Annette Ospino

COMM 487W

12/9/23

Tide Tag: Join the Tide

Setting the Stage for Change: Introducing Tide Tag

Tide Tag is an app dedicated to bringing together communities to eliminate ocean pollution. Our app allows people to upload and log areas with large clumps of trash in the ocean. Using geotags, data is used to identify pollution hot spots and organize cleanups. With our one-of-a-kind app, we aim to revolutionize environmental engagement by utilizing incentives to inspire and educate users, worldwide. Our unique approach not only motivates individuals to participate actively but also serves as a valuable educational tool, empowering users to impact our oceans while earning rewards positively.

In this report, we will talk about Tide Tag, a non-profit project that challenges the big problem of ocean pollution. We will cover the social issues we are tackling, how our app works, look at the market sector, explain how Tide Tag is set up, and lay out our goals. We will also closely examine critical points from our SWOT analysis.

Then, we will dive into the financials. We will talk about how we plan to make Tide Tag profitable and what we expect financially for the first five years, and then get into more details about expenses and revenues for years six to ten. We will discuss return on investment and how those investments play a role. Lastly, we will touch on our exit strategy, thinking about the future and what might happen.

The Menace of Ocean Pollution: A Growing Crisis

According to a study by Dr. Chris Sherrington, an environmental policy and economy consultant at Eunomia, at least 12 million tons enter our marine environment annually. This staggering influx of waste underscores the gravity of the global marine pollution crisis, particularly from plastic waste. This issue threatens ocean ecosystems, adversely impacting marine wildlife through ingestion and entanglement, causing habitat damage, and introducing

toxins into the food chain. The repercussions extend beyond the marine realm, affecting coastal communities and economies that rely on clean oceans.

In safeguarding our waters, we safeguard the many ecosystems that inhabit the depths and our shared future. Our oceans' vitality directly influences our planet's health and, in turn, the worth of humankind. Taking care of our oceans is not just about the environment; it is ensuring we have enough resources, staying strong, and making life better for humans. It's about securing a good future for all of us by looking after the places where life thrives. In a research article by Elli Forgione at SCU, she states how "over 90% of the world's trade occurs by ocean transport". This means the lives of over 3 billion people rely on the ocean. Additionally, the ocean contributes more than half of the oxygen essential for breathing and plays a vital role in regulating our climate. Out oceans deserve significant protection. Our commitment to protecting the waters is a pledge to secure a positive coexistence between humanity and ocean that flows through our planet.

Tide Tag Unwrapped: How It Works

This app-based project will be available to any mobile device with a functioning camera on Google Play and the App Store. Once logged in (currently working to incorporate using Gmail, Apple iD, and Facebook logins), users can upload pictures featuring sizable trash piles beyond what one person can handle (small, scattered items should be picked up individually for ethical disposal). These images, taken near significant waterways, natural rivers, or large lakes, include geotags that our HQ utilizes to pinpoint and thoroughly clean up identified trash hotspots.

Our moderators carefully review submissions to ensure they hold up to guidelines and the approval of legitimate reports. Verified reports are connected to a mapping interface, revealing pollution hotspots based on past submissions for future reference. Our Tide Tag team will collaborate with local agencies, NGOs, and volunteers to orchestrate efficient trash removal at high-priority hotspots.

Incorporating our unique gamification element, users reporting debris spots earn points post-verification. These points unlock rewards and recognition from sustainable partner companies. For instance, a user consistently reporting hotspot trash for a month could earn prizes ranging from merchandise by brands like Boxed Water or Liquid Death to entries in exciting

sweepstakes hosted by Cotopaxi or Quicksilver. The reward corresponds to the user's efforts, creating a tangible link between their contribution and recognition.

At Tide Tag, our mission is to unite communities, raise awareness about ocean pollution, and instill a sense of environmental responsibility in all generations by making recycling enjoyable! We aspire to encourage as many individuals as possible to contribute to conserving and protecting our waters. A noteworthy aspect of our cleanup efforts is that every piece of trash or plastic collected is handed over to companies committed to reusing them in their products. Our focus extends beyond app engagement—we actively contribute to the growth of sustainable brands and companies that benefit both the ocean and the Earth. An exemplary collaboration for mutual benefit would be with Patagonia. Aligning with their mission, as stated on their website, "Patagonia is moving toward 100% renewable and recycled raw materials," makes them an ideal partner. This shared commitment underscores our emphasis on environmental well-being, making Patagonia a fitting choice for future collaborations.

Expanding Horizons: Tide Tag's User Market and Reach

Our market sector consists of a wide range of consumers. Again, this is all being done through an app, so it caters to anyone with a phone with access to their respective mobile app store and a camera. With an astonishing global user base of over 6 billion smartphone users, the app's integration into this widely accessible platform ensures constant consumer engagement. Though many pollution hotspots happen near large bodies of water and coastlines, we don't want to take focus away from lakes, streams, and rivers. This allows for more users to feel welcomed to take initiative anywhere. We plan to create the app simple, allowing any generation to participate. From educating young scouts to earn badges through app usage to influencing coast guards and boat owners to actively report hotspots in expansive waters daily, our goal is to promote widespread engagement across diverse user demographics.

Furthermore, by creating a broad user base, our app becomes a powerful tool for community engagement and environmental education. We anticipate partnerships with educational institutions to integrate the app into curriculum activities, inspiring students to become caretakers of their local environments. Additionally, we have the idea to reach out to fishing communities, encouraging fishers to contribute knowledge and address pollution concerns in their local waters. This will improve the app's impact and builds a network of environmentally conscious people across many age groups and professions.

The Organizational Structure at Tide Tag

At Tide Tag, we plan to adopt a hierarchical program-based organizational structure. As the founder of this non-profit initiative, I will take the role of Executive Director, collaborating closely with our reputable Board of Directors, which includes notable individuals such as Emma Watson, Kelly Slater, Sebastian Vettel, Robert Irwin, and Brittany Broski. This influential board plays a key role in shaping the company's direction, ensuring sufficient resources, and upholding legal and ethical standards.

Operating directly under the Board of Directors, the Executive Director, which is my role, oversees day-to-day operations, acting as a bridge between the board and the operational team. This setup ensures a seamless communication and coordination flow to steer the app towards its mission. Within the operational team, we have crucial positions that contribute to the success of Tide Tag. Kris Jenner, our Director of Operations, will play an important role in ensuring the implementation of our mission. As the Director of Finance, John Summit will manage our financial resources. Cody Ko, the Program Director, will be instrumental in designing and implementing impactful programs. Lastly, Matilda Djerf, our Director of Communications, will attack our communication efforts, preserving clarity and enabling community engagement.

This hierarchical structure creates clear lines of responsibility and facilitates efficient decision-making and communication flow, crucial for a non-profit organization. The strategic involvement of the Board of Directors ensures diverse viewpoints and expertise, contributing to the overall success of Tide Tag in its mission to combat ocean pollution.

SWOT Analysis

<u>Strengths</u>:

- Innovative crowdsourcing model: New approach for gathering pollution data through user engagement.
- Integration of user reports with cleanup efforts
- Gamification incentives to drive user engagement
- Non-profit model: prioritizing social impact, aligning with environmental goals.
- Geo-tagging feature provides specific and accurate location data for targeted interventions.

Weaknesses:

- Loyal User Reporting: Relies mainly voluntary user reports which can be incomplete or unethical

- Requires significant moderation to verify submissions

- Limited technical capabilities as an early-stage startup

- Potential privacy concerns around location data

Opportunities:

- Partnerships with environmental agencies and NGOs

- Research collaborations with universities and scientists

- Expanding features and capabilities over time

- Growing public awareness of ocean pollution

Threats:

- Reliance on grants and donations for funding

- Possible decrease in user engagement over time

- Competition from larger environmental apps

- Technical difficulties scaling a crowdsourcing platform

- Limited adoption in developing countries

Let's take a deep dive into our biggest strength, and how Tide Tag goes beyond data collection to mobilize on-the-ground cleanup efforts. This unique strategy transforms shared awareness into real environmental results, creating local change. Tide Tag stands out by not just creating maps but empowering communities to actively participate in the solution. The app incentivizes consistent engagement through gamification, featuring achievement badges, point streaks, and prize drawings. This commitment to constant interaction makes Tide Tag popular and distinguishes it from apps that merely track or map polluted waters.

Of course, we can't overlook our threat of similar competition. As stated in our previous presentation, Tide Tag faces competition from apps like Plastic Patrol, Sea Cleaners, and One Ocean Watch. Though it's important to note that these competitors seem to have a few features that Tide Tag has implemented, we are an app that has it all! We actively engage communities to address pollution issues collaboratively. In addition, many competitors are limited to tracking or mapping pollution in specific countries or regions, whereas we plan to mobilize globally. The

ultimate goal is to lead in translating awareness into actionable initiatives, staying dedicated to community-building, and making an impact to ocean preservation.

One of the opportunities discussed involved forming partnerships with environmental agencies and NGOs. However, I've thought of a recent concept for a potential partnership. As mentioned, great opportunities lie in establishing partnerships with environmentally conscious companies committed to planetary conservation. Following classroom presentations, I discussed identifying a promising collaboration with Eco Eats Delivery with a classmate. This company operates a sustainable meal plan delivery service that prioritizes consumer preferences over other competitions' recipe structures, while being environmentally friendly. I suggested integrating Eco Eats Delivery as a potential collaborator for future rewards or prizes that users can redeem using accumulated points within our platform. In return, we can offer them a sustainable solution by supplying collected trash, which they can repurpose as recycled material for their packaging. This partnership aligns with our mission to help the planet, creating a mutually beneficial relationship for both companies.

Navigating Financial Waters

<u>Strategies and Sources of Revenue</u>

At Tide Tag, we are a non-profit and are focused on our mission above all; "to unite communities, raise awareness about ocean pollution, and instill a sense of environmental responsibility in all generations by making recycling enjoyable". But we can't create and maintain this initiative without a sustainable financial model.

As the app expands, our strategy involves introducing specific features exclusively for subscribers. Priced at $3.99 per month, this subscription model aims to generate revenue while offering enhanced experiences for users seeking additional benefits from the app. Subscribers will enjoy an ad-free version, perks such as leaderboard boosts, premium camera filters (including heatwave layers), early access to new free features, profile and app customization, and exclusive rewards accessible only to members.

In the next phase, we plan to launch exclusive merchandise that's available for purchase by anyone. This collection will include hoodies, T-shirts, hats, and water bottles, released in capsule collections at specific times throughout the year. These items are priced at $40 for

hoodies, $20 for T-shirts, $15 for hats, and $20 for water bottles. Notably, all our products are crafted from recycled materials, aligning with our commitment to sustainability.

Lastly, we intend to establish an additional revenue stream through our social media marketing efforts, focusing specifically on platforms like TikTok and YouTube. Our strategy involves presenting live cleanup sessions on TikTok and creating educational videos with renowned celebrities who endorse our mission. These celebrities will contribute to educational content, promote the app, and potentially showcase exclusive merchandise.

<u>Grants</u>

Many options exist to explore for grant opportunities. At the foundational level of government funding, our initiatives align with the missions of the Environmental Protection Agency (EPA) and the National Oceanic and Atmospheric Administration (NOAA), which support the protection of oceans and coasts. Significant non-governmental organizations (NGOs) such as the Surfrider Foundation, Ocean Conservancy, The Ocean Foundation, and the National Fish and Wildlife Foundation provide grants specifically tailored for conservation efforts.

More precisely, the Ocean Foundation stands out for awarding 50 grants annually to companies or individuals whose objectives align with their mission on their website: "We support multi-year giving whenever possible. Conserving the ocean is complicated and requires a long-term approach. We invest in individuals and organizations so that they can spend time on implementation, rather than on waiting for the next grant." This aligns well with our goals, and applying for their grants could greatly benefit our initiative. Their website showcases examples of grant amounts awarded to companies and individuals, ranging from $800 to $250,000 per year.

Lastly, there are many outdoor gear and apparel companies whose brand identities and marketing rely heavily on oceans and represent potential sources for corporate grants. Patagonia, REI, Billabong, Quicksilver, GoPro, and others actively invest in environmental causes that resonate with their consumers. This can benefit us, whether it's giving our grants or selling them ad space within our app.

Additionally, the fact that Tide Tag was developed by a current student at a top research university (Penn State University) this opens up possibilities for academic funding. Research partnerships with marine biology programs and environmental institutes could be explored to

secure additional support for our initiatives, such as the Institute of Energy and the Environment Seed Grant Program, which awards up to $30,000.

<center>Expenses & Revenue</center>

Over the course of the ten-year projection, Tide Tag envisions a strong financial trajectory, supported by a strategic approach to revenue generation. The anticipated growth in the number of users, from an initial 500,000 to an impressive 8,000,000 by Year 10, highlights the increasing reach and impact of our app in the community. In terms of funding, grants are expected to play a consistent role, with a gradual increase over the years, reflecting our successful efforts in securing support from government entities and private organizations. Sponsorships, another key revenue stream, exhibit substantial growth, reaching $650,000 in Year 10. This upward trend indicates successful partnerships with businesses and organizations aligned with our environmental mission. Public donations follow suit, showing a steady ascent and culminating in $320,000 by Year 10, highlighting the effectiveness of our fundraising initiatives of our cause among the public. A noteworthy addition to our revenue strategy is the introduction of memberships. This model proves lucrative, contributing $1,596,000 in Year 10. We predict a 2-5% conversion of users switching to the membership, from 25k users in year 1 to over 400k users paying member fees. By offering exclusive benefits to members, we revenue and engagement. Beyond these sources, strategic investments from investors, totaling $4,000,000 in Year 10, add a substantial boost to our financial standing. Additionally, merchandising provides a dynamic revenue stream, scaling from $40,000 in Year 1 to $250,000 in Year 10.
In total, these diverse revenue streams culminate in a strong financial outlook for Tide Tag, with a projected total revenue of $4,616,000 by the end of the tenth year.

As for expenses, our marketing costs increase from $200,000 in Year 1 to $425,000 in Year 10. This strategic investment is aimed at building brand awareness and attracting a larger audience to the app. Operational costs, including overhead, merchandising development, and headquarters expenses, are carefully managed. Operational expenses start at $100,000 in Year 1 and reach $250,000 in Year 10. The careful distribution of resources ensures efficient day-to-day operations, sustained growth, and the continuous development of the Tide Tag brand. Equipment and cleanup costs witness significant growth, scaling from $100,000 in Year 1 to $550,000 in Year 10, as we plan to not only pick up trash on coastlines, but in deep waters where more extensive diving equipment is needed. This planned increase reflects the organization's

commitment to actively engage in cleanup initiatives and maintain the necessary infrastructure for efficient waste removal. Below is our spreadsheet with more precise estimates of the company's growth.

	Year 1	Year 2	Year 3	Year 4	Year 5
Number of Users	*500,000*	*600,000*	*700,000*	*800,000*	*900,000*
Product Development	$100,000.00	$125,000.00	$150,000.00	$175,000.00	$200,000.00
Marketing	$200,000.00	$225,000.00	$250,000.00	$275,000.00	$300,000.00
Operations	$100,000.00	$110,000.00	$120,000.00	$130,000.00	$200,000.00
Equipment/Cleanup Costs	$100,000.00	$150,000.00	$200,000.00	$250,000.00	$300,000.00
Other Overhead	$100,000.00	$110,000.00	$120,000.00	$130,000.00	$140,000.00
Merch Development	$100,000.00	$110,000.00	$120,000.00	$130,000.00	$140,000.00
HQ	$150,000.00	$160,000.00	$170,000.00	$180,000.00	$190,000.00
Total Expenses	$850,000.00	$990,000.00	$1,130,000.00	$1,270,000.00	$1,470,000.00
Grants	$500,000.00	$500,000.00	$550,000.00	$500,000.00	$600,000.00
Sponsorships	$20,000.00	$40,000.00	$100,000.00	$200,000.00	$300,000.00
Public Donations	$10,000.00	$50,000.00	$100,000.00	$150,000.00	$200,000.00
Memberships	$99,750.00	$119,700.00	$139,650.00	$159,600.00	$179,550.00
Investors	$50,000.00				
Merchandising	$40,000.00	$50,000.00	$60,000.00	$70,000.00	$80,000.00
Total Revenue	$719,750.00	$759,700.00	$949,650.00	$1,079,600.00	$1,359,550.00
Net Loss/Profit:	-$130,250.00	-$230,300.00	-$180,350.00	-$190,400.00	-$110,450.00

	Year 6	Year 7	Year 8	Year 9	Year 10
Number of Users	*1,000,000*	*1,500,000*	*1,800,000*	*3,600,000*	*8,000,000*
Product Development	$225,000.00	$250,000.00	$275,000.00	$300,000.00	$325,000.00
Marketing	$325,000.00	$350,000.00	$375,000.00	$400,000.00	$425,000.00
Operations	$210,000.00	$220,000.00	$230,000.00	$240,000.00	$250,000.00
Equipment/Cleanup Costs	$350,000.00	$400,000.00	$450,000.00	$500,000.00	$550,000.00
Other Overhead	$150,000.00	$160,000.00	$170,000.00	$180,000.00	$190,000.00
Merch Development	$150,000.00	$160,000.00	$170,000.00	$180,000.00	$190,000.00
HQ	$200,000.00	$210,000.00	$220,000.00	$230,000.00	$240,000.00
Total Expenses	$1,610,000.00	$1,750,000.00	$1,890,000.00	$2,030,000.00	$2,170,000.00
Grants	$600,000.00	$600,000.00	$700,000.00	$750,000.00	$800,000.00
Sponsorships	$550,000.00	$600,000.00	$650,000.00	$650,000.00	$650,000.00
Public Donations	$200,000.00	$250,000.00	$300,000.00	$300,000.00	$320,000.00
Memberships	$199,500.00	$299,250.00	$359,100.00	$718,200.00	$1,596,000.00
Investors	$1,000,000.00	$1,000,000.00	$1,000,000.00	$1,000,000.00	$1,000,000.00
Merchandising	$90,000.00	$100,000.00	$120,000.00	$150,000.00	$250,000.00
Total Revenue	$2,639,500.00	$2,849,250.00	$3,129,100.00	$3,568,200.00	$4,616,000.00
Net Loss/Profit:	$1,029,500.00	$1,099,250.00	$1,239,100.00	$1,538,200.00	$2,446,000.00

Tide Tag incurs losses in the initial years, with net losses of $130,250 in Year 1 and $230,300 in Year 2. These early losses are expected for our startup as we plan to invest heavily in product development, marketing, operations, and equipment. However, by Year 6, TIDE TAG

started to see a significant turnaround, achieving a net profit of $1,029,500. This positive trend continued in the following years, with increasing profits: $1,099,250 in Year 7, $1,239,100 in Year 8, $1,538,200 in Year 9, and a substantial net profit of $2,446,000 in Year 10. These profits are attributed to the growth in the number of users' diverse revenue streams from grants, sponsorships, public donations, memberships, investors, and merchandising. The significant increase in revenue outweighs the cumulative expenses, resulting in a profitable venture. This financial trajectory suggests we become financially sustainable and thriving after the initial challenging startup phase.

Plotting the Course: Profitability Curve and ROI

Below is our profitability curve for the ten-year financial trajectory. It is important to note that the $5,000,000 peer investment is calculated into Years 6-10, divided evenly amongst the years.
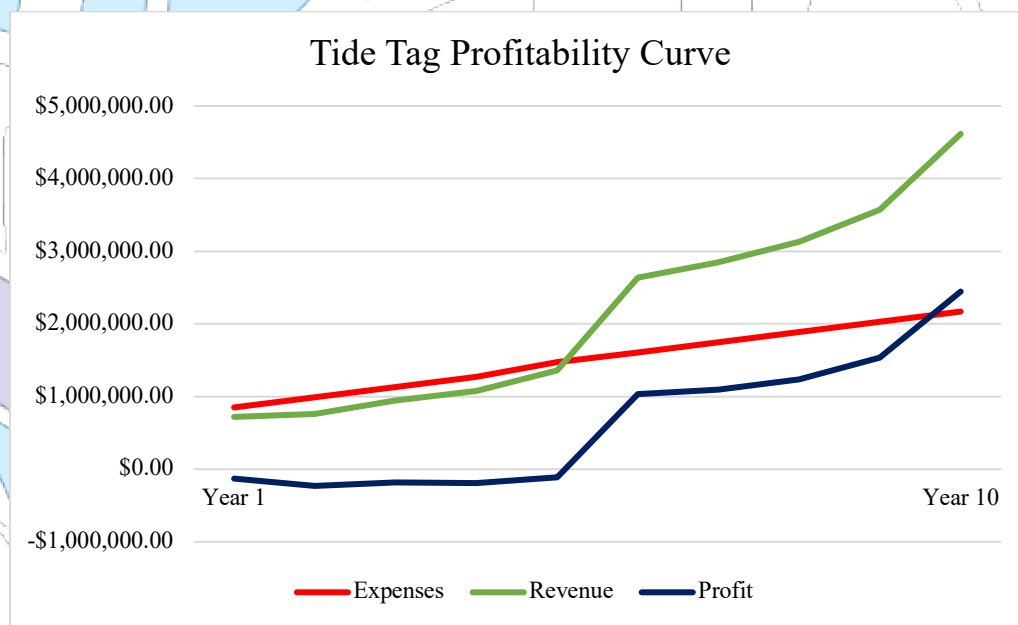
The profitability curve illustrates Tide Tag's financial performance over the ten-year period. In the initial years (Year 1 to Year 5), the company experiences losses, as expenses outweigh revenue. However, starting from Year 6, Tide Tag enters a profitable phase, with revenue surpassing expenses consistently. This positive trend indicates that the business becomes financially viable and generates a surplus over time.

In the case of Tide Tag, the ROI becomes positive from Year 6 onward, as the company sits at about 14%, compared to Year 5, which was at -1.93%. Though we received a $5 million

investment in Year 6, we distributed it over the next five years to improve ROI as we progress. The increasing net profits, particularly in the later years, suggest that investors and stakeholders could expect a more favorable ROI, providing returns on their initial investments.

Navigating the Horizon: Considering the Future of Tide Tag

Over the next two decades, our goal is to keep making a positive impact on communities and contributing to the well-being of our oceans. As financial indicators show us promising numbers, both the board of directors and I have strategic plans to enhance the app's features and functions. Our vision is to transform Tide Tag into the ultimate centralized platform for community-driven conservation efforts, expanding its scope beyond just trash removal. This expansion includes incorporating reporting features on issues such as habitat destruction and overfishing.

Additionally, we aim to integrate augmented reality, using interactive educational resources and visualizations to illustrate the environmental consequences of pollution. Recognizing the expansion of VR headsets and meta-accessories from various companies, it is important to adapt to these technical advancements, utilizing them to further our mission. One last idea we would like to bring to the table is to implement a real-time alert system within Tide Tag to notify users of environmental emergencies, such as oil spills, natural disasters, or other critical events. This feature could empower users to respond promptly and efficiently to urgent environmental issues.

Conclusion: Wrapping Up the Tide Tag Journey

In conclusion, Tide Tag is not just an app; it's a movement that exceeds limits, generations, and industries. The company is a testament to the power of community action and innovation. Tide Tag's team, guided by an amazing Board of Directors and a dedicated operational team, ensures effective decision-making and transparent communication when creating this app for everyone. Investing in Tide Tag is not only a financial venture; it's a commitment to shaping a sustainable future. As we navigate these environmental challenges, Tide Tag is here, offering clear motivations for individuals, corporations, and institutions to invest in this great initiative. Our detailed financial projections show a path to profitability, ensuring that Tide Tag not only fulfills its environmental mission but also establishes financial stability over time. The involvement of notable figures and collaborations with entities like

Patagonia and Eco Eats Delivery demonstrate a network committed to shared values. We offer a different and fun opportunity for investors to align their financial pursuits with a higher purpose.

We are very thankful for the commitment and investments made so far with fellow peers, as we are able to generate more profit and create something meaningful for the world. We hope to keep receiving those investments in the next coming years, as well as winning awards for the app. Which helps with boosting app awareness and, again, receiving more funding. As mentioned earlier in the process of creating this project, investors would have an active role advising the company and maybe even be a part of our prestigious Board of Directors

Tide Tag invites everyone to join the tide, creating a future where the ebb and flow of the oceans mirror a harmonious coexistence between humanity and the environment. Join the tide. Join the movement. Together, we chart a course toward a cleaner, healthier, and more sustainable tomorrow!

Works Cited

"Plastics in the Marine Environment." *Eunomia*, 31 Oct. 2018, www.eunomia.co.uk/reports-tools/plastics-in-the-marine-environment/. Accessed 12 Dec. 2023.

Forgione, Elli. "What Are The Long-Term Effects of Ocean Pollution, and Why Should We Care?." (2023).

"Why Recycled? - Patagonia Films." *Patagonia Outdoor Clothing & Gear*, www.patagonia.com/why-recycled/. Accessed 12 Dec. 2023.

"Grantmaking." *The Ocean Foundation*, 7 June 2023, oceanfdn.org/grantmaking/. Accessed 12 Dec. 2023.

"What Is the Hierarchy of a Nonprofit Organization?" Instrumentl, www.instrumentl.com/blog/what-is-the-hierarchy-of-nonprofit-organization. Accessed 12 Dec. 2023.

Anderson, Olivia. "Eco Eats Delivery" COMM 487W Project (Fall 2023)