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Sustainable Social Media: Consumer engagement with marine conservation NGOs

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Master in Marketing

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BUSINESS
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Resumo

A preservação dos ambientes marinhos é um desafio urgente, com grandes implicações globais. As Organizações Não Governamentais (ONGs) desempenham um papel fundamental nesse esforço, utilizando estratégias para sensibilizar, influenciar políticas e engajar o público em ações de conservação. Numa era marcada pela digitalização, as mídias sociais emergiram como uma ferramenta poderosa para as ONGs melhorarem a comunicação, a conscientização e o envolvimento. Esta tese investiga os tipos de conteúdo no Instagram que mais eficazmente promovem o envolvimento dos utilizadores para ONGs de proteção dos oceanos, visando fornecer sugestões acionáveis para melhorar suas estratégias de comunicação digitais.

Este estudo analisa como diferentes tipos de conteúdos nos posts no Instagram (educacionais, emocionais, remunerativas, de impacto e chamadas para ação) influenciam métricas de envolvimento dos usuários (likes, comentários, compartilhamentos) e intenções de doações. Ao analisar padrões de envolvimento e interações dos usuários, esta pesquisa contribui para preencher a lacuna de conhecimento sobre estratégias eficazes de mídia social para ONGs, distinguindo-se da literatura existente que predominantemente aborda entidades com fins lucrativos. Baseia-se em respostas de inquéritos de 206 utilizadores do Instagram com idades entre os 18 e os 38 anos. O SPSS foi utilizado para realizar testes estatísticos. Com o teste de Friedman, as diferenças nas métricas de envolvimento e nas intenções de doação foram avaliadas e analisadas.

Os resultados mostram uma diferença significativa nas métricas de envolvimento dos utilizadores em relação aos diferentes tipos de publicações. Posts com conteúdo remunerativo receberam o maior número de likes, comentários e compartilhamentos. Por outro lado, em relação às intenções de doação, não houve um resultado significativo relativamente. Isto sugere que podem existir outros fatores que influenciam as intenções de doação dos consumidores.

Palavras-chave: conservação dos oceanos; engajamento nas redes sociais; marketing no Instagram; organizações não governamentais (ONGs); estratégias de marketing digital

Sistema de Classificação JEL: Economia Ecológica (Q57); Marketing (M31); Instituições Sem Fins Lucrativos (L31); Busca; Aprendizado; Informação e Conhecimento; Comunicação; Crença; Desconhecimento (D83)

Abstract

The preservation of marine environments is a critical and urgent challenge, with far-reaching implications for the welfare of millions. Non-Governmental Organizations (NGOs) play a pivotal role in this effort, utilizing various strategies to raise awareness, influence policy, and engage the public in conservation efforts. In an era marked by digital connectedness, social media has emerged as a powerful tool for NGOs to enhance communication, awareness, and engagement. This thesis investigates the type of Instagram posts that most effectively drive user engagement for ocean protection NGOs, aiming to provide practical insights to enhance their social media strategies.

This study focuses on understanding how different types of Instagram posts (educational, emotional, remunerative, impact, call-to-action) influence user engagement metrics and donation intentions. This research contributes to filling the knowledge gap regarding effective social media strategies for NGOs with a focus on ocean protection, distinguishing itself from existing literature that primarily addresses for-profit companies. It is based on survey responses from 206 Instagram users between the ages from 18 to 38 years. SPSS was used to perform statistical tests. With the Friedman test, the differences in engagement metrics and donation intentions could be assessed and analyzed.

The results show a significant difference for user engagement metrics regarding different post types. Remunerative, followed by emotional posts received the most likes, comments and shares. For the donation intentions on the other hand, there was no significant outcome regarding the 5 post types. This suggests, that might be other factors which influence the consumers donation intention.

Keywords: ocean conservation; social media engagement; Instagram marketing; content types; non-governmental organizations (NGOs); digital marketing strategies

JEL Classification System: Ecological Economics (Q57); Marketing (M31); Nonprofit Institutions (L31), Search; Learning; Information and Knowledge; Communication; Belief; Unawareness (D83)

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1. Introduction

Addressing the ocean crisis with urgency is a matter of greatest significance, with direct implications for the welfare and survival of millions. Past and present activities have caused harm to the Earth's fundamental life-support system, affecting the prospects of current and future generations (Laffoley et al., 2020). Fortunately, there are organizations actively trying to safeguard the ocean through awareness campaigns, fundraising efforts, and concrete actions, such as, for example, organizing ocean clean-up initiatives (Vance & Rangeley, 2019). Non-Governmental Organizations (in the following: NGOs) are working on addressing some of the world's biggest challenges. Given the nature of their work, which typically operates without direct profit, researchers make significant contributions by helping these organizations achieve their missions. This includes, among other tasks, analyzing the factors driving NGO performance (Shah & George, 2021). Previous research concluded that marketing concepts and strategies effectively attract awareness and involvement, leading to increased donations, engagement, and volunteer work, ultimately supporting NGOs (Pio et al., 2021). Therefore, focusing on marketing strategies is essential for positive NGO development and growth.

In this era of digital connectedness, social media has emerged as a powerful marketing tool to enhance communication, awareness and engagement (Snoussi & Abdullah, 2020). NGOs recognize this potential and leverage social media platforms to advance their mission by connecting with individuals on a more personal level and disseminating information to effectively engage them to participate in the cause (Mehrotra & Siraj, 2021). Instagram is particularly powerful for enhancing their performance due to its broad reach and easy methods for interaction and engagement with the audience (Snoussi & Abdullah, 2020). Given this, it is vital to comprehend how to improve customer engagement rates, as user engagement serves as a fundamental indicator of success on Instagram (Schreiner et al., 2021).

Considering the critical significance of ocean protection and the pivotal role of supporting NGOs in their missions, alongside the immense potential for spreading awareness on Instagram, a potent social media platform, it becomes essential to combine these two areas. This thesis delves into these realms by researching which types of Instagram content from ocean protection NGOs receive higher engagement metrics and higher donation intentions.

1.1. Relevance of the topic

There is an urgent need for climate action; this is a fact confirmed by multiple studies (Deutsch et al., 2024; Ebarvia, 2016; Fesenfeld & Rinscheid, 2021; Jefferson et al., 2021; Laffoley & Baxter, 2016; Meerab, 2023; Sala et al., 2021; van Bommel & Höffken, 2023). A wide array of critical issues has to be dealt with. These include, but are not limited to, global warming and climate change, which threaten to disrupt weather patterns and global temperatures; ozone layer depletion, which increases harmful ultraviolet radiation reaching the earth; and the decline of biological diversity, which jeopardizes ecosystem stability and resilience (Kirschke & Newig, 2017). Another major concern is the disruption of the marine ecosystem, which is extremely sensitive to the impacts of climate change (González Hernández et al., 2023). The relevance of this research lies on its focus on a critical and timely issue: the preservation of marine environments. The ocean covers approximately 71% of the earth's surface and is crucial for regulating our climate and sustaining a variety of resources. The consequences of this ecosystem disruption are profound, impacting not only marine species and habitats but also the billions of humans reliant on the oceans for food, economic activities, and cultural identity (Visbeck, 2018). NGOs have proven to be effective in protecting the oceans, playing a pivotal role through activities such as raising awareness, influencing policies, and engaging the public in conservation efforts (Jung et al., 2014;Anheier & Toepler, 2022). In order to successfully communicate their messages and engage with the global community, NGOs need to implement effective communication strategies. However, there is a scarcity of resources regarding effective marketing strategies available to them. This makes it challenging for the organizations to effectively communicate their missions and raise awareness (Pio et al., 2021). By analyzing Instagram engagement strategies, this research contributes directly to environmental support, using social media as a powerful tool for promoting public awareness and action in ocean conservation (Šmelhausová et al., 2022).

1.2. Problem statement

According to Rietveld et al. (2021), businesses remain unsure about which social media content has the greatest potential to effectively impact user behavior in a positive manner. Moreover, as of today it is still unclear which kind of content drives consumer engagement. Furthermore, while previous research explored consumer engagement on social media for different industries, there is still a knowledge gap when it comes to social media profiles dedicated to marine conservation

(Rahman et al., 2022). This is critical because the approach required for NGOs focused on ocean conservation differs fundamentally from that of commercial businesses. NGOs do not primarily focus on creating content that drives product sales, but more on engaging audiences around complex environmental issues and motivating action that does not necessarily involve a direct purchase (Fong & Yazdanifard, 2015). This is why this thesis aims to address and bridge this existing research gap. We follow the advice from Confetto et al. (2023) and analyze the social media behavior in non-business context specifically focusing on its application within NGOs. Other studies from other industries suggested researching for other brand categories or other sectors as well (Bonilla-Quijada et al., 2023; Doyle et al., 2022).

1.3. Research purpose

Titled "Sustainable Social Media: Consumer engagement with marine conservation NGOs", this research endeavors to investigate the complex dynamics underpinning consumer engagement with NGO-generated content on social media in response to the urgent need for effective engagement strategies. By delving into the factors that inspire individuals to interact with and support NGOs' initiatives related to ocean conservation, this study seeks to not only enhance our comprehension of effective engagement strategies but also contribute to the overarching goal of preserving our oceans for current and future generations (Laffoley et al., 2020). This study distinguishes itself from the existing literature on user engagement and content strategies by differentiating between for-profit businesses and non-profit organizations, recognizing that they require distinct approaches to engage their audiences effectively (Dolnicar & Lazarevski, 2009). Researching this specifically for ocean protection NGOs and their presence on Instagram, a platform predominantly dedicated to image sharing, is a niche topic that has been relatively underexplored, with limited studies conducted in the past (Ison et al., 2024). To implement a successful marketing strategy, it is important to identify the most suitable content types, incorporating appeals customized to the specific requirements of the company (Ahmadi et al., 2023). By examining which types of content on Instagram generate the most user engagement, this research is expected to help ocean protection NGOs to gain practical insights and strategies that can help them maximize their impact resourcefully and efficiently and improve their social media presence.

1.4. Research question

This thesis aims to answer three key research questions by the end of the study:

1. How does the type of content (educational, emotional, remunerative, impact, call-to-action), posted by ocean protection NGOs on Instagram, influence user engagement metrics (likes, comments, shares) and donation intentions?
2. Do specific groups (gender, age or previous donation and engagement experiences) have impact on the engagement metrics and donation intentions?
3. What content types lead to the highest engagement metrics and donation intentions?

1.5. Research outline

This master thesis is divided into five main chapters.

The first chapter introduces the research problem and topic relevance, as well as the research purpose, research questions and the thesis structure.

After the introduction, a literature review will explore the importance of ocean protection and definitions of NGOs. Furthermore, the impact and influence of social media and the concepts of user engagement are explained. Moreover, in this chapter, the research hypotheses are developed based on existing literature. Also, the research model is presented and defined.

The third chapter covers the research methodology used for this study, and explains the survey's design and implementation, the structure of the questionnaire, as well as the methods used for data collection.

In the fourth chapter, the findings and the results of the study will be analyzed and presented through statistical testing, followed by a discussion and evaluation of the research hypotheses' validity.

The final chapter will cover the main conclusion of this research, answer the research questions and give theoretical and practical implications. Furthermore, it will cover proposed future research and limitations of the study.

2. Literature Review

The following literature review contains relevant academic works and research that aid in developing hypotheses and gaining insights into the primary subjects addressed in this study. Firstly, the role and significance of marine conservation will be examined. Following this, the significance of NGOs will be further analyzed. Subsequently, we will explore the potential benefits of social media marketing and delineate why Instagram serves as a fitting platform. Finally, the chapter will focus on user engagement behavior on Instagram, emphasizing the impact of content type on it. Hypotheses will be formulated based on the selected literature and the research model will be presented.

2.1. Ecology and preservation

2.1.1 Environmental concerns

Global warming is a serious issue. Climate scientists have been publishing alarming reports of climate change for decades already, emphasizing the importance of urgent actions to protect our home planet (van Bommel & Höffken, 2023).

A recent example is the IPCC's sixth assessment report, highlighting once more the risks and factors of climate change and the human influence on the climate system (Intergovernmental Panel on Climate Change, 2023). The environment is undoubtedly fundamental for the survival of our humankind and for fostering a sustainable human development, and numerous challenges must be addressed in order to establish an earth which makes a harmonious co-existence of the environment and the human population possible (Jianping et al., 2014). These challenges are a result of human impact as well as natural causes. However, there is a notable increase in human misbehavior, such as, for example, improper waste disposal, the extraction of natural resources and high energy consumption, which contribute to the increase in global warming (McGrath & Jonker, 2023). Concerns encompass a wide range of issues, including, but not limited to, global warming and climate change, ozone destruction, decline of biological diversity, marine pollution as well as challenges related to food and agriculture and the management of water resources and energy usage (Kirschke & Newig, 2017).

In 2022, the Pew Research Center came to the conclusion that climate change is a major threat for the human population (Poushter et al., 2022). In order to save our planet earth, various strategies on local, national and international levels, have been emerging. On the one side, there

are mitigation strategies aimed at reducing greenhouse gas emissions by transitioning to green energy sources and minimizing waste. On the other hand, there are adaptation strategies which are focusing on helping societies by building resilience and decreasing vulnerabilities to the impact of climate change (Meerab, 2023). However, progress in addressing climate change has been slow, since there seems to be a gap between people's concern about climate change and their actual actions (Fesenfeld & Rinscheid, 2021). Fesenfeld & Rinscheid (2021) therefore suggest highlighting the urgency of climate change to ultimately mobilize concerned citizens to actively support climate policies.

2.1.2. Ocean protection

The Earth's oceans hold a wealth of biodiversity, housing distinct life forms and genetic reservoirs that offer vital ecosystem services essential for human welfare (Sala et al., 2021). Nevertheless, marine biodiversity has been declining significantly over the last century. This is a result of overfishing, pollution and climate change, among others. Almost 66% of the oceans are heavily impacted by human activities (Halpern et al., 2015). In contrast, only around 2.7% of the oceans are highly protected. This figure is concerning as it falls short of meeting the necessary thresholds to effectively pursue global ecological and economic objectives. Researchers found out that at least 40% of the oceans have to be protected, in order to conserve marine species and biodiversity sustainably (Jefferson et al., 2021).

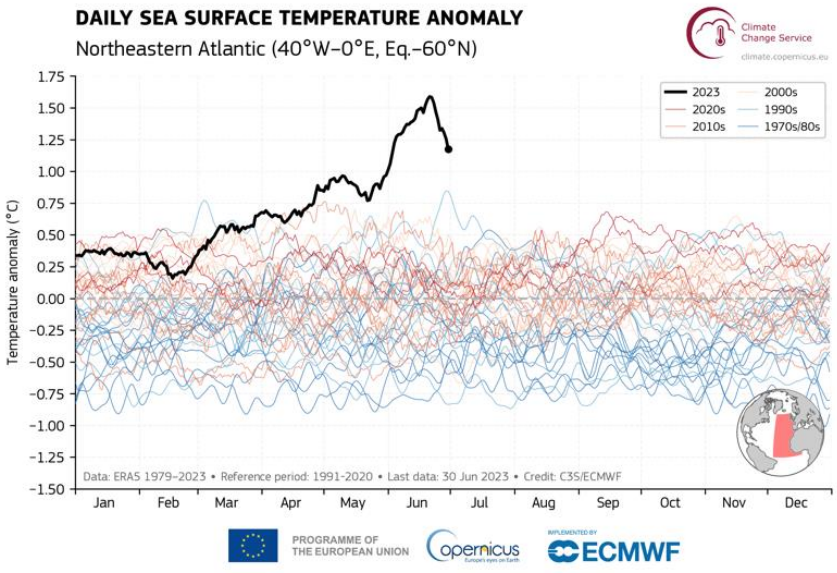
Pendleton et al. (2020) emphasize the critical need to safeguard the oceans, underscoring its role as the planet's life-support system. It stabilizes the climate and directly sustains human well-being by providing essential resources, such as food, minerals, and energy (Pendleton et al., 2020). The oceans significantly influence the oxygen we breathe, contributing more than half of the world's oxygen supply and adding a substantial amount to the atmosphere (Deutsch et al., 2024). Furthermore, the oceans provide home to a wide range of organisms. Ocean destruction directly impacts these species and affects biodiversity negatively (Laffoley & Baxter, 2016). From an economic point of view, the ocean represents a substantial economic asset due to its multiple resources and services, which include, among others, fisheries, shipping, tourism and energy production, as well as not quantifiable services, like shoreline protection or carbon sequestration (Ebarvia, 2016).

Although scientists have proven the great oceans' importance for the planet Earth (Deutsch et al., 2024; Jefferson et al., 2021; Pendleton et al., 2020; Sala et al., 2021), the degradation of the

ocean is escalating due to human actions (Halpern et al., 2015). Consequences like ocean warming, sea level rise, pollution and the intensification of extreme weather are affecting marine diversity significantly (González Hernández et al., 2023). Even more alarming is the accelerated pace of ocean destruction. Calado et al. (2012) for example state that offshore operations, which encompass a spectrum of activities such as oil and gas extraction, wind and wave energy production, fishing, aquaculture, dredging, mineral extraction, shipping, and cruising, have experienced noteworthy growth. Unfortunately, these endeavors are often marked by a lack of coordination and sustainability, leading to the deterioration and depletion of both oceanic and coastal biodiversity (Halpern et al., 2008).

According to the Copernicus Climate Change Service (2023), in late May, temperatures in the northeastern Atlantic usually began to climb, peaking at higher-than-usual levels around middle of June, as shown in the Daily SST Anomalies chart. In June 2023 however, temperatures were earlier in the season than what was commonly seen before, when such warmth typically arrived in late July. As shown in Figure 1.1, these changes are undergoing a significant evolution.

Figure 1.1 - *"Daily Sea Surface Temperatur Anomaly". Source:* Copernicus Climate Change Service (2023)



This ocean warming has, among others, a profound impact on the environment and climate, leading to ocean expansion, changes in stratification and currents, reduced oxygen levels, rising sea levels, and increased intensity of hurricanes and storms (Venegas et al., 2023). Furthermore, a multitude

of species, ranging from coral reefs, plankton, and algae to penguins, whales, and fish, are increasingly vulnerable to extinction and disruptions in their life cycle timing (Cannell et al., 2019). A study, investigated by Nguyen et al. (2018), states, that it is necessary to protect and rebuild the oceans in order to protect the whole eco-system. In order to do that, raising greater awareness about our oceans and the environment at large is of great importance (Easman et al., 2018).

2.2. NGOs

2.2.1. Definition

NGOs are third sector societies operating across fields like development, human rights, sustainability, environment, health or education (Hamilton et al., 2010). They primarily advocate for their missions, ideas, programs, and services rather than tangible goods (Fong & Yazdanifard, 2015) and are generally best known for two types of activities: Delivering services to those in need and organizing advocacy efforts and public campaigns to foster social transformation (Hamilton et al., 2010). In scholarly discussions, although "NGO" is prevalent, there are other interchangeable terms like "nonprofit organizations" or "voluntary organizations" used, reflecting cultural variations rather than distinct meanings (Hamilton et al., 2010). In this thesis, the terms mentioned will all be used.

The nonprofit sector comprises privately-run, voluntary organizations and associations dedicated to public service and not driven by profit (Anheier & Toepler, 2022). Goals may include fundraising, recruiting additional volunteers, raising awareness, and seeking corporate support (Fong & Yazdanifard, 2015). Although NGOs do not focus primarily on profit, this sector has become a major economic force. This is, amongst others, because of the increased need for human services, reforms in welfare systems, privatization policies and advancements in information and communication technology leading to decreased organizational costs (Anheier & Toepler, 2022).

One field which is strongly represented by NGOs is the environmental one. There are organizations for various environmental purposes, among these also the ones focusing on marine conservation and ocean protection (Vance & Rangeley, 2019). Their objective is to safeguard and preserve the oceans, employing both direct actions such as removing fishing equipment, defending animals and conducting ocean cleanups, as well as collaborating with law enforcement agencies and governments to strengthen laws and policies (Sea Shepherd Global, 2024).

2.2.2. Donations

In general, there are various ways on how to promote sustainability as an individual, including the purchase of environmentally friendly products, waste reduction or using public transportation. However, charitable donation remains one of the most effective actions (Zhang et al., 2019). NGOs usually rely on fundraising and donations in order to exist and to fund their activities. There is a significant correlation between the success of an NGO's fundraising efforts and improved conservation outcomes (Veríssimo et al., 2018). There are two sorts of donations that raise most consideration: money and time. Whereas time refers to activities such as volunteering, money represents financial help (Reed et al., 2007).

Analyzing the motivations behind donors is seen as quite a challenging area of research. Veríssimo et al. (2018) have come to the conclusion that it is very hard to find a relation between donor characteristics and spending patterns. However, there are indicators that describe donation motivations, based on previous studies. Aknin et al. (2017) found out that the emotional wellbeing of donors is higher after their donation. Ku & Zaroff (2014) wanted to explore the characteristics of donors and came to the conclusion, that individuals with higher intrinsic than extrinsic motivation are eager to donate a higher amount of money. In their case, higher intrinsic values were defined as higher community feeling and affiliation, whereas extrinsic values would be more materialistic values, such as the procurement of monies (Ku & Zaroff, 2014). In another study, analysts distinguished two conceivable motives for charitable contributions: altruistic and egoistic ones. Whereas the first one is known as seeking to improve the wellbeing of the ones in need, the second one involves enhancing one's own welfare (Bendapudi et al., 1996). Furthermore, Septianto et al. (2022) came to the conclusion that the amount of donations varied based on the nature of a disaster, with the predicted effects being weaker for man-made disasters compared to natural disasters. Having considered all these studies, it can be said that the motivations can really differ between each donor.

While analyzing demographic characteristics proves to be relatively straightforward, delving into the inner motivations of individuals presents significant challenges. However, marketing initiatives provide opportunities to enhance and influence these motivations. In the subsequent chapters of this thesis, this will undergo further analysis.

2.2.3. Marketing for NGOs

In the current landscape, NGOs face intense competition, necessitating the adoption of marketing strategies similar to for-profit organizations. While for-profit entities aim to sell products, NGOs primarily focus on promoting their mission and garnering support from the community (Dolnicar & Lazarevski, 2009). Even though merely 17% of NGOs worldwide maintain dedicated marketing departments, mostly due to a lack of resources (Pio et al., 2021), it remains imperative for them to utilize marketing strategies to raise awareness. That is because the greater the awareness among local citizens regarding the NGOs' presence, and the more the general public appreciates their commendable efforts, the higher the attention and broader the influence they can achieve (Easman et al., 2018). Nevertheless, Shah & George (2021) point out that marketing practices can be quite difficult to measure and that the marketing performance often relies on the behavior and attitude changes of the target segments. As a result, implementing marketing strategies can be quite a challenge for NGOs. Considering research findings which support the positive impact of marketing on advancing the missions of NGOs (Pio et al., 2021;Shah & George, 2021; Dolnicar & Lazarevski, 2009), underscoring its significance becomes essential.

Among the advantages of NGO marketing, but not limited to, are disseminating information about the organization, sharing articles and videos, promoting organizational events, and announcing donation opportunities (Pio et al., 2021). Shah & George (2021) published a study, confirming that an NGOs marketing practices positively influence the consumers' behavior. Moreover, since NGOs want to attract donations, they also have to attract the audiences, which is why marketing also serves as a social role (Pio et al., 2021). Pio et al. (2021) point out that social marketing, marketing concepts and strategies can indeed attract community awareness and evolvement. This can result in donations, voluntary work or evolvement in charitable events, some of the main supports for NGOs.

2.3. Social Media

2.3.1. Impact

The usage of social media has increased rapidly in the past years with 4.59 billion users worldwide in 2022, and an estimated 5.85 billion users until 2027 (Stacy Jo Dixon, 2022). The social media world can be characterized as extremely dynamic, with new applications every day. From a business point of view, almost every consumer brand is active on social media and integrates it in

their digital strategies (Voorveld, 2019). To reach more people in a faster way and with lower costs, social media is often used as an integrated communication tool (Snoussi & Abdullah, 2020). Moreover, social media facilitates managing customer relationships, brand promotion and, but not only, customer education. Marketers on social media cannot only connect with their existing audience but also tap into their extended network, creating a significant multiplier effect in reach and visibility (Tafesse & Wien, 2017).

For conservation organizations, the usage of social media can certainly be a useful data source and communication tool (Šmelhausová et al., 2022). Thus, it can motivate people to become involved in conservation activities (Jung et al., 2014). NGOs can promote their initiatives, build a community of supporters and create meaningful communication (van der Wal & Arts, 2015). Accountability, trust, and perceived legitimacy can be increased (Kaplan-Hallam & Bennett, 2018), as well as helping conservation goals (Bergman et al., 2022). Feng et al. (2017) came to the conclusion, that due to high competition for charitable resources and the drive to reach more consumers, an increasing number of managers are applying social media as an indispensable marketing tool. According to Rahman et al. (2022), websites are not enough anymore when it comes to having a digital presence. NGOs have to adapt to the consumer trend towards social media in order to reach their target audience online.

2.3.2. The power of Instagram

Instagram is a tool where users can like, comment on and share images or videos with shorter captions (Shaw et al., 2022). Out of all social media platforms, it emerges as a powerful instrument, leveraging its capacity to captivate individuals through visual content such as images and videos, as well as the simple approach to interact and engage with the companies (Snoussi & Abdullah 2020). This, in turn, plays a pivotal role in enhancing the effectiveness of a company's marketing strategy, fostering user relationships and expanding its audience reach. With more than 11 million active monthly users, Instagram is ranked in fourth place among social media platforms, coming after Facebook, YouTube and WhatsApp (Rahman et al., 2022). Despite that, there is evidence that Instagram is growing the fastest and has the highest engagement rate of all the social media platforms (Yew et al., 2018). Voorveld (2019) clearly indicates that Instagram will become the leading social media platform in the next few years. Research shows that images exceed words in conveying specific messages and enhancing user engagement. That is because their interpretation

relies on emotions, familiarity with the subject and memories (Shaw et al., 2022). Per Casaló et al. (2021), media agencies expect a surge in image-based communication, which aligns with the projected growth of the Instagram platform. Zhao et al. (2023) have analyzed the importance of visual content and come to the conclusion that content with image richness positively influences behavioral and emotional engagement. Given the increasing popularity of Instagram and the central focus of this thesis on engaging with social media users, Instagram emerges as a fitting platform to address the research inquiry.

2.4. User engagement on Instagram

The idea of user engagement can be described as the observable actions and behaviors exhibited by a customer towards a brand or company that extend beyond purchasing behavior driven by motivational drivers. One of these actions, among others, is interaction with the brand (Bijmolt et al., 2010). Schreiner et al. (2021) say that user engagement can be seen as a synonym for the interaction with content. This marks a transition from transactional marketing to relationship marketing. Customer engagement in this context has the potential to cultivate customer loyalty and foster a positive, enduring connection with the brand (Lim & Rasul, 2022). Bernritter et al. (2016) came to the conclusion that there are various positive aspects for the users when engaging with Instagram content, such as, for example, social, informational, time and effort, economic and personal treatment benefits.

Muntinga et al. (2011) state, that there are three types of engagement with brand-related content on social media. These three types are distinguished by their level of activeness and divided into the categories consumption, contribution and creation. Consumption describes the more passive activities, such as, for example, viewing brand related videos and pictures, reading comments on brand profiles and their posts or following a brand page. These are actions that require the minimum engagement (Rahman et al., 2022). Contribution describes a mid-range level of engagement and includes behaviors such as, for example, liking and commenting on a brand post. The ultimate level of active consumer behavior is creation and includes producing customer-generated content. An example of this could be uploading brand related videos (Muntinga et al., 2011). Generally, it can be said that the engagement rate quantifies the volume of responses and interactions that content on social media elicits from users (Jaakonmäki et al., 2017). It is important

to consider that brands target different market segment, which is why their social media strategy should be adapted accordingly to achieve the right results (Rahman et al., 2022).

User engagement is a key indicator to measure success on social media activities for companies (Schreiner et al., 2021). A study conducted by Lim & Rasul (2022) revealed that brands have benefitted from enhancing the customer engagement rate on their social media platforms. Hence, comprehending the factors motivating consumers to engage with content is crucial for companies (Rietveld et al., 2021). In this thesis, two forms of user engagement will be further analyzed: user engagement metrics on Instagram (likes, comments and shares) and donation intentions after seeing specific Instagram posts.

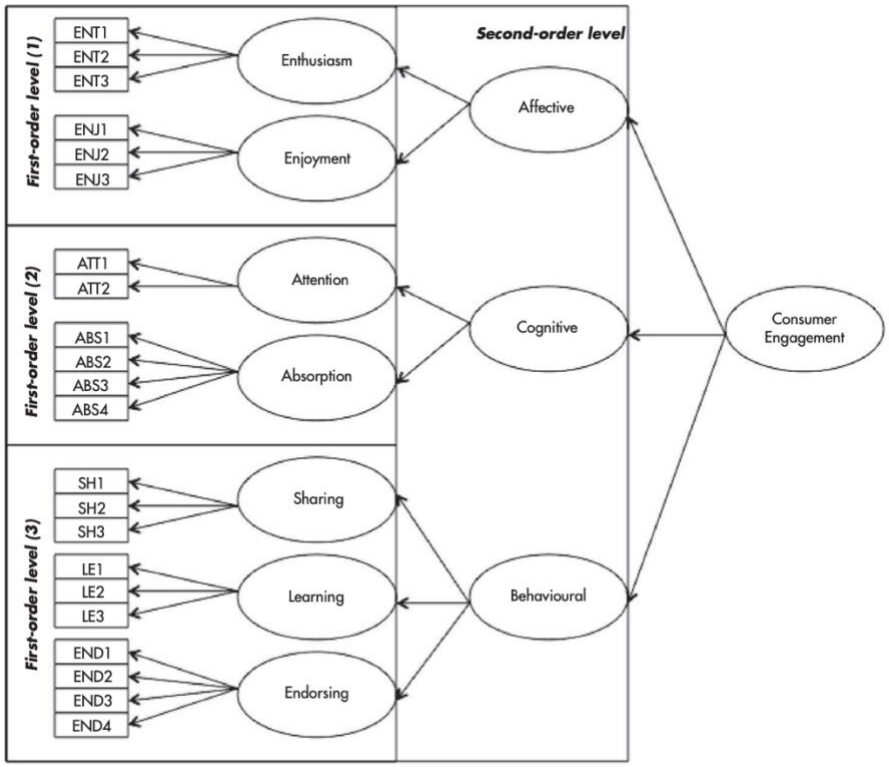
2.4.1. Measurements and analytics

Measuring user engagement is necessary for evaluating whether the sender is successful in engaging the receivers (Lalmas et al., 2014). Social media generates extensive and dynamic data that organizations can monitor, analyze and measure, in order to enhance their online presence. Engagement metrics are, among others, the number of users, click-through rates, likes, comments, shares or page visits. They depend on the social media platform that is used (Drivas et al., 2022).

Scholars have developed various metrics and procedures to measure user engagement, which can generally be divided in qualitative and quantitative methods. An example of a qualitative method would be the model of Dessart et al. (2016). They came up with a 22-item scale with three dimensions, which can be used to operationalize engagement with multiple objects (see Figure 2.1). The dimensions include affective, behavioral and cognitive categories with the 7 sub-dimensions enthusiasm, enjoyment, attention absorption, sharing, learning and endorsing. This research addresses the need for a better understanding of engagement across various contexts and the need for a more nuanced understanding of engagement (Dessart et al., 2016).

In comparison, when evaluating existing studies and literature, the most common way of analyzing user engagement in a quantitative way is the enumeration of likes, comments and shares (Ángeles Oviedo-García et al., 2014; Rietveld et al., 2020; Schivinski et al., 2016). Following the methodologies of these previous studies, this quantitative method is adapted for implementation in the thesis when measuring the engagement metrics likes, comments and shares, as well as donation engagement.

Figure 2.1 – *"22-item model of consumer engagement". Source: Dessart et al. (2016)*



2.4.2. User motivation

Multiple factors play a role in influencing users' motivation to interact with content on Instagram. In order to maintain a systematic approach, the Uses and Gratification (U&G) theory is being adopted to understand the motivations of users to engage with different kind of content (Pletikosa Cvijikj & Michahelles, 2013). This theory explains how people select media that fulfills their specific needs, enabling them to achieve gratifications like gaining knowledge, finding entertainment and relaxation, engaging in social interactions, and receiving rewards or compensation. It also supports the perspective that consumers are rather active than passive recipients of media (Dolan et al., 2016). Within the U&G framework, there is evidence that users engage with brands on social media because of one of the following reasons: Social Interaction, Brand Love, Affinity for Instagram, Brand Admiration, Entertainment, Decision Making, and Information (Choi et al., 2023). The findings of Choi et al. (2023) underscore the importance of emotional connections and high-quality visual content in fostering a strong social presence, ultimately enhancing user satisfaction and brand loyalty. Understanding these motivations can also

help NGOs craft more compelling and effective content strategies to engage their audience and promote environmental conservation.

2.4.3. Factors influencing engagement rates

Analyzing the factors that influence engagement rates can be considered as a challenge, as a large number of variables are involved in this process, which are also highly individualized. For this reason, the outcomes on the following analysis will be based on the research of Schreiner & Riedl (2019). They devised a model based of 5 categories, given that each of these has an impact on user engagement. These 5 categories are: *community, content context, medium, receiver, sender*. Each of these categories comprises various subcategories, as shown in Figure 2.2 below (Schreiner & Riedl, 2019).

The category *community* received the lowest level of attention, indicating that in existing literature this one is the least prominent. Researchers argue that the strength within a network can influence the engagement behaviors (Muller & Peres, 2019). Moreover, there is evidence that the shares of positive as well as negative comments received from a community are positively related to the number of comments (de Vries et al., 2012).

The highest amount of attention was given to the category *content*. Here, an important sub-chapter was the perceptions of emotions. It has been proved that the visual emotional appeals are a driver of consumer engagement behavior in terms of comments and likes (Rietveld et al., 2020). Similarly, the timing of the posting, as well as the content strategy are also fundamental sub-categories (Cvijikj et al., 2011).

Result in the *medium* category were, amongst others, that the social media platform makes a difference in user engagement (Shahbaznezhad et al., 2021). That can be explained through the nature of the platform – while Instagram focuses on visual content, images on Facebook show lower engagement rates.

When analyzing the category *receiver*, it can be said that the user's motivation, trust and attributes, such, for example, social media usage and interest, are influencing the engagement rate (Kim et al., 2015).

In the category *sender*, a lot of attention from previous studies was given to the subcategory origin of the sender. There, elements like industry type, product type or brand type were considered

to have potential influence on user engagement, meaning that different industries post different content (Schultz, 2017).

Figure 2.2 - *"Main categories of influential sources". Source: Schreiner & Riedl (2019)*

Main categories of influential sources																											
Community			**Context of content**								**Medium**				**Receiver**								**Sender**				
14 articles			30 articles								21 articles				31 articles								34 articles				
Sub-categories of influential sources																											
Visible community engagement	Impact of network and relations	**Total**	Popular content types & topics	Content/social media strategy	Emotional perception	Multichannel integration	Position	Seeding	Time	**Total**	Device type	Platform type	Ranking algorithm	**Total**	Content/receiver relation	Context of receiver	Culture	Customer attributes	Demography	Privacy	Psychological factors	**Total**	Branding factors	Content/sender relation	Invested resources	Origin	Sender/brand relation	**Total**
6	9	**15**	11	12	13	2	1	4	12	**55**	1	20	1	**22**	2	1	10	12	3	1	18	**47**	3	1	2	29	5	**40**
Number of articles																											

2.4.4. Content types

As seen in the previously discussed model of Schreiner and Riedl (2019), the type of content is a crucial factor influencing user engagement. This finding is supported by the research of Pletikosa Cvijikj & Michahelles (2013) as well as Shahbaznezhad et al. (2021), who concluded that the type of content significantly affects engagement levels. Recognizing the significance of content types, this research examines various types of content by categorizing them into five of the most prevalent categories identified by previous literature and most often seen in an ocean protection NGOs Instagram account. In the following, these categories are defined, and hypotheses are formulated. In addition, reference is made to the study by Velivela et al. (2022) which found a correlation between engagement metrics such as likes, comments, and shares and donation intentions. Although this correlation was identified in the context of overall social media presence rather than specific content types, we assume that higher levels of likes, shares, and comments will correspond with higher donation intentions for the same content type, which is why the hypotheses are categorized as follows: Hypothesis "a" investigates how different types of content influence user engagement metrics (likes, comments and shares), while Hypothesis "b" examines how the same content types affect donation intentions.

2.4.4.1. Emotional posts

Emotional posts intend to evoke consumers' emotions. They can contain emotional language, inspiring stories or humor/sadness (Tafesse & Wien, 2017). Individuals who have less motivation or ability to process a message cognitively will be a better target for emotional posts. In the past it was already confirmed that emotions can be recognized as an important and effective communication element (Lee et al., 2018). NGOs have the distinct opportunity to strategically use emotional narratives, as their content often involves strong emotional themes and triggers (Ison et al., 2024). Inspired by Lee et al. (2018) due to the high similarity of their research context to this thesis, the following hypotheses are made, based on their findings:

H1a: Emotional posts will result in higher engagement metrics (likes, comments, shares) compared to other content types.
H1b: Emotional posts will result in higher donation intention compared to other content types.

2.4.4.2. Educational posts

Educational appeals tend to be fact-based and more rational. Visuals provide relevant information, educate or reduce uncertainty. Especially users who want to gain knowledge or solutions to specific problems are a suitable audience for this kind of content (Rietveld et al., 2021). Intellectual stimulation is being provided to the consumer, which can lead to higher engagement (Tafesse & Wien, 2017). This is why the following hypotheses are being made:

H2a: Educational posts will lead to higher engagement metrics (likes, comments, shares) compared to other content types.
H2b: Educational posts will lead to higher donation intention compared to other content types.

2.4.4.3. Call-to-action posts

Call-to-action posts typically serve as a stimulus that encourage users to undertake specific actions. These actions are generally associated with brand-related objectives and can encompass a wide range of activities, from purchasing products to engaging with content or other forms of online interaction. When using these persuasive tactics, companies want to increase engagement (Weiger et al., 2018). We follow Weiger et al.'s (2018) suggestion that call-to-action posts can make

customers feel that their contributions within the brand community are impactful. This perceived effectiveness can enhance their sense of competence, thereby motivating them to engage more actively. That is why the following hypotheses are being formulated:

H3a: Call-to-action posts will result in higher engagement metrics (likes, comments, shares) compared to other content types.
H3b: Call-to-action posts, will result in higher donation intention compared to other content types.

2.4.4.4. Impact posts

In discussions about nature conservation, a negative tone is often employed in order to engage the audience through fear. However, emphasizing conservation efforts in a positive light, such as, for example, highlighting conservation achievements, can significantly strengthen support for both science and conservation initiatives (Balmford & Knowlton, 2017). Research indicates that presenting individuals solely with ecological problems, rather than solutions or initiatives, can result in disengagement. Success stories are essential for sustaining public engagement in conservation efforts (Balmford & Knowlton, 2017). Considering this, the following hypotheses are being made:

H4a: Impact posts will lead to higher engagement metrics (likes, comments, shares) compared to other content types.
H4b: Impact posts will lead to higher donation intention compared to other content types.

2.4.4.5. Remunerative posts

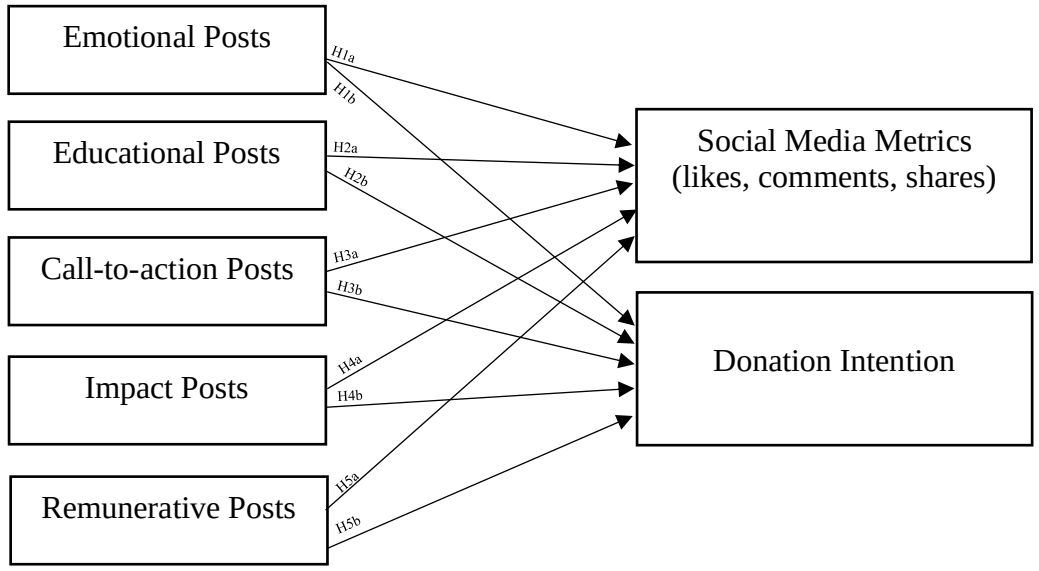
Given previous studies, there is evidence that remunerative posts might motivate consumers to engage, since they expect some kind of future award, such as, for example, economic incentives or personal wants (Muntinga et al., 2011). According to Pletikosa Cvijikj & Michahelles (2013) remunerative content can drive both, passive and active social media engagement among users, which can then also lead to a higher donation intention. Based on this study, the following hypotheses are formulated:

H5a: Remunerative posts will result in higher engagement metrics (likes, comments, shares) compared to other content types.
H5b: Remunerative posts will result in higher donation intention compared to other content types.

2.5. Conceptual Model

This study aims to investigate the influence of different content types of Instagram posts on user engagement metrics (likes, comments and shares) and donation intention. The analysis will consider five distinct content types utilized by ocean protection NGOs: emotional (H1), educational (H2), call-to-action (H3), impact (H4) and remunerative (H5) posts. The goal is to find out, how strong their level on influence is on the dependent variables. The theoretical framework, illustrated in Figure 2.3, provides an overview of the research approach.

Figure 2.3 - Proposed research model



3. Methodology

In the following chapter, the development of the empirical study is described, in particular the design of the study and the implementation and evaluation of the survey.

3.1. Research approach

This research aims to test the proposed hypothesis and to answer the research questions. The goal of this study is to test the hypothesized relationship between the independent variables and the dependent variables. This approach will provide practical insights into how ocean protection NGOs can optimize their social media strategies to enhance user engagement and support for ocean protection initiatives. Therefore, a quantitative research study in the form of a survey was conducted to gather data from a diverse group of Instagram users. Surveys are a highly favored method in research as they are efficient, versatile and can collect large amount of data quickly and cost-efficiently. Besides, a quantitative research study allows to reach a large sample and generalize results (Jones et al., 2013). For this reason, they are considered to be the appropriate method for this study.

3.2. Data collection and sample

3.2.1. Questionnaire Development

An experimental questionnaire was designed through the Qualtrics Software. The data was also collected there. Since this study investigates the effectiveness of different content types, the participants were shown five conditions (the independent variables: call-to-action, remunerative, emotional, educational or impact post example) and had to rate their likelihood in engaging with or donating because of this content. The order of the pictures shown was randomized and different for each participant; however, every participant had to rate every post example. There was a single link for the participants which randomized the order automatically. As everyone globally could participate, the survey was developed in English, in order to make sure that people worldwide could understand. The NGO “Sea Shepherd” was selected to represent ocean protection organizations. With a substantial following of 1.2 million and a significant global online presence, “Sea Shepherd” ensures the representation of an official and influential NGO in this study. The chosen posts were all real and were posted at some point in the past. To avoid introducing any unnecessary additional influencing factors, the numbers of likes and comments were removed, as previous studies have

shown that these can affect engagement intentions (Bakshy et al., 2012). The posts were selected based on criteria deemed appropriate for each category, as identified in previous literature (Balmford & Knowlton, 2017; Ison et al., 2024; Mejtoft et al., 2021; Muntinga et al., 2011; Tafesse & Wien, 2017; Weiger et al., 2018) as well as based on the outcomes of two focus groups, where 8 participants were asked to evaluate whether the posts were adequately aligned with the intended objectives of the study (Appendix C).

The survey started with a short introduction and general explanation of rules. The participants were informed about the aim of the study and that their data would be treated anonymously and confidentially. The real part of the survey was then divided into four parts: The first part was to find out if the participant is eligible to participate in the survey. Only people between the age 18-38 who had an Instagram account were allowed to take part. This is, because this study focuses on generation Z and Millennials and Instagram users. If they did not fulfill these two criteria, the survey ended for them there.

The second part was about the participants' social media behavior. The survey explored the frequency of Instagram usage and included questions regarding participants' interests in ocean conservation and their awareness of the organization "Sea Shepherd". Given that "Sea Shepherd's" posts were utilized for the survey, it was essential to determine participants' familiarity with the organization and assess whether any pre-existing opinions could influence their responses. Additionally, participants were asked if they had previously engaged with or donated to NGOs, in order to analyze whether past engagement impacts their answers.

The third part of the survey was the main focus. The five posts with the different content types were presented. Respondents were asked to imagine that they are scrolling on their Instagram feed and coming across these specific posts. Participants were asked to indicate their likelihood of engaging with the content (liking, commenting, and sharing) and whether they would intent to donate to this NGO based on the posts. These questions were posed for each independent variable to enable comparative analysis later.

The last part was to find out about the participant's profile. Some basic demographic information, specifically age, gender, nationality, highest level of education and current occupation of the person was collected as these factors can potentially influence behaviors or intentions. After answering the questions, the participants were thanked for their participation and assured that their answers were recorded.

In order to receive high quality answers, 5 attention check questions were added in the survey. To be considered a valid response, the participants needed to answer at least four of the attention checks questions correctly. Those who failed this check were not considered in the study (Berinsky et al., 2024).

3.2.2. Stimuli

To ensure that the questionnaire included the appropriate posts for each of the five categories and that classifications were validated by multiple perspectives, a focus group was conducted. It was crucial to confirm that the selected posts aligned with the research objectives and the proposed categories. This qualitative research involved two focus groups, each consisting of four participants, to gather primary data on the suitability of the chosen posts. Existing literature confirms that focus groups are an effective method for researchers aiming to delve into a topic comprehensively. They are particularly useful for testing narratives and refining questionnaires (Nyumba et al., 2018), which aligns perfectly with the purpose in this study.

All eight participants were selected based on availability, constituting a convenience sample. They were between the ages of 18-38 and had an Instagram account, ensuring alignment with the survey criteria that required these attributes for participation was given. Similar to the survey, there were no restrictions regarding the participants' countries of origin, enhancing the international and global representativeness of the study, so that in the end there were three participants from Germany, one from France, one from Switzerland, one from Portugal, one from the United States and one from Colombia. The focus group discussions were held in person, in a neutral environment. Each discussion had a duration of about 20 minutes. The entire interview was recorded and later transcribed (Appendix C). The questions were made before the start of the discussions, making it a guided interview. It consisted of two parts: the first part was about the classification of the posts. The participants needed to classify each post to one of the given categories without knowing how the others classified them. The second part included the discussion, where they had to argue why they believed that the given posts would belong to their chosen category.

The focus group discussions validated the categorization of the posts, as all participants consistently classified the posts into the same categories without any exceptions. Participants found the categorization process straightforward and intuitive, understanding clearly why each post

belonged to its respective category. With this confirmation, the survey could confidently proceed using the selected posts for the chosen categories.

3.2.3. Data measurements and scales

The questions in the questionnaire were formulated using scales from the existing literature to accurately measure each variable in the model. Table 3.1 below shows the number of items of each scale and associates each variable with its respective scale's author.

Table 3.1 - *Scales authors and number of items*

Variable	Scale's Author	Number of items
User Engagement Metrics (likes, comments, shares)	Salonen et al. (2024)	3
Donation Intention	Lee & Hong (2016) (adapted)	2

All items from the mentioned scales were rated using a 5-point Likert scale ranging from 1 (most unlikely) to 5 (most likely). Past donation experiences and familiarity with the NGO "Sea Shepherd" as well as demographic information were used as control variables. For demographic variables, gender was categorized as "female", "male", "other" and "prefer not to say". Age was grouped into three categories: "1" for ages 18-24, "2" for ages 25-30, and "3" for ages 31-38. Education levels were divided into six categories: "1" represents high school or lower, "2" a bachelor's degree, "3" postgraduation degree, "4" a master's degree, "5" PhD, and "6" others. Occupation was categorized according to the type of employment with "1" being student, "2" for working student, "3" for employed, "4" for unemployed and "5" for others. Last, for the country of origin, the participants could choose from a list with all available countries (all this information is shown in Appendix B).

3.2.4. Samples

The target population of this study is every Instagram user worldwide between the age 18-38 (Generation Z and Y). The participants were recruited over a period of 52 days via a link that was distributed among various Instagram and other online social media channels across multiple countries. Participation was accessible via desktop as well as via mobile devices. The questionnaire was forwarded to people worldwide, making it a convenience sample. All people who did not pass

4/5 of the attention check questions, were under 18 or over 38 years old, did not have an Instagram account or did not complete the full survey were excluded. This resulted in a sample of 206 valid questionnaires out of 242 questionnaires received, which were included in the analysis.

Table 3.2 provides an overview of the socio-demographic characteristics of the sample. The participants were geographically diverse, with the three largest groups coming from Germany (n=37), the United Kingdom (n=20), and the United States of America (n=19). There were participants coming from various other countries as well, however, for efficiency reasons only the three largest groups are being mentioned in the table. In terms of gender distribution, 57% (n=117) of the sample were female, while 42% (n=86) were male, demonstrating a relatively balanced representation. More than half of the people (n=114) were between 25 and 30 years old. The sample also indicated a trend towards higher education, with 42% having completed a bachelor's degree (n=86) and 29% (n=60) possessing qualifications even beyond that level (postgraduation or master). Occupation status was also assessed, revealing that the majority of the participants (n=109) with a percentage of 53 were currently employed, whereas 66 participants were either students or working students at the time of the participation.

Table 3.2 - *Sociodemographic characteristics of the sample*

	n	%
Age		
18-24	71	34.5
25-30	114	55.3
31-38	21	10.2
Gender		
Female	117	56.8
Male	86	41.7
Non-binary, third gender	2	.97
Other / Prefer not to say	1	.49
Education		
Highschool or lower	53	25.7
Bachelor's degree	86	41.7
Post-graduation	27	13.1
Master's degree	33	16.0
PhD	3	1.5
Other	4	1.9
Current Situation		
Student	39	18.9
Working Student	27	13.1
Employed	109	52.9
Unemployed	21	10.2
Other	10	4.9
Country of Residence		
Germany	37	18.0
United Kingdom of Great Britain and Northern Ireland	20	9.7
United States of America	19	9.2
Other Country	130	63.1

Notes. N = 206

4. Results

In order to analyze the results from the survey statistically, all the data collected from the questionnaire were uploaded directly to IBM SPSS 29 Statistics. First, the descriptive statistics were analyzed, followed by a reliability and validity test to make sure that the data are accurate and consistent. To answer the hypothesis, the Friedman test was used, since all the necessary criteria for using this non-parametric test were met. In addition, the Friedman test was also used to determine whether there are potential significant differences among various (demographic) groups in terms of the results.

4.1. Descriptive Statistics

Descriptive statistics are fundamental in statistical analysis as they provide a comprehensive overview of the data, including summarizing measures of central tendency (mean) and dispersion (standard deviation and variance) to understand the underlying patterns and trends in engagement metrics and donation behavior (Dong, 2023). For this thesis, descriptive statistics provide an initial overview of the mean ranks for the engagement metrics and the donation intentions among the survey respondents. The engagement metrics were measured through the variables likes, comments and shares and the donation intention through two questions adapted from previous research (Lee & Hong, 2016).

As shown in Appendix D, the mean number of likes received by different post types indicates that remunerative and emotional posts are the most liked ones, both with a mean of 3.67. Impact posts on the other side received the lowest average number of likes, with a mean of 3.42. The standard deviation for the engagement metric “likes” is relatively consistent across post types, reaching from .076 to .091, which suggests comparable variability in the number of likes that each post type receives.

In terms of comments, it can be seen that the means are generally lower than those in the case of the likes, which indicates that there is a higher tendency for users of liking a post rather than commenting on it. Remunerative posts again had the highest average of comment intentions (3.06), while the impact posts show the lowest mean with a value of 2.53. The variability in comments is comparable across post types, with standard deviations ranging from 0.087 to 0.091. That indicates that there is a consistent pattern in commenting behavior.

With regards to the shares, the remunerative posts continue to have the highest mean with a value of 3.08, while impact posts once again show the lowest mean, with a value of 2.67. The standard deviation for shares is slightly higher than for the comments and indicates that the variability is consistent among all of the five post types.

The donation intentions were measured through two questions in the survey: "I might donate to this NGO" (referred to as donation 1) and "It is worth donating to this NGO" (referred to as donation 2) (See Appendix D). The values are relatively comparable, ranging from a mean of 3.12 (call-to-action posts) to 3.22 (emotional posts) for the first donation variable, donation 1, and from 3.70 (remunerative post) to 3.80 (emotional post) for the second one, donation 2. That shows that overall, the emotional posts demonstrate the highest means for both variables, whereas the call-to-action post showed the lowest donation intention for donation 1 and the remunerative posts the lowest for donation 2. The standard deviations were similar for all types of posts, ranging from .081 (educational post) to .088 (impact post) for donation 1, and from 0.75 (educational and emotional post) to 0.76 (impact, remunerative and call-to-action post) for donation 2. That indicates that the observed mean ranks were consistently close to the overall mean across participants (Dong, 2023).

4.2. Reliability and Validity

A reliability analysis with Cronbach's alpha was used to assess the internal consistency of the scales used. As a result, the alpha coefficients of all the variables regarding the engagement reached $\alpha >$ .71, with the variables reaching from 0,718 for the call-to-action posts to 0.859 for the impact posts (see Appendix E). This, according to Taber (2018), means that the model is internally reliable. For the donation variable, the alpha coefficients for all independent variables ranged between 0.743 and 0.867, meaning that they as well can be considered as reliable.

When testing validity, the KMO and Bartletts Test of Sphericity were used to test if the instruments measure what they are intended to measure as well as the strength of the relationship among the tested variables. The Bartlett test is significant for all variables and with KMO values being above .5 (see Appendix F), it can be said that there is convergent validity for each variable as they correlate with the respective scale by at least .5 (Shrestha, 2021). The data of the tests further corroborate that the variance explained by the engagement metrics ranges from 74.12% to 79.03%, while the variance explained by the donation metrics ranges from 78.14% to 81.84%. These findings indicate that the factors effectively capture the variance within these metrics.

4.3. Statistical testing

4.3.1. Friedman test and dependent variables by content

To assess the differences in engagement metrics (likes, comments, shares) and donation intentions and compare the outcomes between the different types of posts - impact, educational, remunerative, emotional and call-to-action, the Friedman test was used. This test was chosen due to the non-normal distribution of engagement and donation metrics and was also considered because of the comparison of the 5 post type variables which require repeated measures. Another reason why this approach is considered valid is that it aims to identify the most effective type of contribution for each individual by making significant comparisons between different respondents (Pereira et al., 2015). The analysis aims to understand the extent to which different post types influence engagement metrics and donation intent, thereby assessing the validity of the hypotheses.

The results of the Friedman test for the likes, demonstrated in Table 4.1, show, that there are significant results for the user engagement metric variables. For the likes, the chi square has a value of 14.075 with a p-value of $p < 0.007$. That indicates that there is a statistically significant difference in the number of likes received by different types of posts. Emotional and remunerative posts receive the highest mean ranks (3.19 for emotional and 3.16 for remunerative), indicating that they are liked more than other types of posts, whereas the impact post received the least mean rank, with a value of 2.83.

For the comments (see Table 4.2), there is also evidence that the remunerative and the emotional post types generate higher engagement than the rest of the post types. Remunerative posts have the highest Friedman mean rank with a value of 3.31, suggesting they have the highest likelihood of receiving comments. The impact posts again received the lowest mean rank (2.71), indicating that there is less tendency to comment on this post. With a chi square value of 30.848 and $p < 0.001$, the difference in the number of comments compared by post type is significant.

Table 4.1 - *Friedman test "Likes"*

Variables	***Like Impact***	***Like Education***	***Like Remunerative***	***Like Emotional***	***Like Call-to-action***
Mean	3.42	3.5	3.67	3.67	3.44
SD	1.311	1.233	1.197	1.212	1.259
Mean rank (Friedman)	2.83	2.98	3.16	3.19	2.85
Chi Square	14.075	14.075	14.075	14.075	14.075
Asymp sign	.007	.007	.007	.007	.007

Notes. SD = Standard deviation

Table 4.2 - *Friedmann test "Comments"*

Variables	***Comment Impact***	***Comment Education***	***Comment Remunerative***	***Comment Emotional***	***Comment Call-to-action***
Mean	2.53	2.75	3.06	2.89	2.64
SD	1.248	1.301	1.294	1.289	1.268
Mean rank (Friedman)	2.71	3.01	3.31	3.13	2.84
Chi Square	30.848	30.848	30.848	30.848	30.848
Asymp sign	.001	.001	.001	.001	.001

Notes. SD = Standard deviation

For the shares (see Table 4.3), the chi square value is 22.732 with $p < 0.001$, suggesting that there is a significant difference also in the number of shares among different post types is given. Remunerative posts with the highest mean rank of 3.23 show the highest likelihood of sharing the post. Additionally, emotional posts, with the second-highest mean rank of 3.14, can be identified as a post type that significantly drives engagement as well, while impact posts, with a mean rank of 2.71, ranked the lowest, meaning that it is likely to receive the least shares.

Table 4.3 - *Friedmann test "Shares"*

Variables	***Share Impact***	***Share Education***	***Share Remunerative***	***Share Emotional***	***Share Call-to-action***
Mean	2.67	2.9	3.08	2.95	2.81
SD	1.265	1.344	1.338	1.322	1.328
Mean rank (Friedman)	2.71	3.02	3.23	3.14	2.89
Chi Square	22.732	22.732	22.732	22.732	22.732
Asymp sign	.001	.001	.001	.001	.001

Notes. SD = Standard deviation

After analyzing each engagement metric individually, the three variables were aggregated into a single variable, the user engagement metrics variable, which also served as the dependent variable in the conceptual model. In Table 4.4 it is visible, that the Friedman test results indicate a significant difference in the overall user engagement metrics among different types of posts with a chi square value of 30.834 and $p < 0.001$. The mean ranks of remunerative (3.30) and emotional (3.23) posts are the two highest, whereas the impact post type with a value of 2.65 indicates the lowest engagement. As remunerative posts received the highest Friedman mean rank, it can be assumed that this post type is the most effective when it comes to receiving higher user engagement metrics, supporting the hypothesis that remunerative posts result in higher engagement metrics compared to other content types. The high mean rank of emotional posts also suggests that they are effective in generating overall user engagement, supporting the hypothesis that emotional posts lead to higher engagement metrics. Educational posts, with a mean rank of 3.03, generate higher engagement than impact and call-to-action posts, but less than emotional and remunerative posts. This indicates that educational posts are effective but not the most engaging. As they still receive higher engagement in comparison to other post types, the hypothesis can also be accepted. Impact posts show the lowest mean rank (2.65), indicating they generate the least engagement among the post types analyzed. This finding does not support the hypothesis that impact posts result in higher engagement metrics compared to other post types. Call-to-action posts have a mean rank of 2.80, which is higher than impact posts but lower than educational, emotional, and remunerative posts. Although this suggests that they may not be the most effective post type for generating user engagement on Instagram, they still receive higher engagement compared to other post types. Therefore, the hypothesis can still be considered valid.

Table 4.4 - *Friedmann test "Total engagement metrics"*

Variables	***All engagement Impact***	***All engagement Education***	***All engagement Remunerative***	***All engagement Emotional***	***All engagement Call-to-Action***
Mean	2.8706	3.0485	3.267	3.1699	2.9628
SD	1.126	1.118	1.115	1.098	1.143
Mean rank (Friedman)	2.65	3.03	3.3	3.23	2.8
Chi Square	30.834	30.834	30.834	30.834	30.834
Asymp sign	.001	.001	.001	.001	.001

Notes. SD = Standard deviation

The second dependent variable, the donation intention, was firstly measured through the two items "donation 1" (Table 4.5) and "donation 2" (Table 4.6) and then aggregated into one donation variable (Table 4.7) which serves as the dependent variable in the conceptual model. In comparison to the user engagement variable, the donation intention shows a different result. The Friedman test results reveal no significant differences in donation intention among the different types of posts (with the post type mean ranks of 2.90 for impact, 3.01 for educational, 2.95 for remunerative, 2.99 for call-to-action and 3.14 for the emotional post type for the variable "donation all"). That outcome is indicated by a chi square value of 3.919 and an asymp. significance (p-value) of $p < 0.417$. Although emotional posts have the highest mean rank and impact posts have the lowest, these differences are not statistically significant. These findings indicate that, contrary to the made hypotheses, the type of post (impact, educational, remunerative, emotional, call-to-action) does not significantly influence donation intention and it cannot be said that any of the given post types generate more donations. This suggests that other factors beyond the type of post may be more critical in driving donation intention, as the observed data does not provide enough evidence that there is a significant difference.

Table 4.5 - *Friedmann test "Donation 1"*

Variables	***Donation 1 Impact***	***Donation 1 Education***	***Donation 1 Remunerative***	***Donation 1 Emotional***	***Donation 1 Call-to-action***
Mean	3.15	3.18	3.15	3.21	3.12
SD	1.261	1.162	1.212	1.164	1.204
Mean rank (Friedman)	2.95	3.00	2.97	3.11	2.97
Chi Square	2.215	2.215	2.215	2.215	2.215
Asymp sign	.696	.696	.696	.696	.696

Notes. SD = Standard deviation

Table 4.6 - *Friedmann test "Donation 2"*

Variables	***Donation 2 Impact***	***Donation 2 Education***	***Donation 2 Remunerative***	***Donation 2 Emotional***	***Donation 2 Call-to-action***
Mean	3.72	3.74	3.69	3.79	3.73
SD	1.088	1.075	1.093	1.071	1.09
Mean rank (Friedman)	2.93	3.03	2.9	3.13	3.01
Chi Square	4.848	4.848	4.848	4.848	4.848
Asymp sign	.303	.303	.303	.303	.303

Notes. SD = Standard deviation

Table 4.7 - *Friedmann test "Total donation"*

Variables	***Donation all Impact***	***Donation all Education***	***Donation all Remunerative***	***Donation all Emotional***	***Donation all Call-to-action***
Mean	3.43	3.46	3.43	3.50	3.43
SD	1.054	1.003	1.042	0.997	1.014
Mean rank (Friedman)	2.9	3.01	2.95	3.14	2.99
Chi Square	3.919	3.919	3.919	3.919	3.919
Asymp sign	.417	.417	.417	.417	.417

Notes. SD = Standard deviation

4.3.2. Friedman statistical testing with different groups

In the previous chapters, the effectiveness of various content types in driving engagement metrics and donation intentions was examined among a general audience, the survey participants. However, in order to refine social media strategies for ocean protection NGOs, it is essential to gain insight into how different demographic and behavioral groups respond to these content types. This chapter employs the Friedman test, a non-parametric statistical method used to detect differences in treatments across multiple test attempts (Pereira et al., 2015), to investigate these variations. The objective of this chapter is to explore whether the influence of content types on engagement metrics and donation intentions varies according to control variables gender, age, previous donation and engagement experience and awareness of the NGO "Sea Shepherd".

The analysis of user engagement metric intentions across different content types reveals several statistically significant differences (Table 4.8 and 4.9). This suggests that engagement intentions are sensitive to the type of content presented, particularly across different demographic and behavioral groups.

In Table 4.8, the two demographic control variables age and gender were analyzed and compared. Starting with gender, the analysis shows significant differences in user engagement intentions across the five content types. For males, the mean ranks ranged from 2.57 for impact post, to 3.26 for the remunerative post, with a chi square of 12.843 and an asymp. sig. value of 0.012, indicating statistical significance. This suggests that males are more likely to engage with remunerative content compared to the other types. Females also showed significant differences, with the lowest mean rank of 2.75 for call-to-action posts and the highest one for remunerative posts with a value of 3.32, with a chi square of 17.504 and an p-value of 0.002. Both genders are most likely to engage with remunerative posts. However, males ranked impact posts as the lowest, while females ranked call-to-action posts as the lowest in terms of driving engagement.

The second demographic group that was analyzed was age, as visible also in Table 4.8. Age also shows significant differences in user engagement intentions. With $p < 0.001$ and a chi square of 18.591, the youngest age group, 18-24 years, indicates a highly significant variability in engagement intentions across content types. This group showed a strong preference for remunerative and emotional content, with mean ranks of 3.36 and 3.34, whereas the impact post obtained the lowest mean rank value of 2.51. The age group 25-30 also showed significant differences, with an asymp. sig. value of 0.007 and a chi square of 13.995, suggesting that content

type significantly influences engagement intentions within this group as well. With a Friedman mean rank value of 3.28, the remunerative posts received the highest engagement, whereas the impact post again received the lowest one (2.71). In contrast, the 31-38 age group did not show significant differences, with an asymp. sig. value of 0.814 and a chi square of 1.573, indicating that their engagement intentions are less influenced by content type.

The findings indicate that younger audiences are significantly more responsive to certain content types, with a particular tendency to engage most with remunerative and emotional posts and less with impact posts.

Table 4.8 - *Friedmann demographic group tests for engagement metrics*

Variable		***Impact Mean rank***	***Education Mean rank***	***Remunerative Mean rank***	***Emotional Mean rank***	***Call-to-Action Mean rank***	***Asymp. Sig.***	***Chi Square***
Gender	Male	2.57	3.13	3.26	3.17	2.87	.012	12.843
	Female	2.72	2.95	3.32	3.26	2.75	.002	17.504
Age	18-24	2.51	3.02	3.36	3.34	2.77	< .001	18.591
	25-30	2.71	3.01	3.28	3.22	2.78	.007	13.995
	31-38	2.74	3.14	3.21	2.90	3.00	.814	1.573

In addition to the demographic groups, it was also tested if previous engagement with and donations to NGOs, as well as awareness of the NGO "Sea Shepherd" would play a role in analyzing which content types are the most effective ones (see Table 4.9). Awareness of "Sea Shepherd" was measured by the survey question "Do you know the NGO "Sea Shepherd" with the answer possibilities "Yes, and I follow it", "Yes, but I don't follow it" and "No". While analyzing this control group, there is significant difference in user engagement intentions. Followers of the NGO showed a strong preference for remunerative content, with a mean rank of 3.88, whereas the impact post type was the least effective with a Friedman mean rank of 2.55. With an asymp. sig. value of 0.040 and a chi square value of 10.049, there are significant differences, indicating that content type influences how the users engage with the organization. Those aware of "Sea Shepherd" but not following it also showed significant differences, with an asymp. sig. value of 0.033 and a chi square of 10.459. Within this group, the emotional posts received the highest mean with a value of

3.26. The lowest mean rank was the one for the impact post with a value of 2.56. Those unaware of “Sea Shepherd” also showed significant differences in engagement intentions, with an asymp. sig. value of 0.003 and the chi square being 15.928, ranging from mean ranks of 3.28 (remunerative posts) to 2.71 (impact posts). This indicates that content type plays a crucial role in shaping user engagement intentions, regardless of prior awareness of the NGO.

Another group was analyzed on the basis of whether they had engaged with NGOs on Instagram before or not. Those with prior engagement showed significant differences, with an asymp. sig. value of 0.004 and a chi square of 15.347, indicating that content type strongly influences how they engage. In particular, this group showed a preference for emotional content, with a mean rank of 3.42 for those who engaged already with an NGO, whereas the ones who did not engage in the past ranked the remunerative posts the highest (3.35). The lowest mean rank for both groups was the one of the impact posts with 2.60 for those who engaged before and 2.68 for those who did not.

The last control variable group was analyzed regarding their previous donation behavior. Both groups, the ones who previously donated to NGOs, as well as the ones who did not, showed a significant tendency to engage with remunerative posts (3.30) the most, the first group with an asymp. sig. value of .052 and a chi square of 9.412 and the second one with an asymp. sig. being less than 0.001 and the chi square value being 24.215. The lowest mean rank was the one for the call-to-action post (2.63) for previous donors, and impact posts (2.57) for non-donors.

In conclusion, the statistical analysis reveals that engagement intentions are significantly influenced by content type across various demographic and behavioral groups. These findings underscore the importance of tailoring content to specific audience segments to maximize engagement. For ocean protection NGOs like “Sea Shepherd”, these insights can inform more effective social media strategies that not only drive engagement but also build a stronger connection with potential supporters. Given all the different groups, the most effective content type when it comes to generating engagement is the remunerative post type, followed by the emotional one. Impact post remains the least successful post type among almost every group.

Table 4.9 - *Friedman past behavior group tests for engagement metrics*

Variable		***Impact Mean rank***	***Education Mean rank***	***Remunerative Mean rank***	***Emotional Mean rank***	***Call-to-Action Mean rank***	***Asymp. Sig.***	***Chi Square***
Do you know the NGO "Sea Shepherd"?	Yes, and follower	2.55	2.68	3.88	3.15	2.75	.040	10.049
	Yes, but no follower	2.56	3.13	3.16	3.26	2.88	.033	10.459
	No	2.71	3.03	3.28	3.23	2.76	.003	15.928
Previous engagement with NGOs on Instagram	Yes	2.60	2.92	3.22	3.42	2.84	.004	15.347
	No	2.68	3.09	3.35	3.11	2.77	< .001	18.912
Previous donation to NGOs	Yes	2.82	3.05	3.30	3.21	2.63	.052	9.412
	No	2.57	3.02	3.30	3.24	2.88	< .001	24.215

When analyzing donation intentions across different content types, the Friedman test reveals that the majority of the differences observed were not statistically significant. This suggests that, irrespective of the content type, the willingness to donate remains fairly consistent within each demographic and behavioral subgroup (see Table 4.10 and 4.11).

Regarding the demographics, age and gender were selected as control variables (Table 4.10). The males mean ranks for donation intentions across different content types vary from 2.85 for impact posts to 3.09 for remunerative posts. However, with a p-value of 0.780 and a chi square of 1.760, these differences are not statistically significant. Similarly, females showed slightly higher variability, particularly with emotional posts (3.22), but the overall p-value of 0.258 and the chi square of 5.299 indicates no significant difference in donation intentions based on the type of content. These findings suggest that while there may be slight preferences for certain content types for both genders, neither gender exhibits strong variability in donation intentions across the types of content analyzed.

Age groups also exhibited minimal significant variation in donation intentions across content types. The youngest age group, 18-24 years, displayed mean ranks ranging from 2.84 (impact donations) to 3.19 (education donations), but with an asymp. sig. value of 0.384 and a chi

square of 4.168, these differences were not statistically significant. The same pattern was observed in the 25-30 and 31-38 age groups, where the asymp. sig. values were 0.678 and 0.906, and the chi square values 2.318 and 1.027, respectively. For the 25–30-year-olds, emotional posts were ranked highest (3.16) and impact posts were ranked lowest (2.93). In contrast, for the 31–38-year-olds, both remunerative and emotional posts were ranked highest (3.12), while educational posts were ranked lowest (2.81). Although the mean rank values for the post types varied in the different age groups, these results imply that age does not significantly influence how different content types affect donation intentions. The lack of significant variation in how age groups respond to different content types implies that age-related differences in donation intentions are minimal.

Table 4.10 - *Friedmann demographic group test for donation*

Variables		***Impact Mean rank***	***Education Mean rank***	***Remunerative Mean rank***	***Emotional Mean rank***	***Call-to-Action Mean rank***	***Asymp. Sig.***	***Chi Square***
Gender	Male	2.85	3.06	3.09	3.04	2.96	.780	1.760
	Female	2.94	2.96	2.85	3.22	3.03	.258	5.299
Age	18-24	2.84	3.19	2.84	3.12	3.01	.384	4.168
	25-30	2.93	2.94	2.99	3.16	2.98	.678	2.318
	31-38	2.98	2.81	3.12	3.12	2.98	.906	1.027

Table 4.11 shows the results for the groups' previous engagement with and donations to NGOs and awareness of the NGO "Sea Shepherd". They all showed similar results.

For those who know and follow "Sea Shepherd", donation intentions ranged from a mean rank of 2.65 for emotional donations to 3.38 for call-to-action donations. However, with a p-value of 0.335 and a chi square of 4.564, these differences were not significant. Those aware of "Sea Shepherd" but not following it showed the highest mean rank for the emotional posts (3.16) and the lowest for the remunerative posts (2.81), but also did not show significant differences in

donation intentions, with an asymp. sig. value of 0.411 and a chi square of 3.965. The group which did not know the NGO "Sea Shepherd" before, was the only one showing significant differences with a p-value of .039 and a chi square of 10.088. In this group, the emotional posts received the highest donation intentions with a Friedman mean rank of 3.22, whereas the impact post showed the lowest donation intention (2.77). With this result being significant, it can be said that people who do not know the NGO "Sea Shepherd" would most likely donate after seeing an emotional post.

When considering previous engagement with NGOs on Instagram, those with prior engagement demonstrated slightly higher mean ranks for some content types, such as 3.17 for call-to-action donations, in comparison with the lowest rank of 2.80 for the remunerative posts. Yet, the asymp. sig. value of 0.333 and the chi square value of 4.851 confirm that these differences are not statistically significant. Similarly, those without previous engagement showed no significant variation in donation intentions, with an asymp. sig. value of 0.098 and a chi square of 7.831. For this group, the impact post was ranked the lowest (2.80) and the emotional post was ranked the highest (3.17).

Previous donation behavior also did not show any significant differences, as the asymp. sig. values were 0.778 and 0.145 and the chi squares 1.768 and 6.829 for previous donors and for non-donors. While previous donors demonstrated the highest mean rank for the call-to-action posts (3.10) and the lowest to the educational post (2.85), the group which did not donate in the past to NGOs showed the highest rank for the emotional post (3.19) and the least for the impact post (2.82).

In summary, the Friedman test indicates that while there are minor variations in mean ranks across different content types, none of these variations are statistically significant within the context of donation intentions, except the group that did not know the NGO "Sea Shepherd".

This suggest that emotional posts are the most effective post types in terms of generating higher donations by the people who were not aware of "Sea Shepherd". Other than this and considering the other control variables, donation behaviors are relatively stable, but not significant across different demographic and behavioral subgroups, regardless of the type of content presented. This finding is critical for NGOs like Sea Shepherd, as it suggests that content type alone may not be a decisive factor in influencing donation behavior among their audience.

Table 4.11 - *Friedman past behavior group test for donation*

Variables		***Impact Mean rank***	***Education Mean rank***	***Remunerative Mean rank***	***Emotional Mean rank***	***Call-to-Action Mean rank***	***Asymp. Sig.***	***Chi Square***
Do you know the NGO "Sea Shepherd"?	Yes, and follower	3.23	3.08	2.68	2.65	3.38	.335	4.564
	Yes, but no follower	3.05	2.84	2.81	3.16	3.15	.411	3.965
	No	2.77	3.10	3.07	3.22	2.84	.039	10.088
Previous engagement with NGOs on Instagram	Yes	3.08	2.85	2.80	3.10	3.17	.333	4.581
	No	2.80	3.11	3.04	3.17	2.88	.098	7.831
Previous donation to NGOs	Yes	3.08	2.85	2.92	3.05	3.10	.778	1.768
	No	2.82	3.09	2.97	3.19	2.94	.145	6.829

5. Discussion

5.1. Key findings

The aim of this study was to identify which content types drive higher engagement metrics and donation intentions by having participants evaluating their likelihood of interacting with five different types of posts. The results are summarized in Table 5.1 below. There are significant positive effects for four of the variables that were analyzed (remunerative, emotional, call-to-action, and educational posts). However, the fifth variable, impact posts, did not demonstrate a higher effect on user engagement metrics or donation intentions. Moreover, while four out of five independent variables significantly impacted user engagement metrics positively, none of the five variables demonstrated a significant difference in their effect on donation intentions. This suggests that other factors may exert a greater influence on donation intentions than the content type.

Table 5.1 - *Summary of results for hypotheses testing*

Hypothesis	Relationship	Result
H1a	Emotional posts will result in higher engagement metrics (likes, comments, shares) compared to other content types.	Accepted
H1b	Emotional posts will result in higher donation intention compared to other content types.	Rejected
H2a	Educational posts will result in higher engagement metrics (likes, comments, shares) compared to other content types.	Accepted
H2b	Educational posts will result in higher donation intention compared to other content types.	Rejected
H3a	Call-to-action posts will result in higher engagement metrics (likes, comments, shares) compared to other content types.	Accepted
H3b	Call-to-action posts will result in higher donation intention compared to other content types.	Rejected
H4a	Impact posts will result in higher engagement metrics (likes, comments, shares) compared to other content types.	Rejected
H4b	Impact posts will result in higher donation intention compared to other content types.	Rejected
H5a	Remunerative posts will result in higher engagement metrics (likes, comments, shares) compared to other content types.	Accepted
H5b	Remunerative posts will result in higher donation intention compared to other content types.	Rejected

Throughout the study, all three research questions could be answered. This will further be evaluated in the following:

1. *How does the type of content (educational, emotional, remunerative, impact, call-to-action), posted by ocean protection NGOs on Instagram, influence user engagement metrics (likes, comments, shares) and donation intentions?*

It can be said that the type of content significantly influences user engagement metrics (likes, comments, shares) but has less impact on donation intentions. Educational, call-to-action and especially remunerative and emotional posts were found to have a positive effect on engagement metrics, driving higher interaction from users. Impact posts resulted in significantly lower engagement metrics compared to the other four content types. Regarding donation intentions, none of the content types led to significant differences, suggesting that other factors beyond content type may play a more crucial role in influencing donation behavior.

2. *Do specific groups (gender, age, awareness of the NGO or previous donation and engagement experiences) have impact on the engagement metrics and donation intentions?*

The Friedman group tests showed subtle differences in results across various groups. While the remunerative post type generated the highest engagement metrics across all demographic groups, emotional posts ranked highest in engagement metrics for individuals who were already familiar with the NGO “Sea Shepherd” but were not followers, as well as for those who had previously engaged with NGOs on Instagram. This indicates that certain groups influence engagement metrics differently, offering valuable insights for tailoring content to specific target audiences. Regarding the donation intentions it is to say that one group did indeed have an impact. While most groups did not show significant results, the group unfamiliar with the NGO "Sea Shepherd" was the only one to show a significant difference in donation intention. This finding suggests that exposure to certain post types could potentially drive higher donation intentions among individuals with no prior knowledge of the NGO.

3. *What content types lead to the highest engagement metrics and donation intentions?*

Given the test results it can be said, that remunerative and emotional post types lead to the highest engagement metrics, followed by call-to-action and educational posts. This was the result

of several Friedman tests with different groups taken. As the only significant result for donation intention came from the group unfamiliar with the NGO "Sea Shepherd," the emotional posts received the highest ranking within this group.

Based on these results, the findings ofSchreiner & Riedl (2019), Pletikosa Cvijikj & Michahelles (2013) and Shahbaznezhad et al. (2021) can be supported in this research. Their assertion that user engagement metrics are influenced by the type of content could be confirmed by the significant outcomes observed in this research. However, this study contradicts the findings of Velivela et al. (2022), who concluded that engagement metrics on Instagram are correlated with donation intentions. While this thesis found significant results for engagement metrics, it did not find any significant results for donation intention. Therefore, this thesis cannot confirm that post types resulting in higher engagement metrics also lead to higher donations. Regarding the specific type of contents, the assumptions from Lee et al. (2018); Pletikosa Cvijikj & Michahelles (2013); Tafesse & Wien (2017) and Weiger et al. (2018), that emotional, educational, call-to-action and remunerative posts can influence the engagement positively can be confirmed, due to the significant result of higher engagement metrics in comparison to impact posts.

5.2. Theoretical contribution

This research adopts an innovative approach by focusing on ocean protection NGOs and their strategies for enhancing social media engagement, thereby contributing to existing literature. Given the limited research on what drives success for NGOs on social media (Saxton & Wang, 2014), this thesis aims to enhance understanding by exploring how engagement metrics and donation intentions can be increased on Instagram. The study focuses on five distinct content types, emotional, educational, call-to-action, impact and remunerative posts, identified through an analysis of frequently appearing posts on an ocean protection organization’s Instagram page. Given the differences between marketing strategies employed by for-profit companies and NGOs, it is essential to consider different post types and marketing techniques (Dolnicar & Lazarevski, 2009). Several studies analyzed engagement on social media for for-profit companies and recommended to further explore specific niche sectors, as each sector differs from the others when it comes to building effective online marketing strategies (Bonilla-Quijada et al., 2023; Doyle et al., 2022). In response to Bonilla-Quijada et al. (2023) and Doyle et al. (2022)’s suggestion, this study focuses on the niche, yet crucial sector of ocean protection.

5.3. Managerial implications

The findings of this research provide invaluable insights for marine conservation NGOs, offering them a framework for optimizing their social media strategies. The study demonstrates that emotional and remunerative posts are especially effective in generating user engagement on Instagram. Posting these content types is more likely to result in a greater number of likes, comments, and shares, thereby increasing the reach and impact of the content. As a conclusion of that, it is recommended that NGOs give priority to these types of posts in their content strategies.

Despite the effectiveness of these content types in enhancing user engagement metrics, the research showed no statistically significant correlation between content type and donation intentions. This indicates that, while engaging content can enhance likes, comments and shares, it may not be a sufficient standalone strategy to drive donations. To address this issue, NGOs should investigate additional strategies on how to influence donation behavior on their Instagram accounts. It is crucial to comprehend and address the elements that influence donation intentions beyond the characteristics of the social media content.

The study also underscores the significance of considering demographic variations and past engagement patterns when forming social media strategies. Engagement patterns differ across diverse behavioral groups, and content that resonates with one group may not receive the same response from another. NGOs should therefore adapt their content in order to align with the preferences and behaviors of different audience segments. Customizing content for different groups based on these insights can enhance user engagement.

In conclusion, ocean protection NGOs seeking to maximize their impact on Instagram should focus on the creation and sharing of content that is emotional and remunerative, followed by educational content or content containing calls-to-action. This approach is likely to drive higher user engagement. While these content types enhance engagement, NGOs should also develop additional strategies to address donation intentions through social media.

5.4. Limitations and future research

The present study provides insightful findings in the field of content analysis for ocean protection NGOs on Instagram. Despite some significant contributions and practical outcomes gained from this study, it is important to note some limitations that might affect the generalization of the results. Firstly, a limitation to consider is the selection of only five post types for analysis. In reality, social

media content is far more diverse, encompassing a wide range of formats and strategies that were not included in this study (Tafesse & Wien, 2017). The chosen post types may not fully represent the breadth of content that ocean protection NGOs could potentially post, and different post types which are not included in this study might change the outcome.

Another limitation concerns the possibility that elements, other than the post type itself, may have influenced engagement. For example, aspects such as the graphics, color schemes, or even the overall design of the posts could have played a significant role in driving engagement (Schreiner & Riedl, 2019). This study did not isolate these factors, making it difficult to determine whether the observed effects were solely due to the post type or were influenced by other visual or aesthetic components.

Another limitation pertains to the fact that the study did not include the number of likes, comments or shares associated with the posts, which in real-world social media contexts could influence user behavior. In practice, social proof - such as seeing that a post has received a large number of likes - can significantly impact an individual's likelihood to like, comment or share with or to donate because of a post (Bakshy et al., 2012). The absence of this consideration means that the study's findings may not fully represent how users would behave in an actual social media environment.

In conclusion, while the study offers meaningful insights into the effectiveness of different social media post types for an ocean protection NGO, it is essential to contextualize the findings within the limitations of the study. The limitations of this study suggest that future research should explore a broader range of post types, consider additional influencing factors such as visual elements and social proof, and examine different NGOs to enhance the generalizability of the results. Additionally, one area that offers opportunities for future research is an in-depth examination of the factors that influence donation intentions. Although this study did not identify any significant effects of post type on donation behavior, it would be beneficial to examine additional variables that may influence donation decisions. For example, future studies could investigate the role of trust in the NGO, the perceived urgency of the cause, or the framing of donation appeals. A deeper investigation of these factors could enable NGOs to develop more targeted and practical strategies for increasing donations through social media.

Bibliography

Ahmadi, A., Taghipour, A., Fetscherin, M., & Ieamsom, S. (2023). Analyzing the influence of celebrities' emotional and rational brand posts. *Spanish Journal of Marketing - ESIC*, *27*(1), 117–136. https://doi.org/10.1108/SJME-12-2021-0238

Aknin, L. B., Mayraz, G., & Helliwell, J. F. (2017). The emotional consequences of donation opportunities. *The Journal of Positive Psychology*, *12*(2), 169–177. https://doi.org/10.1080/17439760.2016.1163409

Amanda McGrath, & Alexandra Jonker. (2023, November 28). *What are environmental issues?* IBM. https://www.ibm.com/topics/environmental-issues

Ángeles Oviedo-García, M., Muñoz-Expósito, M., Castellanos-Verdugo, M., & Sancho-Mejías, M. (2014). Metric proposal for customer engagement in Facebook. *Journal of Research in Interactive Marketing*, *8*(4), 327–344. https://doi.org/10.1108/JRIM-05-2014-0028

Anheier, H. K., & Toepler, S. (2022). *Nonprofit Organizations*. Routledge. https://doi.org/10.4324/9780429299681

Bakshy, E., Eckles, D., Yan, R., & Rosenn, I. (2012). Social influence in social advertising. *Proceedings of the 13th ACM Conference on Electronic Commerce*, 146–161. https://doi.org/10.1145/2229012.2229027

Balmford, A., & Knowlton, N. (2017). Why Earth Optimism? *Science*, *356*(6335), 225–225. https://doi.org/10.1126/science.aan4082

Bendapudi, N., Singh, S. N., & Bendapudi, V. (1996). Enhancing Helping Behavior: An Integrative Framework for Promotion Planning. *Journal of Marketing*, *60*(3), 33. https://doi.org/10.2307/1251840

Bergman, J. N., Buxton, R. T., Lin, H.-Y., Lenda, M., Attinello, K., Hajdasz, A. C., Rivest, S. A., Tran Nguyen, T., Cooke, S. J., & Bennett, J. R. (2022). Evaluating the benefits and risks of social media for wildlife conservation. *FACETS*, *7*, 360–397. https://doi.org/10.1139/facets-2021-0112

Berinsky, A. J., Frydman, A., Margolis, M. F., Sances, M. W., & Valerio, D. C. (2024). Measuring Attentiveness in Self-Administered Surveys. *Public Opinion Quarterly*, *88*(1), 214–241. https://doi.org/10.1093/poq/nfae004

Bernritter, S. F., Verlegh, P. W. J., & Smit, E. G. (2016). Why Nonprofits Are Easier to Endorse on Social Media: The Roles of Warmth and Brand Symbolism. *Journal of Interactive Marketing*, *33*, 27–42. https://doi.org/10.1016/j.intmar.2015.10.002

Bijmolt, T. H. A., Leeflang, P. S. H., Block, F., Eisenbeiss, M., Hardie, B. G. S., Lemmens, A., & Saffert, P. (2010). Analytics for Customer Engagement. *Journal of Service Research*, *13*(3), 341–356. https://doi.org/10.1177/1094670510375603

Bonilla-Quijada, M., Del Olmo, J. L., Andreu, D., & Ripoll, J. (2023). Customer engagement on Instagram for luxury fashion brands: An empirical comparative analysis. *Cogent Social Sciences*, *9*(1). https://doi.org/10.1080/23311886.2023.2235169

Calado, H., Bentz, J., Ng, K., Zivian, A., Schaefer, N., Pringle, C., Johnson, D., & Phillips, M. (2012). NGO involvement in marine spatial planning: A way forward? *Marine Policy*, *36*(2), 382–388. https://doi.org/10.1016/j.marpol.2011.07.009

Cannell, B. L., Thomson, P. G., Schoepf, V., Pattiaratchi, C. B., & Fraser, M. W. (2019). Impacts of marine heatwaves. In *Marine Extremes* (pp. 123–140). Routledge. https://doi.org/10.4324/9780429491023-8

Casaló, L. V., Flavián, C., & Ibáñez-Sánchez, S. (2021). Be creative, my friend! Engaging users on Instagram by promoting positive emotions. *Journal of Business Research*, *130*, 416–425. https://doi.org/10.1016/j.jbusres.2020.02.014

Choi, J. H., Kang, M., & Choi, T. R. (2023). Why Do You Engage with Brand on Instagram? Consumer Motivations for Engaging with Global Brands. *International Journal on Social and Education Sciences*, *5*(3), 626–642. https://doi.org/10.46328/ijonses.564

Confetto, M. G., Covucci, C., Addeo, F., & Normando, M. (2023). Sustainability advocacy antecedents: how social media content influences sustainable behaviours among Generation Z. *Journal of Consumer Marketing*, *40*(6), 758–774. https://doi.org/10.1108/JCM-11-2021-5038

Copernicus Climate Change Service. (2023, July 6). *Record-breaking North Atlantic Ocean temperatures contribute to extreme marine heatwaves*. Copernicus Climate Change Service. https://climate.copernicus.eu/record-breaking-north-atlantic-ocean-temperatures-contribute-extreme-marine-heatwaves

Cvijikj, I. P., Spiegler, E. D., & Michahelles, F. (2011). The Effect of Post Type, Category and Posting Day on User Interaction Level on Facebook. *2011 IEEE Third Int'l Conference on Privacy, Security, Risk and Trust and 2011 IEEE Third Int'l Conference on Social Computing*, 810–813. https://doi.org/10.1109/PASSAT/SocialCom.2011.21

de Vries, L., Gensler, S., & Leeflang, P. S. H. (2012). Popularity of Brand Posts on Brand Fan Pages: An Investigation of the Effects of Social Media Marketing. *Journal of Interactive Marketing*, *26*(2), 83–91. https://doi.org/10.1016/j.intmar.2012.01.003

Dessart, L., Veloutsou, C., & Morgan-Thomas, A. (2016). Capturing consumer engagement: duality, dimensionality and measurement. *Journal of Marketing Management*, *32*(5–6), 399–426. https://doi.org/10.1080/0267257X.2015.1130738

Deutsch, C., Penn, J. L., & Lucey, N. (2024). Climate, Oxygen, and the Future of Marine Biodiversity. *Annual Review of Marine Science*, *16*(1), 217–245. https://doi.org/10.1146/annurev-marine-040323-095231

Dolan, R., Conduit, J., Fahy, J., & Goodman, S. (2016). Social media engagement behaviour: a uses and gratifications perspective. *Journal of Strategic Marketing*, *24*(3–4), 261–277. https://doi.org/10.1080/0965254X.2015.1095222

Dolnicar, S., & Lazarevski, K. (2009). Marketing in non-profifit organizations : an international perspective. In *International Marketing Review* (Vol. 26, Issue 3, pp. 275–291). https://ro.uow.edu.au/commpapers/572

Dong, Y. (2023). Descriptive Statistics and Its Applications. *Highlights in Science, Engineering and Technology*, *47*, 16–23. https://doi.org/10.54097/hset.v47i.8159

Doyle, J. P., Su, Y., & Kunkel, T. (2022). Athlete branding via social media: examining the factors influencing consumer engagement on Instagram. *European Sport Management Quarterly*, *22*(4), 506–526. https://doi.org/10.1080/16184742.2020.1806897

Drivas, I. C., Kouis, D., Kyriaki-Manessi, D., & Giannakopoulou, F. (2022). Social Media Analytics and Metrics for Improving Users Engagement. *Knowledge*, *2*(2), 225–242. https://doi.org/10.3390/knowledge2020014

Easman, E. S., Abernethy, K. E., & Godley, B. J. (2018). Assessing public awareness of marine environmental threats and conservation efforts. *Marine Policy*, *87*, 234–240. https://doi.org/10.1016/j.marpol.2017.10.030

Ebarvia, M. C. M. (2016). Economic Assessment of Oceans for Sustainable Blue Economy Development. *Journal of Ocean and Coastal Economics*, *2*(2). https://doi.org/10.15351/2373-8456.1051

Feng, Y., Du, L., & Ling, Q. (2017). How social media strategies of nonprofit organizations affect consumer donation intention and word-of-mouth. *Social Behavior and Personality: An International Journal*, *45*(11), 1775–1786. https://doi.org/10.2224/sbp.4412

Fesenfeld, L. P., & Rinscheid, A. (2021). Emphasizing urgency of climate change is insufficient to increase policy support. *One Earth*, *4*(3), 411–424. https://doi.org/10.1016/j.oneear.2021.02.010

González Hernández, M. M., León, C. J., García, C., & Lam-González, Y. E. (2023). Assessing the climate-related risk of marine biodiversity degradation for coastal and marine tourism. *Ocean & Coastal Management*, *232*, 106436. https://doi.org/10.1016/j.ocecoaman.2022.106436

Halpern, B. S., Frazier, M., Potapenko, J., Casey, K. S., Koenig, K., Longo, C., Lowndes, J. S., Rockwood, R. C., Selig, E. R., Selkoe, K. A., & Walbridge, S. (2015). Spatial and temporal changes in cumulative human impacts on the world's ocean. *Nature Communications*, *6*(1), 7615. https://doi.org/10.1038/ncomms8615

Halpern, B. S., Walbridge, S., Selkoe, K. A., Kappel, C. V., Micheli, F., D'Agrosa, C., Bruno, J. F., Casey, K. S., Ebert, C., Fox, H. E., Fujita, R., Heinemann, D., Lenihan, H. S., Madin, E. M. P., Perry, M. T., Selig, E. R., Spalding, M., Steneck, R., & Watson, R. (2008). A Global Map of Human Impact on Marine Ecosystems. *Science*, *319*(5865), 948–952. https://doi.org/10.1126/science.1149345

Hamilton, T., Spengler, N., Blaess, F., Dibb, R., DeJonge, A., Freise, M., Ruff, K., Omona, J., Reichard, C., Stephenson, M., Martens, K., Burger, R., Owens, T., Pacheco-Vega, R., Sacharko, J., Groneberg, A., Lewis, D., A. Metelsky, B., Renz, D. O., … Thuemler, E. (2010). Nongovernmental Organizations, Definition and History. In *International Encyclopedia of Civil Society* (pp. 1056–1062). Springer US. https://doi.org/10.1007/978-0-387-93996-4_3

Intergovernmental Panel on Climate Change. (2023). *Climate Change 2021 – The Physical Science Basis*. Cambridge University Press. https://doi.org/10.1017/9781009157896

Ison, S., Cvitanovic, C., Pecl, G., Hobday, A. J., & van Putten, I. (2024). The role of visual framing in marine conservation communication. *Ocean & Coastal Management*, *248*, 106938. https://doi.org/10.1016/j.ocecoaman.2023.106938

Jaakonmäki, R., Müller, O., & vom Brocke, J. (2017). *The Impact of Content, Context, and Creator on User Engagement in Social Media Marketing*. https://doi.org/10.24251/HICSS.2017.136

Jefferson, T., Costello, M. J., Zhao, Q., & Lundquist, C. J. (2021). Conserving threatened marine species and biodiversity requires 40% ocean protection. *Biological Conservation*, *264*, 109368. https://doi.org/10.1016/j.biocon.2021.109368

Jianping, L., Minrong, L., Jinnan, W., Jianjian, L., Hongwen, S., & Maoxing, H. (2014). *Global Environmental Issues and Human Wellbeing* (pp. 3–21). https://doi.org/10.1007/978-3-642-54678-5_1

Jones, T., Baxter, M., & Khanduja, V. (2013). A quick guide to survey research. *The Annals of The Royal College of Surgeons of England*, *95*(1), 5–7. https://doi.org/10.1308/003588413X13511609956372

Jung, K., No, W., & Kim, J. W. (2014). Who Leads Nonprofit Advocacy through Social Media? Some Evidence from the Australian Marine Conservation Society's Twitter Networks. *Journal of Contemporary Eastern Asia*, *13*(1), 69–81. https://doi.org/10.17477/jcea.2014.13.1.069

Kaplan-Hallam, M., & Bennett, N. J. (2018). Adaptive social impact management for conservation and environmental management. *Conservation Biology*, *32*(2), 304–314. https://doi.org/10.1111/cobi.12985

Kim, D.-H., Spiller, L., & Hettche, M. (2015). Analyzing media types and content orientations in Facebook for global brands. *Journal of Research in Interactive Marketing*, *9*(1), 4–30. https://doi.org/10.1108/JRIM-05-2014-0023

Kirschke, S., & Newig, J. (2017). Addressing Complexity in Environmental Management and Governance. *Sustainability*, *9*(6), 983. https://doi.org/10.3390/su9060983

Ku, L., & Zaroff, C. (2014). How far is your money from your mouth? The effects of intrinsic relative to extrinsic values on willingness to pay and protect the environment. *Journal of Environmental Psychology*, *40*, 472–483. https://doi.org/10.1016/j.jenvp.2014.10.008

Laffoley, D., & Baxter, J. M. (Eds.). (2016). *Explaining Ocean Warming: Causes, scale, effects and consequences*. IUCN, International Union for Conservation of Nature. https://doi.org/10.2305/IUCN.CH.2016.08.en

Laffoley, D., Baxter, J. M., Amon, D. J., Currie, D. E. J., Downs, C. A., Hall-Spencer, J. M., Harden-Davies, H., Page, R., Reid, C. P., Roberts, C. M., Rogers, A., Thiele, T., Sheppard, C. R. C., Sumaila, R. U., & Woodall, L. C. (2020). Eight urgent, fundamental and simultaneous steps needed to restore ocean health, and the consequences for humanity and the planet of inaction or delay. *Aquatic Conservation: Marine and Freshwater Ecosystems*, *30*(1), 194–208. https://doi.org/10.1002/aqc.3182

Lalmas, M., O'Brien, H., & Yom-Tov, E. (2014). Measuring User Engagement. *Synthesis Lectures on Information Concepts, Retrieval, and Services*, *6*(4), 1–132. https://doi.org/10.2200/S00605ED1V01Y201410ICR038

Lee, D., Hosanagar, K., & Nair, H. S. (2018). Advertising Content and Consumer Engagement on Social Media: Evidence from Facebook. *Management Science*, *64*(11), 5105–5131. https://doi.org/10.1287/mnsc.2017.2902

Lee, J., & Hong, I. B. (2016). Predicting positive user responses to social media advertising: The roles of emotional appeal, informativeness, and creativity. *International Journal of Information Management*, *36*(3), 360–373. https://doi.org/10.1016/j.ijinfomgt.2016.01.001

Lim, W. M., & Rasul, T. (2022). Customer engagement and social media: Revisiting the past to inform the future. *Journal of Business Research*, *148*, 325–342. https://doi.org/10.1016/j.jbusres.2022.04.068

Meerab, K. (2023). Addressing the Global Environmental Crisis: A Comprehensive Review of Current Strategies and Challenges. *International Research Journal of Arts and Social Sciences*, *11*(3). https://doi.org/10.14303/2276-6502.2023.93

Mehrotra, A., & Siraj, S. (2021). Social Media Marketing - An Effective Solution for Non-Profit Organizations. *2021 11th International Conference on Cloud Computing, Data Science & Engineering (Confluence)*, 1072–1077. https://doi.org/10.1109/Confluence51648.2021.9377089

Mejtoft, T., Hedlund, J., Cripps, H., Söderström, U., & Norberg, O. (2021). Designing Call to Action: Users' Perception of Different Characteristics. *34th Bled EConference Digital Support from Crisis to Progressive Change: Conference Proceedings*, 405–416. https://doi.org/10.18690/978-961-286-485-9.30

Muller, E., & Peres, R. (2019). The effect of social networks structure on innovation performance: A review and directions for research. *International Journal of Research in Marketing*, *36*(1), 3–19. https://doi.org/10.1016/j.ijresmar.2018.05.003

Muntinga, D. G., Moorman, M., & Smit, E. G. (2011). Introducing COBRAs. *International Journal of Advertising*, *30*(1), 13–46. https://doi.org/10.2501/IJA-30-1-013-046

Nguyen, K. A. T., Jolly, C. M., & Nguelifack, B. M. (2018). Biodiversity, coastal protection and resource endowment: Policy options for improving ocean health. *Journal of Policy Modeling*, *40*(2), 242–264. https://doi.org/10.1016/j.jpolmod.2018.02.002

O.Nyumba, T., Wilson, K., Derrick, C. J., & Mukherjee, N. (2018). The use of focus group discussion methodology: Insights from two decades of application in conservation. *Methods in Ecology and Evolution*, *9*(1), 20–32. https://doi.org/10.1111/2041-210X.12860

Pendleton, L., Evans, K., & Visbeck, M. (2020). We need a global movement to transform ocean science for a better world. *Proceedings of the National Academy of Sciences*, *117*(18), 9652–9655. https://doi.org/10.1073/pnas.2005485117

Pereira, D. G., Afonso, A., & Medeiros, F. M. (2015). Overview of Friedman's Test and Post-hoc Analysis. *Communications in Statistics - Simulation and Computation*, *44*(10), 2636–2653. https://doi.org/10.1080/03610918.2014.931971

Pio, L., Cavaliere, L., Mittal, P., Chakravarthi, K., & Gupta, A. (2021). The Impact of Marketing Practices on NGO Performance: The Pestel Model Effect. *Turkish Online Journal of Qualitative Inquiry (TOJQI)*, *12*(3), 2884–2903. https://www.researchgate.net/publication/353202079

Pletikosa Cvijikj, I., & Michahelles, F. (2013). Online engagement factors on Facebook brand pages. *Social Network Analysis and Mining*, *3*(4), 843–861. https://doi.org/10.1007/s13278-013-0098-8

Poushter, J., Fagan, M., Gubbala, S., Associate, R., & Klein, H. (2022). *Climate Change Remains Top Global Threat Across 19-Country Survey People see UN favorably and believe "common values" are more important for bringing nations together than "common problems" FOR MEDIA OR OTHER INQUIRIES*. www.pewresearch.org

Rahman, W. N. A., Mutum, D. S., & Ghazali, E. M. (2022). Consumer Engagement With Visual Content on Instagram. *International Journal of E-Services and Mobile Applications*, *14*(1), 1–21. https://doi.org/10.4018/IJESMA.295960

Reed, A., Aquino, K., & Levy, E. (2007). Moral Identity and Judgments of Charitable Behaviors. *Journal of Marketing*, *71*(1), 178–193. https://doi.org/10.1509/jmkg.71.1.178

Rietveld, R., Van Dolen, W., Mazloom, M., & Worring, M. (2020). What you Feel, Is what you like Influence of Message Appeals on Customer Engagement on Instagram. *Journal of Interactive Marketing*, *49*(1), 20–53. https://doi.org/10.1016/j.intmar.2019.06.003

Rietveld, R., Van Dolen, W., Mazloom, M., & Worring, M. (2021). What Drives Customer Engagement on Instagram? *Keller Center Research Report*, *14*(1), 23–26.

Sala, E., Mayorga, J., Bradley, D., Cabral, R. B., Atwood, T. B., Auber, A., Cheung, W., Costello, C., Ferretti, F., Friedlander, A. M., Gaines, S. D., Garilao, C., Goodell, W., Halpern, B. S., Hinson, A., Kaschner, K., Kesner-Reyes, K., Leprieur, F., McGowan, J., … Lubchenco, J. (2021). Protecting the global ocean for biodiversity, food and climate. *Nature*, *592*(7854), 397–402. https://doi.org/10.1038/s41586-021-03371-z

Salonen, A., Mero, J., Munnukka, J., Zimmer, M., & Karjaluoto, H. (2024). Digital content marketing on social media along the B2B customer journey: The effect of timely content delivery on customer engagement. *Industrial Marketing Management*, *118*, 12–26. https://doi.org/10.1016/j.indmarman.2024.02.002

Saxton, G. D., & Wang, L. (2014). The Social Network Effect. *Nonprofit and Voluntary Sector Quarterly*, *43*(5), 850–868. https://doi.org/10.1177/0899764013485159

Schivinski, B., Christodoulides, G., & Dabrowski, D. (2016). Measuring Consumers' Engagement With Brand-Related Social-Media Content. *Journal of Advertising Research*, *56*(1), 64–80. https://doi.org/10.2501/JAR-2016-004

Schreiner, M., Fischer, T., & Riedl, R. (2021). Impact of content characteristics and emotion on behavioral engagement in social media: literature review and research agenda. *Electronic Commerce Research*, *21*(2), 329–345. https://doi.org/10.1007/s10660-019-09353-8

Schreiner, M., & Riedl, R. (2019). *Identification of Factors Influencing the Content Engagement Effect in Social Media Communication*. https://www.researchgate.net/publication/333507023

Schultz, C. D. (2017). Proposing to your fans: Which brand post characteristics drive consumer engagement activities on social media brand pages? *Electronic Commerce Research and Applications*, *26*, 23–34. https://doi.org/10.1016/j.elerap.2017.09.005

Sea Shepherd Global. (2024). *Our mission* . https://www.seashepherdglobal.org/who-we-are/our-mission/

Septianto, F., Seo, Y., & Paramita, W. (2022). The Role of Implicit Theories in Motivating Donations in Response to Threat-Based Awe. *Journal of Public Policy & Marketing*, *41*(1), 72–88. https://doi.org/10.1177/07439156211042281

Shah, D., & George, M. (2021). Linking Marketing to Nonprofit Performance. *Journal of Public Policy & Marketing*, *40*(4), 571–583. https://doi.org/10.1177/0743915620978538

Shahbaznezhad, H., Dolan, R., & Rashidirad, M. (2021). The Role of Social Media Content Format and Platform in Users' Engagement Behavior. *Journal of Interactive Marketing*, *53*, 47–65. https://doi.org/10.1016/j.intmar.2020.05.001

Shaw, M. N., Borrie, W. T., McLeod, E. M., & Miller, K. K. (2022). Wildlife Photos on Social Media: A Quantitative Content Analysis of Conservation Organisations' Instagram Images. *Animals*, *12*(14), 1787. https://doi.org/10.3390/ani12141787

Shrestha, N. (2021). Factor Analysis as a Tool for Survey Analysis. *American Journal of Applied Mathematics and Statistics*, *9*(1), 4–11. https://doi.org/10.12691/ajams-9-1-2

Šmelhausová, J., Riepe, C., Jarić, I., & Essl, F. (2022). How Instagram users influence nature conservation: A case study on protected areas in Central Europe. *Biological Conservation*, *276*, 109787. https://doi.org/10.1016/j.biocon.2022.109787

Snoussi, T., & Abdullah, A. (2020). Instagram as an integrated Marketing communication tool. *International Journal of Innovation, Creativity, and Change*, *14*(5), 2201–1323.

Stacy Jo Dixon. (2022, August 29). *Number of global social network users 2017-2027*. Statista. https://www.statista.com/statistics/278414/number-of-worldwide-social-network-users/

Taber, K. S. (2018). The Use of Cronbach's Alpha When Developing and Reporting Research Instruments in Science Education. *Research in Science Education*, *48*(6), 1273–1296. https://doi.org/10.1007/s11165-016-9602-2

Tafesse, W., & Wien, A. (2017). A framework for categorizing social media posts. *Cogent Business & Management*, *4*(1), 1284390. https://doi.org/10.1080/23311975.2017.1284390

van Bommel, N., & Höffken, J. I. (2023). The urgency of climate action and the aim for justice in energy transitions – dynamics and complexity. *Environmental Innovation and Societal Transitions*, *48*, 100763. https://doi.org/10.1016/j.eist.2023.100763

van der Wal, R., & Arts, K. (2015). Digital conservation: An introduction. *Ambio*, *44*(S4), 517–521. https://doi.org/10.1007/s13280-015-0701-5

Vance, A., & Rangeley, R. (2019). Non-Governmental Organization Roles in Shaping Future Ocean Governance and Management. In *The Future of Ocean Governance and Capacity Development* (pp. 53–58). Brill | Nijhoff. https://doi.org/10.1163/9789004380271_011

Velivela, V., Raj, C., Salman Tiwana, M., Prasanna, R., Samarawickrama, M., & Prasad, M. (2022). *The Effectiveness of Social Media Engagement Strategy on Disaster Fundraising*. https://doi.org/DOI: 10.48550/arXiv.2210.11322

Venegas, R. M., Acevedo, J., & Treml, E. A. (2023). Three decades of ocean warming impacts on marine ecosystems: A review and perspective. *Deep Sea Research Part II: Topical Studies in Oceanography*, *212*, 105318. https://doi.org/10.1016/j.dsr2.2023.105318

Veríssimo, D., Campbell, H. A., Tollington, S., MacMillan, D. C., & Smith, R. J. (2018). Why do people donate to conservation? Insights from a 'real world' campaign. *PLOS ONE*, *13*(1), e0191888. https://doi.org/10.1371/journal.pone.0191888

Visbeck, M. (2018). Ocean science research is key for a sustainable future. *Nature Communications*, *9*(1), 690. https://doi.org/10.1038/s41467-018-03158-3

Voorveld, H. A. M. (2019). Brand Communication in Social Media: A Research Agenda. *Journal of Advertising*, *48*(1), 14–26. https://doi.org/10.1080/00913367.2019.1588808

Weiger, W. H., Hammerschmidt, M., & Wetzel, H. A. (2018). Don't You Dare Push Me: How Persuasive Social Media Tactics Shape Customer Engagement. *Journal of the Association for Consumer Research*, *3*(3), 364–378. https://doi.org/10.1086/698713

Yee Fong, M., & Rashad Yazdanifard, A. (2015). The Comparison between NGO Marketing and Conventional Marketing Practices from SWOT Analysis, Marketing Mix, and Performance Evaluation Perspectives. *International Journal of Management, Accounting and Economics*, *2*(9), 1075–1087.

Yew, R. L. H., Suhaidi, S. B., Seewoochurn, P., & Sevamalai, V. K. (2018). Social Network Influencers' Engagement Rate Algorithm Using Instagram Data. *2018 Fourth International Conference on Advances in Computing, Communication & Automation (ICACCA)*, 1–8. https://doi.org/10.1109/ICACCAF.2018.8776755

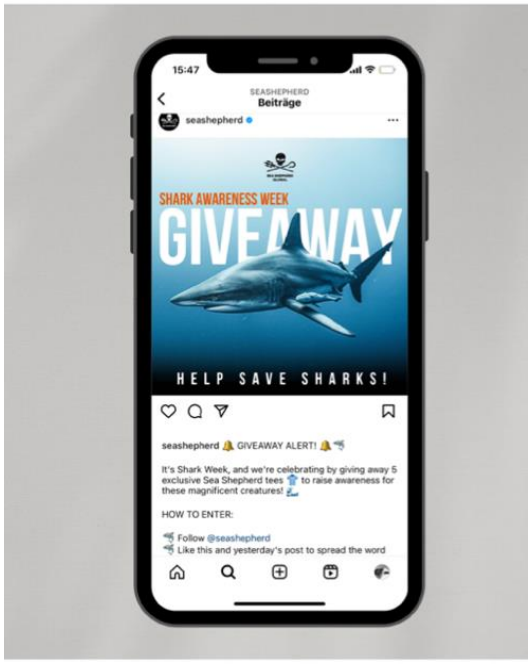
Zhang, Y., Lin, C., & Yang, J. (2019). Time or Money? The Influence of Warm and Competent Appeals on Donation Intentions. *Sustainability*, *11*(22), 6228. https://doi.org/10.3390/su11226228

Zhao, L., Zhang, M., Ming, Y., Niu, T., & Wang, Y. (2023). The effect of image richness on customer engagement: Evidence from Sina Weibo. *Journal of Business Research*, *154*, 113307. https://doi.org/10.1016/j.jbusres.2022.113307

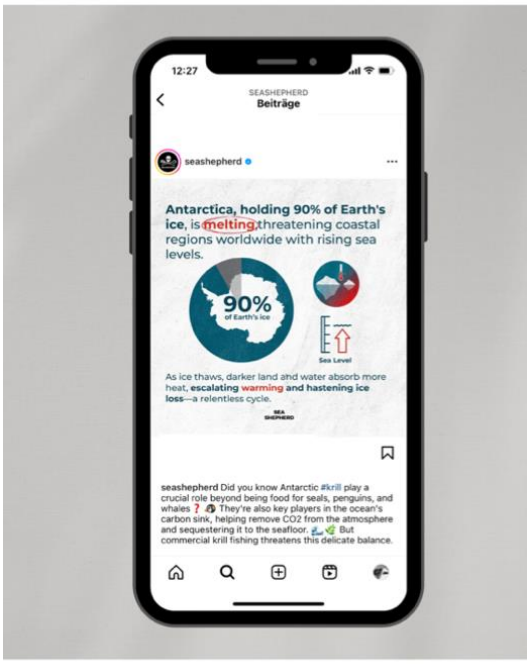
Appendix

Appendix A: Stimulus Material

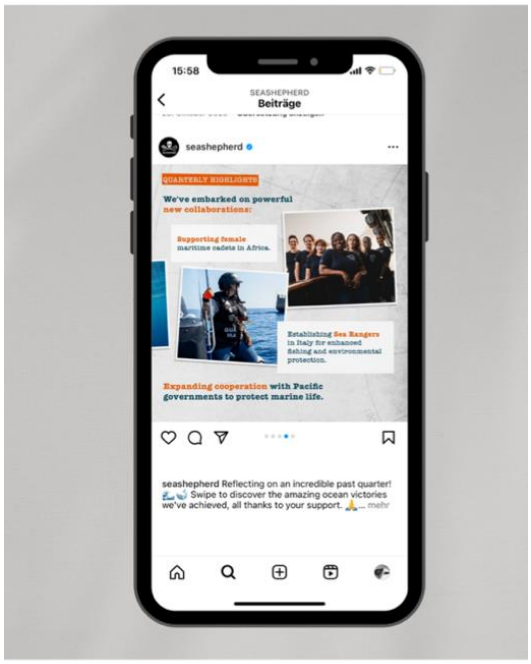
Remunerative post



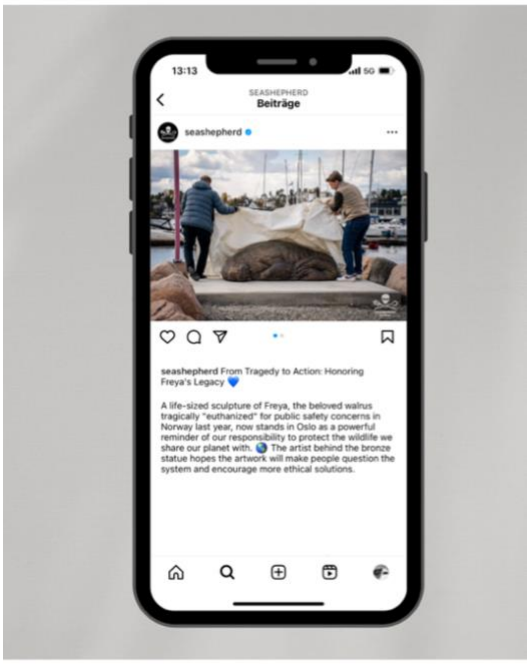
Educational post



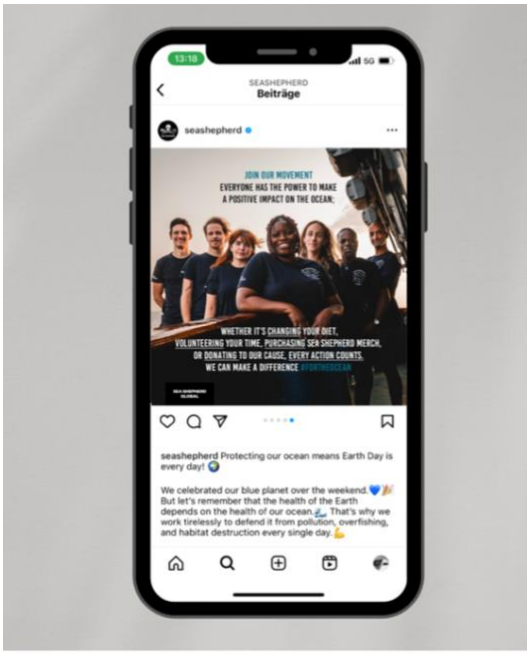
Impact post



Emotional post



Call to action post



Appendix B: Survey

Consumer Engagement with NGOs Masterthesis

Dear participant,

I am Pia, a student at the ISCTE Business School of Lisbon. This survey is part of my master thesis research, which focuses on understanding how Social Media content can influence public engagement and support ocean protection efforts. Your input is invaluable in helping to shape effective social media strategies for NGOs dedicated to the protection of our oceans and maximizing their impact on marine conservation.

Please remember the following points:

- There are no right or wrong answers; your personal opinions and experiences are what matter.
- All data collected will be stored and analyzed anonymously.
- Your responses cannot be traced back to you and will be handled confidentially.
- I encourage you to answer each question spontaneously and honestly.

I care about the quality of my survey data. It is important that you provide thoughtful answers to each question in this survey in order to get the most accurate measures of your opinions. The survey should only take about **5 minutes** of your time, so I kindly ask you to read each question thoroughly.

To start the survey, please **click on the arrow on the bottom right side of your screen.**

Should you have any questions or comments, please contact me via email at pjrai@iscte-iul.pt.

Thank you for your contribution to my work! Best, Pia.

Do you have an Instagram account?

- ○ Yes (1)
- ○ No (2)

How old are you (in years)?

- ○ 18-24 (1)
- ○ 25-30 (2)
- ○ 31-38 (3)
- ○ Other (4)

How often do you use Instagram?

- ○ Multiple times a day (1)
- ○ Once a day (2)
- ○ Few times a week (3)
- ○ Few times a month (4)
- ○ Rarely (5)

Are you interested in the topics ocean protection and marine conservation?

- ○ Extremely unlikely (1)
- ○ Somewhat unlikely (2)
- ○ Neither likely nor unlikely (3)
- ○ Somewhat likely (4)
- ○ Extremely likely (5)

Have you engaged (like, comment, share) with NGOs on Instagram before?

- ○ Yes (1)
- ○ No (2)

Have you donated to NGOs before?

- ○ Yes (1)
- ○ No (2)

Do you know the NGO "**Sea Shepherd**"?

- ○ Yes, and I follow it (1)
- ○ Yes, but I don't follow it (2)
- ○ No (3)

Imagine now that you are scrolling through your Instagram feed and you come across 5 posts of the ocean protection NGO "**Sea Shepherd**". Please review the posts carefully before answering the questions that follow.

(Shows post type)

Indicate the extent to which you thought the Instagram post was engaging:

- ○ Extremely unlikely (1)
- ○ Somewhat unlikely (2)
- ○ Neither likely nor unlikely (3)
- ○ Somewhat likely (4)
- ○ Extremely likely (5)

How likely are you to engage with this post? (Like, Comment or Share)

	Extremely unlikely (1)	Somewhat unlikely (2)	Neither likely nor unlikely (3)	Somewhat likely (4)	Extremely likely (5)
How likely are you to 'Like' the post you just read? (1)	○	○	○	○	○
How likely are you to 'Comment' on the post you just read? (2)	○	○	○	○	○
How likely are you to 'Share' the post you just read? (3)	○	○	○	○	○

Based on this post, how likely are you to agree on these statements?

	Extremely unlikely (1)	Somewhat unlikely (2)	Neither likely nor unlikely (3)	Somewhat likely (4)	Extremely likely (5)
I might donate to this NGO (1)	○	○	○	○	○
It is worth donating to this NGO (2)	○	○	○	○	○
Please mark "Extremely likely" to this statement (3)	○	○	○	○	○

(Shows post type)

Indicate the extent to which you thought the Instagram post was engaging:

- ○ Extremely unengaging (1)
- ○ Somewhat unengaging (2)
- ○ Neither engaging nor unengaging (3)
- ○ Somewhat engaging (4)
- ○ Extremely engaging (5)

How likely are you to engage with this post? (Like, Comment or Share)

	Extremely unlikely (1)	Somewhat unlikely (2)	Neither likely nor unlikely (3)	Somewhat likely (4)	Extremely likely (5)
How likely are you to 'Like' the post you just read? (1)	○	○	○	○	○
Please mark "Extremely likely" to this statement (2)	○	○	○	○	○
How likely are you to 'Comment' on the post you just read? (3)	○	○	○	○	○
How likely are you to 'Share' the post you just read? (4)	○	○	○	○	○

Based on this post, how likely are you to agree on these statements?

	Extremely unlikely (1)	Somewhat unlikely (2)	Neither likely nor unlikely (3)	Somewhat likely (4)	Extremely likely (5)
I might donate to this NGO (1)	○	○	○	○	○
It is worth donating to this NGO (2)	○	○	○	○	○

(Shows post type)

Indicate the extent to which you thought the Instagram post was engaging:

- ○ Extremely unengaging (1)
- ○ Somewhat unengaging (2)
- ○ Neither engaging nor unengaging (3)
- ○ Somewhat engaging (4)
- ○ Extremely engaging (5)

How likely are you to engage with this post? (Like, Comment or Share)

	Extremely unlikely (1)	Somewhat unlikely (2)	Neither likely nor unlikely (3)	Somewhat likely (4)	Extremely likely (5)
How likely are you to ‘Like’ the post you just read? (1)	○	○	○	○	○
How likely are you to ‘Comment’ on the post you just read? (2)	○	○	○	○	○
Please mark "Somewhat likely" to this statement (3)	○	○	○	○	○
How likely are you to ‘Share’ the post you just read? (4)	○	○	○	○	○

Based on this post, how likely are you to agree on these statements?

	Extremely unlikely (1)	Somewhat unlikely (2)	Neither likely nor unlikely (3)	Somewhat likely (4)	Extremely likely (5)
I might donate to this NGO (1)	○	○	○	○	○
It is worth donating to this NGO (2)	○	○	○	○	○

(Shows post type)

Indicate the extent to which you thought the Instagram post was engaging:

- ○ Extremely unengaging (1)
- ○ Somewhat unengaging (2)
- ○ Neither engaging nor unengaging (3)
- ○ Somewhat engaging (4)
- ○ Extremely engaging (5)

How likely are you to engage with this post? (Like, Comment or Share)

	Extremely unlikely (1)	Somewhat unlikely (2)	Neither likely nor unlikely (3)	Somewhat likely (4)	Extremely likely (5)
How likely are you to 'Like' the post you just read? (1)	○	○	○	○	○
How likely are you to 'Comment' on the post you just read? (2)	○	○	○	○	○
How likely are you to 'Share' the post you just read? (3)	○	○	○	○	○
Please mark "Somewhat unlikely" to this statement (4)	○	○	○	○	○

Based on this post, how likely are you to agree on these statements?

	Extremely unlikely (1)	Somewhat unlikely (2)	Neither likely nor unlikely (3)	Somewhat likely (4)	Extremely likely (5)
I might donate to this NGO (1)	○	○	○	○	○
It is worth donating to this NGO (2)	○	○	○	○	○

(Shows post type)

Indicate the extent to which you thought the Instagram post was engaging:

- ○ Extremely unengaging (1)
- ○ Somewhat unengaging (2)
- ○ Neither engaging nor unengaging (3)
- ○ Somewhat engaging (4)
- ○ Extremely engaging (5)

How likely are you to engage with this post? (Like, Comment or Share)

	Extremely unlikely (1)	Somewhat unlikely (2)	Neither likely nor unlikely (3)	Somewhat likely (4)	Extremely likely (5)
How likely are you to 'Like' the post you just read? (1)	○	○	○	○	○
How likely are you to 'Comment' the post you just read? (2)	○	○	○	○	○
How likely are you to 'Share' the post you just read? (3)	○	○	○	○	○
Please mark "Extremely likely" to this statement (4)	○	○	○	○	○

Based on this post, how likely are you to agree on these statements?

	Extremely unlikely (1)	Somewhat unlikely (2)	Neither likely nor unlikely (3)	Somewhat likely (4)	Extremely likely (5)
I might donate to this NGO (1)	○	○	○	○	○
It is worth donating to this NGO (2)	○	○	○	○	○

Which gender do you feel you belong to?

- ○ Male (1)
- ○ Female (2)
- ○ Non-binary / third gender (3)
- ○ Prefer not to say (4)

What level of education do you have? Please select the highest qualification you have achieved so far.

- ○ High school or lower (1)
- ○ Bachelor degree (2)
- ○ Post graduation (3)
- ○ Master degree (4)
- ○ PhD (5)
- ○ Other (6)

What describes your current situation best?

- ○ Student (1)
- ○ Working student (2)
- ○ Employed (3)
- ○ Unemployed (4)
- ○ Other (5)

What is your country of origin?

▼ Afghanistan (1) ... Zimbabwe (1357)

Appendix C: Focus group transcript

Focus group 1:

Total Participation time required: 20 minutes

Moderator: Pia Jungmayr

A: Mia

B: Flavie

C: Paul

D: Maxi

1.Introduction

Moderator: Welcome and thank you so much for your participation. The purpose of this exercise is to classify Instagram posts into predefined content categories, to make sure that the later research is being made correctly. There is no right or wrong answers; we are all here to share. This session is being recorded by a voiceover, so that it can be later transcribed.

2. Warm up

Moderator: Before we start, would everybody please take turns to introduce yourself.

A: Okay, my name is Mia, I come from Portugal and I'm 25.

B: My name is Flavie, I am from France and I'm 25.

C: My name is Paul, I come from Germany and I'm 26 years old.

D: My name is Maxi and I'm from Switzerland and I'm 36.

3. Post classification

Hand out prints of the 5 posts for each participant. Additionally, one piece of blank paper and a pencil for everyone to take notes.

Moderator: You will be shown a series of Instagram posts. For each post, please indicate individually which category you believe it belongs to by selecting one of the following options:

- Call-to-action: Posts that encourage immediate action from the viewer.
- Remunerative: Posts that offer a reward or price when taking a certain action.
- Emotional: Posts designed to evoke an emotional response.
- Impact Post: Posts that highlight the outcomes or effects of actions.
- Educational Post: Posts that provide information or teach something.

After 5 minutes:

Moderator: Okay, let's start with the 1st post (shows post that is supposed to be represented for call-to-action post). Which category do you believe this post belongs to and why?

C: Call-to-action.

D: I think it's call-to-action because it says join our movement, so they want me to join them.

B: I agree, they want me to do something.

A: I agree, I picked the same.

Moderator: Let's continue with the second post (shows post that is supposed to be represented for educational post). Which category did you chose for this one and why?

A: Educational.

B: Educational.

Moderator: And why?

B: Because it is teaching you something. Giving facts.

C: Yeah, I think so too.

D: It like shows why it is important to join. Like it's basically the second one from the first one. The first one called you to join and this might be an explanation of why I should join.

Moderator: This is the third post (shows post that is supposed to be represented for impact post). Which category did you put this post to and why?

A: Impact!

C: Impact. Because it shows which impact, they had on women. And how to include women in this sea rangers.

D: Yeah, I agree I picked the same.

B: Me too.

Moderator: Let's continue with the fourth post (shows post that is supposed to be represented for emotional post). Which category does this post belong to and why?

D: This is the emotional one I would say so because they show like a very tragic picture of an animal being covered up with like a sheet and they want to like target the audience here by to find their emotional support in order maybe to donate or to support them and to figure out why it's important for them to engage.

C: Yes, I picked also the emotional one.

A: Yes, I think it's obvious.

B: Agree.

Moderator: Last but not least, we have this post (shows post that is supposed to be represented for remunerative post). Which category do you feel this post belongs to and why?

C: I think it's the remunerative one.

D: Yes, it says very big in the picture that they're giving something away and that they're doing it due to the purpose of the Sharks Awareness Week, and they want you to engage here as well in order to help the sharks, but they want to give something away for your support and guidance.

A: I agree with the remunerative post.

B: I picked the same.

4. Discussion

Moderator: Now that you have independently classified the posts, we will discuss your choices as a group. The aim is to understand your reasoning and to reach a consensus on the categorization of each post.

Moderator: Were there any elements that made you hesitate or reconsider your initial categorization for any of the posts?

A: Not really, I think they were quite distinctive, right?

C: Yeah.

B: Yeah, I agree, I think it was quite obvious for all of them.

D: I agree.

Moderator: How easy or difficult was it for you to classify the posts? Can you elaborate on why?

D: I have to say at first, I wasn't sure after seeing the 1st post but then after I've seen all the posts it was easier to manage to categorize them because at first you didn't know what else is coming and if there is like anything which maybe fits in the category a bit better than the one that I was just seeing so therefore I would say after I've seen everything, I would say easy.

B: Yes, that was very well explained, yes, I agree with that.

C: Yeah!

D: Me too.

Moderator: Do you think the categories provided are clear and distinct? Why or why not?

C: I think there are some like things that work out in some other different categories like for example in the impact post there's also some information shown so you could think for a second, like you're not sure if it's maybe educational as well, but I think most of them were quite distinct.

A: I think in the end it was distinctive, like in the end it was only one possibility or one option that would fit even though some information could be part of two options, but I think the posts in general could always only be one option.

B: Yes, I agree.

D: Yes, me too, nothing to add.

5. Closing

Moderator:

1. Summarize the group's final classifications and the reasons behind any changes or confirmations.
2. Thank the participants for their time and valuable insights.

Moderator: Okay perfect, so to summarize, actually all the classifications can be categorized in these categories, and no one disagrees to do it differently or classify it in another way. It is clear and distinct that the posts belong to the suggested categories.
All participants: Yes!
Moderator: Thank you so much for your participation, time and valuable insides.

Focus group 2:

Total Participation time required: 18 minutes
Moderator: Pia Jungmayr
A: Lauren
B: Andrea
C: Laura
D: Maximilian

1.Introduction
Moderator: Welcome and thank you so much for your participation. The purpose of this exercise is to classify Instagram posts into predefined content categories, to make sure that the later research is being made correctly. There is no right or wrong answers; we are all here to share. This session is being recorded by a voiceover, so that it can be later transcribed.

2. Warm up
Moderator: Before we start, would everybody please take turns to introduce yourself.
A: Yes, my name is Lauren, I am 26 and I come from the US.
B: So, I am Andrea, 25, and I am from Colombia.
C: Hello, my name is Laura, I come from Austria and I am 25 years old.
D: So, my name is Maximilian, I am also from Austria and I am 20.

3. Post classification

Hand out prints of the 5 posts for each participant. Additionally, one piece of blank paper and a pencil for everyone to take notes.

Moderator: You will be shown a series of Instagram posts. For each post, please indicate individually which category you believe it belongs to by selecting one of the following options:

- Call-to-action: Posts that encourage immediate action from the viewer.
- Remunerative: Posts that offer a reward or price when taking a certain action.
- Emotional: Posts designed to evoke an emotional response.
- Impact Post: Posts that highlight the outcomes or effects of actions.
- Educational Post: Posts that provide information or teach something.

After 5 minutes:

Moderator: Okay, let's start with the 1st post (shows post that is supposed to be represented for call-to-action post). Which category do you believe this post belongs to and why?

B: I categorized it as call-to-action post. I thought because it encourages people to take a certain action.

C: Yeah, me too. They want me to do something. To take action.

A: I agree, I also classified it as call-to-action.

D: Me too, I agree with everything that has been said.

Moderator: Let's continue with the second post (shows post that is supposed to be represented for educational post). Which category did you chose for this one and why?

A: I classified it as educational post because it provides informative content that teaches something new.

B: I agree, definitely educational. The content teaches something to a certain topic.

C: I also put educational. It's meant to educate the audience.

D: I agree.

Moderator: This is the third post (shows post that is supposed to be represented for impact post). Which category did you put this post to and why?
A: I placed it in the impact post category. They are showing what they achieved, and which impact they have made so far.
C: Yeah, same here. I think it is pretty obvious an impact post as they summarize their impact.
D: Yes, I agree with everyone. They are emphasizing on what problems they are facing and how they change that.
B: I also categorized it as impact post. I think the others explained pretty well, for the same reasons I did it.

Moderator: Let's continue with the fourth post (shows post that is supposed to be represented for emotional post). Which category does this post belong to and why?
C: I categorized it as an emotional post. It evokes a feeling of sadness and designed to get an emotional response.
A: Yes, I thought the same. The message is very touching.
B: I think the emotional appeal is very clear in this post.
D: I totally agree with everything.

Moderator: Last but not least, we have this post (shows post that is supposed to be represented for remunerative post). Which category do you feel this post belongs to and why?
B: I think it's the remunerative post. It is a giveaway, so they want to reward you with something if you take certain action.
A: Yes, I think so too. Because you are receiving something.
D: I totally agree.
C: Yes, I think the same. The focus is on the reward that you get when you follow the instructions.

4. Discussion

Moderator: Now that you have independently classified the posts, we will discuss your choices as a group. The aim is to understand your reasoning and to reach a consensus on the categorization of each post.

Moderator: Were there any elements that made you hesitate or reconsider your initial categorization for any of the posts?
A: I felt that the elements were very clear for each post. Like it would not make sense to classify it in another way.
C: Yes, I agree. I think especially when you can compare them to each other.
B: Yes, me too.
D: I agree. I think it was pretty obvious for all the posts.

Moderator: How easy or difficult was it for you to classify the posts? Can you elaborate on why?
A: It was very easy for me. Each category has like unique elements that make classification easy or typical for the individual posts.
D: I feel that of course there are some elements that can also be for another category. For example, in the educational post it also had an emotional component because the facts are also kind of touching and sad. But all in all, in the end it was still very clear which content belonged to which category.
C: Yes, I totally agree.
B: Me too!

Moderator: Do you think the categories provided are clear and distinct? Why or why not?
C: Yes, I think they are very clear. Like of course the posts have elements of other categories as well but all in all in the end it is quite obvious for each category.
A: I think so too, I didn't have any doubts.
B: Yes, they are very distinct. You could not have put the picture in any other way.
D: I totally agree.

Closing

Moderator:
1. Summarize the group's final classifications and the reasons behind any changes or confirmations.
2. Thank the participants for their time and valuable insights.

Moderator: Okay perfect, so to summarize, actually all the classifications can be categorized in these categories, and no one disagrees to do it differently or classify it in another way. It is clear and distinct that the posts belong to the suggested categories.

A: Yes, I did not have any doubts it could be differently and feel that you can definitely go on which these classifications.

B: I agree!

C and D (at the same time): Yes.

Moderator: Thank you so much for your participation, time and valuable insides.

Appendix D: Descriptive Statistics

Variable		*N*	*Mean*	*SD*	*Variance*
Impact Post	Likes	206	3.42	.091	1.311
	Comments	206	2.53	.087	1.248
	Shares	206	2.67	.088	1.265
	Donation 1	206	3.16	.088	1.264
	Donation 2	206	3.72	.076	1.089
Educational Post	Likes	206	3.50	.086	1.233
	Comments	206	2.75	.091	1.301
	Shares	206	2.90	.094	1.344
	Donation 1	206	3.18	.081	1.167
	Donation 2	206	3.74	.075	1.076
Remunerative Post	Likes	206	3.67	.083	1.197
	Comments	206	3.06	.090	1.294
	Shares	206	3.08	.093	1.338
	Donation 1	206	3.16	.085	1.216
	Donation 2	206	3.70	.076	1.094
Emotional Post	Likes	206	3.67	.084	1.212
	Comments	206	2.89	.090	1.289
	Shares	206	2.95	.092	1.322
	Donation 1	206	3.22	.081	1.168
	Donation 2	206	3.80	.075	1.072
Call-to-action Post	Likes	206	3.44	.088	1.259
	Comments	206	2.64	.088	1.268
	Shares	206	2.81	.093	1.328
	Donation 1	205	3.12	.084	1.204
	Donation 2	205	3.73	.076	1.090

Appendix E: Reliability and validity of user engagement metrics

Variable	***Emotional***	***Impact***	***Remunerative***	***Call-to-action***	***Educational***
Likes	.811	.835	.839	.860	.796
Comments	.883	.901	.903	.899	.895
Shares	.886	.915	.875	.907	.901
TVE	74.120 %	78.24 %	76.2 %	79.029 %	74.83 %
KMO	.699	.706	.709	.726	.684
Bartlett's Test	235.397	304.27	261.015	303.510	258.945
Sign.	$p < .001$	$p < .001$	$p < .001$	$p < .001$	$p < .001$
Cronbach alpha	.825	.859	.843	.718	.832

Notes. TVE = Total variance explained

Appendix F: Reliability and validity of donation intentions

Variable	***Emotional***	***Impact***	***Remunerative***	***Call-to-action***	***Educational***
Donation 1	.893	.898	.905	.884	.898
Donation 2	.893	.898	.905	.884	.898
TVE	79.689 %	80.661 %	81.840 %	78.143 %	80.656 %
KMO	.500	.500	.500	.500	.500
Bartlett's Test	88.469	95.987	105.831	77.148	95.942
Sign.	$p < .001$	$p < .001$	$p < .001$	$p < .001$	$p < .001$
Cronbach alpha	.743	.755	.775	.867	.759

Notes. TVE = Total variance explained