MSc MARRES
Blue Managers Project

Olivia Rahel Grubenmann

COMMUNICATION AND CORAL RESTORATION

BRANCH Coral Foundation
Max van Aalst

Université Côte d'Azur - MSc MARRES
Professional Project - Project Plan
08 / 06 / 2023

Acknowledgment

I would like to thank the MARRES team of Crystalle Moreno, Christophe Mocquet, and Sara Sergi for their advice and support regarding this professional project. I would also like to thank Max van Aalst from BRANCH Coral Foundation for accepting me as a communications intern, helping me with the administrative aspects of the internship in advance, and always tried to find a way so that I had everything I needed to successfully complete my professional project. I am honored to have had the chance to contribute to the goals of the foundation and learning about coral restoration, communication, and working in a marine conservation NGO.

EXECUTIVE SUMMARY

Coral reefs in the Caribbean and around the world are under threat due to local, global stressors of natural and anthropogenic origin, such as climate change, pollution, overfishing, diseases, and habitat destruction. In the past decades, the staghorn coral *Acropora cervicornis,* which used to be the dominant coral species in the Caribbean, has experienced severe population drops of more than 95% due to climate change and disease outbreaks. To address this issue, active restoration methods, such as direct transplantation of whole coral colonies or fragments, managed relocation, coral gardening, construction of artificial reefs, and seeding reefs with coral embryos and larvae, are increasingly implemented complementary to global actions on climate change. Through active restoration, the resilience of coral reefs to the diverse local and global stressors can be increased and bridge the temporal gap until global actions on climate change and implemented and take effect. Additionally, environmental stewardship and interest in protecting coral reefs can be increased by engaging local communities in the restoration efforts.

This professional project aimed to support the coral restoration organization BRANCH Coral Foundation on the Caribbean island of Curaçao, a former Dutch colony, with its mission of protecting and restoring Curaçao's coral reefs, by building coral nurseries with the endangered Staghorn coral species *Acropora cervicornis* and informing the local and global public to generate a long-term beneficial impact on both the environment and local communities. The organization focuses on the three key pillars of coral restoration, education, and community involvement and collaborates with a broad network of researchers, scientists, dive centers, students, and volunteers.
This professional project was designed to assist in building a communication basis for the starting organization, which included among others developing internal workflows and guidelines, building a collection of photos, videos, templates and other communication material, developing and testing different formats, and creating relevant content for the foundations' communication channels, such as the website, newsletter, and social media. With this project it was aimed to help increase the reach, awareness, and engagement of BRANCH Coral Foundation and keep stakeholders informed and involved. Besides this main focus on communication-related activities, the internship also entailed assisting in the field with the construction and maintenance of the coral nurseries and contributing to the writing of a business plan.

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1. CONTEXT

1.1 Coral Reefs: Importance and Threats

Coral reefs make up less than 0.1% of the ocean floor, but they are among the most diverse, complex, and important ecosystems of our planet and offer a habitat for more than 25% of all known marine fish species (IUCN, 2022) and many other marine organisms, such as sea turtles, marine mammals, invertebrates, algae, and microbes. Moreover, probably only a small portion of the total species living in reefs have been discovered so far. However, marine ecosystems are among the most heavily exploited ecosystems on the planet. As a result of coastal development, climate change, pollution, and other human-induced factors, 30% of all coral reefs have been damaged or destroyed in the last several decades (Cramer et al., 2022) and it is estimated that 75% of all reefs worldwide are highly endangered (Meesters et al., 2015).

Coral reefs are primarily created by reef-building coral colonies that deposit calcium carbonate skeletons. Most of these animals have symbiotic algae inside their cells that use photosynthesis to provide the coral with the energy needed to form its skeleton, while in turn the corals provide protection and essential nutrients. Unfavorable conditions, such as unusually warm water, can ruin this symbiotic relationship of the coral and the algae, causing the algae to leave its host and the coral to decline or die. (Cramer et al., 2022). Coral reefs provide many benefits to humans, such as tourism, food provision, protection of the coast from storms, provision of genetic material, and compounds for medicinal purposes, and millions of people worldwide rely on them (Barbier, 2017). Figure 1 illustrates these benefits, which are referred to as ecosystem services, grouped within the four broad categories of human wellbeing, marine biodiversity, jobs, and economy, as well as coastline protection. Coastal communities in tropical and subtropical areas, small island developing states (SIDS), and Indigenous peoples are often directly dependent on healthy coral reefs to provide food, jobs, and protection of the coast from storms. For example, reef-related tourism generates almost US$36 billion each year globally and the estimated total global economic value of coral reefs is around US$10 trillion per year (Knowlton et al., 2021).

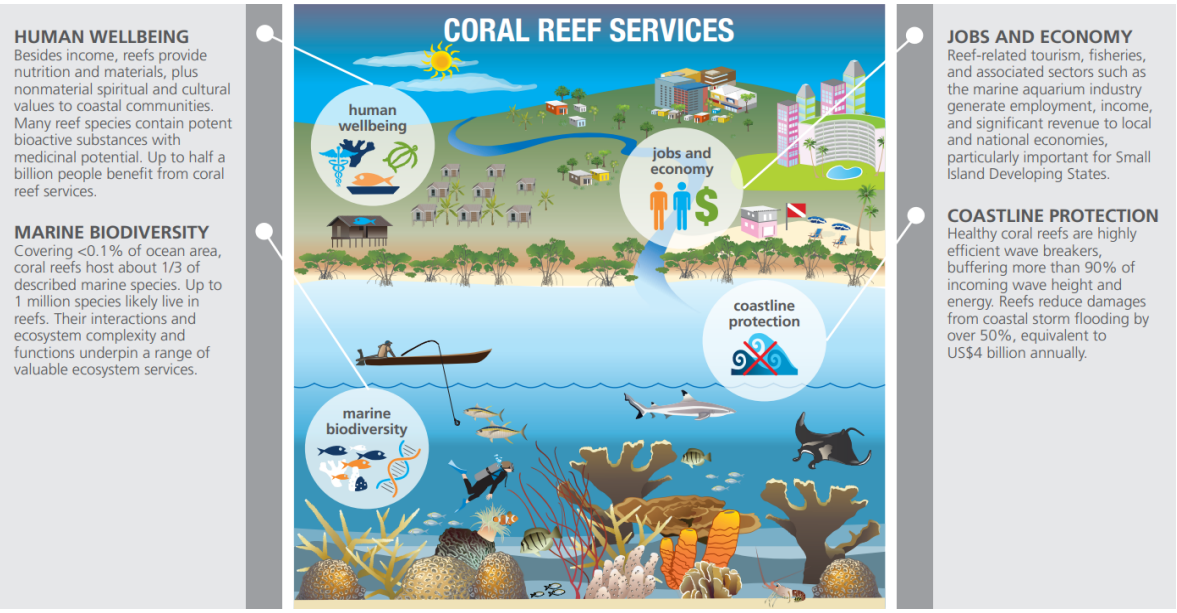


Figure 1: Ecosystem services of coral reefs, Knowlton et al., 2021.

Since the 1950s however, the capacity of coral reefs to provide these ecosystem services has declined by around 50% (Eddy et al., 2021). Climate change and its consequences of globally rising temperatures, sea level rise, and increasing acidification of the oceans are considered the main threats for coral reefs worldwide (Cramer et al., 2022). As a consequence to abnormally high temperatures, bleaching events in coral reefs around the world are occurring more frequently, jeopardizing their survival (Eddy et al., 2021). Local stressors such as pollution, overfishing, diseases, and habitat destruction further decrease the resilience of coral reefs to global stressors such as climate change, and negatively impact their health and abundance, and consequently also their ability to provide ecosystem services for the human population (Cramer et al., 2022). For this reason, SDG 14.2 of the United Nations Sustainable Development Goals of 2015 pleads for the protection and restoration of marine ecosystems such as coral reefs. With climate change as the most severe threat, and local stressors adding on to the pressure on coral reefs, protecting and restoring coral reefs and their many ecosystem services will require cooperation across all levels and with a global reduction of greenhouse gas emissions to react to climate change, but also with an increase in local protection and restoration efforts to increase the resilience of coral reefs to these stressors (Eddy et al., 2021).

1.2 Coral Reef Restoration

With increasing pressures and the ongoing rapid decline of coral reefs worldwide, more and more people and organizations from the academic, conservation, and private fields are expanding their efforts beyond traditional conservation towards more active reef restoration methods (Cramer et al., 2022). Ecological restoration defined by the Society of Ecological Restoration is 'the process of assisting the recovery of an ecosystem that has been degraded, damaged, or destroyed' (SER, 204), and is increasingly seen as a relevant complementary tool to conservation efforts. The Convention on Biological Diversity has declared that the restoration of terrestrial areas, inland water, and marine ecosystems is essential for assuring the functioning and services of ecosystems, which further highlights the scientific support for restoration efforts (Rinkevich, 2014).

Restoration can be active or passive. While passive restoration relies on natural processes to repair damage with minimal human input, active restoration involves human intervention. Regarding coral reefs, it has been discovered that passive restoration practices did not effectively and sufficiently remedy long-term negative impacts on the reefs (Rinkevich, 2014). When looking at the active restoration of coral reefs, it can be broadly categorized into physical techniques, which involve for example the creation of artificial reefs, and biological methods, such as the propagation of corals using sexual (broadcasting and brooding) and asexual (fragments and nubbins) means (Chavanich et al., 2015). There have been numerous ways proposed for actively restoring coral reefs, with some receiving extensive study (Rinkevich, 2014). One of the original concepts is the direct transplantation of whole coral colonies and/or fragments, which has a range of issues including effects on donor reefs and transplanted colonies. A similar, more modern approach is the use of 'managed relocation' or 'assisted colonization', which involves moving species outside their normal range for conservation purposes. A more promising approach is the 'gardening concept', which involves first raising coral fragments in nurseries and then transplanting them onto denuded reef areas once they are mature enough. This approach has been tested in various reefs worldwide and has shown benefits such as reduced harm to donor reefs, higher survival of transplanted corals, as well as improved health of transplants (Rinkevich, 2014). Other methods are the construction of artificial reefs, for example in areas that have been damaged by destructive fishing methods, or seeding coral embryos and larvae

in destructed reefs. Considering intensifying global pressures such as climate change, methods such as assisted evolution may also increasingly be included in future restoration efforts. This method involves picking coral genotypes that are more resistant to bleaching and designing new genotypes with gene editing (Cramer et al., 2022).

1.3 Coral Reefs on Curaçao: The Staghorn Coral *Acropora cervicornis*

Since Curaçao, a Caribbean island and former Dutch colony, will be the location of the internship surrounding this project plan, this part is dedicated to a focus on the current situation, and the conservation and restoration efforts made around the island. Most coral reef restoration projects of Curaçao, and many other places in the Caribbean, are focusing on the staghorn coral *Acropora cervicornis,* the previously locally dominant, but now threatened coral species there, listed as CR-critically endangered on the IUCNs red list (Meesters et al., 2015). In the last decades, *Acropora cervicornis* has experienced severe population drops of more than 95% due to increased sea-surface temperatures from climate change and resultant bleaching, hurricanes, and disease outbreaks. This has led to *A. cervicornis* being listed as 'threatened' under the U.S. Endangered Species Act in 2006. In the early 1980s, the White Band disease eradicated most of the *A. cervicornis* and caused significant damage to the *A. palmata* (elkhorn coral) in the Caribbean. Before the disease, coral fields could be found in abundance around Curaçao and the neighboring island of Bonaire. By 1985 however, more than 90% of these fields had vanished due to the disease. This decrease in the dominant coral species has changed the coral reefs from complex three-dimensional structures to flat stretches of sea with much lower structural complexity in the shallows, leading to a decrease in biodiversity, reduction in fish biomass, and severe reduction in the reef's capacity to buffer storm and hurricane damage (Meesters et al., 2015).

Staghorn corals belong to the most important creatures in today's reefs due to their diversity and their high contribution to the three-dimensional structure of coral reefs. They help create and sustain the high diversity of reef biota, as well as the topography of the reef. However, with the intensification of anthropogenic stressors in the coming decades, the Staghorn coral is in danger of ecological extinction, which would lead to a dramatic decrease in the functioning of the whole reef system (Renema et al., 2016). Low adult density with a consequence of reduced reproductive potential, limited genotypic diversity, as well as lack of connectivity have made it difficult to rely solely on natural recovery for *A. cervicornis*. Therefore, the implementation of active restoration to establish reproductive coral thickets may be a feasible alternative. Furthermore, characteristics such as fast growth and regeneration rates, as well as the ability to asexually propagate via fragmentation, make *A. cervicornis* particularly suitable for coral gardening projects (Lirman et al., 2010).

Corals can reproduce both sexually through the production of gametes and asexually through fragmentation (Meesters et al., 2015), but the recovery of *Acropora cervicornis* is complicated by its limited success in sexual recruitment and therefore heavy reliance on asexual reproduction by fragmentation (Herlan & Lirman, 2009). Furthermore, genetic research showed that the gene flow of the species *A. cervicornis* between different regions in the Caribbean is limited. It is therefore suggested to direct conservation efforts for *A. cervicornis* towards preserving and managing local populations, rather than relying on larvae inputs from other regions (Hemond & Vollmer, 2010). The production of colonies from fragments has the benefit of bypassing the early larval stages with high mortality rates. The restoration method of asexual reproduction does not require as much technical knowledge as other methods, making it a great way to engage volunteers in the conservation effort.

Furthermore, *Acropora cervicornis* is a fast-growing species, so the effects of this method can be seen relatively quickly. Of course, the potential for reduced genetic diversity in the resulting population has to be considered (Meesters et al., 2015). However, local conservation of populations and active restoration of stocks with fragmentation might also help to improve rates of sexual recruitment to support the recovery (Herlan & Lirman, 2009).

Various techniques have been employed to promote coral gardening, including attaching fragments or nubbins to mid-water wire frames, utilizing floating platforms, utilizing concrete, and suspending lines. Despite the cost-effectiveness of coral nurseries compared to other restoration techniques, they can still be expensive and time-consuming. Wild adult *Acropora cervicornis* colonies are scarce, which makes it essential to maximize nursery productivity while taking the least amount of donor tissue (Herlan & Lirman 2009). With the increasing popularity of *A. cervicornis* nurseries, it is important to research the best practices to optimize their growth and health. Best practices and strategies have been developed to minimize the impacts on wild donor colonies and improve survivorship of transplants. However, there are no systematic studies yet on the maximum amount of tissue that can be clipped from a colony without endangering it. Determining this would be valuable for existing nursery guidelines and could potentially enhance restoration efforts across the Caribbean (Lohr et al., 2015).

A criticism that is often voiced in regards to coral restoration, is that it will not reverse declines in coral reefs while big stressors such as rising ocean temperature due to climate change are still in place and is useless if it cannot restore reefs at the ecosystem scale. However, according to supporters of coral restoration these active restoration efforts are nevertheless important, as they can help in protecting the biodiversity and ecosystem services of coral reefs, until measures to mitigate global pressures such as climate change are implemented and take effect. Active restoration could buy time until global actions on climate change are being successfully implemented. Furthermore, supporters argue that active coral restoration is necessary for the recovery of threatened coral species such as *A. cervicornis,* which have experienced drastic declines not only due to warming temperatures, but also due to diseases such as the White band disease and for which natural population maintenance has been disrupted. Moreover, engaging local communities in coral reef restoration projects can heighten the knowledge of the importance of this ecosystem and increase interest to protect it. So, while active coral restoration, for example with coral gardening, has the potential to engage and sensitize the local community, increase the resilience of reefs in the face of diverse local and global stressors, and 'buy time' until climate change mitigation measures take effect, it is important to remember that restoring coral reefs should not and cannot replace global actions on climate change (Boström-Einarsson et al., 2020).

1.4 Communication for Marine Conservation

While the scientific understanding of the threats to marine ecosystems has increased quickly over the past decades, this has been less the case among the public. As has often been emphasized in literature, effective communication has the power to increase support for marine conservation and motivate behavioral and even policy changes. However, so far environmental communication has mainly focused on terrestrial ecosystems and since recently climate change issues, while communication for marine conservation has been neglected. Therefore, marine conservation needs

an increase in innovative and research-informed communication efforts (Kolandai-Matchett & Armoudian, 2020).

In the context of NGOs working in marine conservation and restoration, a strong communication infrastructure and plan is crucial for their survival and success, just like it is for any other organization. Among other things, it can increase fundings, raise awareness, and keep stakeholders informed and involved. However, there is a systematic underfunding of communication in NGOs, for one reason because they are often relying on donations from their community, which usually prefer to invest in the organization's projects directly, and less in other supporting areas of the organization, such as communication or administration, even if these are critical for the success of the projects and the long-term survival of the NGO. This makes it difficult for NGOs to build a long-term communication infrastructure (Álvarez-Ossorio, 2022). To build an effective and efficient communication basis, an NGO can for example find guidance with general communication theories, the main concepts of communication, and best practice examples of other NGOs.

Key Communication Concepts

Historically, communication has evolved from the traditional communication methods with possibilities for interaction, such as speeches, stories, and theater, to the emergence of large-scale print, radio, and television with little interaction. Today, there is more interaction possible again between messenger and audience, for example by communicating via social media. Moreover, as the authors Day et al. (2014) point out, for a long time, communication was considered as comprising the main elements of a messenger, a message, and a receiver, while in modern communication theory the importance of the goal or intention of the messenger is increasingly acknowledged (Day et al., 2014). The authors also state that a big part of communication efforts for marine conservation have been focusing on the intention to inform and influence the audience, perhaps due to the oftentimes scientific basis of communication efforts on marine conservation. However, they also mention the focus of some organizations on intentions like learning and relating, referring to the time and resource investment these organizations are putting into trying to understand and interact with their various audiences.

Besides the intention of the communication, another important part for how effective a communication will be, is the messenger. The messenger can be an individual person or an organization. Among other aspects, gaining and maintaining credibility among the audience is crucial for effective communication (Day et al., 2014). Marine scientists are often seen as credible due to their expertise and neutral information. Nevertheless, scientists and communicators should collaborate to create messages that are both precise and strategically crafted (Kolandai-Matchett & Armoudian, 2020). Another key concept in communications is the audience. The public as an audience is not homogenous, but rather made up of different groups sharing similar values and interests. When communicating, it is therefore important to know who is the target group that should receive a certain message. The better the interests and values of a targeted group are understood, the easier it will be to connect with this audience and the higher the chances of reaching them, interacting with them, influencing, or involving them.

Selecting the best method or medium for connecting with and engaging a target audience is another essential aspect of successful communication. There are numerous options available for NGOs today, from traditional methods like in-person exchanges and phone calls to more modern approaches like emails, newsletters, and social media (Day et al., 2014). These new communication systems and platforms also allow for greater outreach and awareness. The literature around this topic is divided, with some authors believing that the internet has increased the reach of NGO work

and allowed for more collective action (Earl et al., 2011). Conversely, others have argued that the internet has enabled NGOs to compete for public and media attention, making it harder for any single organization to gain traction, due to the limited capacity of the public to take in all the attention at once, which is not solved by the internet (Thrall et al., 2014). Since the success of any NGO and its projects is often reliant on how effectively it can bring its message across to existing and new audiences, internet and social media platforms are often used, because information can be shared quickly and with a lot of people. Studies show that using social media can help extend the reach of information to a larger and more diverse audience, by allowing to connect with other individuals and organizations. This makes social media a powerful tool for communicating messages (Jung et al., 2014).

Another aspect of communication is the message itself. The message that is communicated should connect the messenger, the audience, and the subject. To be effective, the message should be tailored to the targeted audience, as well as to the intention of the communication. In this context, the concept of storytelling is important, as an effective tool to deliver a message and connect with the audience. According to the authors Day et al. (2014), it is important to avoid using a narrative formula that leaves the audience feeling disempowered. Instead, there should be a focus on positive statements that inspire action. When creating messages, communicators should also be mindful of the language, tone, and terms used. For example, simple language is much more comprehensible to non-experts than technical jargon. Also, to guarantee accuracy, messages should however be inspected by both scientists and non-scientists (Kolandai-Matchett & Armoudian, 2020).

As described before, a clear intention is crucial for the success of any communication effort. However, every NGO might define success differently, so it is important to ask this question before starting to communicate (Seeyave et al., 2017). Once the definition of success and the intention are clear and the communication measures are unfolding or completed, it is important to make an evaluation. Thanks to data analytics it is today possible to track the response of user behavior and the audience to various intentions, messengers, mediums, and messages in many details. This creates the opportunity to test and measure the effect of different communication strategies (Day et al., 2014).

Strategic Communication

An NGO needs to use its platforms effectively to communicate its goals, values, and activities. Strategic communication can help the organization to reach its mission and goals. According to Duong (2017), strategic communication refers to an organization's conscious use of communication to achieve its objectives and how it communicates to promote them. The author points out that to achieve the organization's goal, an NGO has to tailor its communication methods and messages to each of their various target groups, which may include donors, beneficiaries, governments and others. He points out however, that even though the messages for each of the audiences may vary, there is something they have in common, which is stories, or in other words storytelling (Duong, 2017).

The strategy to successful communication will look different for every NGO in marine conservation. However, in “Defying Ocean’s End through the Power of Communications”, the authors Glover et al. (2012) list some approaches in communication that have commonly worked well for NGOs. One approach is to emphasize the importance of the ocean and the need to take action quickly. A second one is to create an emotional bond between the people and the ocean and dispel myths that it is limitless. Thirdly, it is also important to inform people of the threats the ocean faces and the consequences, as well as emphasize how people can benefit from healthy ocean ecosystems

and present alternatives to current behaviors. And lastly, NGOs in marine conservation should highlight case studies that are relevant to their target audiences (Glover et al., 2012).

Effective communication can also be a useful tool for NGOs seeking donations. However, for this to be successful, it is important to communicate the efficiency of the organization, which can be done for example by publishing accounts, organizing open house days, and communicating how donations are being used (Michel & Rieunier, 2012). According to the authors Michel & Rieunier (2012), some NGOs have also discovered that if their mailings were too colorful, donors were less likely to donate because the organization was perceived as too commercial.

How a message is framed has a big influence on how it will be received by the audience and what effect it will have. So far, the narrative surrounding coral reefs has often been pessimistic and discouraging. While it is certainly necessary to express the urgency to act against the degradation of marine ecosystems such as coral reefs, it is also crucial to highlight the chances of changing the current trajectory to motivate scientists and society alike to take action. Therefore, examples of success should also be emphasized, for example by showing people case studies that demonstrate the positive results of management actions. Although there is much negative news about the current health and future of coral reefs, there is also reason to be optimistic. A heightened public and political awareness about reef conservation has been seen worldwide and the United Nations has committed to a Decade of Ocean Science. In addition, people from all over the world have been playing a major role in trying to protect and restore coral reefs. The key to success is a combination of science-based decisions and community awareness and engagement. There are signs of coral recovery in different parts of the world since protective measures were put in place. And although it might take centuries for coral ecosystems to heal from human interference, the fact that improvements can be seen in decades is an encouraging sign (Cziesielski et al., 2021).

1.5 Context of the Professional Project at BRANCH Coral Foundation

BRANCH Coral Foundation (in the following also called BRANCH in short) was established in 2022 to help in the recovery and protection of Curaçao's coral reefs. Using a variety of restoration techniques, such as creating nurseries with endangered Staghorn coral and informing the local and global public, BRANCH strives to have a long-term beneficial impact on both the environment and local communities. BRANCH gives volunteers the opportunity to support the coral restoration efforts through fun and informative diving experiences. The organization's mission is guided by the following three key components: coral restoration, education, and community. To achieve their goals and mission, they join forces with a diverse network of researchers, scientists, dive centers, students, and volunteers.

Main Activities of BRANCH Coral Foundation

- **Internships:** University students are given the opportunity to take on an internship with BRANCH. Interns can assist the foundation in achieving its goals and have the chance to come up with their own research project while also working with the corals in the nurseries. Furthermore, BRANCH Coral Foundation seeks to support local students in finding a job on Curaçao after their studies.

- **Volunteer Programs:** Volunteer programs offered by the foundation provide interested individuals with the possibility to learn about coral restoration techniques to maintain healthy coral nurseries. The volunteers have the opportunity to complete dive courses at a reduced price before starting with the work.

- **PADI BRANCH Coral Restoration Specialty Diver Course:** With the PADI BRANCH Coral Restoration Specialty Diver Course students are given the chance to take an active role in preserving and restoring the delicate coral reef ecosystem under the supervision of a team of specialist local marine biologists and experienced dive instructors. First, participants of the course broaden their knowledge of coral conservation, and then apply this knowledge in a second step in and around one of the nurseries during two coral conservation dives under the guidance of experienced teachers.
- **Coral Nursery Tour:** Guided diving and snorkeling tours with a representative of BRANCH to the coral nurseries at the house reefs of dive school partners are offered.
- **Adoption Program:** The adoption program enables interested individuals to support a specific coral from BRANCH nurseries or even an entire nursery tree, which eventually will be transplanted onto the reef. Individuals have the possibility to name their coral, track its growth on the website, and receive updates.
- **Education Program:** A team of marine biologists will visit the school or class and give lessons about coral reefs and the marine ecosystem. BRANCH also welcomes the classes at its nurseries. BRANCH has already taught more than 30 school classes of all levels on Curacao in Dutch and the local language Papiamentu. Furthermore, together with the local environmental education NGO Green Kidz Curacao, BRANCH has developed a e-learning materials about coral reefs which are available to anyone free of charge.

Baseline of the Communication Activities at BRANCH Coral Foundation

The organization BRANCH Coral Foundation has only been officially established in September 2022 and there was not yet the capacity to develop a communication strategy or publish content on a regular basis. The online communication platforms, their target groups and their number of followers, subscribers, or page views at the start of the internship in April 2023 are presented in the following Table 1.

Table 1: Online communication platforms of BRANCH, target groups, and number of followers/subscribers/page views at the start of the internship in April 2023.

Platform	Followers/Page views/subscribers	Target groups	Responsibility
Website (www.branchcoralfoundation.com)	264 average monthly visitors	Individuals, businesses, partners	Max van Aalst
Monthly Newsletter	86 followers	Individuals, businesses, partners	Max van Aalst
Instagram (@ branchcoralfoundation)	389 followers	Individuals, partners	Max van Aalst
LinkedIn (@BRANCH Coral Foundation)	53 followers	Businesses, partners	Max van Aalst

2. OBJECTIVES

For a project to succeed, clear goals and objectives need to be defined. In the following, the main elements of the project regarding the primary and secondary goals of the internship, as well as the short- and long-term objectives of the project, and the host organization BRANCH Coral Foundation in general, will be discussed.

2.1 Project Overview

Protecting and restoring coral reefs is crucial for the wellbeing of humans and the environment, as they offer many important ecosystem services, such as food, employment, recreation, coastal protection, and compounds for medical products. Therefore, raising awareness about the preservation and restoration of corals is essential (Knowlton et al., 2021). BRANCH Coral Foundation strives to contribute to the restoration and protection of Caribbean coral reefs with its three main fields of activities of coral restoration, education, and community outreach.

Since the organization has been officially established for only about six months by the start of the internship, there are no communication strategy, guidelines, or strategic and regular communication activities in place yet. However, professional, consistent, and innovative communication is critical for an organization, no matter if the main goal is to grow, reach more and the right people, raise awareness, work together more efficiently, find new partners, or receive more funding. Therefore, the main idea of this professional project was to develop a base for the communication and start to create relevant content. With her academic and professional background in communication, the intern planned to help BRANCH define its main goals regarding communication and the measures to reach them, set up a base for communication activities in the future, as well as develop and implement first ideas for content creation for the foundation's communication channels. In addition to this main task, the intern intended to assist the team with their regular activities of monitoring and maintaining the coral nurseries, as well as the education program at local schools and the coral nurseries.

2.2 Project Goals and Objectives

I. Primary goal

The primary goal of this professional project was to:

- create a base for current and future communication activities at BRANCH Coral Foundation, including a basic communication strategy, templates, and guidelines, and start to create regular and relevant content for the communication channels.

II. Secondary goals

The secondary goals of this professional project were to:

- assist with in field monitoring and maintenance of the coral nurseries.
- assist with educational activities in the coral nurseries and schools.

III. Short term objectives

The short-term objectives of this professional project were to:

- develop a strong base for communication activities in the future (strategy, folder structure, guidelines, processes, templates)
- create regular content for the different channels and find the voice of BRANCH by experimenting with content, language, and styles.
- assist in the maintenance of the existing coral nurseries and education programs.

IV. Long term objectives

The long-term objectives of this professional project and the time afterwards were to:

- have a strong internal and external communication in place, which supports the foundation to reach its main goals.
- have regular and relevant content on the different channels.
- leverage communication to have meaningful interactions with relevant audiences, maintain and expand the foundation's network of partners, and secure sufficient funding.

V. Project scope

The scope of the project was to firstly build a base for communication activities at BRANCH Coral Foundation in order to help it reach its main goals, and secondly start with experimenting and creating regular and relevant content for the foundations' communication channels.
The internship intended to enable the student to gain knowledge and practical experience in communication for marine conservation, content creation, coral restoration methods, as well as education and community outreach.

3. TEAM AND STAKEHOLDERS

This part is dedicated to the team and stakeholders regarding this professional project.

3.1 Team

BRANCH Coral Foundation was the host organization and sponsor of this project. The core team at BRANCH is mainly composed of Max van Aalst *jr.* (Director and co-founder) and the board members Noëlla Bérénos-Ruivenkamp and Max van Aalst *sr*. During the time of the internship, the team at BRANCH was supported by two other interns, Olle Juch and Jente van Langerak, who were conducting research for their bachelor thesis with the foundation. Furthermore, volunteer Maarten van Aalst regularly supported BRANCH with business planning and field work. An outside resource for the professional project was the team of MARRES, which was supporting the intern with coordination and administrative issues and had a check-in with the intern. Another outside resource were the partnering dive schools, who were providing equipment for the coral nursery maintenance dives.

During her internship, the intern was mostly working together with the Director and project supervisor Max van Aalst, the two other interns and the volunteer Maarten van Aalst. The intern was responsible for all communication-related matters. However, big decisions were be made in accordance and with prior discussion with the supervisor. Figure 2 presents the structure and relationships of the team at the host organization at the time of the internship.

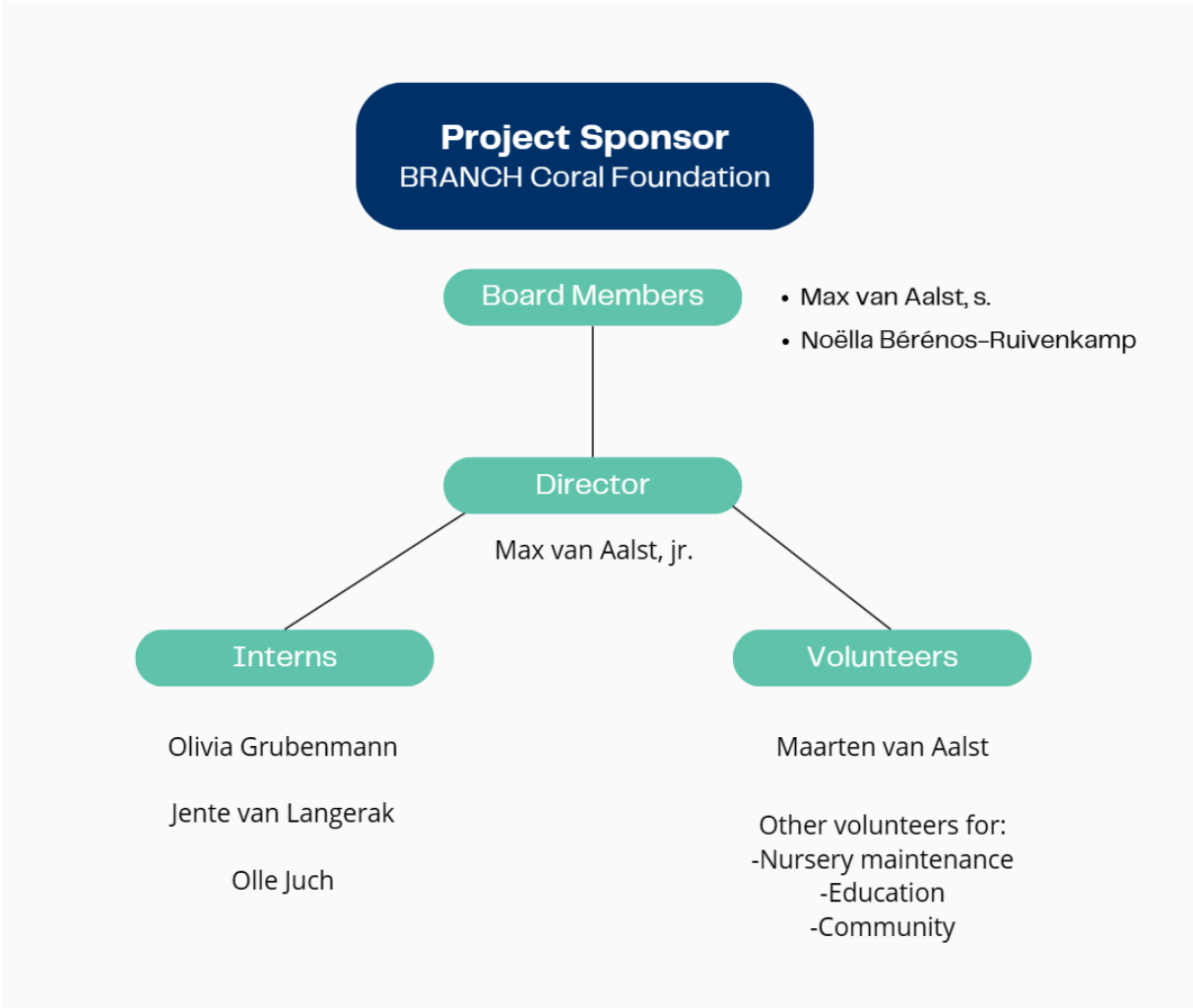


Figure 2: Organizational chart of the team at BRANCH Coral Foundation.

Communication and support

For internal communication, the team at BRANCH preferred WhatsApp for informal or urgent exchanges and emails for more formal exchanges. For external communication the team mainly used emails and video calls. In the months prior to the start of the internship, the intern had already had several video calls with her supervisor Max van Aalst, to prepare and plan the project and settle administrative issues, such as the organization of housing and transportation. During the internship, the intern had at least once a week an in-person meeting and exchange with the supervisor as well as at least one meeting per week with the whole team. The weekday, length, and content of these meetings varied from week to week. Additionally, the intern had a check-in with a MARRES team member when she was halfway through her internship.

3.2 Stakeholders

In Table 2, the eight most important stakeholders in relation to the interns' professional project at BRANCH Coral Foundation will be presented in priority direct and then indirect. These stakeholders will then be displayed on a matrix according to their interest and power regarding the professional project.

Table 2: The main stakeholders and their impact/power and interest in the project.

	Stakeholder 1	Stakeholder 2	Stakeholder 3	Stakeholder 4
Name	**MARRES**	**Supervisor (Max van Aalst)**	**Partnering Dive Centers:** • **Scuba Do** • **Blue Bay** • **PortoMari Sports**	**Online community / online audience**
Function	Coordination and support team of professional project	Director of the foundation, project manager, supervising the interns and team	Main donors for the nurseries at Jan Thiel Beach, Porto Mari Beach, and Blue Bay Beach, providing the location and funding for the coral nurseries and outplants	Target groups for communication activities, potential donors and service users
Internal/external	External	Internal	External	External
Direct/indirect	Direct	Direct	Direct	Direct
Power on the project	3 The MARRES team decided about the existence and framework of the professional project structure and coordinated it	4 The supervisor is also the director and therefore makes the final decisions	3 Without the support of the local dive center, BRANCH will have to find other partners for locations and funding of coral nurseries. Also, without a good relationship, the maintenance of the nurseries will be	3 Audience / Online Community consists of potential donors, funders, service users ranging from locals to tourists, and ambassadors for coral reefs

			more complicated or even impossible.	
Interest to work on this project or to support this project	3 MARRES coordinated the internship and had interest in its success, as it also reflected and represented their work to some extent	4 Very high interest for the internship experience to be positive to boost image of the foundation and the output of the project to be successful	3 The dive centers provide the funding and locations to BRANCH for the coral nurseries; therefore, they should be interested in the project succeeding. Furthermore, the Owner of the dive center Dive Division used to be the president of BRANCH and the dive center profits from the collaboration for diving and snorkeling tours.	2 Depending on the audience's interest in diving, snorkeling, and coral reefs
Impact on the project	Medium	High	High	High
How was this stakeholder managed?	- Keep satisfied - Regular check-ins with team member of MARRES - Fulfilling the deliverables of the professional project	- Manage closely - Regular meetings and co-decision making where necessary - Report regularly	- Manage closely - Providing with video/photo material taken during dives	- Keep satisfied - Motivate with relevant content to use services

	Stakeholder 5	Stakeholder 6	Stakeholder 7	Stakeholder 8
Name	**CARMABI (The Caribbean Research and Management of Biodiversity foundation)**	**Local schools**	**GMN (Ministry of Health, Environment & Nature Curacao)**	**CURious 2 Dive**
Function	CARMABI actively manages three national parks on Curacao and advises the government on handing out coral nursery permits	Target group for education activities and raising awareness	Manages and decides about the distribution of coral nursery permits and sets the guidelines	The diving school and BRANCH help each other with cleaning activities, and the sharing of information, knowledge and volunteers
Internal/external	External	External	External	External
Direct/indirect	Direct	Indirect	Indirect	Indirect
Power on the project	4 Without the permits, BRANCH cannot implement coral nurseries on Curacao	1 Low, because BRANCH can relocate their education activities to other target groups, if schools have no wish to participate and it is not affecting the restoration of coral reefs	4 Without the permits, BRANCH cannot implement coral nurseries on Curacao	1 Useful collaboration but not essential for BRANCH's projects
Interest to work on this project or to support this project	2 Generally, CARMABI has interest in protecting and restoring Curacao's coral reefs, but its focus is on science and it is hesitant to collaborate with the	3 Several school classes are already participating in the educational activities of BRANCH, and more are interested	2 GMN has interest in protecting and restoring Curacao's coral reefs. Due to their workload, the ministry has however not a big interest to be	3 Healthy reefs will attract more divers. One of the mentioned goals of the diving school CURious 2 Dive is therefore

	tourist sector, which however is one of the funding sources for BRANCH		directly involved other than handing out the permits and providing and ensuring the restoration guidelines to the restoration organizations.	the restoration of Curacao's coral reefs and raising awareness.
Impact on the project	High	Medium	High	Medium
How do you manage this stakeholder	- Keep satisfied - Regular meetings - Report regularly about successes and obstacles	- Keep informed - Regular exchanges	- Keep satisfied - Report regularly about successes and obstacles - Follow the guidelines and rules for coral restoration	- Keep informed - Regular exchanges

In Figure 3 below the main stakeholders of Table 2 are displayed in a stakeholder matrix in terms of their power on and interest in the project.

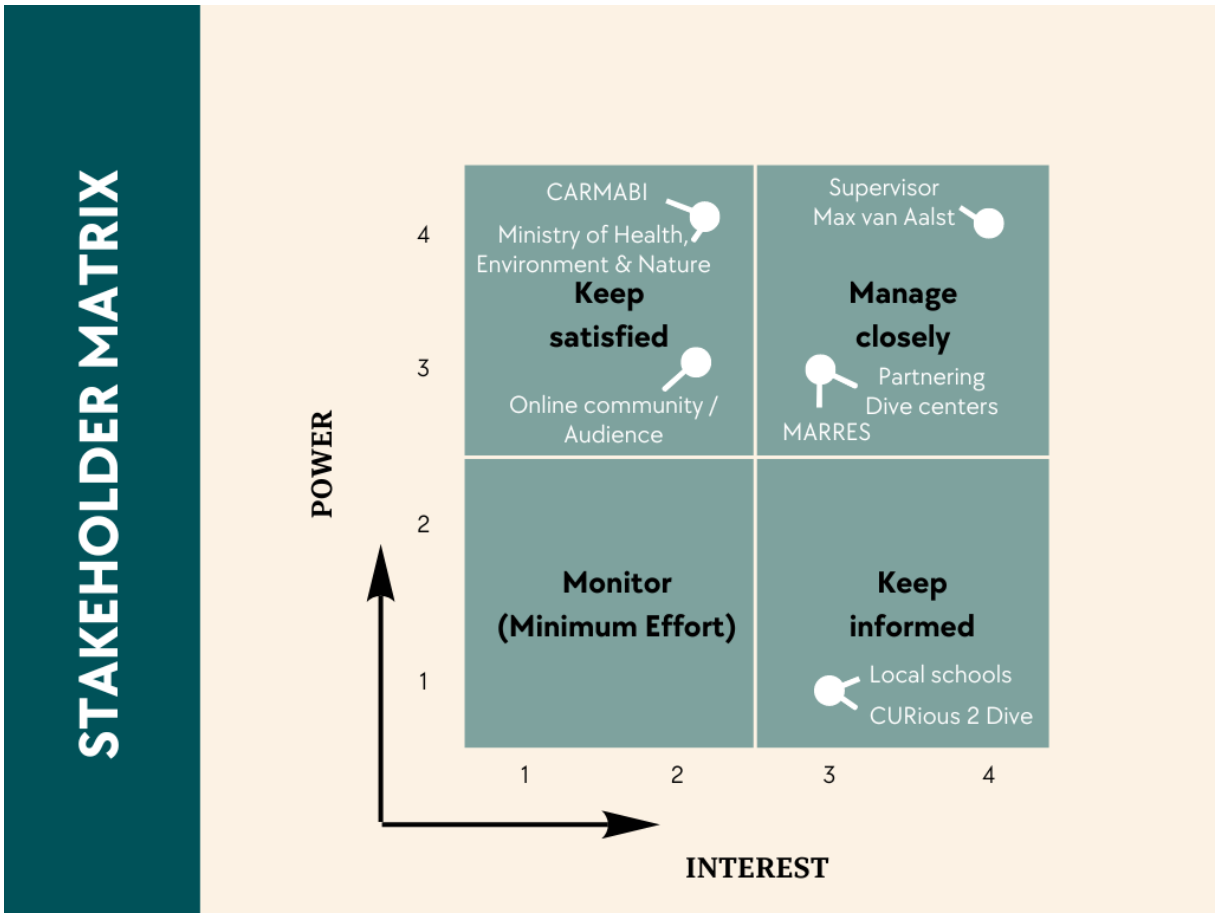


Figure 3: Matrix of stakeholders according to their interest and power in Table 2 regarding the professional project.

According to the stakeholder matrix (Figure 3), three stakeholder groups had to be managed especially closely, due to their high interest and power in the project. This is the supervisor of BRANCH Max van Aalst, the partnering dive centers Scuba Do in Jan Thiel, Blue Bay at Blue Bay Beach, and PortoMari Sports at Playa Porto Mari, which are the main donors and location providers of the BRANCH coral nurseries, and the coordination team at MARRES. The global strategy for managing these main stakeholders in the "Manage closely" area of the matrix was to have a regular exchange in person, via phone calls, texts, or email, to inform them about the development and status of the project, discuss potential adjustments of the goals, milestones, and methods, and-where necessary and helpful, to involve them in the decision-making process. With MARRES, the intern had one phone exchange midway through the internship and was in regular contact via WhatsApp. With the supervisor, the intern had at least one in-person exchange per week to specifically talk about communication-related issues. Besides this, the intern and her supervisor were mainly in contact via WhatsApp. With the partnering dive centers, the intern was only partially in direct contact. While Max van Aalst (Director) was responsible for the acquisition and managing of the partnering dive schools, the intern was responsible for exchanges on communication-related matters, such as coordinated social media posts or exchange of visual material. While the collaboration with the two dive schools Scuba Do and PortoMari Sports worked well, the collaboration with the dive school Blue Bay brought with it some conflicts, which will be discussed more in detail in chapter 7 Assumptions and Obstacles of this project plan.

Two other important stakeholders with high power, but medium interest are the Ministry of Health Environment and Nature on Curacao (GNM), which sets the guidelines and hands out the permits for sexual and asexual coral restoration, and the nature organization CARMABI, which manages three national parks on Curacao and advises GMN in the handing out of permits. Both stakeholders have an interest in protecting and restoring Curacao's coral reefs. GMN mostly because diving and tourism belong to the most important sources of income for the island and CARMABI, because of their goal of protecting the nature of Curacao. However, due to their high workload and broad range of responsibilities, their interest in working with the project is limited. Furthermore, while BRANCH also seeks to actively engage the tourism sector in the island's coral restoration efforts, the focus of CARMABI is mostly on scientific research. However, without the approval of these two stakeholders, BRANCH is not able to obtain and keep its coral nursery permit. Therefore, both of them have a high power regarding the project and the management strategy was to keep them satisfied by working according to the rules and regulations they set and reporting regularly about successes and challenges. The intern was only indirectly in contact with these two stakeholders. The person responsible was mainly the foundation's director Max van Aalst.

Another stakeholder group with a medium to high interest in the professional project was the online community/audience, which had to be kept satisfied. This group had a relatively high power on the project, since a large part of the professional project focused on communicating and raising awareness on coral reefs online and because it was a potential source for funding (coral adoptions, fees for tours, courses). Nevertheless, the main source of funding came from the dive schools, not from the online audience. The interaction of the intern with this stakeholder group was mainly via social media, where locals and tourists alike could learn about the services of BRANCH, such as diving and snorkeling tours, educational activities, and the PADI coral restoration course, or learn about the coral reef ecosystem.

Two stakeholders in the matrix with a high interest but small power that had to be kept informed are firstly the dive center CURious2Dive, which collaborates with BRANCH to help each other with cleaning activities and the sharing of information, knowledge and volunteers, and secondly the local schools, which are participating in educational activities of BRANCH. Since the intern focused more on the communication and restoration activities, she only accompanied one of the school visits. The collaborations with the schools were mainly managed and carried out by director Max van Aalst together with the nature organization CARMABI. The intern's interactions with his stakeholder were therefore mostly limited to social media. With the dive school CURious2Dive, the intern was mainly in contact about social media posts and occasionally supporting them in the field with nursery cleanings as a volunteer.

4. RESULTS

In the following, the main results of the professional project will be exposed and discussed.

4.1 Communication Materials, Organization, and Corporate Design

Collection of communication material

Another result of the professional project is the creation of a collection of photos, videos, templates, and other communication material, such as presentation slides and posters, which can be used for communication, education, promotion, fundraising, acquisition of new partners, and other activities. As an example, a one-pager organization profile can be found in Appendix II.

Improved workflows, organization, and teamwork

At the beginning of the internship, the organization did not use a file sharing platform for internal collaboration yet. To improve teamwork and facilitate workflow and file sharing, the intern set up a shared Google Drive account, created a folder structure, and created general guiding documents such as an overview of all the organization's accounts and log in information. This saved the team members time and reduced inefficiency, such as the same work being done twice due to lack of transparency and internal communication.

Implementation of new corporate design (CD)

At the start of the professional project a new corporate design had been developed, consisting of an updated logo, typefaces, and a color scheme. As the person responsible for the communication of the organization, the intern updated the existing communication materials to the new corporate design. This included for example updating the colors, fonts, and logo on BRANCH's website, social media channels, newsletter, and others.

4.2 New Formats for Social Media

One of the main results of the professional project was the development and implementation of new formats for social media. During the project, the intern developed and implemented two new formats for Instagram, which was the channel BRANCH wanted to focus on most. Just like the rest of the communication activities, these new formats should contribute to at least one of the main pillars of BRANCH, which are coral restoration, education, and community. These new formats contributed to both the education, as well as the community pillar.

Coral Facts Series

One format that was developed for Instagram was an educational series of posts called Coral Facts. The main aim of this format is to raise awareness and educate the online community on coral reefs and their features, importance, and threats. To achieve this, several steps needed to be completed, ranging from designing a post template for the series following the new corporate design, online and offline researching of facts and figures about coral reefs, writing the facts and corresponding captions, and posting. To bring more structure and professionality into the Instagram account of BRANCH, it was suggested to create a specific Instagram grid layout, which is the visual arrangement of the videos and images of a user's Instagram profile. Since informational, entertaining, and project-related content should be balanced, it was decided to have a ratio of 1:4 of the recurring coral fact posts. This ratio of posts would also lead to a recurring grid in the profile of BRANCH, which can be seen in contrast to the original profile feed of BRANCH in Figure 4 below.

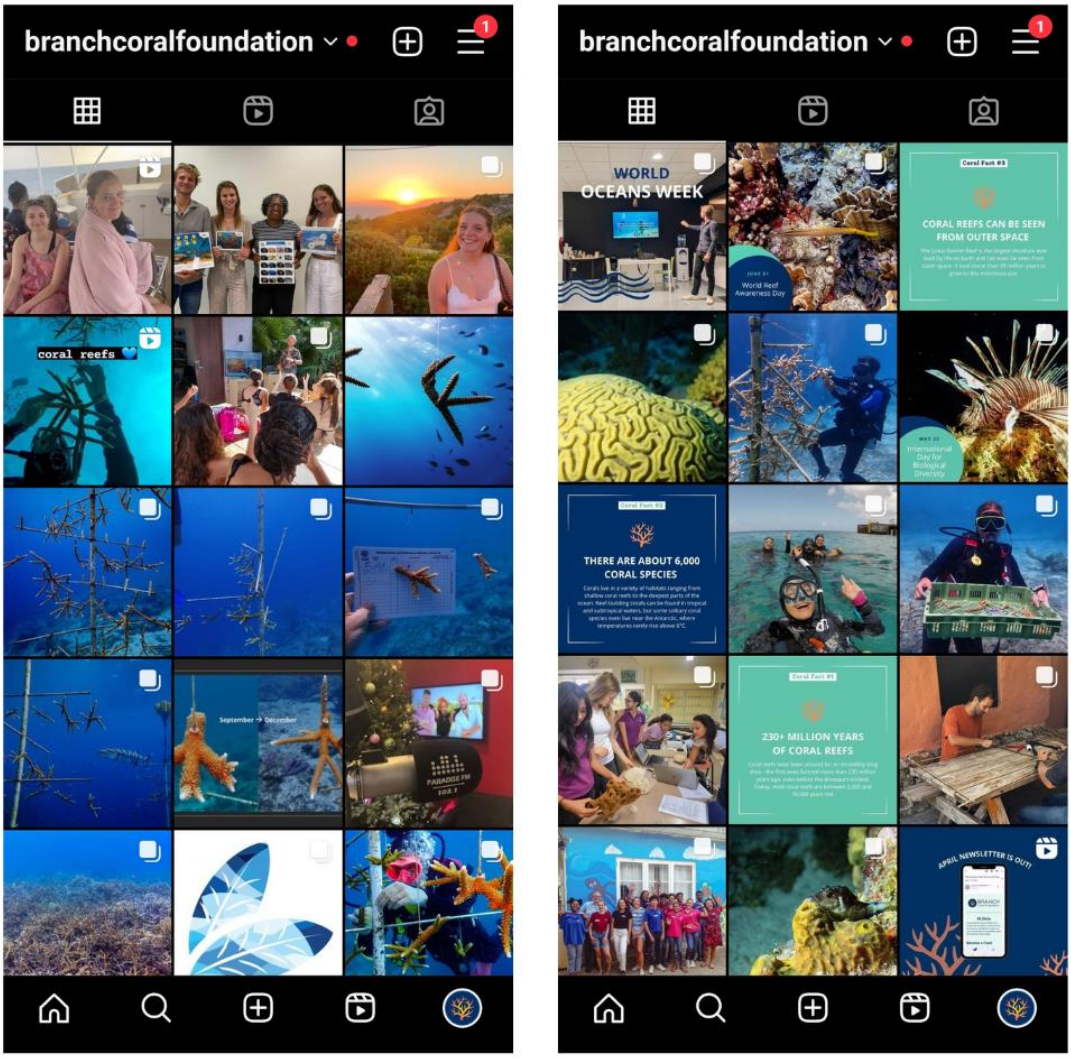


Figure 4: Instagram feed of BRANCH without a grid layout before (left) and with the grid layout after the implementation of the coral facts format (right).

Coral Quiz

The second format that was introduced was a bi-weekly coral quiz in the Instagram story of BRANCH. The Instagram stories only stay online for 24 hours, but are more interactive than feed posts, due to the interactive elements that can be added, such as links, buttons, quizzes, and polls. Due to this interactivity, the Instagram story was determined as the ideal channel for the coral quiz. Since the audience of the stories consist mainly of people who already follow the account, it can be assumed that most viewers already have a basic interest in coral reefs or the work of BRANCH. The main aim of this format was therefore to increase interaction with the Instagram followers of BRANCH and create a community-feeling. Moreover, since the results of the quiz are visible in the insights, the quiz was also a useful way to find out about the level of knowledge the BRANCH community on Instagram already has about coral reefs, which would in turn help to better align other content on this channel according to this.

The questions and answers for the quiz were drawn from different online and offline resources, the sources of which were provided for the users for further reading. The design of the quiz was done in line with the newly defined corporate design of BRANCH, including the colors and fonts, which can be seen in Figure 5 below, showing the design of this quiz as well as some example questions. On average, each quiz was seen by about 100 people, of which between 25-35 people participated.

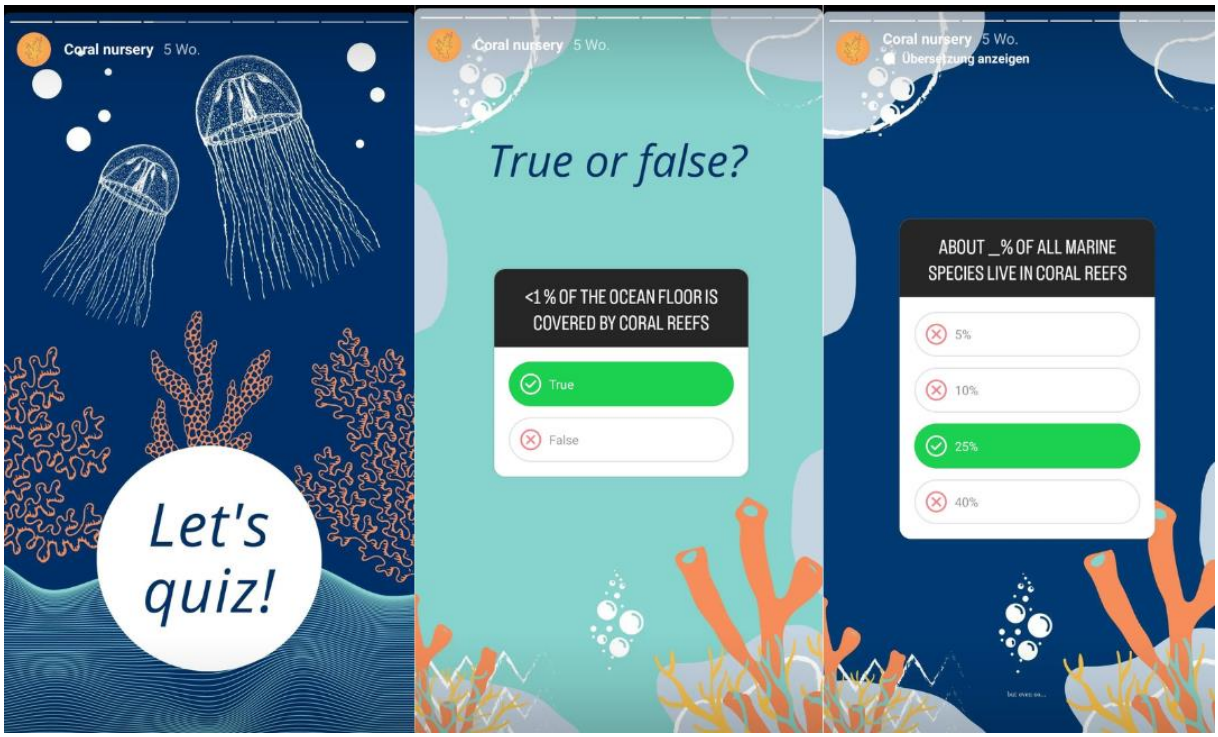


Figure 5: Example questions of the bi-weekly coral quiz in the Instagram story of BRANCH.

Besides these two main new formats, other content was created, such as:

- the presentation of the team members with the aim of creating transparency and authenticity,
- posts for international world days such as the UN World Reef Awareness Day with the aim of reaching more people by using a trending topic,
- updates from the field and partnerships, with the aim of creating more transparency, and strengthening partnerships.

Due to the limited time and scope of this professional project it was not possible to develop all the content and format ideas the intern had. In the future, it would be interesting to analyze the performance of the above described two new formats and adjust the social media concept accordingly. Furthermore, it would be interesting to develop more Reels, which are short videos of up to 90 seconds and which are highly pushed by the algorithm of Instagram. This would allow BRANCH to increase its reach and get more followers.

4.3 Growth of Reach and Engagement of Online Community

Within the duration of the internship from April 3rd to the day of finishing of this report on June 6th, a small but steady growth in the reach and engagement of the social media community and newsletter subscribers of BRANCH can be observed. However, since the Instagram account of BRANCH was originally not set up as a business account, but as a personal profile instead, there are no insights available for the time before the start of the internship in April. Therefore, it is not possible to make comparisons regarding the performance insights for the time before and during the internship. Regarding the website, the average number of monthly visitors has decreased during this time period. Reasons for this decline in monthly visitors have yet to be examined.
In the following Table 3, some insights for the main active online communication channels of BRANCH for the period of the start of the internship on April 3rd and the finalization of this report will be presented. More insights into the Analytics of the different communication channels can be found in Appendix III-VI.

Table 3: Overview of the change in reach of the main communication channels of BRANCH between April 3rd to June 6th.

Platform	**Followers/visitors/ subscribers before April 3rd 2023**	**Followers/visitors/ subscribers after April 3rd 2023**	**Increase / Decrease**
Website (www.branchcoralfoundation.com)	264 visitors / month	207 visitors / month	-57 visitors / month
Monthly Newsletter	86 subscribers	98 subscribers	+ 12 subscribers
Instagram (@ branchcoralfoundation)	389 followers	469 followers	+ 80 followers
LinkedIn (@BRANCH Coral Foundation)	53 followers	64 followers	+ 11 followers

Focus Instagram

As most focus of the communication activities was put into the Instagram channel, a more detailed overview of the reach, profile visits, and new followers from April 3rd to June 6th were analyzed, as can be seen in Figure 6 below. Within this time period of 66 days, 1,021 people were reached on Instagram, 441 people visited the BRANCH profile, and 80 new followers were gained according to insights from the Meta Business Suite. In a next step it would be interesting to analyze the performance of the individual posts and stories, the demographic of the followers, and other insights provided by the Meta Business Suite in more detail to adjust the content plan and to eventually create a social media strategy.

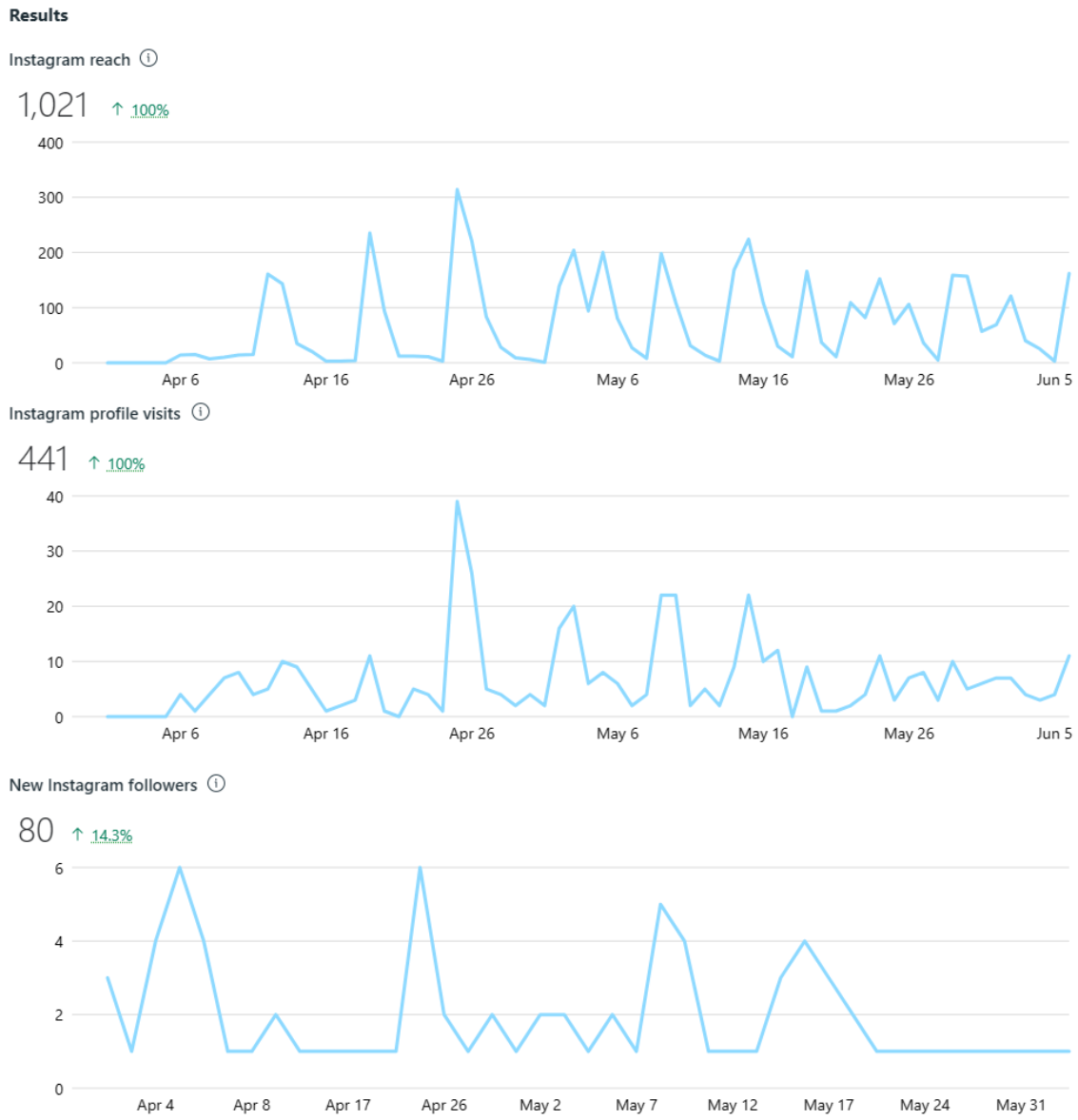


Figure 6: Insights of reach, profile visits, and new followers on Instagram from April 3rd to June 6th, Meta Business Suite.

To grow the reach on these different communication channels even further, there are five suggestions for the continuation of the project:

1. Post frequently and consistently
2. Improve engagement for content by analyzing past posts with high engagement
3. Placing ads to reach more people
4. Create more short-video content such as Reels
5. Create more interactive content such as quizzes and polls

4.4 Business Plan

Another main result that was achieved during the professional project was the development and writing of a business plan for BRANCH Coral Foundation. The intern proposed the design and structure of the plan and developed the content together with the director Max van Aalst and volunteer Maarten van Aalst. The final version of the business plan consists of 18 pages and is structured into an executive summary, an overview of the organization and its services, a business description, the industry background, a competitor analysis, a market analysis, a marketing plan, a financial plan, and a description of the next steps.

This business plan helped BRANCH with refining the vision and mission statement of the organization, as well as putting on paper some of the aspects that had not been written down anywhere before. Furthermore, the business plan helped in the preparation of presentations, such as for a stakeholder meeting. The business plan will also contribute to the acquisition of new partners and will help BRANCH to generate more funding, since in most cases, a business plan is demanded when applying for grants and other forms of funding.

4.5 New Coral Nursery Trees

While it was not possible to work on new coral nurseries during the first two months of the project due to the delay in receiving the new restoration permit from the government, as will be explained in more detail in chapter 7 Assumptions and Obstacles, BRANCH was able to build nursery trees again in the last month of the project. A total of 10 coral nursery trees were built by the team for the two new nursery locations at Jan Thiel Beach and Playa Porto Mari, each of the trees with a capacity for 60 coral fragments, which makes a total of 600 new coral fragments divided onto two locations on the island. After growing in these nurseries for about six months, these coral fragments will be big enough to be outplanted on the house reef of the two locations.
During the construction of the coral nursery trees on land, the team also discovered new methods for building the nurseries more efficiently, while still following the regulations of the government. For the continuation of the project, these findings could be documented and further improved. It would be favorable that in the future, coral nurseries could be produced on a bigger scale to be more efficient.

5. DELIVERABLES AND TIME MANAGEMENT

To reach the goals and objectives of this professional project, seven milestones are defined with each one of them containing several tasks that contribute to achieving them. The first milestone of the project was to develop an organizing and reporting system for communication, since at the start of the professional project there was not yet a file sharing system in place. The aim was to make workflows more efficient, organize all existing and future files, and avoid that the same work is being done twice.
The second milestone was to write a business plan for the foundation together with the team and create a one-pager organization profile. The business plan was intended to refine the vision, mission and other aspects of the organization and facilitate strategic decisions in the future. With the business plan completed, it will also be possible to create a communication strategy. The third milestone was to participate in the first stakeholder workshop of all the restoration organizations on Curacao, which was organized by the Ministry of Health and Nature Curacao to synchronize all the restoration efforts done by the different organizations on the Island.

Among the participants were the four organizations doing asexual coral restoration, as well as representatives from the nature organization CARMABI, the coral restoration organization Secore, which focuses on sexual methods of coral restoration, the fishermen cooperative, the harbor master and even the prime minister of Curacao. The intern prepared the presentation of BRANCH for this workshop, represented BRANCH at the event together with the director Max van Aalst jr. and Max van Aalst sr., and documented the event for communication purposes. The fourth milestone was the creation of a collection of photos, videos, and templates in the new corporate design (CD), which was created shortly before the start of the internship. During the cleaning and monitoring dives, as well as during some of the education activities, the intern documented the activities with photos and videos, which were then edited and posted on the relevant online channels of BRANCH. Other materials such as a poster and templates were created also. The 5th milestone entailed assisting the foundation with the construction, setting up and maintenance of the coral nurseries. During the Internship, the intern assisted every second week during the cleaning dives in the coral nurseries of BRANCH and its partner Curious2Dive. Starting June, the intern also helped with the construction of the new nursery trees for the new nursery locations. The 6th milestone was the writing and sending of the Newsletters for April and June. The intern also adapted the design of the newsletter according to the corporate design. The 7th milestone was to assist with the educational activities of BRANCH by assisting during at least one school visit and creating posts for social media about it, promoting the "Coral Restoration Dive Course" on social media and in the newsletter and developing and implementing new education formats for social media. All of these milestones and their corresponding tasks and deliverables will be presented in the following Table 4.

Table 4: Overview of the Milestones, tasks, and deliverables of the professional project.

WBS	Deliverables	Who is responsible
Milestone 1 **Develop an organizing and reporting system for communication** **Task 1 :** Plan and have a meeting to get an overview of foundation, team, organizing and workflows **Task 2 :** Set up a folder structure for every everything communication-related **Task 3 :** Gather, analyze, and correctly organize all existing communication related material in the folders **Task 4 :** Create a document with an overview of all the existing communication channels, platforms, and login information **Task 5 :** Create a template document for communication reporting (website, social media, newsletter etc.)	• Communication folder system • Document with all communication channels and login information • Monthly and/or yearly communication reporting template	Olivia Grubenmann

Task 6 : Monitor communication activities and progress in the reporting document		
Milestone 2 **Write the business plan and an organization profile (one-pager)** **Task 1 :** Set up and have a team meeting to discuss the content and style of the business plan **Task 2 :** Find or create a template for the business plan **Task 3 :** Write the content of the business plan in collaboration with the team **Task 4 :** Proofread the business plan and send it to the board members **Task 5 :** Create an organization profile (one-pager) with the most important information about the organization for pitching and networking events or business meetings	● Meeting protocol ● Business plan ● Organization profile (one-pager)	Olivia Grubenmann, Max van Aalst, Maarten van Aalst
Milestone 3 **Participate in the first stakeholder workshop of all the restoration organizations on Curacao** **Task 1 :** Have a team meeting to discuss the contents of the 10-minute presentation of BRANCH **Task 2 :** Prepare a layout and content for the presentation **Task 3 :** Attend the workshop together with the Director and a board member of BRANCH **Task 4 :** Document the event in a protocol and photos **Task 5** : Create a social media post about the workshop	● Presentation slides ● Workshop protocol ● Photos of the event ● Social Media post on LinkedIn and Instagram about the event	Olivia Grubenmann, Max van Aalst jr., Max van Aalst sr.

Milestone 4 **Collection of photos, videos, and templates in the new corporate design (CD)** **Task 1 :** Create a set of templates for social media posts and stories in the new corporate design (CD) of the foundation **Task 2 :** Take videos and photos on regular maintenance dives in the nurseries and during nursery construction on land **Task 3 :** Take videos and photos during educational activities **Task 4 :** Edit videos and photos for social media **Task 5 :** Create a short video introducing the foundation **Task 6 :** Create short videos introducing the different activities and services of BRANCH **Task 7:** Create a poster about the services of BRANCH	• Set of templates for social media posts and stories in the CD of BRANCH • Poster about BRANCH and its services • Short video of the Foundation and team • Short videos for the main activities and services of BRANCH	Olivia Grubenmann, Jente Langerak
Milestone 5 **Assistance with the building, setting up and maintenance of the coral nurseries** **Task 1 :** Complete the "PADI BRANCH Coral Restoration Specialty Course" **Task 2 :** Assist during nursery cleaning dives at the existing coral nursery every two weeks **Task 3 :** Assist with building the coral nursery trees for the 2nd location at Jan Thiel Beach and 3rd location at Playa Porto Mari **Task 4 :** Assist with placing the nursery trees in the water at the two new locations and attaching the coral fragments **Task 5 :** Document the individual steps in photos and videos for social media	• Clean and healthy coral nurseries • Video and photo footage from the cleaning dives • Video and photo footage from the nursery building and placement • Social media posts	Olivia Grubenmann, Max van Aalst, Jente Langerak, Olle Juch, Maarten van Aalst

Milestone 6 **Redesign, write and send out Newsletter** **Task 1 :** Analyze design and performance of former newsletters **Task 2 :** Redesign the newsletter according to the new corporate design **Task 3 :** Research topics for the April newsletter, write and send it **Task 4 :** Research topics for the June newsletter, write and send it **Task 5 :** Promote the newsletter on social media	● Newsletter for April ● Newsletter for June ● Social media post promoting the newsletter	Olivia Grubenmann
Milestone 7 **Assist with educational activities** **Task 1 :** Set up meeting with supervisor for information on current educational activities **Task 2 :** Assist during at least one school visit and document for social media **Task 3** : Create posts about the school visits **Task 4 :** Promote the "Coral Restoration Dive Course" on social media and in the newsletter **Task 5 :** Develop and implement a new education format for social media with coral facts	● Video and photo footage from the school visit(s) ● Social media post from the school visit(s) ● A collection of social media posts for the new online education format "Coral facts"	Olivia Grubenmann, Max van Aalst

GANTT chart

The milestones and tasks of Table 4 are displayed in a GANTT chart created with Microsoft Excel to visualize the planned timeline of the professional project with its milestones and tasks, the responsible person, and the progress for each task. Due to the limit in space within this report, Figure 7 below only shows an example of the first four weeks for 3 of the 7 milestones. The full GANTT chart can be found in Appendix I.

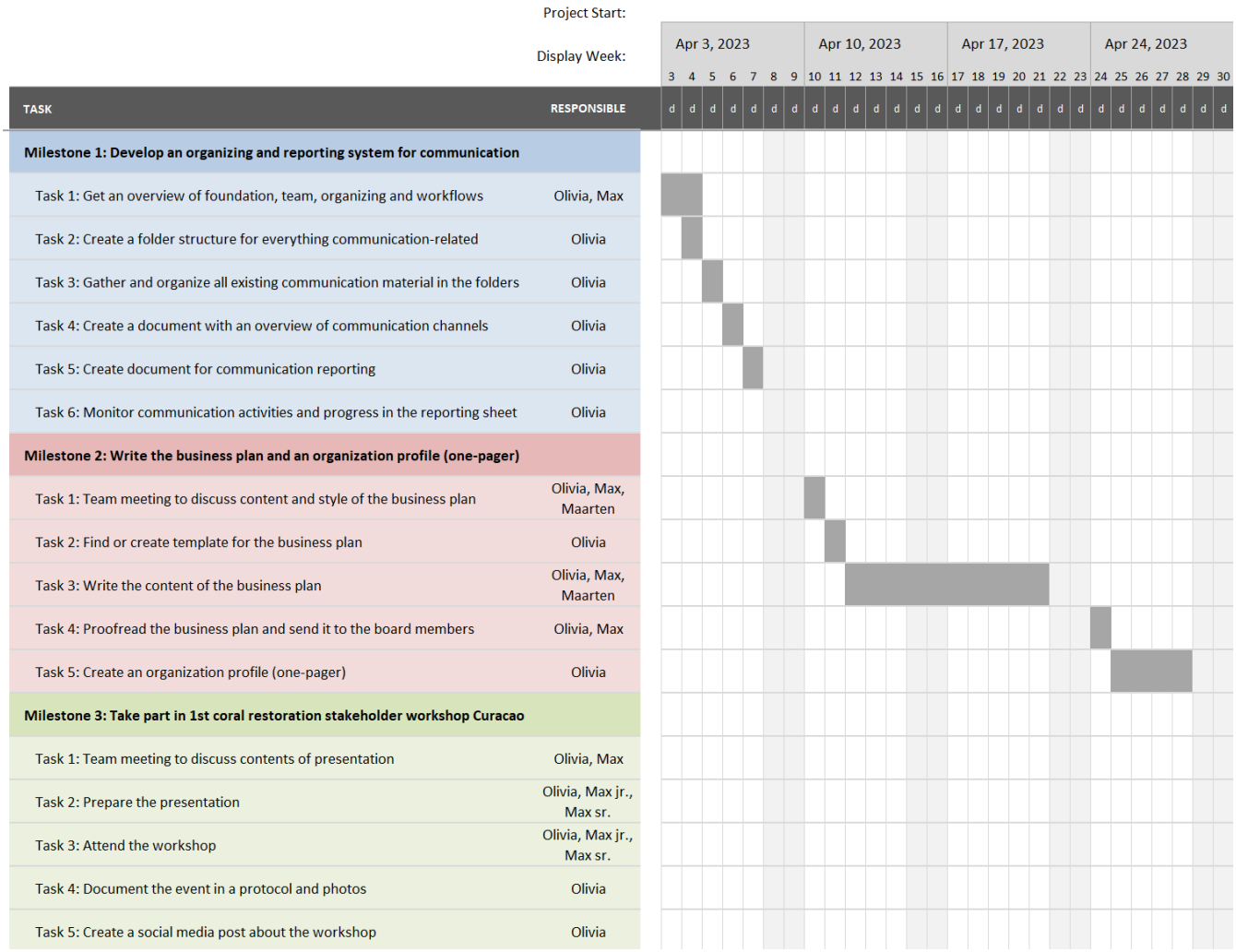


Figure 7: GANTT chart of the first four weeks for milestones 1-3 and tasks of the project from Table 4.

Suggested next steps for the project

- **Creating a communication strategy:** With the business plan developed, a next step for the organization will be to create a communication strategy based on the information such as the vision, mission and goals, established in the business plan.
- **Creating a content plan for social media**: After writing the communication strategy, it could be an option to write a content plan for social media. Content ideas could be to document the growth of the corals in the new nurseries, promote the Coral Adoption program, the PADI coral restoration dive course and coral nursery tours.

- **Writing fundraising proposals**: To generate more funding for the organization, it will be important to research for other funding opportunities such as grants or sponsorships and write funding proposals.
- **Analyze communication insights**: After some of the initial testing of different content on different platforms is done, it will be important to analyze the performance of the content on the different channels and adjust the strategy and content plan where necessary.
- **Other ideas:** Other ideas could be the implementation of Search engine optimization (SEO), increasing the posting frequency on social media, and making an audit of the website.

6. FINANCIAL ASPECTS

This part is dedicated to the financial aspects of the professional project and the host organization in general. The estimations of the main costs are presented in two parts: the overall costs of the host organization and the project related costs. In addition to the estimations of the overall and the project related costs, an overview of the main current revenues, as well as options for additional funding of the organization and the internship will be presented.

6.1 Overall Costs of the Host Organization

Since the host organization has not had a fully year of operations by the end of this professional project in June 2023, there is not yet an overview of the actual yearly costs and revenues for the organization. However, the following overview (Table 5) tries to give an estimation of the overall costs and revenues of the host organization for one year.

Table 5: Estimation of the overall costs in euros of BRANCH Coral Foundation for the first full year of operations 2023.

Costs (euros)	
Fixed / Investment costs	
Coworking space passes	1’500
Website and Newsletter hosting	600
Salaries	15’000
3 Dive sets	500
GoPro	250
One-time payment for creating the Foundation	1’600
Dive courses of 3 interns	1’770

Variable costs	
Education material	100
Fuel for car	1’200
Gas for scuba tanks	675
Material for nurseries (frames, ropes, tools, cleaning utensils)	2250 (3x750)
Other expenses (office material, rental of additional dive equipment etc.)	600
Total costs	**26’045**
Net budget after costs	+ **16’705 euros**

6.2 Revenue Streams of the Host Organization

Donations and Funding

As of now, the foundation receives funding from the following organizations (in euros):

- Vidanova: 1250 one-time general donation
- Coca Cola: 2000 one time for the education program

Coral Nursery Implementation

BRANCH Coral Foundation offers individuals and businesses the opportunity to invest in their own coral nursery. BRANCH constructs, installs, and maintains the nurseries for a period of two years. The exact amount for the investment is dependent on the desired amount of trees desired in the nursery, however, in most cases BRANCH suggests placing five nursery trees per location. The nursery sponsor pays a one-time fee of 1’500 for the construction and installment of the nursery trees. In addition, the sponsor agrees to generate at least 4’500 euros per year from selling BRANCH services and products such as nursery dive tours, restoration five courses, and others. 50% of the revenue from every product and service the sponsors sell, goes to BRANCH for the maintenance of the nursery and outplanting the corals. If the sponsors are not able to generate 4’500 euros per year from selling BRANCH services and products, they are responsible for providing the remaining amount from other sources. For the time being, all the nursery sponsors are dive centers.

- Dive Division: 8’000 one time general sponsoring and 1’500 nursery implementation
- Dive Center Scuba Do: 1500 one time + 4500/year for the coral nursery implementation and maintenance
- Dive Center PortoMari Sports: 1500 one time + 4500/year for the coral nursery implementation and maintenance

Course Fees
Together with its dive school partners, BRANCH offers guests the PADI BRANCH Coral Restoration Specialty Course, from which BRANCH receives a set fee. The fee for the PADI BRANCH Specialty course is 250 euros per guest.

Tour Fees
Other revenue streams consist of visiting fees paid by guests:

- Diving nursery visit fee with BRANCH representative: 20 euros pp
- Snorkel nursery visit fee with BRANCH representative: 10 euros pp

Coral Adoptions
Interested individuals and organizations can support BRANCH by adopting a coral for 25 euros. At the time of this initial project plan 87 adoptions have been publicly listed on the website.

Merchanise
Another revenue stream it the selling of merchandise such as BRANCH T-shirt and locally made bracelets. The selling of merchandise is estimated to generate about 5'000 euros in revenue for the first year of operations.

The following Table 6 will give an overview of the expected revenues from these income sources for BRANCH in the first full year of operations 2023.

Table 6: Estimation of the overall revenues in euros of BRANCH Coral Foundation for the first full year of operations 2023.

Revenues (euros)	
Coral nursery implementation	4'500 (3x1'500)
General donations	8'000
Diving restoration course fees	6'250 (50x125)
Diving tour fees	4'000 (200x20)
Snorkeling tour fees	3'000 (300x10)
Coral adoptions	4'000 (300x25)
Merchandise	5'000
Total revenues	**42'750**

In Figure 8 below, the estimated revenues of BRANCH for the first full business year of 2023 will be presented in a pie chart. As visible in the chart, the revenue coming from these funding and income sources is so far quite evenly distributed, with donations making being the biggest and coral adoptions the smallest part.

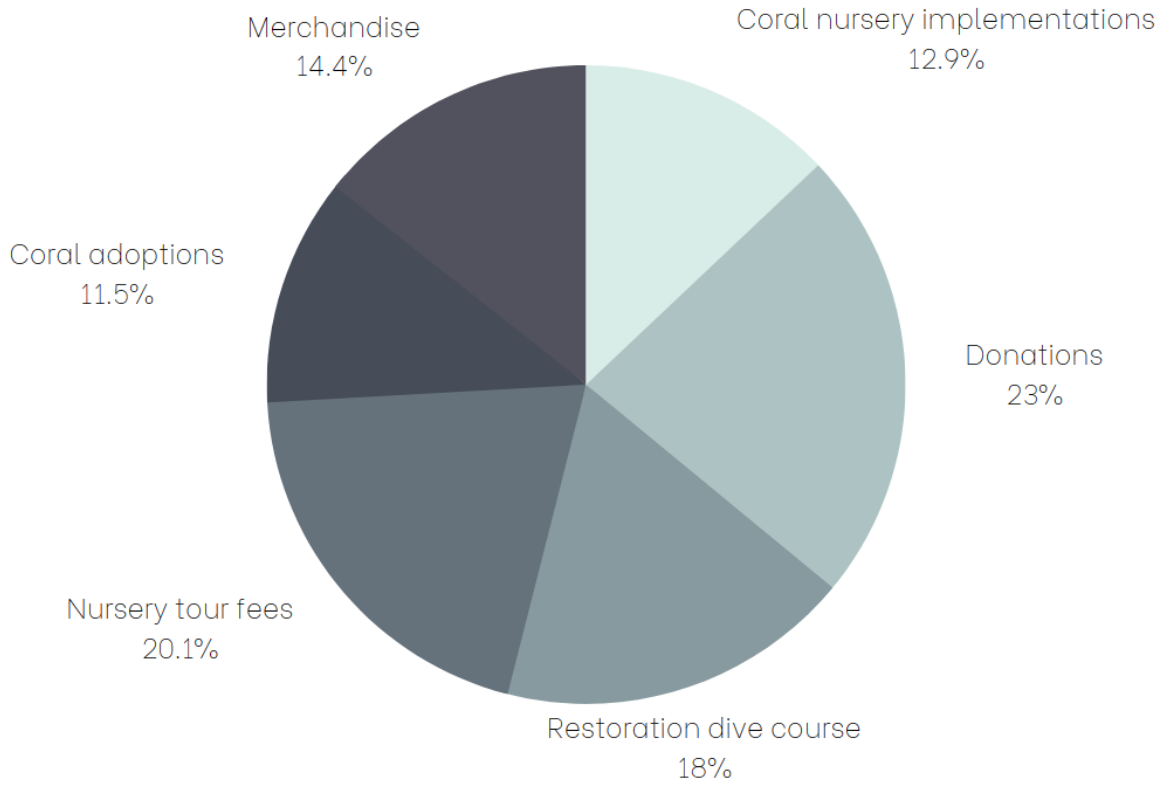


Figure 8: Pie chart of the estimated revenues of BRANCH for the first full business year of 2023.

After subtracting all the estimated costs of 26'045 euros per year from the estimated revenues of 42'750 euros of one year, there is a total net budget of approximately 16'705 euros. Since neither the founder and project manager, nor anyone else working for BRANCH Coral Foundation is receiving a fixed wage in these early stages of the foundation, this surplus of 16'705 euros (which amounts to approximately 1390 euros per month), composes the monetary compensation for the project manager, unless it is reinvested into the foundation. To be able to pay a minimum wage to its staff, the foundation will have to increase its current fundings, find additional funding opportunities and/or decrease its costs. Since the costs are already kept low thanks to the network of partners and volunteer work, the more promising options would seem to be increasing the existing fundings and finding additional funding sources, such as from grants, new donors or by offering additional services. The overview of revenues and costs of BRANCH for the first full year of operations 2023 and their resulting net budget can be found in Appendix VII.

6.3 Project Related Costs

In the following, an estimation of the project-related costs will be presented. As can be seen below, the total cost of the three-month professional project is estimated to be about 5'990 euros, of which most will be covered by the intern.

Table 7: Estimation of project related costs (in euros) covered by the intern and the host organization during the 3 months of the internship.

Project related costs covered by intern (3 months) in euros	
Flight ticket AMS-CUR-AMS	890
Night train Zurich-Amsterdam-Zurich	160
Accommodation (incl. water, electricity, and parking space)	2'100
Meals	1'350
Price difference for buying and reselling car	150
Gas for car	270
Car insurance	150
Phone contract	90
Extension of travel insurance	50
Dive insurance	200
PADI fee for Dive courses	210
Total project related costs for the intern (in euros)	**5'620**
Project related costs covered by the host organization and partners (3 months) in euros	
Gas tanks for dives	150
Rental of dive equipment for intern	200
Office material and other expenses	100
Memberships and user profiles for communication platforms	150
Go Pro	250
Contribution to Dive courses (PADI Advanced, Rescue, and Coral Restoration Dive courses)	590
Coworking pass for the intern	280
Total project related cost for the organization (in euros)	**1'720**
Total estimated project related cost (3 months) in euros	**7'340**

Material and Nonmaterial Resources

Material resources needed for the project were a laptop, a camera or phone with a good camera, a clip-on microphone for interviews, an underwater camera or GoPro, scuba diving equipment for content collection and creation, and a car (owned or rented) to get around the island (no reliable public transport available). Nonmaterial resources needed were subscriptions for different communication tools such as for example Creative Cloud for content creation and editing, Hootsuite or another tool for content planning, budget for the hosting, maintenance, and improvement of the website, and a pass or membership for a workspace, for example in a coworking. Resources that can currently be used for free are Canva for designing content and the newsletter service provider Mailchimp (so long as the number of subscriptions is below a certain threshold).

Time costs

In addition to the direct financial expenses for the material and nonmaterial resources of the project covered by the intern and the host organization, there are also time costs that need to be considered for both sides. In the 12 weeks prior to the start of the internship the supervisor of the host organization is investing on average approximately 1 hour per week for meetings and preparation support (e.g. to find housing and transportation), and about 3 hours per week during the 12 weeks of the internship for coaching and meetings, amounting to about 48 hours in total. The time cost of the intern for this project consisted of a preparation time of approximately 8 hours per week for 12 weeks (96 hours) prior to the internship, as well as approximately 40 hours per week for the 12-week internship (480 hours), equaling a total of approximately 576 hours of working hours of the intern. After the completion of the internship end of June 2023, another person will have to continue the communication activities. In the long term, it is suggested to have one part- or full-time position for communication and marketing, as well as a full- or part time communication intern or volunteer.

6.5 Potential Funding Options

Additional funding options for BRANCH Coral Foundation

The foundation is aiming to cover its expenses and expand its programs through the different activities described in the context part, its partnerships, and the selling of merchandise.
Funds which have not been directly used for the foundations' three main programs of coral restoration, education, and community outreach, are invested in other long term goals such as expanding its research and internship possibilities, and setting up a laboratory for ex-situ research on coral restoration.

- **Merchandise**: One of the foundation's goals is to improve its web shop with merchandise products, such as the coral adoption program, PADI BRANCH Coral Restoration Diver Specialty Course, or snorkeling and diving tours. These products are also advertised via the foundation's social media channels, and it is planned that they will be sold by the foundation's partnering dive centers, and possibly other local shops and partners in the future.

- **Grants**: Further funding and grant opportunities, for example from the European Commission and the United Nations are being reviewed.

Funding and income options for the Intern

The professional project was self-funded by the intern. There was no salary, accommodation or meals provided by the host organization or a third party. However, the intern had the opportunity to improve her diving skills at the lowest possible financial expense (paying only for the certification from PADI, but not for the instructor's time), saving her a total of 590 euros, and was able to profit from the valuable knowledge, experience, and network of the BRANCH team. Furthermore, the host organization helped the intern among other things with finding a cheap accommodation and car for the three months, getting the car ready before the arrival of the intern, and organized the airport transfer, which helps the intern to keep the costs at a minimum. Additionally, the intern received a total of 1100 euros in funding from the Stage Erasmus+ program, which helps to cover her expenses. These amounts can be seen in the Table 6 below.

Table 6: Overview of funding and income sources for the intern.

Source of funding / income	Amount
Stage Erasmus+ (370 euros/month)	1110 euros
Contribution of the host organization to the intern's diving education and courses	590 euros
Total funding / income	**1'700 euros**

7. ASSUMPTIONS AND OBSTACLES

For every project, an assessment of the potential risks, their possible consequences, and risk management strategies are crucial. In Table 7 below, a risk assessment was conducted displaying the risks and obstacles the intern faced so far or might face during the remaining time of the professional project and appropriate risk management strategies are discussed. Risk management strategies could be to avoid the risk by taking corresponding actions, to transfer the risk for example by making someone else responsible, to mitigate the risk by taking actions to decrease the impact or chance of the risk happening, or to accept the risk, if it is too small to be worth any effort. The risks are then displayed in a matrix in Figure 9 according to their probability and significance.

Table 7: Risk assessment table for the professional project with a color scale from 1-4. Darker colors indicate a risk with a higher probability and/or significance for the project.

Risk description	**Probability**	**Significance** (if happens)	**Possible consequences**	**Who is responsible**	**Mitigation plan**
Risk 1 **Lack of budget**	3	2	Reduced activities possible Reduced team Delayed payment for expenses	Host organization	Finding new or additional investors Finding new or additional donors Increasing existing donations or fundings Minimizing costs Find less costly alternatives
Risk 2 **Lockdown due to COVID-19 (or other viruses)**	1	2	No field work possible No content creation outside possible Only home office possible Team or student sick Project delays	Host organization Intern	Switching to online meetings Focus on creating alternative content from home Focus more on strategic and conceptual tasks instead of content creation

Risk 3 **Storms and other natural disasters**	1	3	No field work possible Destruction of coral nurseries No in field content creation Only home office Potential loss of reliable electricity and internet connection Accidents and damages on the coral nurseries, house, or workplace	Host organization Intern	Switching to online meetings Focus on creating alternative content from home Focus more on strategic and conceptual tasks instead of content creation
Risk 4 **Diving accident**	1	4	Impacts on interns' or other injured diver's health Injuries No or reduced work possible	Dive center Intern Host organization	Follow instructions of dive guide Never dive alone Be careful and attentive, avoid risky situations
Risk 5 **Car accident**	1	4	Negative impacts on intern's health Injured intern or other driver No or reduced work possible	Intern	Drive safely Avoid dangerous roads
Risk 6 **Change of restoration regulations**	2	3	Stagnating or halting restoration efforts	Local government Host organization	Stay informed about any changes in restoration regulations Involve stakeholders from the government Exchange

					regularly with stakeholders from conservation, restoration, and research
Risk 7 **Conflict with stakeholders**	4	3	Depending on stakeholder: Stagnating or halting restoration efforts Reputational damage Reduced funding Legal issues	Host organization	Involve stakeholders at every stage of the project Set up clear and fair contracts from the start Clearly define responsibilities Communicate transparently and regularly
Risk 8 **Delay or refusal of restoration permit**	3	3	If restoration permit is *delayed*: Delayed restoration efforts possible, less funding, smaller range of activities possible If restoration permit is *refused*: Halting the in-field restoration efforts, loss of crucial funding from coral nursery adopters	Host organization Government (Ministry of Health and Nature Curacao) Nature organization CARMABI	Send in coral nursery permit at least 6 months before it is needed Abide by all the rules and regulations Stay informed about restoration regulations and any changes Exchange with stakeholders from the government regularly

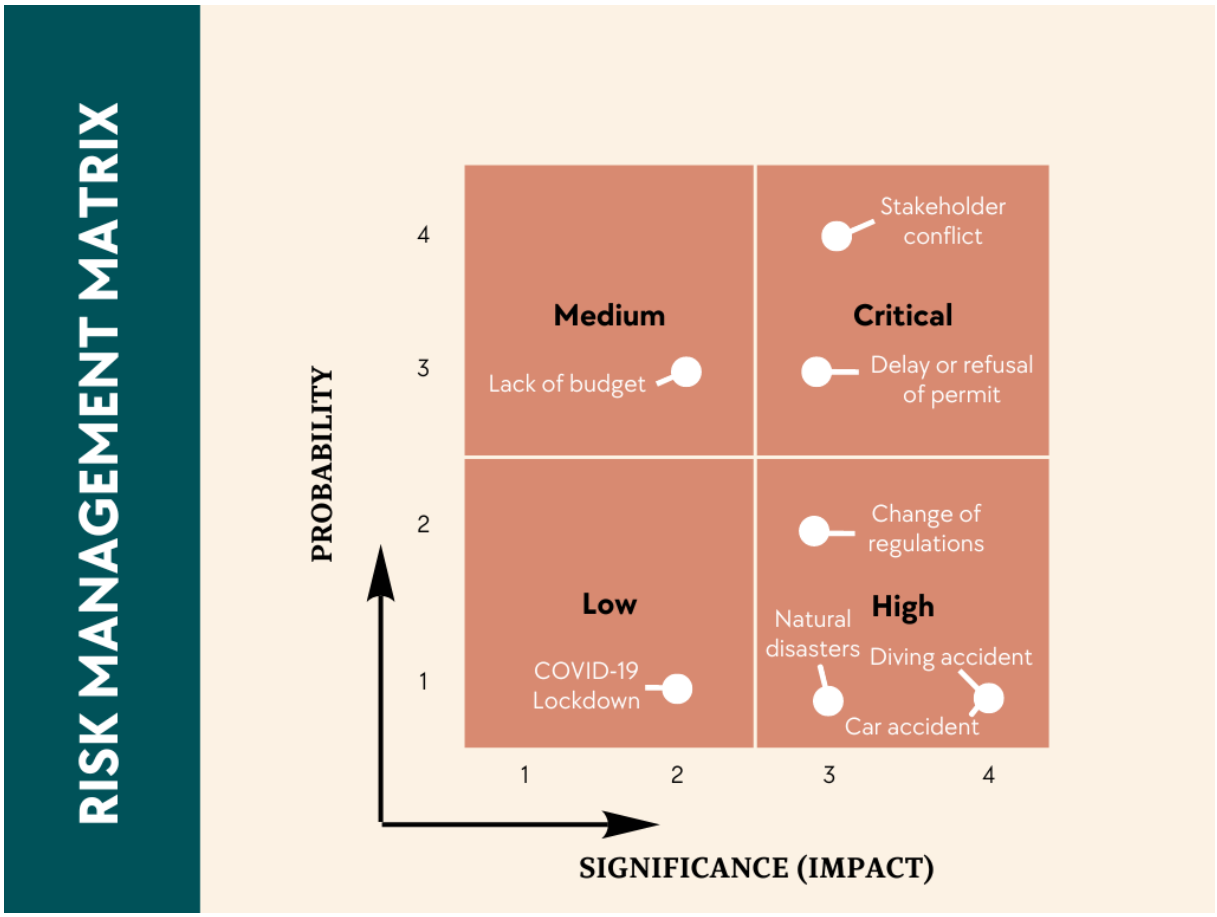


Figure 9: Matrix of risks associated with the professional project based on table 7.

Critical risk: Stakeholder conflict and delay or refusal of restoration permit

Among the risks displayed in the matrix of risks, there are two with a high likelihood to occur and a high significance in terms of impact on the project. Those are a stakeholder conflict and the delay or refusal of receiving the coral restoration permit. Both risks occurred during the internship and their consequences, and the risk management strategy are discussed in the following.
The first risk discussed will be the stakeholder conflict. BRANCH works together with many stakeholders ranging from the government, dive centers, other NGOs, researchers, the tourism sector, and the local communities. Since every stakeholder has its own goals and agenda, it is not unusual for conflicts to arise. In terms of impact on the professional project, the main stakeholder conflict was between the host organization BRANCH and the partnering dive center Dive Division at Blue Bay Beach. The founder and head of the dive center was initially also part of the founding team and president of BRANCH Coral Foundation and since the restoration efforts were first limited to Blue Bay, the mandatory coral restoration permit had initially been set up under the name of Blue Bay Beach. Only later on, the dive center at Blue Bay and Max van Aalst planned to create BRANCH Coral Foundation to expand also to other locations on the island. Therefore, it was decided that the name of the permit should be changed to BRANCH Coral Foundation, upon which an application for a change of the permit was handed in to the Ministry of Health and Nature of Curacao (GMN).
At the start of the internship in April, BRANCH still had an ongoing partnership with the dive center

Blue Bay Beach with several coral nurseries already set up for several months and the first corals outplanted on the house reef. It was the agreement, that Blue Bay Dive Center sponsors the construction and maintenance of the coral nurseries and outplants for a period of two years, provides a location in their house reef, and provides an office, dive equipment and gas tanks. However, by the arrival of the intern on Curacao, there was a conflict of interest arising between the Dive center Blue Bay and BRANCH Coral Foundation, which intensified over the weeks. In the first three weeks of the internship, the team of BRANCH still fulfilled their part of the agreement by cleaning the coral nurseries at Blue Bay on a biweekly basis and monitoring their growth. However, step by step the owner of the Blue Bay dive center did not agree anymore to BRANCH cleaning and monitoring the nurseries, stating that they wanted to do it themselves and requesting the sponsored money for the two years to be returned to them dive center. Due to a lack of transparent communication and an ever more uncooperative atmosphere, BRANCH had to pause its restoration efforts at Blue Bay Beach and the two organizations parted their ways.
It was the intention of BRANCH, that by the arrival of the intern, two additional partnerships with dive centers would be in place, one with the dive school Scuba Do at Jan Thiel and the other one with the dive center PortoMari Sports at Playa Porto Mari, which both had showed great interest in a nursery sponsorship. However, since the new permit under the name of BRANCH Coral Foundation had not yet arrived, the team was limited in securing new coral nursery sponsors. Unable to do coral restoration at the existing location at Blue Bay, and not yet able to start restoration efforts at new locations, the intern and the rest of the BRANCH team had to change their focus of activities from end of April to the beginning of June. To manage this risk, the intern focused more on other activities such as creating a collection of photos, videos and templates, website maintenance, creating educational content for social media and working on a business plan with the other team members. Furthermore, the intern volunteered with a partner of BRANCH in their biweekly cleaning of their own independent coral nurseries to still gain experience in the maintenance of coral nurseries.
To avoid or mitigate the risk of stakeholder conflict in the future, BRANCH has now set up clear and written agreements with the new partners and sponsors from the very beginning of the project and clarified any expectations, concerns, and responsibilities. Furthermore, it would be useful to have regular stakeholder meetings to raise concerns and find possible solutions before the conflicts escalate.

The second high probability and high impact risk was the delay or refusal of the coral restoration permit, which occurred during the professional project. Part of the professional project aimed at working on communication related topics for the organization, while another part of the project was to assist the team with building and maintaining the coral nurseries and outplants and collecting content for the organizations communication channels while doing so. In the exchanges before the start of the internship, the BRANCH team was confident that by the time of the internship start, the team would be able to start with the construction of coral nurseries for two new locations. Furthermore, the team of BRANCH also did not expect the conflict with Blue Bay to escalate the way it did, since there was still a good connection with most of the Blue Bay dive center team and thus, still had access to the permit, while waiting on the one under the name of BRANCH.
Since the intern was not aware about the requested permit change, the risk of a permit refusal or delay was at first not estimated to be relevant. With the chain of events after the intern's arrival, the probability of the risk occurring is estimated to be high. The impact on the professional project of the risk occurring is now estimated to be relatively high, since without the permit restoration activities and content creation would not be possible in the field and communication activities would be limited. For example, the "Adopt a Coral" program of BRANCH would not be able to be advertised, since there would be not enough coral fragments available for adoption. In combination with the risk

of the stakeholder conflict described above, which hindered BRANCH to work at least on the existing nursery, other services such as the PADI Coral Restoration Dive Course and the Nursery snorkeling and diving tours could also not be promoted, which limited the content creation of the intern.
After the arrival of the new permit on the name of BRANCH in the beginning of June, the team was able to implement the contracts with the two dive schools at Jan Thiel and Porto Mari and resume its activities in the field. As a mitigation strategy for a delay of receiving a new permit or renewing the existing one in the future, it is suggested to apply for the new permit or the extension of an existing one at least six months in advance, as administrative issues can take longer than expected. A refusal of the restoration permit did not occur during the time of this professional project and can be avoided by following the rules and regulations of the restoration guidelines provided by the government.

High risk: Diving accident, car accident, change of regulations, natural disasters

Four risks that are thought to have a low probability of occurring, but which would have a high significance in terms of impact if they occurred, are a diving accident, a car accident, a change of regulations for asexual coral restoration, and natural disasters. These risks would have a very high impact and could lead to a reduced or halted project execution, and even bodily harm in the case of the first three. The risk of a car accident is important to list, because on Curacao the main way of mobility is by car and the traffic can be chaotic. However, as long as some precautionary measures are taken, such as driving cautiously and avoiding dangerous roads and busy hours, the probability of the risk occurring can be kept at a minimum. The risk of a diving accident has a low probability of occurring if all safety measures and instructions are respected by the involved parties. However, in case of either a diving or driving accident happening, the impact on the project could be very severe, because it could mean that the intern is unable to work anymore and even the health of the intern could be at risk. Even though so far none of these risks occurred during the time of the professional project, it is important to think of a mitigation plan to minimize these risks. By following instructions and regulations, being careful and attentive and avoiding risky situations, the probability of most of these risks can be reduced to a minimum. To reduce the impact of the risk, a good insurance cover will be essential.

For the natural disaster and change of regulations, the impact on the project is estimated to be a bit lower than for the car and diving accidents. This is because it would not lead to bodily harm to anyone, and furthermore, if there is a change of regulations, for example in regards to where, how or when coral nurseries may be built and maintained on Curacao, this will have an impact on BRANCH, but it is not expected that the foundation will have to halt its restoration efforts completely, because besides adapting to these changed regulations, it also has other core activities such as education and community outreach, which could be expanded in that case.
The risk of natural disasters has a low probability of occurring, because the weather on Curacao is relatively stable throughout the year and the island lies outside of the hurricane belt. However, in case a natural disaster should hit, it would have a big significance on the project, as the field work would be impacted or halted, and a severe storm could even impact the intern's health. Gladly, this risk did not occur during the time of the professional project. Since there is not much one can do individually to immediately avoid the risk of occurring, the risk management strategy would be to mitigate the risk by taking measures to lessen the impact it would have. In case of a natural disaster, the team could switch to online meetings, focus on creating alternative content from home, and focus more on strategic and conceptual tasks instead of field work.

Medium risk: Lack of budget

One risk with a high probability but low to medium impact is the lack of budget. For the organization in general, the impact would be estimated higher, however, since the intern is not receiving financial compensation and many of the communication tools and platforms can be used without monetary costs, many communication activities would be able to be continued. The probability is estimated to high, since BRANCH is a very young organization and does not yet have a lot of capacity for fundraising.

At the time of the internship, the organization had enough funding to carry out the main activities such as building and maintaining the coral nurseries and holding educational classes at the schools. However, as expected the organization does not have sufficient funding yet to pay a regular income to its employer Max van Aalst and its three interns. Should the lack of budget remain a problem even with the foundation's growing network of partners and donors, BRANCH might consequently have to change, reduce, or halt some of its activities for an unknown amount of time. To avoid, minimize or handle the risk, BRANCH could already now try to find new funding sources, minimize costs, and search for less costly alternatives where possible.

Low risk: Covid-19-Lockdown

Besides the four risks with low probability and high significance for the project, there is also one risk identified with a low probability and low significance, which is a lockdown due to Covid-19 or other viruses. The lower probability is because the number of new infections in many countries worldwide, including Curacao, has been decreasing over the last months. Moreover, Curacao has a well-organized system in place for checking the health of citizens and travelers entering and leaving Curacao, conducting vaccinations, and has implemented a variety of sanitary measures. The expected impact of the risk is expected to be lower than the one of the other risks, because after experiencing several waves of infections in the past years, most institutions and people have by now developed strategies of coping with a lockdown situation. Moreover, in case of a lockdown, the intern could still work because many of the communication related activities and tasks could also be carried out from home office. Due to its low probability and low impact, the management strategy for this risk is to accept it. This risk did not occur during the professional project.

8. IMPACTS

In terms of the impacts of the project on the interns' professional career and vice versa the intern's impact on the project and the foundation in general, there are several aspects to be highlighted.

8.1 Impact of the Project on the Intern

This part discusses how the project impacted the intern on a personal level.

Communication for Coral Restoration

The internship provided the intern with work experience in communication for marine conservation and coral restoration. The intern was able to discover which factors contribute to an NGOs communication being successful and became familiar with the challenges and opportunities environmental NGOs face in terms of communication. The intern had the opportunity to learn how to determine the target audiences, how to best frame and communicate messages on coral restoration, and marine conservation more generally, and how to initiate and motivate audiences to take action for the protection and restoration of coral reefs.

General Communication Skills

As expected, the intern had a lot of responsibility and freedom to experiment with different content and formats on the organization's different channels, due to the small size of the team. The intern had the chance to improve her visual communication and storytelling skills, by regularly creating content using a range of equipment, such as a camera, a GoPro, and an underwater camera, as well as skills in video and image editing, which will be useful for her desired career path as a communication specialist, storyteller, and educator in the marine conservation field. Furthermore, the intern was able to work on her visual design skills by designing templates, posters, and social media posts.

Building Connections and Network

Thanks to the foundation's already well-established network with local and international organizations, NGOs, dive centers, researchers, and other stakeholders, the intern was able to expand her professional network in the field of marine conservation and particularly coral restoration. Due to the new workspace of BRANCH in a coworking space, the intern was able to connect to a large community working predominantly in the sustainable development sector of Curacao and the Netherlands. This network might prove useful for the future career of the intern.

Coral Restoration Techniques and Diving Skills

Besides the communication-related tasks, the intern also supported BRANCH with building, maintaining, and cleaning the coral nurseries. Therefore, another impact of the project on the intern is the knowledge and practical experience gained in terms of coral restoration, as well as improved diving skills. Due to the foundations specially developed 'PADI BRANCH Coral Restoration Specialty Diver Course' and its collaboration with the islands local dive centers, the intern had the chance to learn more about coral restoration methods, and gain skills and knowledge for the planning, procedures, techniques, and risks of coral restoration diving. Improving her theoretical knowledge and practical experience in coral restoration, as well as improving her diving skills for conservation and restoration purposes, are valuable skills for the interns' future professional career, since she is interested in finding a job in coral restoration containing deskwork as well as fieldwork. Furthermore, since two other interns were carrying out research for their bachelor thesis with BRANCH on the factors for successful coral outplanting, the intern was able to learn more about the biology dimension of coral reef restoration and scientific methods used in research about coral restoration.

Education and Ocean Literacy

While the focus of the internship was the development of the communication and the assistance in building and maintenance of the coral nurseries, the intern also had the opportunity to accompany someone of the BRANCH team to a high school, where the students learned about the importance of coral reefs. This experience was valuable for the intern, as she was able to observe how the students were reacting to different pieces of information and ways of knowledge transfer. The insights from this school visit will be valuable for the intern's future career in the field of communication and education for marine conservation. Besides this, the intern learned more about how to educate and interact with different groups of people, such as school children, students, dive centers, or tourists.

8.2 Impact of the Intern on the Project and the Overall Host Organization

This part discusses how the intern impacted the project and the overall host organization.

Strong Basis for Communication Activities

Firstly, the intern was able to help the foundation build a basis for present and future communication activities, which is essential for the long-term success of any organization. Among other things, this communication basis included:

- the development of a clear vision and mission statement.
- the definition of goals, target audiences, channels, and key messages for the foundation's communication activities.
- the development and implementation of guidelines, a corporate identity and design (CI / CD), workflows, and an organizing system
- the creation of templates for newsletter, social media, presentation slides, and others

Help with Writing the Business Plan and Organization Profile

The intern pushed for gathering the existing materials about BRANCH and using them to create a professional business plan, which she wrote together with the Director Max van Aalst and volunteer Maarten van Aalst. Furthermore, the intern created a one-pager with the key information about the organization, which could be used for the acquisition of new partners, or when visiting events and stakeholder meetings.

Strengthening and Building Relationships with Partners

The increased awareness for the foundation due to more regular and structured communication led to new partnerships, which was for example visible when BRANCH was approached by a podcaster to wanted to produce an episode about the foundation. Existing partnerships with the dive schools were strengthened for example by promoting each other's content on social media. Due to the increased communication efforts, the trust into the foundation increased, which became visible when more and more organizations and individuals followed the communications activities on social media and interacted with the content of the foundation.

Collection and Creation of Content

The intern helped the foundation to create a variety of content, from videos, photos, text elements, templates, and others, which could be used by the foundation to promote its purpose, goals, and activities more effectively and engage more meaningfully with its stakeholders. For example, a new format was developed and implemented by the intern, which involved a series of posts with educational coral facts.

Increased Reach and Interaction

More frequent and consistent communication on the foundation's different communication channels, defining the target audiences more clearly, and creating innovative content, increased the reach of and interaction with the foundations' relevant audiences. This helped the foundation to create more impact and expand its activities.

Assistance in the Operational Activities

By assisting with the operational activities and tasks such as the regular maintenance of the coral nurseries, education activities at schools and the coral nurseries, community outreach, and others, the interns was able to reduce the workload of the rest of the team so that they were able to focus more of their time on management, fundraising, building partnerships, and other activities that were needed to strengthen and in the future eventually scale the NGO.

9. APPENDIX

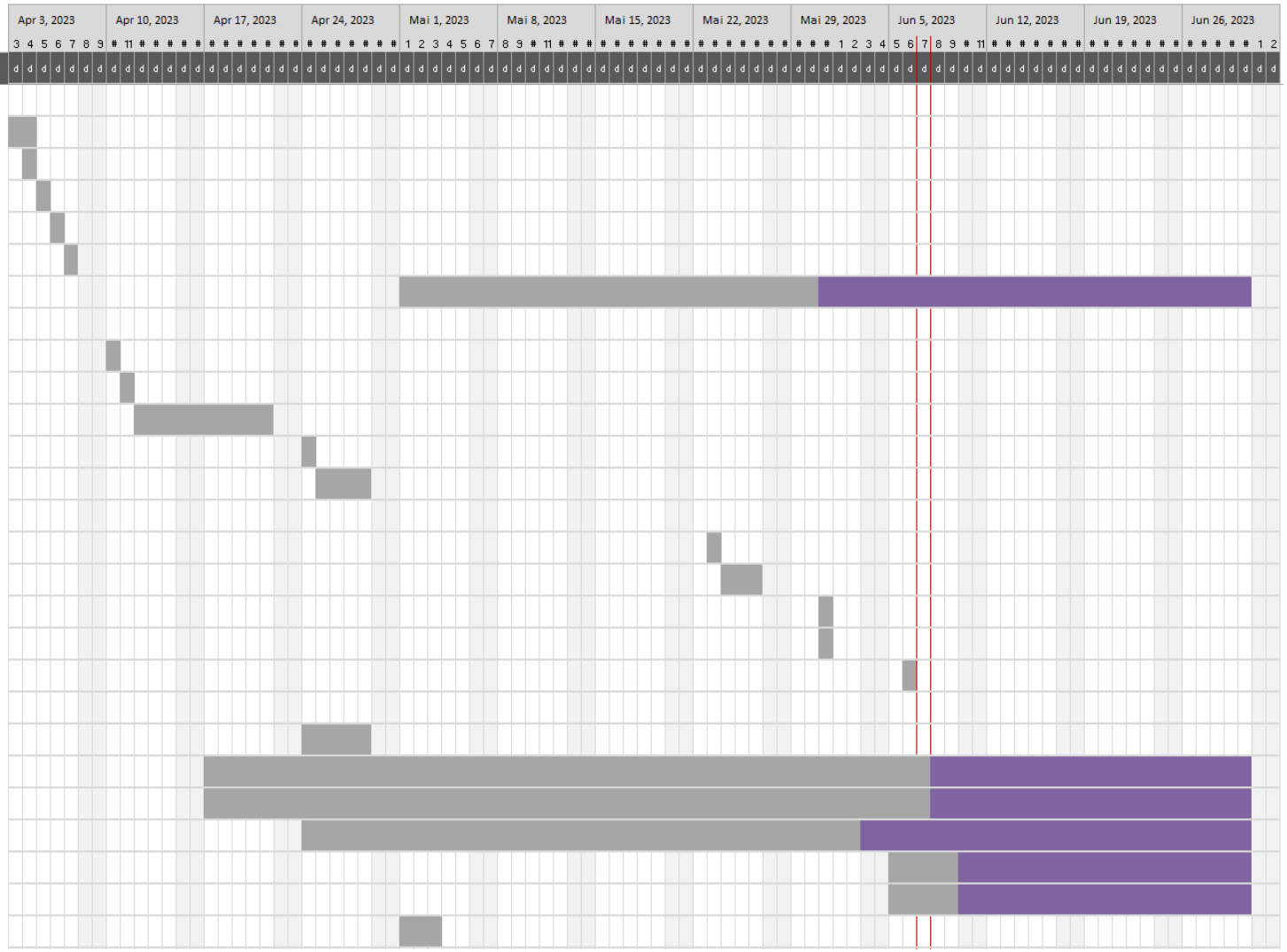
Appendix I: GANTT chart with milestones and tasks of the professional project based on Table 4

Communication at BRANCH

Project Start: Mo, 4.3.2023

Display Week: 1

TASK	RESPONSIBLE	PROGRESS	START	END
Milestone 1: Develop an organizing and reporting system for communication				
Task 1: Get an overview of foundation, team, organizing and workflows	Olivia, Max	100%	03.04.23	04.04.23
Task 2: Create a folder structure for everything communication-related	Olivia	100%	04.04.23	04.04.23
Task 3: Gather and organize all existing communication material in the folders	Olivia	100%	05.04.23	05.04.23
Task 4: Create a document with an overview of communication channels	Olivia	100%	06.04.23	06.04.23
Task 5: Create document for communication reporting	Olivia	100%	07.04.23	07.04.23
Task 6: Monitor communication activities and progress in the reporting sheet	Olivia	50%	01.05.23	30.06.23
Milestone 2: Write the business plan and an organization profile (one-pager)				
Task 1: Team meeting to discuss content and style of the business plan	Olivia, Max, Maarten	100%	10.04.23	10.04.23
Task 2: Find or create template for the business plan	Olivia	100%	11.04.23	11.04.23
Task 3: Write the content of the business plan	Olivia, Max, Maarten	100%	12.04.23	21.04.23
Task 4: Proofread the business plan and send it to the board members	Olivia, Max	100%	24.04.23	24.04.23
Task 5: Create an organization profile (one-pager)	Olivia	100%	25.04.23	28.04.23
Milestone 3: Take part in 1st coral restoration stakeholder workshop Curacao				
Task 1: Team meeting to discuss contents of presentation	Olivia, Max	100%	23.05.23	23.05.23
Task 2: Prepare the presentation	Olivia, Max jr.,	100%	24.05.23	26.05.23
Task 3: Attend the workshop	Olivia, Max jr.,	100%	31.05.23	31.05.23
Task 4: Document the event in a protocol and photos	Olivia	100%	31.05.23	31.05.23
Task 5: Create a social media post about the workshop	Olivia	100%	06.06.23	06.06.23
Milestone 4: Create a collection of videos, photos and templates				
Task 1: Create set of templates for social media in the new corporate design	Olivia, Jente	100%	24.04.23	28.04.23
Task 2: Take videos and photos on regular maintenance dives in the nurseries	Olivia, Max, Jente	70%	17.04.23	30.06.23
Task 3: Take videos and photos during educational activities	Olivia, Max	70%	17.04.23	30.06.23
Task 4: Edit videos and photos for social media	Olivia	60%	24.04.23	30.06.23
Task 5: Create a short video introducing the foundation	Olivia	20%	05.06.23	30.06.23
Task 6: Create short videos introducing activities and services of BRANCH	Olivia	20%	05.06.23	30.06.23
Task 7: Create a poster about the services of BRANCH	Olivia	100%	01.05.23	03.05.23

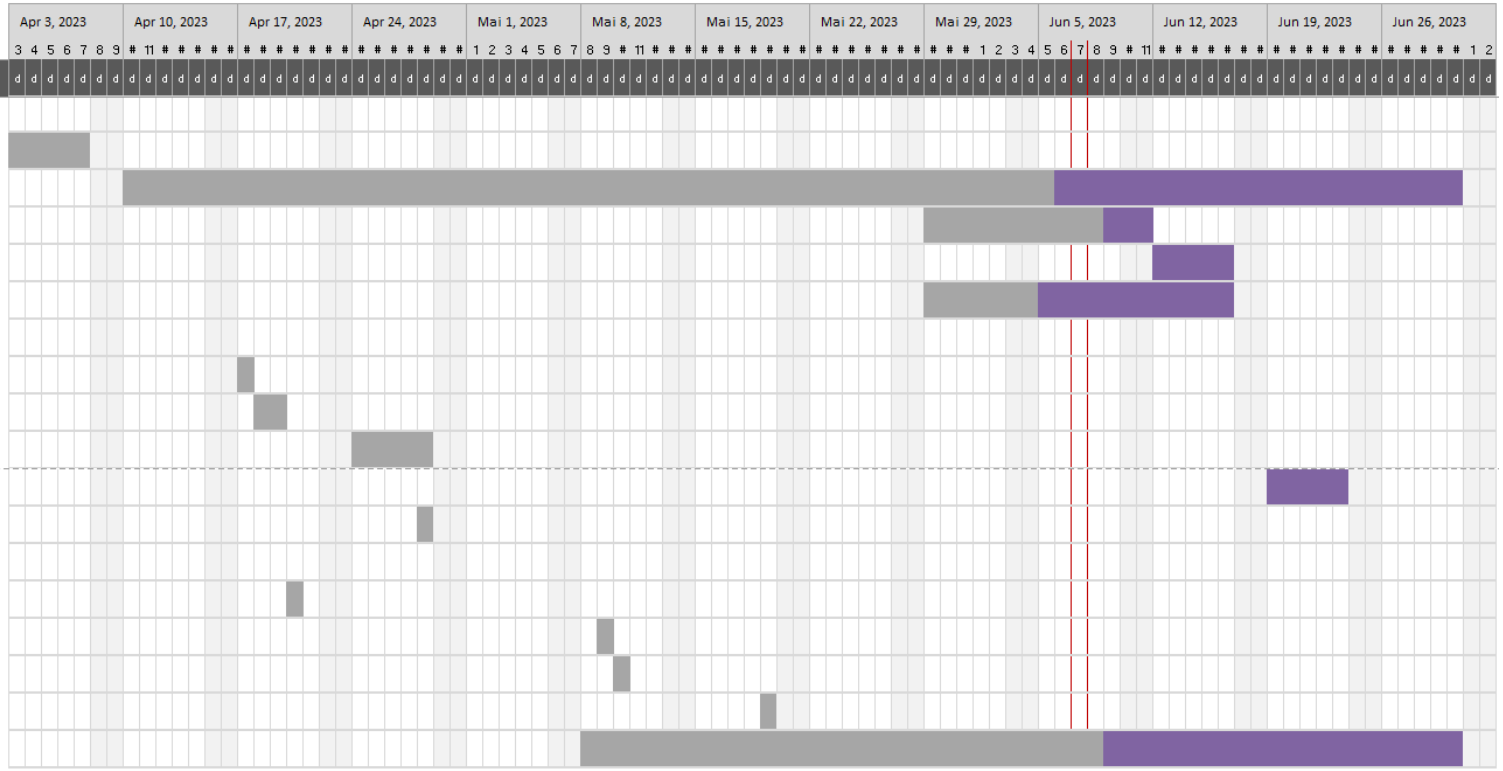


Communication at BRANCH

Project Start: Mo, 4.3.2023

Display Week: 1

TASK	RESPONSIBLE	PROGRESS	START	END
Milestone 5: Assist with the building and maintenance of the coral nurseries				
Task 1: Complete the "PADI BRANCH Coral Restoration Specialty Course"	Olivia, Max	100%	03.04.23	07.04.23
Task 2: Assist nursery cleaning at existing coral nursery every two weeks	Olivia, Max	70%	10.04.23	30.06.23
Task 3: Assist with building coral nursery trees for the 2nd and 3rd location	Olivia, Max, Maarten	80%	29.05.23	11.06.23
Task 4 : Assist with placing nursery trees and corals at the two new locations	Olivia, Max, Maarten	0%	12.06.23	16.06.23
Task 5 : Document the individual steps in photos and videos for social media	Olivia	40%	29.05.23	16.06.23
Milestone 6: Redesign, write and send out Newsletter				
Task 1: Analyze design and performance of former newsletters	Olivia	100%	17.04.23	17.04.23
Task 2: Redesign the newsletter according to the new corporate design	Olivia	100%	18.04.23	19.04.23
Task 3: Research topics for the April newsletter, write and send it	Olivia	100%	24.04.23	28.04.23
Task 4 : Research topics for the June newsletter, write and send it	Olivia	0%	19.06.23	23.06.23
Task 5 : Promote the newsletter on social media	Olivia	100%	28.04.23	28.04.23
Milestone 7: Assist with educational activities at schools and the nursery				
Task 1: Meeting with supervisor for information on educational activities	Olivia, Max	100%	20.04.23	20.04.23
Task 2: Assist during at least one school visit and document for social media	Olivia, Max	100%	09.05.23	09.05.23
Task 3: Create social media posts about the school visit(s)	Olivia	100%	10.05.23	10.05.23
Task 4 : Promote the "Coral Restoration Dive Course" on BRANCH channels	Olivia	100%	19.05.23	19.05.23
Task 5 : Develop and implement new education format for social media	Olivia	60%	08.05.23	30.06.23



Appendix II: Design of the organization profile one-pager

BRANCH
Coral Foundation

ABOUT US

BRANCH stands for *Building Reefs And Nurseries for Coral Habitats*. The BRANCH Coral Foundation was founded in 2022 on Curaçao.

VISION & MISSION

Restoring Reefs Together

We restore and enhance Curaçao's coral reefs using restoration techniques, such as building coral nurseries with endangered staghorn coral and educating the local and international community.

WHAT WE DO

Coral Restoration
We are building and maintaining coral nurseries for endangered coral species. Currently we have multiple nursery trees around Curaçao filled with hundreds of staghorn coral fragments.

Education
- We are teaching all levels of high school classes on Curaçao about corals.
- We offer a PADI BRANCH Coral Restoration Speciality Diver Course.

Community
We are working together with researchers, dive centers, nature organizations, tourism, the government, and the community.

+599-9516 1996

info@branchcoralfoundation.com

www.branchcoralfoundation.com

Blue Bay Beach Curaçao

WHY SUPPORT US

Coral reefs make up less than 0.1% of the ocean floor, but they are among the most diverse, complex, and important ecosystems on our planet. They provide many benefits and services to humans, such as coastal protection, income from tourism, and provision of nutrition, genetic material, and compounds for medicinal purposes. However, coral reefs are rapidly declining around the world. Join us in our mission to protect and restore the Carribeans' beautiful coral reefs and leave your mark!

Appendix III: Instagram Analytics BRANCH Coral Foundation, April-June 2023

Audience

Current audience | Potential audience

Grow your Instagram audience for more insights

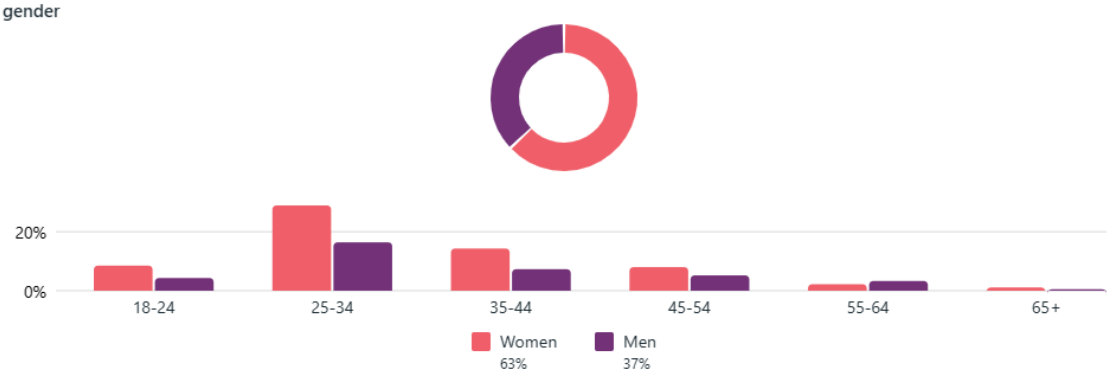
You can learn more about your audience when more people follow your account. Take action now to get discovered and build your community.

See tips | Create post

Instagram followers

469

Age & gender



Top cities

Willemstad, Curaçao	32.6%
Amsterdam, Netherlands	3.2%
The Hague, Netherlands	3%
Utrecht, Netherlands	2.3%
Nijmegen, Netherlands	1.3%

Top countries

Curaçao	35.8%
Netherlands	28.4%
United States	9.4%
France	1.9%
Germany	1.9%

Content overview

Explore noteworthy trends from the content you recently created and shared.

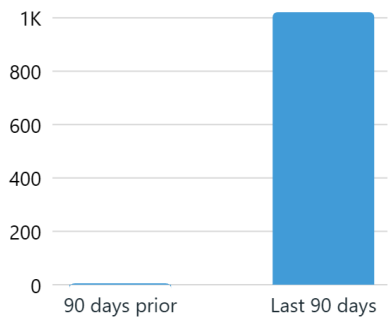
Instagram posts | Instagram stories

Reach

Post reach

1K

Total from last 90 days vs 90 days prior



Median post reach per media type

For posts created in the last 90 days

Images	225
Videos	143
Audio	0
Text	0
Links	0

Median post reach per content format

For posts created in the last 90 days

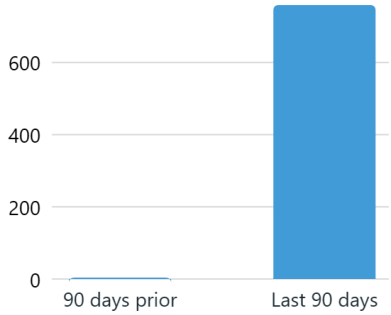
Carousel posts	264
Other posts	196
Reels	143
Live posts	0

Engagement

Post likes, comments and shares

759

Total from last 90 days vs 90 days prior



Median post likes, comments and shares per media type

For posts created in the last 90 days

Videos	63
Images	44
Audio	0
Text	0
Links	0

Median post likes, comments and shares per content format

For posts created in the last 90 days

Reels	63
Carousel posts	49
Other posts	17
Live posts	0

Content overview

Explore noteworthy trends from the content you recently created and shared.

Instagram posts | **Instagram stories**

Reach

Story reach

Data unavailable

This data is currently unavailable.

Median story reach per media type

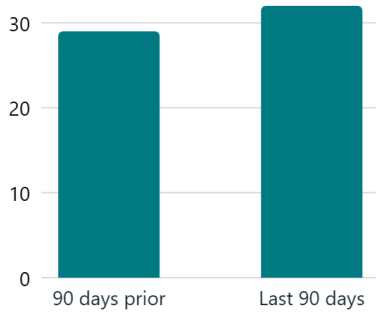
For stories created in the last 90 days

Videos	116
Images	110
Audio	0
Text	0
Links	0

Published Stories

32 ↑ 10.3%

Total stories you shared from last 90 days vs 90 days prior

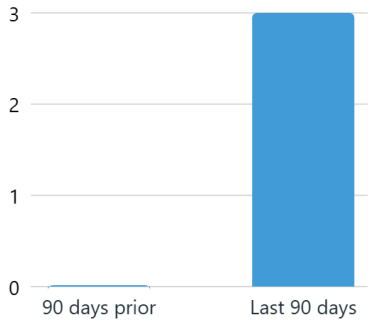


Engagement

Story replies and shares

3

Total from last 90 days vs 90 days prior



Median story replies and shares per media type

For stories created in the last 90 days

Videos	0
Images	0
Audio	0
Text	0
Links	0

Tips & tricks: Engagement

Using stickers and other interactive features on stories can help boost engagement.

Learn more

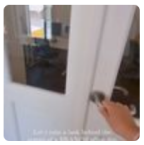
Sharing more information about how your business started and your mission are just a few ways you can take advantage of Instagram stories' 24-hour format.

Learn more

Top-performing organic stories

Here are stories that have performed well over the last 90 days. Understanding what's working can help you decide what to create and share next, so you can keep up the great work.

Highest reach on a story



Instagram story

Let's take a look behind the scenes of a BRANCH office...

May 2, 2023, 2:06 PM

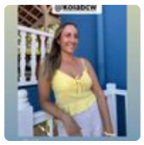
This story reached **69%** more Accounts Center accounts (186 Accounts Center accounts) than your median story (110 Accounts Center accounts) on Instagram.

Highest sticker taps on a story

Insights failed to load

Please reload the page and try again.

Highest volume of replies on a story



Instagram story

May 26, 2023, 8:30 AM

This story received 1 reply compared to your median story (0 replies) on Instagram.

Top-performing organic posts

Here are posts that have performed well over the last 90 days. Understanding what's working can help you decide what to create and share next, so you can keep up the great work.

Highest reach on a post ⓘ

Instagram post

We are seeing a mass mortality (the Caribbean sharp-nose puffer

Apr 25, 2023, 7:16 AM

This post reached **77%** more Accounts Center accounts (396 Accounts Center accounts) than your median post (224 Accounts Center accounts) on Instagram.

Highest likes on a post ⓘ

Instagram post

We were excited to see the enthusiasm, interest, and...

May 9, 2023, 1:02 PM

This post received 78 likes.

Highest comments on a post ⓘ

Instagram post

We are seeing a mass mortality (the Caribbean sharp-nose puffer

Apr 25, 2023, 7:16 AM

This post received **900%** more comments (10 comments) than your median post (1 comment) on Instagram.

Appendix IV: LinkedIn Analytics BRANCH Coral Foundation, April-June 2023

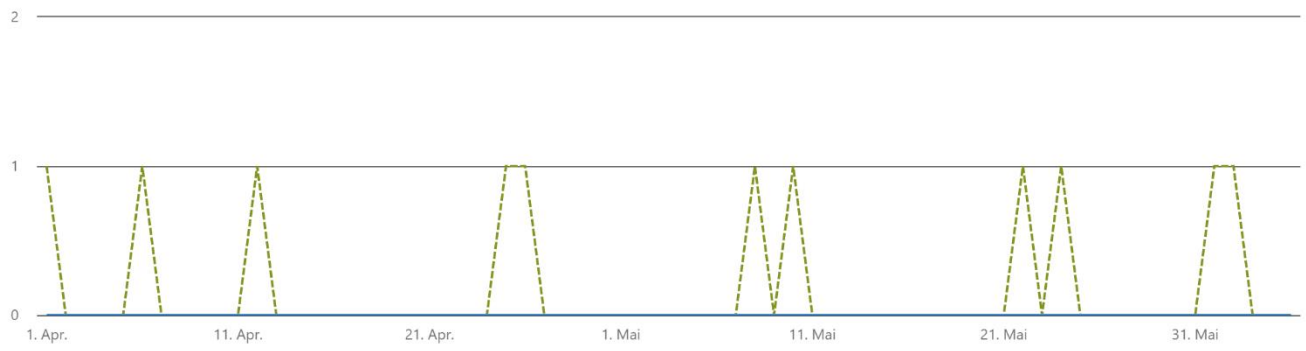
Analysedaten zu Follower:innen | 1. Apr. 2023 bis 5. Juni 2023 | Exportieren

Follower-Highlights

64
Follower:innen insgesamt

11
Neue Follower:innen im folgenden zurückliegenden Zeitraum: 66 Tage
▼80 %

Follower-Zahlen



Demografische Daten zu Ihren Follower:innen

Ort

Randstad, Niederlande · 44 (68,8 %)

Stadtgebiet Brabantine, Niederlande · 1 (1,6 %)

Breda-Tilburg Area, Niederlande · 1 (1,6 %)

Region Arnhem/Nijmegen, Niederlande · 1 (1,6 %)

Region Manchester, Vereinigtes Königreich, Vereinigtes Königreich · 1 (1,6 %)

Andere · 16 (25 %)

Analysedaten zu Inhalten

1. Apr. 2023 bis 5. Juni 2023

Exportieren

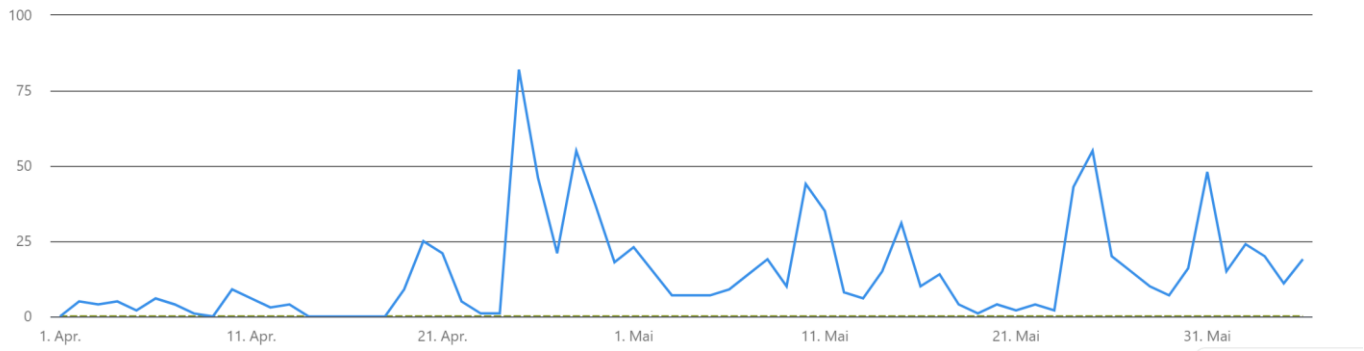
Highlights

Daten für 1.4.2023 bis 5.6.2023

25	3	1
Reaktionen	Kommentare	Direkt geteilte Beiträge
▲127,3 %	▲50 %	▼50 %

Kennzahlen

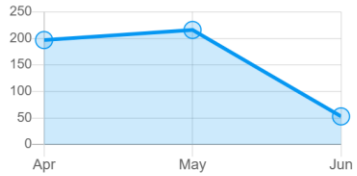
Impressions



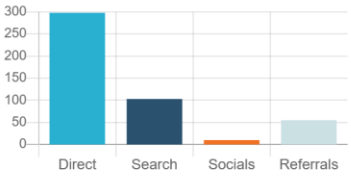
Appendix V: Website Analytics BRANCH Coral Foundation, April-June 2023

Filter by date: April 1, 2023 - June 7, 2023

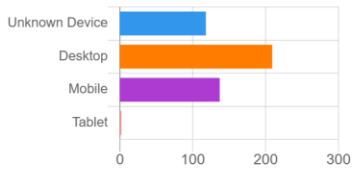
Site Traffic



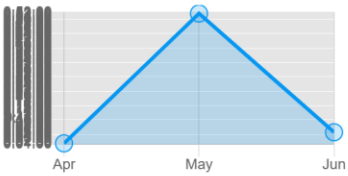
How do most visitors reach you?



Devices



What is the average time of visits on your site?



What are your most popular pages?

#	Page title	Views	Visitors	Average time
1	BRANCH Coral Foundation - Homepage	259	259	0:09:54
2	BRANCH Coral Foundation	176	176	0:07:32
3	Team - BRANCH Coral Foundation	77	77	0:28:46

Social Sources

Need Help ?

Appendix VI: Newsletter Analytics BRANCH Coral Foundation, April 2023 Newsletter

April Newsletter BRANCH Coral Foundation

Switch report

Overview | Activity | Click Performance | Content Optimizer | Social | E-commerce | Inbox | Analytics360

92 Recipients

Audience: BRANCH Coral Foundation

Subject: We are growing! Are you joining us?

Delivered: Mon, Apr 17, 2023 2:35 pm

View email · Download · Print · Share

56	9	2	0
Opened	Clicked	Bounced	Unsubscribed

Successful deliveries	90 97.8%	Clicks per unique opens	16.1%
Total opens	90	Total clicks	14
Last opened	5/24/23 8:21AM	Last clicked	5/24/23 8:25AM
Forwarded	0	Abuse reports	0

Appendix VII: Overview of revenues and costs of BRANCH for the first full year of operations 2023.

Revenues (euros)		**Costs (euros)**	
		Fixed / Investment costs	
Coral nursery implementation	4’500 (3x1’500)	Coworking space passes	1’500
General donations	8’000	Website and Newsletter hosting	600
Diving restoration course fees	6’250 (50x125)	Salaries	15’000
Diving tour fees	4’000 (200x20)	3 Dive sets	500
Snorkeling tour fees	3’000 (300x10)	GoPro	250
Coral adoptions	4’000 (300x25)	Payment for creating the Foundation	1’600
Merchandise	5’000	Dive courses of 3 interns	1’770
Sponsorship	8’000	**Variable costs**	
		Education material	100
		Fuel for car	1’200
		Gas for scuba tanks	675
		Material for nurseries (frames, ropes, tools, cleaning utensils)	2250 (750 per nursery location)
		Other expenses (office material, rental of additional dive equipment etc.)	600
Total revenues	**42’750**	**Total costs**	**26’045**
		Net budget after costs	+ **16’705 euros**

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