of the society. She spent a big part of her life working in a ceramic factory in USA. Now she is the head of a company of sustainability consulting (True North) based in USA, and of this small NPO called BG. This small NPO worked since the first day to create workshops, projects, partnerships and collaborations, and to offer mentorships and sustainability consulting, around a common Biomimicry Design Thinking (BDT).

The team around BG was always defined by less than 10 persons, not employed by the organization, and not fully active. BG had no specific office for a long time. An office was only rented before COVID time in 2019. The office is not paid by BG incomes, but by Theresa Millard from the money she is earning from True North (her consulting sustainability company).

BG's resources were always limited, but the team has good international network of friends, partners, and collaborators. This year, they had their first true employee from February 2024 onwards. They have a customer-centric approach, dedicating time to understand client needs thoroughly. Creativity, teamwork, and innovation are also emphasized.

My task as intern inside BG is to observe, research and analyse the market, and to observe BG, its collaborators, its partners, its competitors companies' characteristics, resources, capabilities, strengths and competencies to propose, build, create new strategies to improve the financial position of BG's company. Even if I had a lot of freedom while developing my work, they asked me to focus more on marketing development because of the lack of resources they used to spend on that part.

Seeing the importance of marketing planning for a company and the current lack of marketing plan in BG, I thought that the implementation of a marketing plan or its beginning at least, would be of great help for the company.

4 Research methodology and analysis

The marketing plan design that was implemented in this study combines the organization suggestions from Iltis (2014) and Enckell (2016) about marketing planning of NPOs. First research was realized to identify the goals and values of the company because it is said as necessary for starting. Then, market research was done as a beginning common step of both works above. Afterwards, some work was made intending to improve three specific services/products offered by the company and to enhance the pertinence of those. This work on specific services includes targeting and positioning. Then, marketing strategies were developed with precise long/short-terms objectives, and ways of measuring progress. A bonus “responsible travelling solutions” study is added as a way of respecting its values and mission while accepting the disadvantages of its position. Finally, a timeline was realized to show possible implementation of the ideas above and containing the marketing objectives. Certain steps are here realized later or earlier than the canvas described by Iltis (2014) and Enckell (2016) because they were not felt as mandatory for the next. Also, by lack of time, certain steps as “marketing plan benefits” were not realized.

Besides from the secondary data about the themes of the literature review, this study takes mainly into account, as part of the market research, some primary data that was gathered through interviews, brainstorming, meetings, experimentation, field observation, participation to events, and design thinking. Interviews were used to explore detailed information in a personalized way. Also, interviews were possible, and easier to book, because of the very specific target which include a few amounts of people in the biomimicry network. Moreover, interviews allow the company BG to keep the same level of closeness as it had in the past with its contacts, and it assures direct results if the interviewees accept to participate.

The qualitative methods are used because the work had an exploratory and descriptive focus. The purpose is to understand and not to prove hypotheses or to build cause effect relationships. The sample for the interviews is a convenience sample, and the interviews were done through

video calls because the interviewees were not in the same country and the related difficulty to travel to their countries.

5 Marketing plan

5.1 Internal goals and values research

The literature review tells us that to engage a proper marketing plan, it is needed to first define goals and values (Chernev, 2020). But more than that, if the actions taken do not bring synergies, or are aligned in the same direction, the limitation on the resources condemn a proper development. If everything is built in different directions, the number of resources necessary is way more important than if you place all your actions in one same direction, towards a well define objective. Also, building in the same direction helps to build synergies, and these help saving resources.

The BG's leaders were struggling on which direction to take. Apparently, the firm did a lot through the years but never defined properly what were their goals or objectives. A big work to help BG's actors to define their mission, values, priorities and goals was then realized in collaboration with Juan Pablo, another intern of BG.

It took us a while but after two presentations, few meetings, brainstorm, restructurations of the ideas spread, design thinking method (Ikigai, MIRO board), mapping, graph realizations (Annex 1), we obtained 5 main recurring values (closeness, gathering, awe, optimistic, and purposeful) . Closeness is to be close to the clients, but also inside the company. Gathering is to enhance networking and bring people interested by the same values or interests together. Awe is to respect and admire nature as the powerful and sublime thing it is. Optimistic is to keep bringing solutions instead of talking about the problems. Purposeful is to follow their mission and not money. This procedure also helped us to define a proper mission proposition for the company (Annex 2). The mission proposition of BG is to: "Use Nature as a source of inspiration to incite positive actions that will help solve human challenges."

It also clarified what are the things that the company is doing and that are more or less aligned with their goals/values (Annex 3). A product/service aligned with the values of the company is

seen as a better opportunity for the organization, because of making it easier for the employees to develop it with a great quality. From that, to identify what kind of services is the best service/product to enhance/improve would be easier.

5.2 Market research

The market research was identified as an important element of the work as a key and a structure for the rest of the investigations around biomimicry. It is why two full weeks were first allocated to that research. In the end, it took even more due to some complications.

A problem that appeared while doing the market research is that it wasn't an easy task to find the demand categorization about biomimicry. Biomimetism is a concept used since always, but biomimicry turned out to be a proper design thinking methodology only in the last 20 years, thanks to the book of Janine Benyus called *Biomimicry: Innovation Inspired by Nature* (2002). Still very few studies exist around the subject. Most of the general public doesn't know what biomimicry is. To answer this problem, a group of nine interviews was conducted with the collaborators, partners, and "clients" of BG. This exercise also includes a SWOT analysis to summarize the results.

5.2.1 Activities of BG

In a synthetic manner we can present the things that BG is doing as workshops, sustainability consulting, mentorship, education, conferences, events, project management, collaborations, and design.

5.2.2 Resources of BG

BG's resources encompass financial, human, physical, intellectual, and social aspects. Financially, the company operates with limited resources, relying on project funding from various sources such as grants and workshops. Key projects include the Biomimicry Changemakers Framework funded by Erasmus+ and the BIOMIMAT (Biominerals, Biomimetics, Biomaterials) innovation project with AINIA (Asociación de Investigación de la Industria Agroalimentaria), funded by IVACE-FEDER (Instituto Valenciano de Competitividad Empresarial - Fondo Europeo de Desarrollo Regional).

In terms of human resources, BG has a team with diverse expertise including material sciences, engineering, biotechnology, and environmental sciences. They excel in project management, grant

writing, teaching, and connecting with people. Physical resources include an office space in Granada, biological material with interesting properties for explaining the usefulness of biomimicry, and access to tools and resources at ESADA design school.

Intellectual resources include the company's name and its reputation in European sustainability circles. Socially, BG has strong connections in both Europe and the USA, particularly with organizations like B3.8 and The Biomimicry Institute.

The company's competencies lie in sustainability consulting, mentorship, project management, collaborations, education, workshops, and design. They take a customer-centric approach, dedicating time to understand client needs thoroughly. Creativity, teamwork, and innovation are also emphasized, with expertise in biomimetic design and sustainability.

5.2.3 SWOT analysis

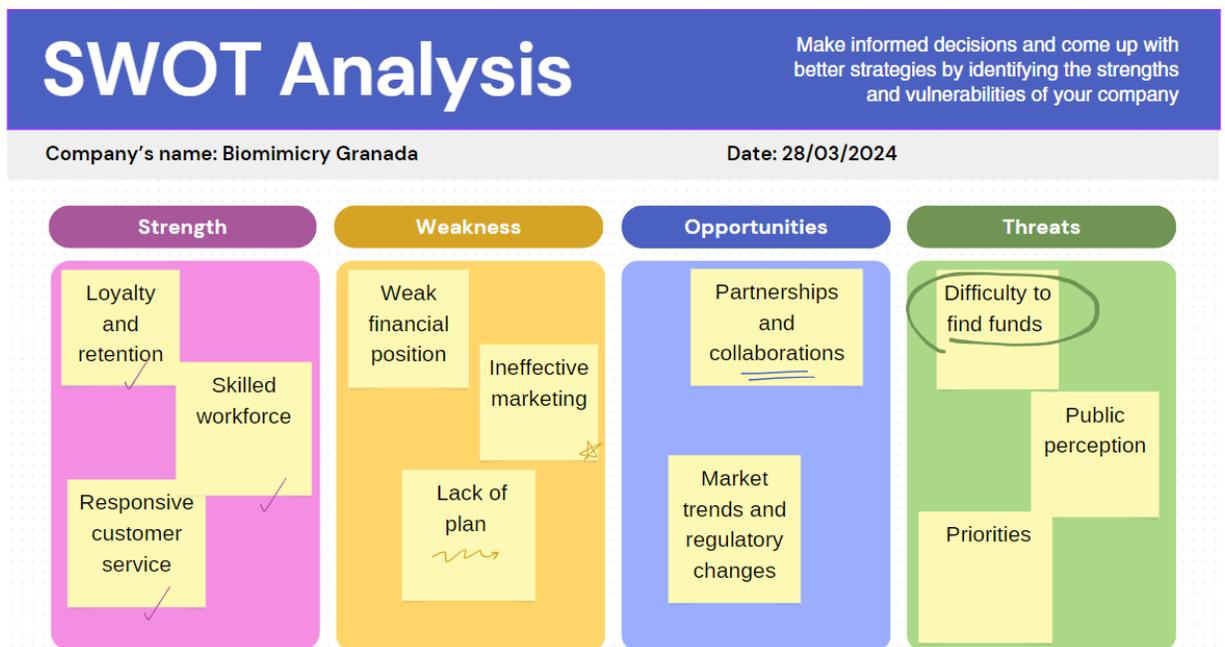


Figure 1 – SWOT analysis

As seen in Figure 1, BG's strengths include innovative product development, a skilled workforce, multiculturalism, efficient operations, loyalty, strong corporate culture, responsive customer service, strong supply chain, and strategic partnerships. However, challenges such as limited brand reputation, weak financial position, no special technological advantages, no global

presence, limited product diversity, limited market reach, complexity of coordination, lack of plan, and ineffective marketing exist.

In those strengths, the biggest are the loyalty and retention (BG has strong relationships and high levels of satisfaction and loyalty), the responsive customer service (BG addresses customer inquiries, issues, and feedback promptly and effectively in a tailored way), and the skilled workforce (BG possesses skilled experienced members demonstrating a talented and motivated workforce with diverse skills and expertise).

In those weaknesses, the most limiting are its weak financial position (the company has limited access to capital for investments or expansion due to poor cash flow), the ineffective marketing (BG has no well-defined marketing strategy, there is a failure to communicate the company's value proposition effectively that leads to difficulties attracting new customers), and the lack of plan (so far BG was working without following any plan, what made the company follow random and tedious projects).

BG counts a lot of opportunities as the market growth and expansion, the partnerships and collaborations, the market trends, the globalization, the digital channels, the regulatory changes and policies, and the evolution of technologies. Unfortunately, some threats are also upon the company like the competition, the finance instability, the brand reputation of BG, the talent acquisition and retention challenges, the disappearance of patience, the difficulty to find funds, the difficulty of matching standard testing, and the usual priorities of the public.

In those opportunities, the main ones are the opportunities on partnerships and collaborations (BG with limited resources is very good at using partners to reach its goals, new partnerships and collaborations can be created every day to be able in the future to reach new objectives), the market trends and regulatory changes (the change in societal values, preferences for customers, environmental concerns, Universal acts related to sustainability obliging governments, environmental regulations, energy efficiency standards, or regulatory developments with sustainable or ethical business practices (Bayhan & Karaca, 2019), are helping the growth of the biomimicry industry).

In those threats, the ones the company should fear the most are the public perception (as a new concept, biomimicry needs time to be known from the public, to develop and to adapt to match better the market needs, it is difficult so far to know how biomimicry can fit best to its public as

the public is still in development too), the difficulty to find funds (for newly developed concepts, it is harder to find funds because of the uncertainty of the results it can bring, the higher risks of inconvenience and system failures (Bayhan & Karaca, 2019)), and priorities (it is still seen as a luxury to ask help from biomimicry's experts, biomimicry isn't always seen important).

5.2.4 Competitive advantage and core competences

Despite the weaknesses and threats, BG holds competitive advantages in expertise and experience (as the biomimicry industry is very young, the expertise of the team members of BG is a huge advantage within this sector), agility (BG offers tailored services), continuous improvement, sustainability (responsible stewardship of resources), interdisciplinary team (diverse backgrounds, multiple perspectives), and unique local opportunities.

Harmonious synergy among team members and geographical position to competitors contribute to its core competencies, making it a remarkable force in the biomimicry industry. There are no proper competitors around Granada. The closest biomimicry companies are more seen as collaborators than competitors. Moreover, the team members follow similar values. Individuals work synergistically to leverage each other's strengths and expertise. The energy between the team members also attracts collaborators and partners not only willing to share a technical aspect of the work but also attracted by the open and familiar feeling induced by BG's team. These unique advantages set BG apart and make it difficult for competitors to replicate its success.

5.2.5 Market share

The leading bio-inspired consultancy company, Biomimicry 3.8 (located in Montana, USA), was established in 1998 (*Biomimicry 3.8 - Innovation Inspired by Nature*, 2024). In comparison, BG appears relatively young, having been founded about 7 years ago. However, despite its youth, the team has been actively applying biomimetic methods since 2015.

BG currently has one employee and approximately 10 more or less active members. When compared to the Biomimicry Educators Network, which boasts 5,578 members, or the Biomimicry Global Network with 12,500 total members (Rovalo et al., 2020), BG may seem to have very few practitioners. Nevertheless, within the official biomimicry organizations in the Iberian Peninsula, BG's members constitute two-thirds of the total (*Biomimicry Iberia*, 2024), indicating its importance within the regional biomimicry community.

In terms of funding, the Biomimicry Institute (also located in Montana, USA), as one of the largest NPOs in biomimicry, received contributions ranging from \$1,000 to \$100,000+ in 2022 (Biomimicry Institute, 2023). In comparison, BG received \$62,100 since its creation.

Regarding social media visibility, the Biomimicry Institute boasts a substantial following on platforms like LinkedIn, YouTube, and Instagram. In contrast, BG has fewer followers across these platforms.

In summary, BG, despite being relatively young, plays a crucial role in the biomimicry community, especially in South-Western Europe. While it may have fewer active members compared to larger organizations, its impact is significant.

5.2.6 Interviews and demand research

The interviews were conducted by video call through Teams. The sample chosen for the interviews is a convenience sample, convenience for me, BG, and the interviewees. Each interviewee was selected as contact given from BG accepting a 20 minutes video call to answer to some questions about the experience they had working with BG in order to help with the business planning and marketing of the company. 9 people were interviewed in total, coming from different backgrounds and having different interests. The interviews took place mostly in April 2024.

The interviews were oriented towards the outreach of BG, the relationship existing, the reason of having/maintaining that relationship for the interviewee, the level of satisfaction, and possible improvements for BG.

The summary, roadmap and characteristics of those interviews can be found in Annex 4. In this document, the results of the interview with Richard were put aside because this interview was not supervised in the same way as the others. Richard received different questions and a less structured interview because of its status. Richard is more aware of how to develop marketing strategies and is also responsible for a part of the biomimicry branch in the UK. He is more a provider of biomimicry services than a customer.

The interviews defined the demand as based on needs of:

- a) Information: People working around biomimicry like to be up to date and to know about the state of the art or to be kept in email loops or newsletters.

- b) Education: Design school would like to teach biomimicry as a new tool for design, and curious people or innovators are interested by learning the BDT method.
- c) Inspiration: Biomimicry can be seen as another source of inspiration for design or innovation.
- d) Networking: People working around biomimicry like to meet other members of this niche science or to be able to exchange ideas.

To reach a better representation of the whole biomimicry population (everyone interested by biomimicry) or the BG's population (BG's partners, clients, collaborators, members), the sample taken could have been bigger, taken in a more random way, or have been taken in a more non-homogeneous way. But the average of sample size for qualitative studies is 6 to 12 meaning that 9 here is not that small. Then during the interviews, we are reaching demands and needs saturation after the 6th interviewees, which means that the sample should be representative.

5.2.7 Competition analysis

Part of the market research, it is important to be aware as much as possible of what the competition is offering and how. Once being given a list of the different collaborators/ partners/ competitors of BG, research was implemented around the actual state and propositions of biomimicry's companies around the world. While going through 29 websites of companies either named directly Biomimicry, or positioning themselves as biomimicry companies, it was found that all the services provided are around education, networking, consulting, events industry, or (re)connection with nature. Those services were implemented through online courses, workshops, a proposition to join a new biomimicry group, webinars, invitation to participate to funding, newsletters, media intervention, financial transparency, annual report, social media contact, a blog, guided walks, or new software proposition. Out of this research through internet, the following results appear in the Table 1 and 2:

Table 1 - Category of services and number of "biomimicry companies" offering them

Category of services	Number of "biomimicry companies" offering it	BG is offering this service
Education	21	yes
Events	16	yes
Consulting	14	yes
Networking	8	yes

Category of services	Number of “biomimicry companies” offering it	BG is offering this service
(re)Connection with nature	4	yes

Table 2 - Category of services and number of “biomimicry companies” offering them

Tools offered	Number of “biomimicry companies” offering it	BG is offering this tool
Social media contact	21	yes
Online course	16	no but by the past yes
Workshop	15	yes
Newsletter	13	no
Media intervention	4	no
Annual report	4	no
Invitation to participate to funding	4	no
Blog	4	no
Guided walks/nature retreat	4	yes
Proposition to join a biomimicry group	4	no
Financial transparency	2	no
Webinar	2	no
Software service	2	no

Out of this research, certain websites looked as if the organization linked to it is dying, and others, on the contrary, are very well designed and look very modern. The different organizations offer often more or less the same type of services. The different companies are spread all around the world. It’s difficult to know if they are doing well or not. The biggest service offered is an education service through online courses. Creating another online course doesn’t look like an easy path seeing the huge competition. A lot of newsletters are already available around biomimicry. A lot of workshops already exist, but the term “workshop” can involve a lot of different activities. The presence on social media seems like a must.

Also, as explained in the *Market share* section, the leaders look like the organizations *Biomimicry 3.8* and *Biomimicry Institute* based in the USA (because of their early implantation at the source of the creation of the BDT method), and *Biolearn* based in South Africa in terms of

online education content. Concerning Europe and the Iberic Peninsula, as explained in the *Market share* section, BG looks standing with very little competition.

5.2.8 Competition influence

BG is mainly impacted by the online education competition. Online courses already exist on different websites of different biomimicry companies. It's the main reason why BG doesn't want to propose online courses nowadays. Concerning the other services or products offered by biomimicry companies, the competition is not influencing much BG. For example, it's not because newsletter or email loops already exist about other companies that some newsletter or email loop from BG would not be interesting. Concerning events, gatherings to promote exchange about biomimicry, biomimicry practitioners are only searching for more of those (the biggest one in Europe nowadays is happening in Paris). And concerning consulting, the biomimicry market is still very underexploited at that level, people still don't know what biomimicry is and its use.

5.2.9 Challenges to enter and to stay in the market

One of the primary hurdles is the difficulty in securing funding, as competition to obtain financial support for projects is fierce (Bulla & Starr-Glass, 2006). A small percentage of practitioners manage to secure substantial funding for their biomimicry projects, with seven percent reporting receiving funding exceeding \$200,000 USD (Rovalo et al., 2020). The lack of initial capital can hamper the ability to conduct proper market research and development, hindering segmentation and targeting strategies, or it can block the existence of the organization. Without a solid understanding of the market landscape and customer needs, companies may find it challenging to position their solutions effectively (Bulla & Starr-Glass, 2006).

Moreover, the presence of established industry leaders in North America, including long-standing biomimicry firms that have been pioneers in the market, contributes to market consolidation. This makes it challenging for emerging companies to carve out their market share, as the dominant giants already hold sway in the industry.

Interoperability and standardization present additional hurdles, as bio-inspired solutions may involve diverse devices, protocols, and platforms. Developing standardized interfaces and protocols to facilitate seamless communication and collaboration is essential for widespread adoption and integration (Alabdulatif & Thilakarathne, 2023).

Ethical and legal considerations further complicate the landscape, particularly regarding autonomous decision-making and data privacy. Addressing issues related to accountability, fairness, transparency, and compliance with regulations is crucial to ensure responsible deployment and use of bio-inspired solutions (Alabdulatif & Thilakarathne, 2023).

Many companies find themselves caught in a delicate balance, attempting to satisfy donors' expectations while neglecting the needs of the target population. This can lead to challenges in renewing funding, as well as the risk of alienating or ignoring key demographic segments (Bulla & Starr-Glass, 2006).

A positive public perception is favourable for sustaining long-term success in the biomimicry market, yet many companies struggle to effectively manage their media presence and cultivate a favourable reputation (Bulla & Starr-Glass, 2006).

5.2.10 Partnerships and collaborations

Through its members, BG has strong partnerships and alliances with key stakeholders. It has collaborative relationships that enhance the company's capabilities, reach, and market presence.

Then, BG is using the tools and knowledge offered by other biomimicry organizations like Biomimicry Institute with its website *Ask Nature* that those share for free. Those tools and that supplementary knowledge help to improve BG's activities.

Moreover, *ESADA* (Superior Design School in Granada) has a very strong relationship with BG. They continue to support the company with in-kind exchange - use of their facilities, use of their designers for graphics and web support.

Furthermore, BG's collaborators help in deviating partners or clients towards the company, if BG is a better fit for them. They also call BG to be part of projects.

5.2.11 Trends and factors influencing the external environment, dynamics

The biomimicry market faces negative influences that pose challenges to its continued expansion. Factors such as variability in funding, unstable investments, and disruptions in collaborations can hinder company growth and innovation (Bulla & Starr-Glass, 2006).

Despite these challenges, the biomimicry market is poised for growth due to its intersection with various trends and advancements (Rovalo et al., 2020). Also, the internationalization of Granada fosters the growth of innovation and emerging technologies as diverse ideas converge. Consequently, it also expands opportunities for biomimicry in various markets. Furthermore, changes in finance, education, public awareness of environmental issues, and advancements in digitalization and globalization are all contributing to the market's expansion. The convergence of different scientific disciplines, saturation of ideas pushing research efficiency, and increasing demand for nature-inspired solutions in an overpopulated world further drive growth in the biomimicry market (Lebdioui, 2022; Markets, 2023).

Moreover, the ongoing exploration for fresh sources of inspiration profoundly influence the development of biomimicry as a valuable creative tool.

5.3 Pertinence and improvement on the services offered

Following the market research results, I proposed some ideas of new projects that would be aligned with the goals and values of the company while reminding the colleagues that it could be even better for them and so for the company if I could just improve already existing projects aligned with their values.

I was then assigned to improve the marketing strategy on two different events (*Biomimicry 101* and *GREEN*), and in parallel to work on a new service, sustainability trainings. The two events cited, that cope very well with the goal and values of BG, are events that BG already did in the past and that the company would like to see evolving.

5.3.1 Biomimicry 101 past situation

-Description: This event is usually a weekend of two and a half days organized around the education and practice of BDT or methodology, and the (re)connection with nature. The education content is mainly taken from *Biomimicry 3.8* resource handbook and is remodelled by BG's team. It is a formal event giving access to a certificate and 2 ECTS. The price was 350€.

-Targeted customers: 10 to 20 designers, engineers, biologists, or educators; adults, English speakers, attracted by biomimicry, and new ways to innovate.

-Value: biomimicry methodology (new way of searching solutions), opportunity to present and to study a problematic following a different angle, opportunity to share and exchange with other innovators on that problematic, (re)connect with nature, networking, inspiration

Discussion:

The core competences tell us that this service must use the team of BG and the special location itself of Granada as main tools. The demands tell us that the customers of these events should be targeted for their interest in networking, or inspiration thirst. The information's need is difficult to satisfy through this event as it is an event open to anyone. Then, to talk about the state of the art in one type of biomimicry/bio-inspired new method or technology would not correspond to all the public. Moreover, a very similar education can already be offered at low cost by *Biomimicry 3.8* (45\$ following their website (*Biomimicry 3.8 - Innovation Inspired by Nature*, 2024)). Education is then not a good angle of attack for the marketing of the event.

Then, it appears that the 101 event is made of two different kinds of content that touched two very different kinds of customers. On one side, there is the (re)connection with nature, and on the other side is the design thinking method. The design thinking method is more oriented towards innovators and experts, and the (re)connection with nature is more oriented towards non-experts, beginners, or curious people.

There is a need to change the targeted customer population which is too vague, and which can be very difficult to comply with the needs of the people interested in biomimicry. However, seeing that increasing the scale of *Biomimicry 101* is not possible (or very complicated for the limited resources of BG), to increase the profit margin, it is also important to target customers that are able to spend more money into the services proposed.

While targeting a more precise population, the services proposed can also easily be modified to match better the wishes of this population.

Ideas for building a more suitable situation:

-To change the 101 event into a full week retreat around BDT, (re)connection with nature, yoga, hiking, visit of and around Granada, environment, sustainability, and health in general.

-To change the 101 event into a bit longer weekend including more technical knowledges and designed for innovators and experts, while getting rid of the majority of the (re)connection with nature.

Team intervention:

It's primordial to discuss the terms of the marketing plan with the whole team (McDonald, 2007). The feedback received agreed on the fact that the 101 event is targeting very different people to make it valuable. After discussing with BG's team and proposing those two options, it came to our mind that the retreat option might be the most feasible and interesting now.

The retreat idea was then pushed further following the Annex 5, but with further discussion, the team decided that it could only be a long-term project seeing their limited resources. It's a project that I cannot end or just accomplished during my internship, even with the support of the team. Ideas are good but it will be developed properly by BG's team later, in due time.

The team gave a lot of interest in the proposition of prototyping the event or activities while sharing them with closer contacts/more local people, to help BG to improve them before launching them to the real public targeted.

Finally, even if this kind of project is well aligned with the mission and vision of the company and that there would be a demand for it, the members of the company never really worked with that kind of public, and therefore, would need more preparation for it.

5.3.2 Biomimicry 101 new situation

-Description: This event is a full week retreat in Granada and the nature around it. This retreat still provides the education and practice of BDT or methodology, and the (re)connection with nature, but at that is added a week in full pension in a sustainable habitat, with local and environmentally friendly food services, with activities nature oriented, guide tours of Granada and of the Alhambra, a flamenco show, and reductions and/or advices to do other kind of activities in Granada or its surroundings. The price would be around 2.000€.

-Targeted customers: 10 to 20 rich people curious about biomimicry or new design thinking ways, strongly interested in a (re)connection with nature, and trying to visit in a more sustainable way.

-Value: biomimicry methodology (new way of searching solutions), opportunity to present and to study a problematic following a different angle, opportunity to share and exchange with other innovators on that problematic, (re)connect with nature, to travel and visit in a more environmentally way, pleasure, leisure, healthiness, networking and inspiration.

5.3.3 *GREEN past situation*

-Description: This event is usually organized on two days. It's a series of lectures and short talks on the first day, and a series of workshop activities on the second day. Everything is around sustainability, bio-inspired materials, climate change, etc. It is a social, local, cheerful and accessible event. The price was 30€.

-Targeted customer: around 30 designers, engineers, biologists, educators, or students, anyone interested in sustainability and its facets.

-Value: interest for the thematic, fun, sustainability learning, networking

Discussion:

The core competences tell us that the importance of the team of BG and the special location itself of Granada. It also tells us that the customers of these events should be targeted for their interest in networking, or inspiration thirst. A first problem is that the public around biomimicry is often international, and the *GREEN* event is proposed more as a local event. It is then easier to present the whole event more around sustainability which is a subject touching way more people even locally. The information's need is difficult to satisfy through this event as it is an event open to anyone. It is easier to talk about the state of the art of a biomimicry subject while keeping a varied crowd captivated on a short presentation than for a real lesson because a short presentation will anyways not go deep inside of the subject, but it is still not possible to interest here people with varied background evenly. Moreover, the education's need here is also very difficult to satisfy seeing the time available. But to educate just softly, without going deep in explanations or practice is still possible here.

Then, *GREEN* is an event that wishes to stay social, local, cheerful and accessible. The *GREEN* event is not made to be profitable, but to attract curious mindsets and to connect with new people. Creating an event that is not profitable doesn't look interesting inside a marketing strategy

unless this event can have a value that differs from a direct source of revenues. The goal would then be to transform *GREEN* into a marketing tool itself. While inviting niche customers to *GREEN*, and while increasing its reach, *GREEN* could be transformed in a proper way of getting more customers and becoming a source of indirect revenues.

On the other hand, it could also be an event to ask the help of other local environmental organizations, or to help them. It could then be a way to make BG more local and more connected with the other local institutions, which is also something that BG aims to do.

Ideas for building a more suitable situation:

-To make *GREEN* bigger, to make it attract more people, more attention would help the event to get more sponsors and to make BG known from other organizations.

-To reduce the entrance fee and use the economy of scale to avoid losses would allow growing the size of the event in attracting people with few resources.

-To ask help or propose help to local NPOs would help to link BG with regional organizations. To be able to receive the help of NPOs without needing to have to pay them, a simple option would be to propose something in exchange. Big events often offer a lot of possibilities. In exchange for time or services, compensation during the event could be the simple possibility of selling products (drinks, foods, etc.). Another type of compensation could be to allow the organization to take more responsibilities and be more involved also in the decisions of the content that will be proposed during the event. A third possibility is only to be able to make their own advertisement during the event, to have been able to sell their image at the event.

-To invite a targeted public like companies that could use the services of BG is a way of increasing the chances of getting new customers in the future. The event should also be created to “seduce” those possible clients.

Team intervention:

Discussions with the rest of the team of BG helped to statue on keeping the *GREEN* event non-profitable, and due to the lack of resources, they don’t feel comfortable to increase the size of

the event drastically. The team of BG helped to statue on a maximum (100 persons) and minimum (20 persons) number of people for the future edition of *GREEN*. They agree with changing the view of the event and making it a strategical tool for marketing.

5.3.4 New GREEN situation

-Description: similar with a lower cost. The price would be around 15€.

-Targeted customers: more oriented towards 100 participants constituted of any possible future partners or collaborators, managers of companies willing to offer sustainable trainings to their workers, and people that could be interested by the *Biomimicry 101* event.

-Value: unchanged

The event would be organized and slightly modified to have a strategic purpose, and not just being opened to anyone willing to join without a target. It would also be logistically more planned, and better organized. The goal would be not to build an event organized at the last minute, but to build an event strategically planned with the right goal, a list of objectives to achieve, in using all the resources available in the best way possible.

5.3.4 Sustainable trainings situation

-Description: trainings around sustainability touching upon biomimicry's methods given as tailored workshops lasting around 4h. The price would be around 700€. *Fundae*, an organism managing public funds to help companies to train their workers, would be used to self-finance the trainings proposed.

-Targeted customers: companies around Granada having the interest of giving sustainability formation to their workers, companies eligible by the *Fundae* organization.

-Value: if BG facilitates administratively funds for the trainings it gives, then the customers will not have to pay anything. The goal here is to give what will look like free pleasant, inspiring, bounding, innovative workshops for companies combining team building and sustainability education.

Sustainable trainings could be a great new service to offer because some grants exist to offer training for people inside of companies, and sustainability knowledge is getting more and more useful for companies, and more and more present in the mind of workers. On top of that,

BG's team as experience in education and creation of workshops, it wouldn't take much time for the time to create a workshop easily adaptable to any kind of companies. The opportunity here looks easy to implement, and easy to sell.

5.4 Research of marketing strategies

5.4.1 In general

Place/Access: The websites of BG were out of date and confusing. As the website(s) is one of the ways people got to know the organization, it is important to keep it relevant and up to date. A first work on the websites was already realized during my stay inside BG. It contributed to update the pages about recurring events, to modify certain topics to match in a better way the values of the company, and others to match better the needs of the customers.

Promotion: Some testimonials and success stories were picked out of the interviews I realized (Annex 6) and are now ready to be placed on the website of BG. Success stories and testimonials is a common tool already used by several other Biomimicry companies found through internet. As the one coming out of the interviews are related to people with different backgrounds and interests, it will certainly help a wide range of people to identify themselves to those and find better interests in the activities of BG.

Processes: Getting feedback and asking about the satisfaction of the clients is very useful to act positively on client retention. Some feedback survey should be prepared and distributed to customers regularly. Receiving feedback is also a way of evaluating the services offered. Metrics and key performances indicators could be placed in it to analyse the development of BG.

Key performance indicators and metrics must be created and put in place to be able to analyse the evolution of BG. To get level of satisfaction through feedback surveys can be one of those. Other ones easy to put in place could be, views on social media, followers, activity of the public (comments, shared posts, email received, messages received...), number of people visiting the webpage, number of participants for the events created, number of project proposition, number of workshops realized, number of grant applications, and number of funds received.

People/ Promotion: To be able to reach more people and to promote better itself, BG should join industries and associations networks to have access to more clients. Investing time in

social media might be helpful. Those networks can be found through LinkedIn, but a frequent activity on specific Instagram accounts can also make BG more seen by the public.

5.4.2 For sustainable trainings

Place/Access: The distribution ways are not expected to change so far.

People: Abraham will be trained to dispense this service, and maybe another employee in the future.

Services: The services will be tailored more or less intensively to customers' companies.

Processes: The process is not expected to change so far.

Prices/Fees: Use of the surplus maximization pricing method. Sustainability workshops can be done several times in a same company. It can be realized in different departments of the company if it is a large company, or just on different thematic. A reduction for long term commitment could help BG to secure longer term revenues. Having longer term revenues is good for BG that suffers from finance instability and uncertainties.

Partners: The relationship with *Fundae* is expected to grow and to be used to enhance the size of this service.

Promotion: While doing the promotion of the sustainable trainings, it is important to explain the value of the trainings, and of sustainability in general. Companies and old mentalities are often not understanding all the benefits of such things. It is important to find the words to be understood, and to communicate in a language that will be understood by companies' managers.

Physical Evidence: The material used will differ in functions of the tools needed for the lectures and the workshops.

5.4.3 For GREEN

Place/Access: The place will stay similar. There is no willingness to change it as it is already convenient.

People: The people in charge and realizing the event are already skilled as they were already responsible for the same kind of event last year. Only the partners will change and bring different supplementary skills every year.

Products/Services: *GREEN* is willing to be a big event, gathering people, and allowing networking. The importance is not to make profit, but to try to make the event bigger and to allow better networking.

Processes: So far, the team is putting a lot of energy into this event and feel starting from scratch each time. A guidebook should be realized, writing down the steps done, to ease the work of the following years, changing only some part of the content and the people doing the lectures/workshops.

Prices/Fees: The objectives here are aligned with the market size maximization pricing method but further than that, profit is not part of the objectives. Use of the cost recovery pricing method. Reductions to increase the number of participants even decreasing the amount of revenues are welcome. One of those is the formula “Bring a friend - get a reduction of 3€”, another one could be “Big groups discount of 2€”. Moreover, *GREEN* is a recurring event. A reduction of 3€ for the next year event can be offered without problem for the people coming. Specifying simply that reductions cannot be cumulated is enough to offer varied reductions for the event.

Partners: Any kind of sponsorship would still be welcome. Allowing sponsors to send some people to the event even for free can maybe be a supplementary incentive for sponsors. The cost of the event is almost fixed compared to the amount of people coming, in the sense that having few supplementary people will not change the cost. Due to that, that incentive for sponsorship is not costing much to BG. Another incentive for sponsorships can be offering some visibility, accepting sponsor companies to sell or demonstrate some product during the event. New companies offering sustainability related services or products could be particularly interested by this offer. A last interesting offering for sponsorship is simply logistic or material sponsors. BG would be delighted by receiving just food or beverages for free to do the promotion of a company. Also, BG could welcome an organization selling its own food or beverage during the event to do not have to take care of that themselves. As BG has limited resources, any help on the logistic or the material needed is helping the organization.

Then, to fit with its willingness of mixing more with local institutions, BG could collaborate with regional organisms in the organization of the *GREEN* event. Benefits and synergies could be shared.

Promotion: On top of social media or other promoting ways, if the point is also to touch local people like worker, sponsors... simple posters for promotion can be used in Granada. The small streets welcoming a high number of walkers everyday are perfect to do promotion by poster.

Physical Evidence: buildings should stay similar as the people organizing. Only the partners and sponsors would change. The material used will differ in functions of the tools needed for the lectures and the workshops.

5.5 Responsible traveling solutions

General processes: The research on responsible travels was done to allow BG to fit better its values while still using its core competences fully. One of the core competences of BG is its position. Granada is at the centre of very varied biological ecosystems, it's also very touristic, beautiful, cheap, and full of history. The problem is that inviting even Europeans to Granada has an ecological cost. To sell sustainability while making money in pushing people consuming and polluting is not the biomimicry way. Most of the research on responsible travels was done while getting contents, and through interviewing two specific contacts of BG's team (July and Vanessa) that already work on the subject.

Julie is working in a luxury travel company (*Carrier Luxury Holidays*, n.d.) that is trying more and more to propose more sustainable ways of traveling, and Vanessa is CEO of a sustainability company (*Our Work - Circonnact*, 2021) proposing regenerative tourism workshops/help.

The first important information to keep in mind is that in luxury travels, transport (planes) is often more than 70-80% of the total carbon emission weight of the travel, and it's very difficult to push people to other kind of transport (Counts, n.d.).

All solutions found are placed in Annexes *Document n°7*, with also some useful links to reach those solutions, to implement them, or to work on other ones. First, the connexion and exchange with the tourists, the organization organizing the holiday, the governments, and the locals should be fair, respectful, well organized, and done with a good communication. Secondly, there exist certifications to appear as "sustainable holiday residency". It is standardized and regulated. Moreover, it's important to cope with the market needs, the quality of the offering, and

the global safety. The product/service offered should stay of quality and satisfy the customer. Certain part of the service offered are polluting and are useless, but others cannot be suppressed without damaging the quality of the service, the fulfilling of the needs of the clients, or the global safety. It is important to ask ourselves: “What can we refuse/ reduce/ reuse/ replace/ repurpose/ recycle? Is it really helping us to be more sustainable (more important to deal with more polluting stuffs first)? Is it still safe? What is the impact on the quality of the service offered?”. Finally, it is important to fix goals, and to try to act also further on the supply chain.

5.6 Marketing plan’s timeline

Below is the Figure 2, a timeline presenting all the services improvements proposed for the next 5 years, and the development suggested of the new services.

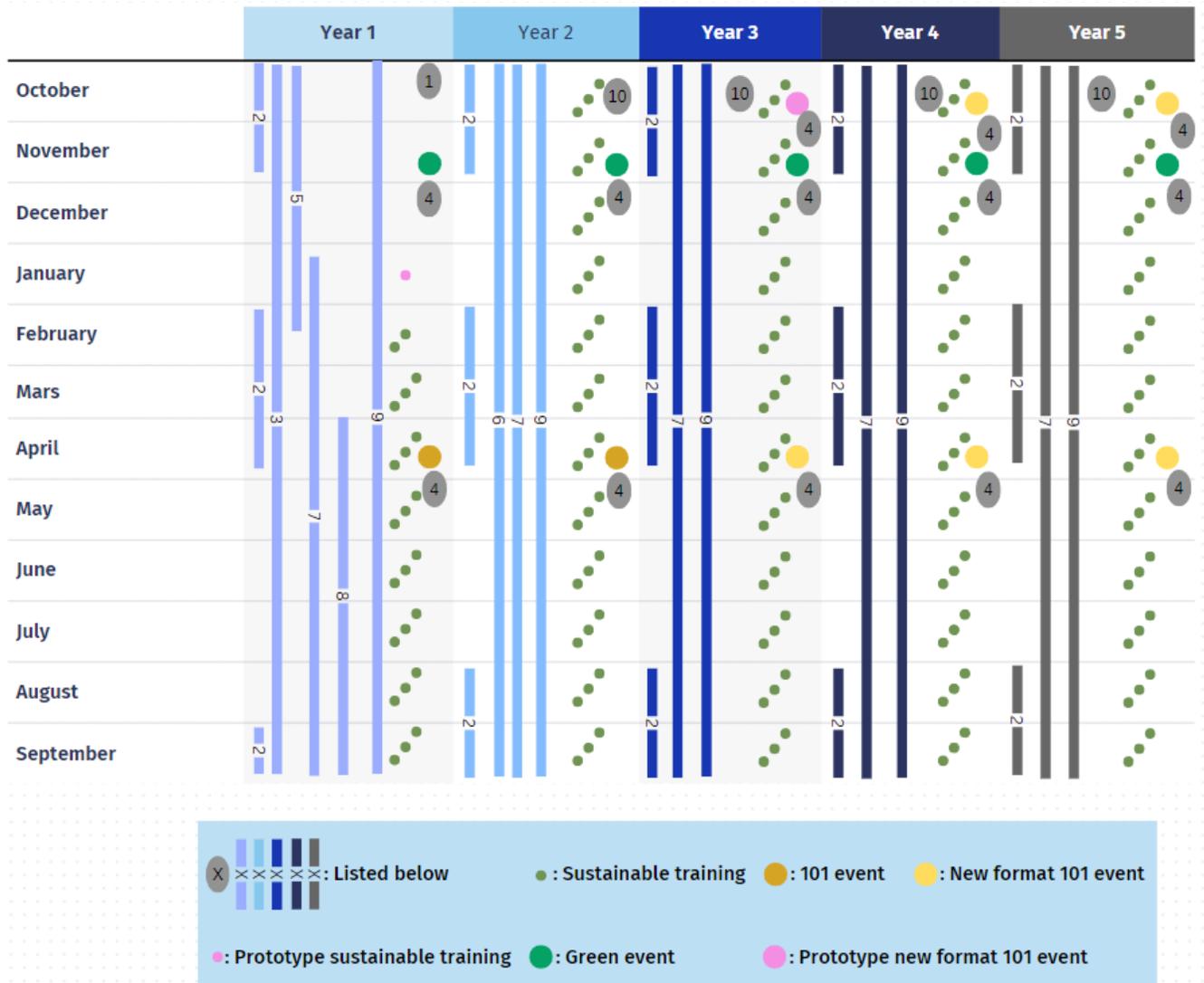


Figure 2 - Marketing plan's timeline

1. Recording of metrics (views, average number of comments, reactions, followers, number of collaborators/partners, last year financial situation, number of potential clients...)
2. Invitation of clients, sponsors and collaborators, promotion of the next event, pricing strategies implementation
3. Realization of the guidebook for each event, and for the sustainable trainings, and realization and use of a proper KM process able to store, communicate, summarize easily information
4. Feedback asked about the last event, analysis of the feedback and proper recording of its results, update of the website
5. Abraham special training for enhancing presentation skills to take in charge the sustainable trainings
6. Implementation of the new 101 format and putting more energy into the development of responsible travel solutions
7. Tailoring of the sustainable trainings
8. Addition and formation of a second person in charge of sustainable trainings
9. Nurture the relationships with key collaborators, join industries and associations networks and to invest time in social media, and development of responsible travel solutions
10. Check on the new metrics, check on new trends/market changes and the way they affect BG, analysis of the evolutions, actions or modifications in function of the results

Three sustainable trainings are planned per month to try to reach the wages of one employee. Each sustainable training is evaluated as 700€ as the price of the last one realized by the company. 2100€ per month is a sum that could allow BG to hire one employee.

6 Conclusion

6.1 Main contributions

6.1.1 Strengthening of previous work

This Master's final work offers several academic and practical contributions. From an academic perspective, it highlights key similarities with other research and corroborates certain trends, thereby strengthening previous works. Below are the main elements from the state of the art that were confirmed during the internship at the NPO BG:

Trishkina (2014) emphasizes that marketing plans help reduce time, costs, and unprofitable activities. This is confirmed at BG through better KM practices, which can reduce future time requirements, lower costs by securing more strategic sponsors, and focus on more profitable activities. By reducing less productive tasks, the organization can improve overall efficiency.

Enckell (2016) and McDonald (2007) suggest that marketing plans align efforts with financial goals. This is also validated, as BG's marketing plan was developed to help meet its financial objectives, which include achieving financial autonomy for its first employee and covering operational expenses.

McDonald (2007) further asserts that a marketing plan helps identify competitive advantages, address emerging opportunities and threats, enforce a structured approach, and prepare the company for change. At BG, the marketing plan highlighted competitive strengths, potential threats, and necessary changes in how information is processed, and services are delivered. This proactive approach ensures the organization can better adapt to future challenges.

Enckell (2016) emphasizes the critical role of marketing in increasing efficiency, competitiveness, and public trust for NPOs. This is confirmed through the case of BG, where the marketing plan aims to enhance both efficiency and competitiveness, especially by reviewing core competencies and service delivery processes. Public trust is also a key consideration.

NPOs often have diversified, non-financial objectives that are harder to quantify, as noted by Enckell (2016). BG's experience reflects this, as it has operated since 2014 but only employed its first full-time worker in 2024. Many of BG's team members have other obligations, which means their involvement is not always a priority. The organization's goals align with its values,

making them harder to quantify, and it primarily offers services, further complicating marketing strategies.

Lettieri et al. (2004) point out that NPOs fail to prioritize staff training, which complicates their marketing efforts. This is confirmed in BG's case, as marketing has not been a priority for the last 10 years, and there has been limited focus on staff training.

Lastly, Enckell (2016) highlights the importance of an active social media presence for NPOs. BG's competition analysis confirms this, as many other biomimicry companies prioritize social media visibility.

6.1.2 New personal contributions

Thanks to the interviews and the secondary data, this work delves into the needs and demands within the biomimicry sector in Granada, identifying opportunities for BG to leverage resources in this niche field.

The work on the adaptation of the services proposed by BG depicts a good example of the transformation of services to a better alignment with company's values, customers' needs and demands, and company's competences, while keeping in mind the resources disponible and the business environment.

From a practical standpoint, the findings guide BG's team in utilizing more effective tools and methods to achieve their goals, while remaining true to their values.

Finally, the research question, "How to develop a marketing plan for a NPO in the Biomimicry sector?" is mostly answered by presenting a structured approach to develop a marketing plan for a NPO in the Biomimicry sector and a concrete example. However, it is acknowledged that some steps may differ for other biomimicry companies. The sequence of actions or additional steps required, depends on the organization. Additionally, due to time constraints, a full implementation of the marketing plan at BG was not achieved, and certain steps common to other marketing plans are absent from this work.

6.2 Limitations and future research

Time limitations affected the depth of the marketing plan. With only a few months to complete the project, it was difficult to create a long-term plan, as McDonald (2007) emphasizes the need for extended time to develop proper complete marketing plan.

Knowledge limitations impacted the accuracy of the findings. Some information came from sources not 100% trustful (e.g. potentially outdated websites of competitors), and interview data relied on possibly non 100% representative sampling, which may introduce bias. Additionally, both the team and I had limited knowledge of the local context in Granada, restricting our solutions.

For future research, exploring efficient marketing strategies for NPOs with limited time and resources could offer valuable insights. Researching the impact of factors like organizational size, investment, and location on marketing success would also be useful. Moreover, verifying if the needs and demands for biomimicry found here apply to other companies in the sector could deepen understanding.

Further studies could also quantify the importance of marketing plans for NPOs or expand data collection through interviews or surveys to better assess market demand.

As biomimicry evolves, continuous research will be necessary to track its development.

Finally, the marketing strategies for BG cannot be generalized to all biomimicry companies, as each faces unique challenges.

6.3 Evaluation of the internship

The aim of this report is partially achieved. I was able to adapt and grow quickly in this new challenge and life experience, thanks to the supportive and impressive team at BG. However, both the team and I were busy with various tasks, and although more availability from team members might have accelerated the progress, it would have been difficult to meet all of my initial expectations within the limited time, even with their full availability.

Some areas, such as defining key metrics, their importance, and future objectives, or detailing the full benefits of the marketing plan, could maybe have been completed. I had also hoped for faster progress with *Fundae* to achieve results and witness the launch of the sustainable

training project, as well as to further assist its development. Additionally, I expected to help to finalize and define new products like the *Event 101*.

Despite this, I am satisfied with the work accomplished and grateful for the unexpected opportunities, such as the discovery of *Responsible Travel Solutions*, which added value to the project along the way.

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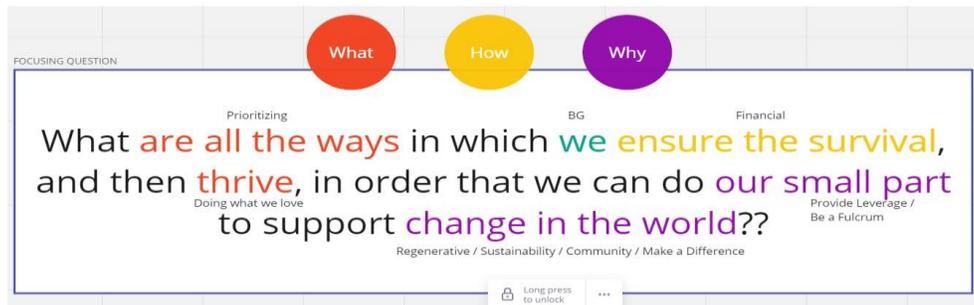
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The Ikigai design thinking method used to merge the ideas coming out of the brainstorming session.



Education price:
 -learn bio: 109\$ for life principles or introduction to biomimicry
 129\$ biomimicry master class
 -Quebec 45h formation 4,995\$, certification (450h) \$15,000
 -Bio 3.8 certification: \$14,445
 -bio SA: 6months part time program \$2,799

Retreat price:
 -argentina \$11.24

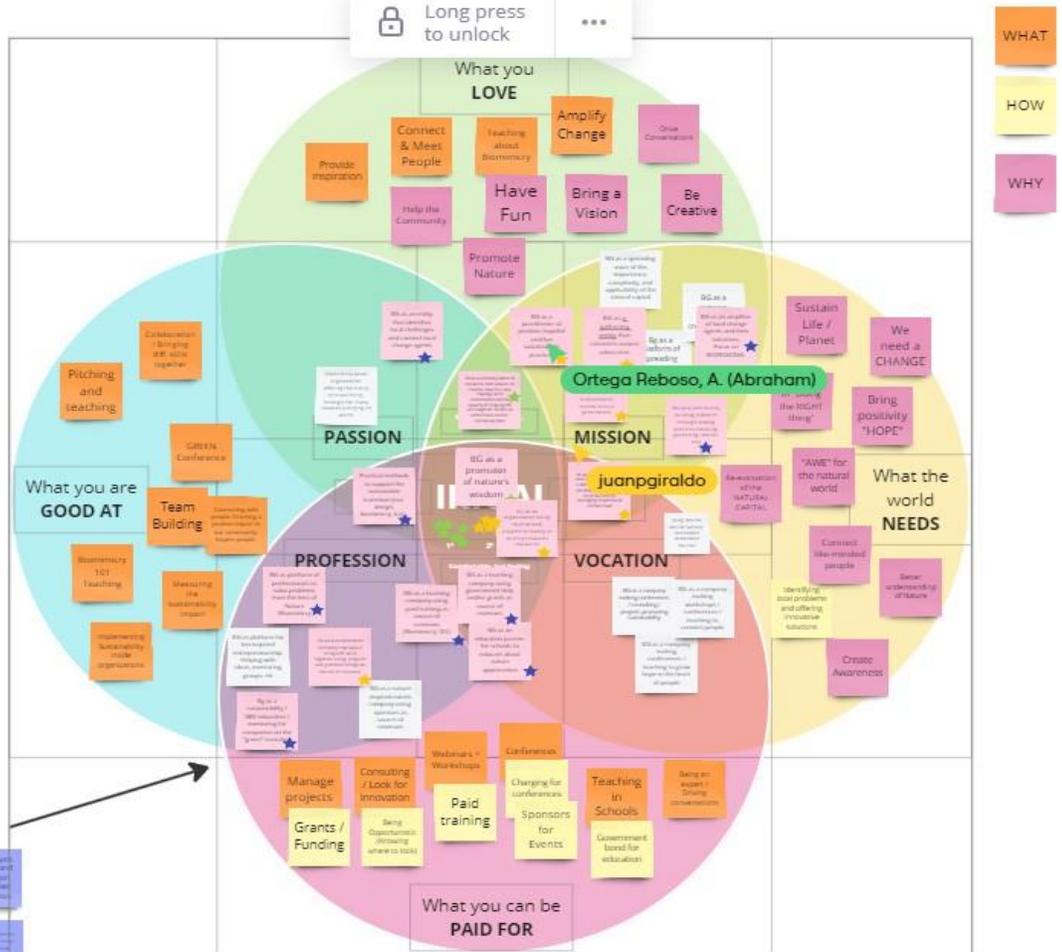
Workshop price:
 -Bio 3.8: starts at \$3,500, customs start at \$25,000
 -bioNL 450€/workshop

Consulting price:
 -Quebec: \$15,000 full guidance

Events price:
 -Bioneers: \$75 to \$285

HUMAN CAPITAL

Extracted concepts. Ask the team what can be integrated in the IKIGAI.



The MIRO board realized, including the Ikigai, the prioritization chart, the focus chart, the brainstorming and definition of values and mission, and the realization of the three verticals of important work realized by BG.



Annex 2

OUR MISSION IN WORLD

Our mission is the declaration that will move us forward. Our purpose. Our North Star.

Use Nature as...

- a driver
- a source of inspiration
- a way to transform perceptions
- Source of knowledge
- a role model
- an active contributor

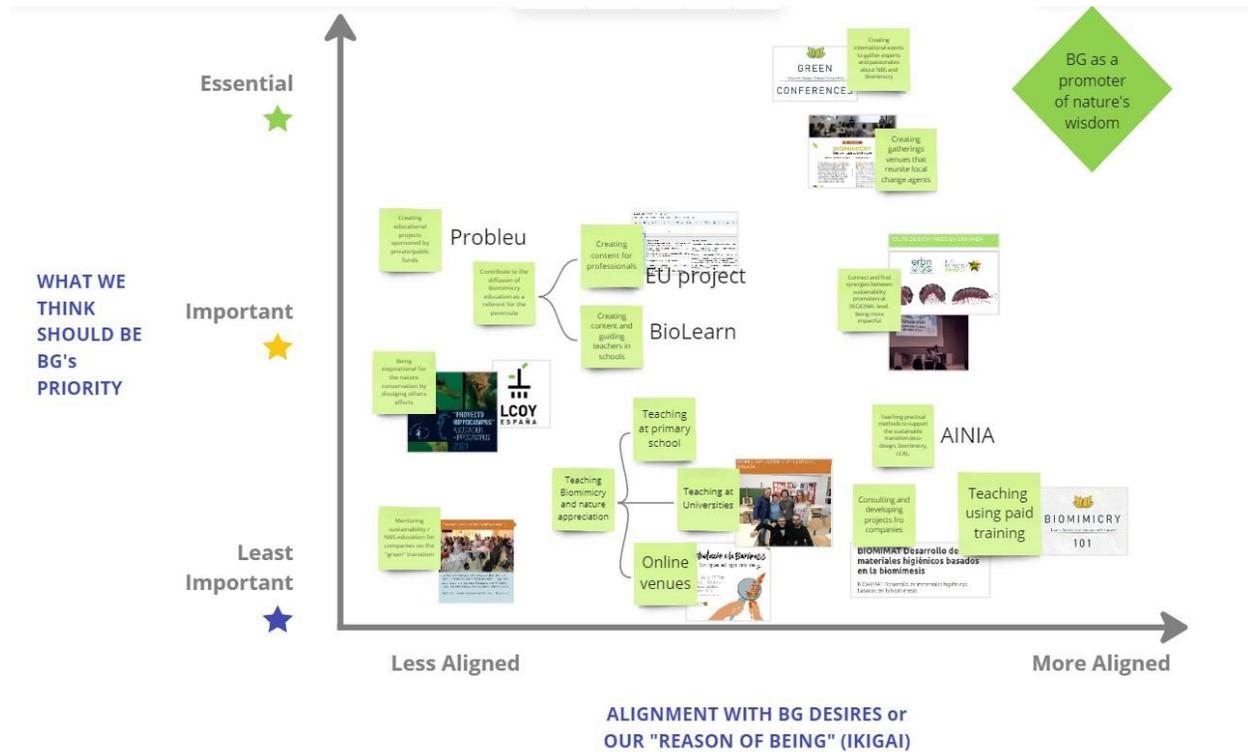
To...

- motivate better practices
- help on the ecological transition
- foster positive change
- gather change agents
- spark admiration
- incite positive actions
- Create stronger connections with nature

that will ...

- influence life choices
- propel change in the world
- bring positivity
- Drive cultural change
- provide balance to our world
- help solve human challenges
- create a better future in harmony with the natural world
- build a common sustainable future

Annex 3



Annex 4

Interviews' roadmap

1. To ask BG's members who are the interviewees and to look at their LinkedIn's profile and websites, to be able to get some information about them before the interviews.
2. To be cheerful and respectful during the email exchanges with the interviewees before the interviews. To give them in advance a sample of questions that would represent the questions I will ask during the interviews.
3. To start the interviews but salutations and thanks for their time and participation.
4. To explain the interviewees who I am and my goals inside of BG and through this interview.
5. To ask the interviewees if I can record the interview and use the transcription for marketing purposes.
6. To start with the questions as:
 - a. How did you find Biomimicry Granada?
 - b. Where would you look to find another company offering you the same services?
 - c. Who are the competitors?
 - d. Why to contact biomimicry Granada?
 - e. What do you like in Biomimicry Granada? Why choose us over the competition?
 - f. What do you think biomimicry Granada is doing?
 - g. What is your relationship with biomimicry Granada?

- h. How strong is the trust between you and Biomimicry Granada?
 - i. What do you need? Why?
 - j. For what or why is this relationship important for you?
 - k. What is missing, are you satisfied? What would you like to see improved?
7. To keep a active listening behaviour during the interviews. To summarize bit by bit what the interviewee tells me to verify if I understand them properly. To keep track of the time. To do not ask them questions that they answered in other previous questions. To try to get quantifiable data or data that I can compare. To ask the questions similar or like what we are talking to together to keep a fluid conversation.
 8. To ask specific quantifiable questions to check on previous answers of to get new data as:
 - a. On a scale of 1 to 10 how would you evaluate...
 - i. ... how easy is it to reach BG in 24h/1week/1month?
 - ii. ... your satisfaction about BGs' work?
 - iii. ... the trust you have for BG?
 - iv. ... the importance of your relationship with the company?
 - b. Would you place that in first/second/... position?
 - c. In which position to contact BG over companies doing the same kind of activities?
 - d. What is for you the best advantage of BG?
 9. To thanks the interviewee again for his/her time
 10. To ask feedback on this interview

Interviews' characteristics

Date	Name	Duration	Residence country	Profession	Position
10th of April	Richard	48 min 30	England	biomimicry expert, manager	old friends who share help or information time to time
10th of April	Alessandro	18 min 37	Italy	biomimicry expert	close old friends, collaborators and partners
11th of April	Lucy	19 min 06	England	startup consultant	no real friendship since they were only once in contact as partners
11th of April	Lorenzo	22 min 33	Spain	product developer, technology developer	close friends open for collaboration
12th of April	José	12 min 09	Spain	teacher from ESADA	first "colleagues" now more friends, partners, they share resources
15th of April	Juan	37 min 11	Spain	teacher and consultant with a background in biology	friends and collaborators
18th of April	Irene	29 min 12	Spain	teacher in superior public design school	friends, and "customer", BG did workshops for her
19th of April	Jeremy	32 min 35	Portugal	Industrial design practitioner, educator and investigator	one time event, but liked it a lot, partner
13th of May	Emilie	12 min 49	Saudi Arabia	legal director for an U.S. Company that operates mostly in the buildings	customer, not really in contact but would come back to another event of the same type

Summary of Interviews

How did you find BG?

Most replied that they found BG thanks to Theresa (founder of BG). Some said: “through LinkedIn/Google, or the website of Biomimicry Iberia”. Then, the answer: “Because of BG being pioneer in Europe (first ones to give “courses”)” was also told. Finally, one person said: “Thanks to the Born Global event (external, specific startups festival)”.

Where is the competition?

- Biomimicry Institute (concerning consulting/advice for startups)
- Learn Biomimicry (concerning education)
- Gendorf, Utrecht (concerning education)
- People just working in research on specific biomimicry application
- Paris' conference
- Born Global event
- Green Innovation Lab
- Nordic Biomimicry
- More specific and precise art using biomimicry (e.g. tattoos)

Do you know what BG is doing?

- Most of the interviewees know everything because work with BG's members
- Lucy doesn't know anything
- Some still would like to be more updated

What are the key advantages/qualities of BG?

- reliable
- familiar and close to the people, informality
- friendly, nice, kind, good, very open, enthusiastic
- what BG is doing (good projects), (values), mindset
- hard workers/great job, discipline, serious
- organize things well, present workshops very well (short content but interesting, fun, meaningful, structured) (we are here for this, we will talk about this, you will learn how to do this...) (scientific content, scientifically proven and used already)
- bilingual

- international connexions
- emotions

-Granada is a good touristic place

What is the nature of your relationship with BG?

- Close friendships
- Good people but doesn't know them really, only met one time

What are your needs towards biomimicry?

- need of information, state of the art content, newsletter
- need of network, meeting more people, exchange of ideas
- need of education
- need of inspiration
- need of reconnection with nature, personal curiosity (less said)

none needs BG to survive

What should BG improve?

- making bigger events and getting sponsorships for those
- hosting a network or creating groups for people to chat in (community on WhatsApp, different groups for each speaker...)
- being more differentiated and more specific about what they are doing on their website (should be stating objectives and why is it different, now the website is too general, each other's projects or different businesses that BG is working with should/could be added/visible (collaborators))
- concerning media; being more popular, saying that BG exist, creating more content online (LinkedIn, website, social media...), getting the public, being everywhere (in events, workshops...)
- creating an online version when proposing things (/ an alternative could be to summarize things and propose a way to online people to do something on their own at home on the same subject)
- doing more together, more projects, bigger projects
- linking with the authorities through the Spanish Centre of Environmental Education (government) for example for education, and training teachers
- having more time to digest information from the participant side because they are not all qualified in all what is said, and it can be difficult to understand and follow everything in that short time

Ritchard's interview's notes

- BG should turn the discourse around *climate adaptation* and not climate change
- webinars are not nice, BG should create its owns, short ones (30min) and get the people interesting through LinkedIn, focus on the problems your potentials clients are looking for, take the people from your posts impressions on social media (people interested by BG)
- work with traditional industries, the ones that are the most difficult to change (glass, farming...)
- targeting the CEOs people because they are the most innovative, no innovation manager or people working in sustainability because they have no control on a board level
- play on tourism impact; solutions for single use things, (sorting of trash...)

- work first with low tec solutions, not proposing innovation straight forward, build trust and solve problems instead of spreading complicated useless/not understandable knowledge/ideas, understand the problem first before trying to give any solution
- keeping contact, to share news that you get about an industry with the person that you know from this industry, and asking feedback to know possible improvements and to discover possible miscommunication
- leading the projects from academia, if not, academic people will fight for intellectual property
- larger design companies are not nice
- in workshops playing with scenarios: what if..., how would you behave if...?
- it's important to ask ourselves: "What are the biggest problems, the biggest things to do for the next 10-50 years?", trying to be in advance on policies, changes, recommendations, what standards are coming out around plastics, agriculture, wastewater...
- it's important to ask ourselves: "What do we want to deliver as technical skills?"

Annex 5

New proposition for Biomimicry 101

Description:

In a consumption society, we invite the client to buy more than products. We invite the client to buy a new way to innovate, a new methodology, a design thinking tool, wrapped up in a whole week of discoveries, vitality(health), and delight(fun).

Everything should be thought of and follow a good dynamic and logistic. It shouldn't be just an event where BG is offering some services, but a strategic way to attract and satisfy a precise amount of targeted people.

Marketing strategy:

The team should invest into "stardust"/presentation: nicely dressed, paying attention to vocabulary, paying attention to the look of the spaces where the customers are invited, not too much, not too little. We are not selling hikes, tours... those products are easily accessible and cheap to access to. We are selling a beautiful blow minding week. A week where to learn, a week where to discover, a week where to connect, a week where to innovate.

There is a need to strengthen what we are selling thanks to training's testimonials, because the service is the experience/travel, and it cannot easily be seen otherwise. There is also a need for a lot of images (hiking images, group images, food images, biomimicry method practice images, yoga images, star teaching images, Granada images...).

The first core competence of BG is its team. The product is not its content but the whole adventure that comes with it created by the close contact with the team of the company.

If the team cannot adapt itself to the clients' needs, maybe this service should not be proposed by BG. Another possibility is to make it more often but making it very unformal so that it would take less time for the team to prepare it, and the target should be more directed towards rich old kids from northern Europe that are tired of cement cities and that are backpacking around Europe/Spain Portugal. It fits a bit better the values of BG but it makes less money. The price should be reduced to around 800€.

Finance strategy:

Cheap to produce + high price = huge margin.

Cheap products with beautiful packaging. The team is the packaging.

Content:

- Hike; two different routes for sporty/less sporty people
- Yoga / winery visit
- Looking at birds/bats/stars
- Flamenco show
- Proposing other services with discounts (climbing, spas, diving, snorkelling, boat tour...) for the day free of activities
- Tour of Granada
- Greetings and explanation of what, and why is biomimicry
- Biomimicry Design Thinking (BDT); the theory and some examples
- BDT; the practice first part (BG giving the clients subjects)
- BDT; the practice second part (the clients choosing their own subject in 3 sessions (Choosing a subject for BDT) (Their own BDT practice)
- BDT; conclusions and exchange around personal findings
- Nature discovery tour around biomimicry
- Visit Alhambra by night, making it ++ (learning ourselves the history about the Alhambra and offering guided tours from us...?)

Why to want rich northern European people?

Because upscaling that kind of event for BG is not possible now. Then to increase the profit without increasing the number of customers, it is easy to simply increase the price of the services. To increase the prices of the services, a way is to target richer customers. Offering better quality services for rich people is a way of increasing the profit without having to increase the amount of services delivered.

Moreover, BG doesn't have the time to reproduce that kind of event a lot of time during the year. To have it offering the company the same amount of money as several events per year, using only a few times (1, 2 or 3) a year event, it is needed to have this event bringing up more money. Having rich clients open to spend more money is a way of raising the price of the services and then, if the production costs stay similar, to increase the profits.

- richest people (considered coming from out of Spain): lots of margin gain
- medium class people: low margin gain; a lot of similar events all making profits are needed to reach a similar amount of margin gain
- low class people or friends: deficit or no gain; it can still be used for training, or for making BG known from a bigger public

Language barrier:

Rich people don't always mean English speaking people.

It should be clearly stated that everything is done in English or BG should have translators in the team.

Usual day schedule:

8.30 a.m. is wake up time. From that point to 9.30 a.m., is breakfast available. At 9.30 a.m., the morning activity starts, and ends at 1.30 p.m. At 2 p.m. is lunch for 1 hour. At 4 p.m. begins the afternoon activity until 7.30 p.m. And the dinner is from 8 p.m. until 9.30 p.m. Some days, an evening activity is organized from 10 p.m. until 11 p.m.

Description of each activity:

Wake up time: and times in general should be more align with northern Europe cultural hours than with Spanish hours, but still a bit moved of half an hour or one hour for customers to be able to say: "Oh I was hungry earlier than the eating time, but you know, those people eat later, heh!".

Make up time: should be at least 40 min. The customers targeted are rich people. Their morning routine cannot be fitted in less than 30 min (make up, useless tools for looking better...). We are offering luxury; people cannot be forced to hurry at any point.

Breakfast: should be accessible by all, and with a lot of different things for a lot of different tastes. Providing local looking expensive products. Prioritizing green products but more important than to put them on the table is the fact to specify that each product is local and expensive/difficult to make. Useless talks are luxuries. A story about one product, or the production of one product is welcome. It will entertain people, wake them up, and engage them talking about a subject. In the morning, people are often not willing to talk. To offer them a good subject of discussion even if it's just to say: "Oh I didn't know that did you?", it's a good start of the day. We should not eat with the clients. Clients are untouchable people. We are not eating with them or sharing casualties with them. We are only sharing with them interesting facts and expertise about our domain of work or making them talk about themselves. Service should be made by someone not of the team. The team is only made of supervisors and experts. The team cannot be seen involved in lower tasks. The team cannot do too many different things. The team should be specialized and looking rich too. The customers should feel integrated and close to the team. That's why the team should look prestigious and rich too. We are not weird people far away in Spain, we are fun experts proposing a travel and a unique experience.

The hike: should be safe. We cannot scare the customers. The customers don't like risks. If they would like risks, they would be poor or extremely rich and they are just rich. The hike should be beautiful. Hiking is an activity for poor people. We want to prove to them that nature is valuable. That's why we want to hike. But we should take the customer to the most beautiful hike of their life for it to be worth it. The hike should be chosen with a lot of care. We want the perfect hike for them. The hike can be led by someone from the team only if that only person states that he/she is crazy about hiking and that she is very experienced and knows the way perfectly. The other person of the team coming along should only state that they like hiking because hiking is close to nature, but they should not love it. They should refer to the first person as the only person with great experience in that domain.

The yoga: should be led by an accredited yoga teacher that is fluent in English. It should be a nice smiling teacher but should not be too close to people, here also distance and space is a symbol of opulence/elegance.

The tour of Granada: should be organized early in the week so that people can say: "oh we were here before!". It should be linked to biomimicry.

(to be continued)

Annex 6

Citations: testimony and success story

The citations are extracted directly from the transcripts of the interview realized and were confirmed and their advertising use on BG's website was granted by the interviewees.

Alessandro Villa, biomimicry expert

“From a let's say more professional perspective of biomimicry, Biomimicry Granada represented to me a good hub to keep learning biomimicry and in general inspired design. Biomimicry Granada represents a good subject, a good actor in the training of people.” (...) “I consider Biomimicry Granada a reliable source of information and updates concerning biomimicry.” (...) “The partnership between Biomimicry Granada and ESADA School aimed at organizing Green Festival is very good. It's a very good event, it is a very good moment to meet interesting people, to meet the smart people around biomimicry, (banish fire) (designers?), design sustainability, regenerative design.”

Emilie Bassil, legal director for Middle East and Africa as Johnson Controls (U.S. Company that operates mostly in the buildings)

“I think that whatever Biomimicry Granada would be proposing, I would be interested to go again, because it was really a very good experience.” (...) “The team was very good, the trainers and the attendees, so it was a very nice dynamic.”

Irene, teacher in public design school

“I worked two times with Biomimicry Granada. I contacted them to do workshops in the school. They did it very naturally. It was fun and very pedagogic, muy divertido, muy interesante. It was not too short and not too long. They communicated not more than what was necessary, only the essential. “ translated by her to : "He trabajado dos veces con Biomimicry Granada. Contacté con ellos para hacer talleres en la Escuela. Fue interesante, divertido y pedagógico, transmitían mucha naturalidad. Supieron mantener perfectamente la atención del alumnado. También agradecí que fueran eficaces y proactivos en las gestiones”.

Jeremy Hugh Aston, Industrial design practitioner, educator and investigator. Coordinator of Masters in Product Design at ESAD, College of Art and Design, Matosinhos, Portugal. ESAD.pt

“The most successful designers to be honest are the ones as we say in English, that have more arrows to their bow. One of them, of course, is finding inspiration from nature.” (...) “I’m very, very satisfied that not only was it a unique experience but also the first time for me to go so deeply into a subject of which I don’t have experience. And I’m very satisfied with the result.” (...) “The material that we received has been scientifically proven through many case studies with people who are qualified and experienced.”

José Antonio, teacher from ESADA

“We have become friends, and I love working with them. They work hard. They organized things very well, which is the thing that I appreciate the most. They were always enthusiastic about working.”

Juan Diego Lopez Hiraldo, teacher and consultant with a background in biology and MSC in coastal management from Newcastle University + CEO of www.vitaxi.com

“I am trying to be close to Biomimicry Granada, because I really would like to do some more work with them.” (...) “They are a reliable team that is doing a great job. There are quite a lot of things that they have been doing and they can be proud of them.”

Lorenzo, product developer, technology developer

“I believe in what they’re doing, good people that are doing good stuff for good reasons.” (...) “We are collaborating on different levels on different things. I value their support and value.” (...) “The course was very well organized with really interesting people, and so I can vouch for the course any time because it was a really great experience for me.”

Annex 7

Sustainability traveling solutions

The travel solutions are:

- to contribute to the community, environment and economy where people are traveling: social engagement, cooperation with local, regional providers and global networks, environmental and citizen science projects, creation of jobs, ...
- to use fair price and income distribution
- to be certified (Global Sustainable Tourism Council (GSTC), GSTC accredits those that certify as a third-party assessment through an audit (made by EarthCheck, Green Destinations, Vireo Srl, e.g.))
- to push the customers to share (to share information of their trip, of what they liked... with social media/the big public) because sharing is helping regenerative traveling
- to push the customers to connect with locals, ...
- to use local food sourcing: regional food suppliers (Cooperation with local suppliers; Contribution to the essence of the place)
- to use local accommodation
- to support initiatives for local infrastructure and social community development
- to eat healthy food with good energy (Efficient water use; Renewable energy)
- to identify why the customers travel, to offer them the best with the smallest number of resources (To personify/adapt to each client)
- to give advice on how to use the public transports and the costs
- to offer a list of local association or recycling firms or green energy actors where to give money additionally to the cost of the trip if the customer are willing to do donations
- to try to work in the direction of cultural heritage preservation and interpretation, wildlife preservation, landscape restoration, and more.
- to do not use useless items that don't change the experience of the customers
- to do not use packaging that we could avoid
- to target the biggest source of wastes/pollution

- to think about the health and safety implications of sustainable solutions: For example, how will housekeeping safely clean and dry reusable bathroom cups?
- to think about what the impact on the customer will be, or on other general wastes if we choose to reduce or suppress something polluting
- to ask ourselves what can we refuse/reduce/reuse/replace/repurpose/recycle, if it is really helping us to be more sustainable (what are the impact if we do it? (e.g. washing uses energy)), if it is still safe, and what is the impact on the quality of the service offered
- to find a way to frame sustainable changes as a positive thing to customers
- to talk to customers about what you're doing and why, all the way through their holiday 'journey'. (Connect the story to the location – for example, by explaining the positive effect plastic waste reduction will have on local marine life, the attractiveness of the beach or the well-being of local people)
- to divide actions into short, medium and long-term tasks and set targets (easy to understand/measure/...)
- to ask your suppliers to eliminate as much packaging as possible, take back packaging from deliveries, deliver items in reusable containers, and identify alternatives for any plastic items they currently source for you.
- to promote healthy competition around sustainability initiatives
- to have good communication through all actors (locals, tourists, travel institutions, local governmental institutions) and help each other's

Some useful links:

- to calculate the travel footprint

<https://sustainabletravel.org/our-work/carbon-offsets/calculate-footprint/>

- to find certified eco hotels

<https://ecohotels.com/hotels/spain/granada/?rooms=2&rehid=>

(only this one in Granada)

Same purpose but different website:

<https://www.easyjet.com/en/holidays/deals/certified-sustainable-hotels>

(it is for hotels located around Andalucia, but it looks greenwashing)

-to find to courses and training to be able to offer sustainable tourism

<https://www.gstcouncil.org/what-is-sustainable-tourism/>

-list of the points to fulfil to be recognized as sustainable tourism offer from GSTC

<https://www.gstcouncil.org/wp-content/uploads/GSTC-Industry-Criteria-for-Tour-Operators-with-indicators-Dec-2016.pdf>

-list of the guiding principles around eco-tourism, it explains basic things fast

<https://www.futureoftourism.org/guiding-principles>

- ABTA's five-step Better Places programme helps Members develop a sustainability approach that is right for their business. Members can access the Better Places tools and resources by visiting:

<https://www.abta.com/member-zone/operational-support/>

- Waste and Resources Action Programme (WRAP) has information on addressing plastic waste in the UK:

<http://www.wrap.org.uk/category/materials-and-products/plastics?page=5>

-The Sustainable Restaurant Association has created an Unwrapping Plastics Toolkit to help food service businesses reduce single-use plastics: <https://thesra.org/campaign/plastics/>

-The Marine Conservation Society has helpful tips and guidance for businesses and individuals wishing to reduce their plastic use: <https://www.mcsuk.org/clean-seas/plasticfree-business>

- UNEP's Single-Use Plastics: A Roadmap for Sustainability is aimed at policy makers but offers useful data and information about the types and effects of plastic, and on programmes and initiatives at national level around the world to tackle the problem:

https://wedocs.unep.org/bitstream/handle/20.500.11822/25496/singleUsePlastic_sustainability.pdf