

Hunter House



Alphaskoop

Master's Degree Final Project

Feasibility and Business Plan

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**Master's Degree in Technology and Engineering
Management**



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Tarragona

2022

Abstract

This document contains a comprehensive feasibility study of the proposed business plan for Alphaskoop. This company is currently based on a product line of four items. The primary offering is a device engineered to assist dog owners by making cleaning up after their pets on the go as easy as possible.

The product's features enable supreme mobility and convenience for pet owners who enjoy taking their pups into public spaces on a leash but find it uncomfortable to clean up after them using just their hand in a bag. The features mentioned are believed to set this product apart from the existing products in this market. Alphaskoop has the mission of providing such value to satisfy customer needs.

Keywords: Alphaskoop, pooper scooper, pet products.

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1 Introduction

This section will briefly introduce the Alphaskoop business case by outlining the opportunity for innovation in the market and formulating objectives for this study.

1.1 Scenario

This product was developed for dog owners picking up after their pet in public spaces. People either using their hands, or a device, to pick up the feces of their dogs. This product was brought to life through the unification of mechanical design and ergonomic principles, which will provide a cutting-edge solution to dog owners who are uncomfortable using their hand to pick up feces and would like a viable solution emphasizing mobile use. These devices will be referred to as “pooper scoopers” throughout this report.

This product seeks to be a more convenient solution for consumers; primarily those who own a leash but find it inconvenient to handle a secondary device for picking up after their pet when they are on the go. While dog leashes and pooper scoopers are individual products, they may now be seen as complimentary and even unified!

1.2 Justification of the product opportunity

1.2.1 Legislation

The unpleasant and potentially hazardous effects of dog feces in public places have induced the introduction of fines that are enforced by many state and local governments in the United States. For example, the City of Austin, Texas has the law, "An owner or handler shall promptly remove and sanitarly dispose of feces left on public or private property by a dog or cat being handled by the person, other than property owned by the owner or handler of the dog or cat" ("Laws- Is Leaving Pet Waste on the Ground against the Law?", n.d.). This creates a scenario in which a solution is necessitated by law in many urban areas. It is also a problem that seems to be partially enforced by social pressures. Despite the societal and legal pressures, a study across three states has shown that between 31-41% of dog owners in the United States still sometimes or never pick up after their pets (Pollution Prevention Fact Sheet: Animal Waste Collection., n.d.). These citizens represent potential customers that may be influenced by a more convenient and effective solution.

1.2.2 Pet Industry Trends Within United States

The key characteristics being introduced here to find insights for opportunity include industry trends and consumer data.

Dogs have been man's best friend for many years, but since the onset of the COVID-19 pandemic there has been significant trends dev1eloping in the industry of pet products and

services. The American Kennel Club presents the following U.S. based trends from a 2021-22 study (Meyers, 2021):

- Homes with dogs increased to 54% in 2020 from 50% in 2018
- Pet owners shopping online increased nearly 20%, to 86% of owners
- 35% of pet owners spent more on pet food, care, and well-ness related products

This study highlights the obvious rise in dog ownership and spending on dog related products. It should also be noted that a survey indicates, “68% of dog owners say they would keep their pet care spending the same no matter what happens with the economy” (“Pet Ownership Statistics [2021]: U.S Pet Population.” , 2021), showing that this trend may be around for some time to come.

Upon initial market research about the consumer, there are indications of key consumer characteristics that will be targeted. These include the age group, geographic locations, and lifestyle habits, which will all be discussed in depth in section 5.2.

The legislation and industry spending trends show continued engagement in this industry, thus suggesting an opportunity for a successful entrance to the market with an innovative product. With the problem justified and the industry insights, the innovative elements and need fulfillment of this product can now be explored.

1.2.3 Opportunity for Innovation

When taking a look at the existing products in the market, there is a wide variability in the features included on different devices. The most favorable features are dependent on the type of pet owner and the use case. This study will focus on the users who possess the traits of our target consumer:

- Prefer not to pick up feces by hand
- Already own a dog leash, traditional or retractable (Appendix 1)
- Desire a portable scooping device
- Prefer at least one free hand when with their pet

While there may be existing products on the market that can cater to at least one of these traits, there are not any that provide for all of them in such a manner as the proposed device.

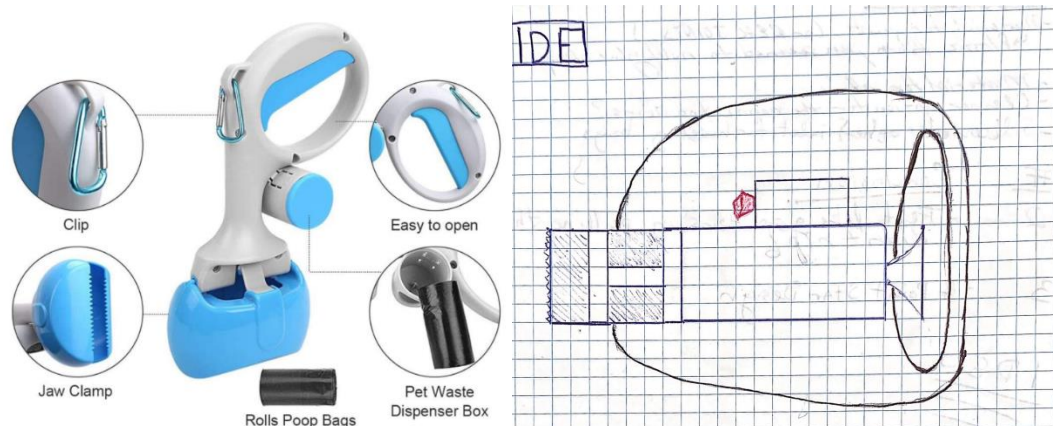


Figure 1: (Left) Existing device that exhibits bag holder, spring-loaded scoop, and a clip.
 (Right) Proposed product concept showing connection to retractable leash style.
 (Recogedor De Cacas De Plástico Portátil, n.d.)

The most similar solutions that exist today are similar to Figure 1 on the left. Notice the trigger activated claw mechanism and the bag holder. Existing products require users to use two hands in order to load the bag onto the scoop. Also, the scoop shown is large, round, and free hanging, making it more burdensome to walk or run while holding it. On the contrary, Figure 1 on the right shows the convenience of the proposed product. Its compact structure allows it to be easily mounted to traditional and retractable leashes (see Appendix 1).

1.3 Presentation of the problem

The problem being addressed here is multi-faceted. First, many pet owners may prefer not to carry a pooper scooper while walking or running their pet since they already carry a leash. These pet owners will then either not pick up after their pet, or they will (sometimes uncomfortably) “hand bag” the feces. Secondly, with this problem being legally enforced it puts those at risk who are unable to deal with the discomfort of picking up after their pets by hand or are unwilling to carry around a separate and bulky poop scooping device.

1.4 Formulation of Objectives

The success of a business strategy can only be measured if qualitative and quantitative objectives are set. These can later be used as signposts on the journey of executing the business plan. These signposts will serve not only as milestones to measure achievement, but also as pillars to guide the company in the intended direction.

1.4.1 General

This project aims to analyze the grounds of this problem and whether there is a need for the proposed solution. Furthermore, insights will be presented about the field of competition in this market and the business requirements for successfully deploying the proposed product.

1.4.2 Specific

The following tasks and analysis will be performed in order to assess the feasibility of entering the market with the business plan:

- Internal and external environmental analysis
- Development of the business model
- Creation of an insightful marketing plan
- Analysis of operational procedures
- Discussion of the organizational design
- Comprehensive financial planning for sales, investing, forecasting, and risk

2 Business Organization

This section will provide details behind the company structure, legal form, and business activities that take place.

2.1 Description of Business

Alphaskoop is a business idea that was formulated with the intention of providing high quality and practical solutions to dog owners. The founder has combined insightful observations and mechanical design to invent the primary product offering.

2.2 Ownership & Principals

The founder of this company is an American engineer with a master's degree in technology and engineering management.

2.3 Organizational Chart

With Alphaskoop being a start-up company, the founder is the only active member of the organization and thus bares all responsibilities of the business.

2.4 Legal Form & Location

Alphaskoop will take the form of a sole proprietorship that is registered with the state of Minnesota in the United States of America.

2.5 Products and Services

The company offers a primary product that was invented by the founder. It is offered with a complimentary product, feces collection bags, and two secondary products, leashes, and harnesses for dogs. All but the primary product offering will be outsourced instead of manufactured in-house.

3 Internal & External Analysis

This section of the feasibility study will identify internal and external factors that may have an impact on the environment Alphaskoop will operate within. The analyses performed were PESTLE, Porter's Five Forces, SWOT, and CAME.

3.1 PESTLE Analysis

This analysis is done with an emphasis on political, economic, social, technological, legal, and environmental factors in order to gain a comprehensive understanding in judging the feasibility of the business plan in today's setting.

3.1.1 Political Factors

The United States political structure is a federal democratic republic comprised of a central federal government, 50 sovereign state governments, and local governments beyond that. The two primary political parties are the democratic and republican parties. The president of the United States is currently part of the democratic party, which has been known to be aligned with more environmental awareness and to take actions towards change. This could play a significant role in shifting public awareness for environmental issues, even down to the harmful impact of pet feces in wastewater. Beyond environmental regulation, this political party has also taken action to support small businesses during the COVID-19 pandemic. President Biden's administration proposed the Bipartisan Infrastructure Law and the Build Back Better Act, which have both been passed in 2021. The US Small Business Administration states some of the benefits these motions will have on entrepreneurs. First, the Infrastructure Law will of course make getting product to consumers easier and more reliable. Second, the Build Back Better Act will allow further investing into small businesses in the form of direct lending, funding incubators, and strengthening the workforce (U.S. Small Business Administration, 2021).

Another important thing to mention is the corporate tax rate in the United States. It was 2017 when the former president Donald Trump passed the bill to cut corporate tax rates to a flat 21% on all taxable income. This presents a governmental situation that levels the playing field for businesses because previously the taxes on businesses had been distributed throughout income brackets. President Donald Trump was part of the Republican party, and it can be taken into consideration that there may be positive and negative aspects for small businesses depending on the party that is in office because they will impact things like tax rates and levels of federal involvement in the economy.

3.1.2 Economic Factors

With the target market residing in the United States, there are several economic conditions that may have an impact on the environment that Alphaskoop will operate within. First, the United States is a mixed economy that has a strong culture of capitalism to drive innovation and social well-being, but there is also some governmental intervention in order to maintain the economy in some circumstances. This economic freedom provides opportunity for anyone to enter the market, while on the other hand this also increases market competition.

When looking at the GDP growth rates in the United States in the past years, there has been a steady state of economic expansion between 2010 and 2019 with growth rates remaining above 1.55%. The COVID-19 pandemic has changed many things in economies around the world. The U.S. state of expansion was disrupted and thrown into a recessive state with a -3.49% GDP growth (U.S. GDP Growth Rate 1961-2022, 2022). The GDP indicates the overall health of an economy and indicates stability of an economic situation. Despite the disruption of the COVID-19 pandemic, disposable income in the United States has been increasing steadily (see Figure 2). This income, along with economic expansion, creates a desirable market to enter into with consumer products.

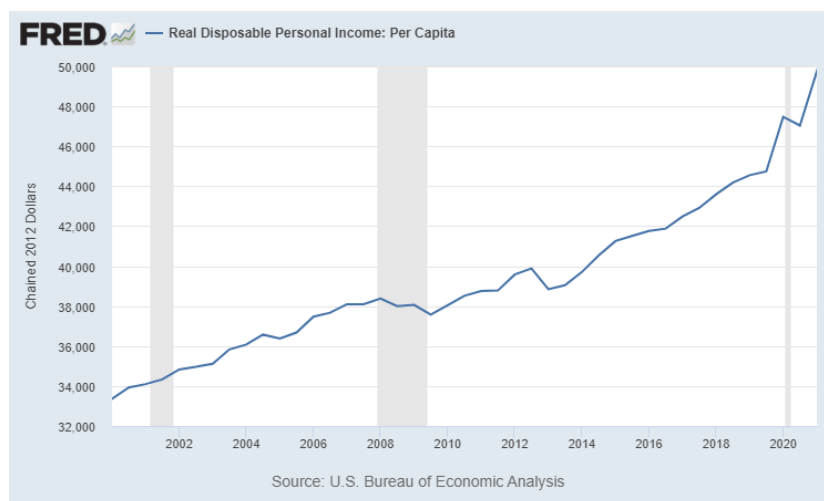


Figure 2: Real Disposable Personal Income per Capita in the United States from 1959-2022. (Real Disposable Income: Per Capita, 2022)

With Alphaskoop being a product-based enterprise that will need to be manufactured, it presents a likely scenario of loans being required to begin operations. Loan interest rates will impact the attractiveness of small businesses to access credit in order to fund their business. While interest rates are susceptible to fluctuation caused by economic and global circumstance, in 2022 loan interest rates range from 2.54% to 7.02% (Nicastro & Lane, 2022). There are many variables that will affect the ability of a new business to obtain a loan

at a feasible rate, but interest rates are something that should be monitored throughout this business plan.

3.1.3 Social Factors

The problem being solved in this business plan is dealing with fecal matter, making it both an environmental and hygienic related business. The environmental factor at hand is that of the harmful effects caused by leaving feces on public land. This can cause the spread of fecal bacteria that can be harmful to the environment and humans. This provides the opportunity to view the Alphaskoop product and solution as a “green product” that contributes to a healthier environment for all. The growing popularity and conscientiousness behind ecological products can serve as an advantage for market entry and volume of potential customers.

The hygienic aspect of this study can be related in wake of the COVID-19 pandemic. During this pandemic, many humans have developed habits for good personal hygiene, creating a certain social dynamic around things that are not properly sterilized. The bombardment of handwashing signs, sanitizer stations, and indirect transactions has no doubt conditioned many people towards living a more sterile lifestyle and to be more mindful around what they touch and interact with. This is an advantage for Alphaskoop on two fronts. First, the obvious externality of sanitary awareness is that more people may find picking up dog feces by hand an uncomfortable situation. Secondly, there will be an increased social pressure from others to pick up after pets in order to keep public spaces clean and sanitary for all. This societal pressure can come in many forms, but nevertheless can serve as an effective motivator for people to take certain actions in order to avoid public scrutiny.

The final social factor that will be discussed is to do with the population and demographics within the United States. Studies have shown that 52% of U.S. consumers that buy pet products are part of the millennial generation (Burke, 2021). This is a clear majority that comes about in the 25- to 44-year-old age group. It is critical to note that this age group is also the largest population in the United States at around 72.1 million (U.S. population by generation 2020, 2021).

3.1.4 Technological Factors

The progression of technology in society can play a critical role in the feasibility of a business in the market, and with the rapidity of advancements in technology in the past years there are several factors to consider. The three primary factors being examined in this section are robotics, automation, and big data.

Robotics can be seen as something that may be on the innovation roadmap for many mechanical devices like the one being considered. In this specific scenario, one could imagine a device that performs the same function with only the press of a button. This may begin to look more attractive to consumers as the years go on, but at this point robotics has not yet penetrated many common consumer products.

Next, automation plays a large role in the ways that companies produce and distribute products. A 2020 global survey showed that 31% of companies have fully automated at least one function (Schwarz, 2020). This number has been increasing and is a commonly known trend in the manufacturing world. While the early stages of production in Alphaskoop are not likely to involve automation, it is a possibility for the future. This is something that demands more capital investment and specialization but can be seen as a potential competitive advantage some businesses may have if it can be used to drive down costs of production.

Automation also has a second, potentially more recreational, facet to be considered, which is that of robotics. Robotics is beginning to extend far beyond the factory floor. Companies like Boston Dynamics, Sony, and more are bringing new products into development that have the potential to serve not only as substitutes to a clean-up device, but also to that of a living pet as well! While this concept may be some years in the future, it is nevertheless an external factor to consider. A psychological study stated, "Based on the Developmental Study, there is evidence that a robotic pet – at least as currently implemented in AIBO – is a mediocre substitute for its living counterpart" (Melson, Kahn, Beck, & Friedman, 2009). This study endeavored to analyze the social bonding and relationships between humans and robotic pets, and it at the very least revealed the potential for meaningful interaction. This concept will be further explored in section 3.2.5 on substitutes.

Lastly, the role of big data in this scenario is pointing to the effect on the ways products are marketed in today's economy. Digital advertising utilizes data collected on consumers in order to perform targeted advertising. This has played a major role in the markets lately, with 54% of advertisement spending going to digital ads in the United States (Guttman, 2022). This can be seen as an advantage that provides the ability of targeting customers that are most likely to be interested in the product, therefore being a more effective way of spending advertising dollars. The fact that e-commerce platforms will play a large role in Alphaskoop distribution channels is also a major advantage.

3.1.5 Legal Factors

It is important to consider the legal environment which a business will be operating in to avoid any unforeseen circumstances that could impact the business. Intellectual property law will be one of the major concerns here. The mechanical design of the Alphaskoop product should be protected by patents. Furthermore, an analysis of existing technologies should also be performed to ensure that there is no infringement taking place against another organization.

The other legal matter to discuss is the legislation surrounding the issue of pet waste. As discussed in section 1.2.1, many communities in the United States have enacted laws that make leaving pet waste in public punishable by fines. This of course has an impact on the relevant consumer base, because if enforcements like this continue to be implemented it can be an advantage to the market Alphaskoop is operating within. The opposite is true if the legislation actually begins to reduce, but this scenario is much less likely.

3.1.6 Environmental Factors

The awareness surrounding pollution and climate change will be key factors affecting this business. The United States Environmental Protection Agency (EPA) has labeled pet waste as a nonpoint source of pollution in urban areas. This problem is primarily regarding stormwater runoff in urban areas that the EPA deems “habitat-destroying impacts” (Nonpoint Source: Urban Areas, n.d.). The potential of dog waste containing harmful bacteria and pollutants are what have made this distinction necessary. Nevertheless, it means that it is an environmental issue that is a cause for concern. Figure 3 shows there is

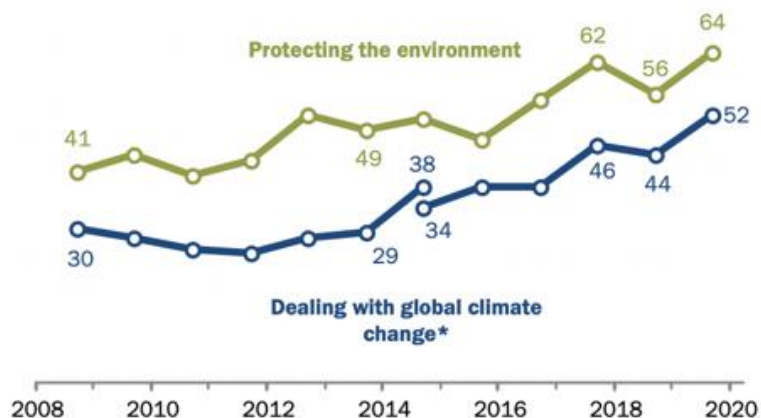


Figure 3: U.S. Adult opinion on environment and climate change governmental initiatives. (Funk & Kennedy, 2020)

a significant increase in American adults that are concerned about protecting the environment.

While this problem is not something positive for communities and the environment, it can be seen as a potential advantage for marketing the Alphaskoop device and serving as a solution to personal and societal problems!

3.2 Porter's 5 Forces

Porter's 5 Forces is a strategy that can be used to evaluate the market that an organization will be operating within. This evaluation is done by focusing on the status of suppliers, customers, competition, new entrants, and substitutes. This assessment seeks to provide key insights towards the forces that may be acting for or against Alphaskoop.

3.2.1 Suppliers

The suppliers of an industry are known to have the ability to exert certain pressures to the industry market depending on the market dynamic and materials involved. The product being discussed will be made up of a standard plastic that is likely to be polyethylene or polypropylene. This material is very commonly used for the manufacturing of a wide range of consumer products that do not demand supreme performance out of the material. The United States is ranked as the third largest plastic manufacturer with over 16,000 plastic manufacturing sites (Habib, 2021). This, and the vast range of products using the same material, are strong indicators of a relatively low bargaining power for suppliers in this industry. While it is unlikely that any particular supplier is highly reliant on Alphaskoop hiring them, the high volume of suppliers will ensure fair pricing and quality services in effort to maintain a business relationship.

3.2.2 Customers

As mentioned in section 1.2.2, there are nearly 54% of households in the US owning dogs. This of course leads to a very high buyer to supplier ratio. This will create a scenario where the consumers do not have much buying power, since they represent independent and low quantity buyers. However, there is the potential that Alphaskoop develops a niche market for a small and savvy set of customers (see section 5.2.3), in which case the buyer power would increase. The dependence of buyers on a single supplier will be low, but there are various features that Alphaskoop product will offer that no other supplier offers.

3.2.3 Competitive Rivalry

The industry of poop scooping devices is well established and by no means a blue ocean. With the first rake-and-bucket style designs originating from the 1970's, there has been many years for the market to recognize the demand and innovate these devices to what they are today. This means that there is no doubt a strong competition in this market today; although, it should also be noted that due to feature differentiation it is by no means perfect

competition. Since it is very difficult to pin down exactly how many poop scooping devices there are on today's market, the popular e-commerce platform for pet products, Chewy.com, was consulted. Upon searching this website for pooper scoopers and filtering for similarity of function, it was found that roughly 15 other similar devices were available. Table 1 below shows a competitive analysis of the top four products seen as the most relevant competitors to Alphaskoop. All of the competitors in this analysis are considered direct competition that may serve the same customers as this business.

Table 1: Analysis of direct competition for Alphaskoop product. (Raw data and sources, Appendix VII)

Competitive Analysis, Normalized Scores (10 = Best, 1 = Worst)					
	Alphaskoop	Pupsule	DogBuddy	Grab-n-Gone	Potty Mouth
Price	4.1	1.0	7.5	4.2	5.8
Mobility					
Weight	N/A	1.5	1.4	1.0	1.2
Size (length)	5.9	4.4	5.8	1.0	5.9
Durability	5	5	10	1	10
Place	7	1	10	1	10
Average	5.5	2.6	6.9	1.6	6.6

The criteria selected for judgement in this table can be briefly defined as follows:

- Price: The price is simply the cost at which the product is being offered.
- Mobility: The mobility evaluates the weight and size of the product based on the data sheets provided. This value is important in determining which product the Alphaskoop target market (see section 5.2.3) would prefer in the case of an active pet owner. These two factors will play a large role in how well users are able to engage in active motion with the product in hand.
- Durability: Durability is key for customer satisfaction and desirability for Alphaskoop's active target market. The rating was subjectively based on reviews and personal insight, marked as low, medium, and high (normalized to 1, 5, and 10 respectively).
- Place: The place criteria scored how well the competitors are making the product accessible to consumers online. This value was determined by counting the number of platforms the product is offered on.

The Alphaskoop product may now be evaluated against the competitor's strengths and weaknesses. Images of the competitors' products can be found in Appendices III-VI.

The price appears to be a weakness for Alphaskoop in this analysis; however, premium quality and pricing is part of the marketing strategy (see section 5.3.1). Mobility was among

the top characteristics that the Alphaskoop was specifically engineered for, so it is no surprise that it ranks top in this category. The ability for the user to move with this product in hand is critical and is among Alphaskoop's top competitive advantages. With the durability scores being more subjective, it is difficult to come to strong conclusions for this category. However, the Alphaskoop is comprised of several smaller and complex components that provide clear potential for fragility. This means silicone-based products, like the Potty Mouth, have a clear advantage in durability. This can be minimized with a simplified design and strategic material selection. Finally, Alphaskoop ranks above average for the online presence. Having proper positioning of the product online will be critical in converting sales. While important to be present on the correct platforms, Alphaskoop will extend its competitive advantage through a strong online marketing strategy (see section 5.4).

Overall, the Alphaskoop is well positioned to compete in this market among the other players. As the analysis revealed, strategic actions regarding material selection, marketing strategy, and more will ensure that this business remains competitive.

3.2.4 New Entrants

The barriers to entry for the market being discussed are relatively low regarding the amount of capital required. When it comes to new competitors entering the market with similar products to those that exist, there is no significant cost advantage that an entrant can leverage without sacrificing the solvency of their business. This comes from the fundamental requirements behind the production of physical products. There is also no significant barrier of access to distribution channels, especially when considering the overwhelming popularity of shopping on e-commerce platforms for this industry. As mentioned before in the section 1.2.2, online shopping of pet owners increased nearly 20%, to 86% of owners. This means there is plenty of opportunity for new entrants to have online distribution channels.

There is the potential barrier of brand loyalty around this market due to the nature of this product. For example, when someone buys a poop scooping device there does not seem to be any obvious reason for people to change brands within a short time scale. This can be reasoned by the likelihood that competitors' products maintain functionality for several years. Surveys from 2021 also show 88% of owners shop for specific pet supply brands (Tighe, 2021). This reasoning, coupled with the data, lead to conclusions of consumers most likely changing brands only if they are grossly unsatisfied with their existing product or attracted to a new product.

3.2.5 Substitutes

Similar to the discussion in section 3.2.3 above, there are 15+ potential substitutes with similar functionality. The strength of Alphaskoop comes from unique features and can be utilized with strategic target marketing. This presence of substitute products is undeniably a threat to this business plan. The magnitude of this threat will depend on the consumer preference of the features and branding that set Alphaskoop apart from the others in the market.

As mentioned in section 2.1.4 above, robotics may play a multi-faceted role in the cycle of this industry. This section will discuss the two primary methods that robotics may provide a substitution to weaken the position of Alphaskoop in the market. The third point discussed will be that of dog feces clean-up services.

Robotics stands to substitute not only clean up devices, but the act of living pets as well. The former may take the form of an autonomous dog poop robot, like Beetl, for example. The Beetl robot locates and picks up dog feces around the yard using cameras and computer vision (Corbett, 2020). This solution would effectively replace the need for a manual poop collection device. The other option is of course the replacement of the living pet with a robot, which has been previously discussed in section 3.1.4. While these ideas may seem far-fetched, Figure 4 below shows the steadily increasing popularity and market size of consumer robotics. By following the money, one can deduce that this future may not be so far off.

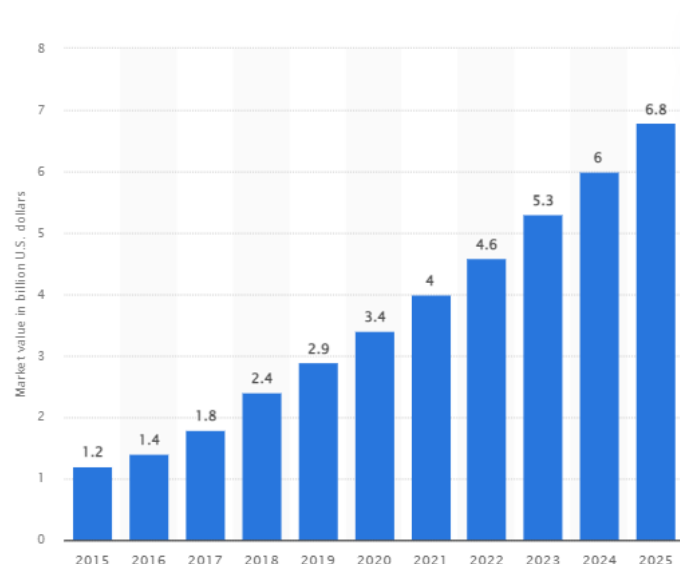


Figure 4: Value of the domestic consumer robotics market worldwide, 2015-2025. (Statista Research Department, 2022)

The third substitute to mention stands to replace the need for a manual poop scooping device, which is the option to hire a cleaning service. In the United States, many feces removal services are taking initiative to fulfill pet owner's needs. This means that, instead of a pet owner cleaning up after their own pet, they are able to outsource and hire this service.

With these substitutes now articulated with a clear functional definition, how do these substitutes effect Alphaskoop specifically? First, the robotic dog is not currently something that will be of concern in the near future, though its progression should be monitored. As for the other two options, they do serve as attractive substitutes for cleaning up on the consumer's private property. However, Alphaskoop is designed specially to be used "in the field". This means the specific use case that Alphaskoop appeals to is not the same as that of the other options. These substitutes are therefore not creating major disadvantages for Alphaskoop.

3.3 S.W.O.T. Analysis

The SWOT analysis provides a look into both internal and external situations surrounding a business plan. The internal strengths and weaknesses will be discussed and followed by the external threats and opportunities. This is done with the goal of obtaining objective conclusions that can be converted into strategic actions for a greater likelihood of success.

3.3.1 Strengths

The primary strengths that Alphaskoop has are product features and the staff. The device has two distinguishable features that can be seen as strengths. First, it is able to be mounted onto existing leashes which will make it an attractive solution for being portable and keeping one hand free. Second, the ability to load a bag onto the claw with a single hand, which will make it easier to load on-the-go than other existing products.

The founder of this company specializes in mechanical and industrial engineering. This will give Alphaskoop two advantages. This allows for agility around the product design due to the mechanical design capacity of the founder. Lastly, the industrial background of the owner will provide knowledge in manufacturing processes and efficiency. These things can also be seen as financial benefits due to potential time and material saved on experimentation and processing.

The last thing to mention is the company imaging and branding. Due to the nature of this company and it being a start-up, there is a strategic advantage of deciding how the product and company is displayed to the public from the very beginning.

3.3.2 Weaknesses

There are a few key weaknesses to mention surrounding Alphaskoop. The first and most obvious being the lack of financial resources. In order to begin production of this product, it will require an initial capital investment to acquire the certifications, machinery, labor, etc. Next, the company consists of only a single individual. This significantly hinders the capacity of the organization as a whole. While there may be certain strengths of the individual, there is many tasks that would be better if allocated. This weakness could give bias to the company feasibility, image, design, and more that would be improved with alternative perspectives. For example, a design weakness of the Alphaskoop product may be the complexity. This is an issue that may be overlooked or seen in a different light because the founder has gained so much familiarity.

3.3.3 Opportunities

There are many opportunities in the pet industry due to its increasing volume and popularity. This has led to people going to greater lengths for their pets. With that being said, if Alphaskoop has established a customer base with its product, it can seek opportunities to expand the business into new products and services in the industry. For example, there is the potential to add a complimentary service line to the business that allows consumers to hire poop scooping services for their property as well. This gives the potential for the business to adopt a service that provides recurring customers and consistent revenue streams. This can be seen as a healthy thing for business finances, so they are not dependent on “one-off” purchases of a single product. This “one-off” purchase can be seen as a threat to the business solvency and will be discussed in the next section.

3.3.4 Threats

There are several threats that are posed against this business plan. The first being the one-time purchases from customers. This means that the finances of the business would be highly dependent on consistent sales of the product line being offered.

Another major threat that should be considered is the economic and societal environments that are developing at the current moment. As of 2022, there is the COVID-19 pandemic and an international war between Russia and Ukraine. These two things can be seen as threats in light of the financial and familial implications. It should be noted that in times of despair people with families and children will almost certainly choose to secure the well-being of human family members before that of the canine family members. Essentially, this means that if the current global circumstances escalate in a negative way it could threaten the market of pet products due to their being non-essential for survival.

The next threat to Alphaskoop is the competitors. With the proposed device being mechanical, it is highly susceptible to being replicated by competitors if not legally protected. Even if the product design is legally protected, there is still the threat of competitors identifying the unique features that are offered and mimicking them in ways that are mechanically different but provide the same functions.

Finally, there are certain aspects of the Alphaskoop design that are a future threat if not considered. The main aspects are durability and ability to provide maintenance. This is a frequently used product that must be able to survive harsh treatment. Furthermore, there are many elements of the early prototypes that may be cause for concern when looking to repair. These are threats that should be accounted for, not only in the design of the product, but in the customer service and warranty plan as well.

3.4 CAME Analysis

The CAME analysis and its conclusions are primarily derived from the SWOT analysis. This takes the analysis one step further in attempt to address the conclusions of the SWOT. This section will outline how to correct weaknesses, adapt to threats, maintain strengths, and exploit opportunities.

3.4.1 Correct Weaknesses

The weaknesses highlighted in the previous section involve the financial and staff circumstances of the organization. These are typically inherent shortcomings of young companies that can be overcome with strategy. The problem of financial resources can be addressed with a strong feasibility plan and presentation to potential investors. The staff can grow as the company evolves and the need to do so becomes more obvious. This should not be done in haste. The hiring decisions should be well thought-out and methodical, especially in the early stages of development. This weakness could be turned into a strength if a strong partnership is formed. A partnership could fill in certain knowledge gaps, reduce the workload, and inspire the company to grow further.

3.4.2 Adapt to Threats

The threats posed by the competition in this market can be addressed similarly to the way other businesses do. The threat of technological replication can be mitigated through legal protection via patents and through superior value provided to the consumer. This means that the consumers should always be listened to and have their needs addressed; this is the only way to ensure quality and satisfaction is being delivered.

In order to ensure that customers feel that Alphaskoop is a product that may be relied on, the threats regarding durability and maintenance should be addressed early on as a strong

criterion in the design choices made. This can be done through reducing feature complexities and improving material quality.

The situation surrounding the COVID-19 pandemic and war should always be kept in mind and used as a motivator to keep the organization agile. This means performing risk assessments that factor in similar scenarios and how they may impact the business. Organizations can also adapt to threats like pandemics by making themselves available online and in-person. As we have seen throughout this pandemic, many companies were forced to have an online presence when the attendance of brick-n-mortar stores was either eliminated or significantly restricted.

3.4.3 Maintain Strengths

The strength of Alphaskoop strategically marketing and branding the business is not something done at a single moment in time. This is something that must be maintained consistently throughout the lifecycle of the business. This means being agile and not afraid to adapt and change. As mentioned before, consumers should always be listened to in order to ensure their demands are met. The sentiment and efficacy of the branding should also be monitored so that changes can be made if necessary.

3.4.4 Exploit Opportunities

The opportunities that exist for the Alphaskoop organization are very expansionary in nature. The potential areas for expansion within the industry should be viewed as an innovative roadmap for the company. This means that there should be objectives that are supported by data, timelines, financing, and work allocation to ensure the growth mindset of the organization is maintained and not forgotten. For example, part of the labor allocation should go to monitoring the market, along with internal finances, in order to be ready for potential business expansion projects if the time is right and it is feasible.

4 Business Model Canvas Analysis

The business model canvas is an important tool in distilling the actual functioning of a company down to the cost structure, value creation, and revenue streams. This canvas acts as a transparent and easy to use device for illustrating the functions of an innovation or business opportunity to anybody. It provides nine segments regarding the value creation, cost structure, finances, and customers. The Alphaskoop business model canvas can be found in Appendix II and be referred to for the content of any of the nine building blocks.

This section will be used to introduce the contents of the nine building blocks and provide necessary descriptions and reasoning.

Customer Affairs

First and foremost, the customer segments must be identified. This will ensure the value proposition and customer channels are correctly aligned with the target market. The customer segments include dog owners who are physically active, investing in quality pet products, urban dwelling, and online shoppers (see section 5.2.3 for further analysis).

Regarding the customer channels, they are e-commerce platforms, company website, and social media. It is important to note that these are not purely for customers to make purchases. They are also critical in relaying the business value proposition surrounding the product mix to the potential and existing customer base. The breakdown of these channels can be referred to in section 5.3.3.

Finally, the customer relationships will initially be limited to a one-year product warranty and reactive conflict resolution. In this way the founder may handle the anticipated customer grievances, while avoiding the need for high-cost customer service operations. This system is favorable in the early stages of a business selling assets but should adapt as the company and customer base expand and demands evolve.

These consumer profiles will be considered, along with channels and relationships, to inform the specific marketing strategy that is deployed later on in this study.

Value Proposition

Through the study of the product offering and the target market, a concise and pointed value proposition may be considered. This business is offering the best user experience with pooper scoopers, including before, during, and after picking up after your pet. It is crucial to recognize that the scope of the user experience extends beyond the exact moment of picking up dog feces, especially for the target market mentioned. These users need a

product that accompanies them off of their own property and will often be walking or running with their pet in an urban or suburban setting. In this way the Alphaskoop value proposition is similar to other offerings on the market but provides a few perks that the competitors do not.

Key Activities, Resources, and Partnerships

Key activities shown are the basics of what is necessary to successfully deliver value to the customers. This business is highly dependent on the successful production and distribution of the products, while managing online and presencial platforms will support the business indirectly. The resources involved are primarily tangible objects to perform production operations like machinery and facilities. Beyond the tangible is the intellectual realm, which consists of the Alphaskoop brand and product patent. The branding is a key feature of the business marketing strategy, and the patent will help protect the founder's rights to the product design.

The strategic alliances that Alphaskoop seeks are that of the popular retail pet stores, PetSmart and Petco (section 5.3.3 for detail). The other style of partnership to be gained is with the wholesale suppliers that will provide the complimentary and secondary products. While the partnerships shown are objectives for the early stages of development, outsourcing various operations should be kept in mind as the business scales.

Cost and Revenues

The final segment of the business model is the business finances. The money coming into the organization is purely through asset sales of the primary, complimentary and secondary products. The anticipated costs to be incurred include production costs, material sourcing, and marketing expenses (section 7).

5 Marketing Plan

The marketing plan for Alphaskoop will seek to provide an effective and concise definition of the company's core operating principles, the business proposal, and the specific marketing strategy that will be applied to execute the companies' intentions.

5.1 Core Operating Principles: Mission, Vision, Values

The core operating principles will include the identification of Alphaskoop's mission, vision, and values that will serve as the foundation throughout the companies' operations.

5.1.1 Mission

Provide a high-quality solution for active dog owners to pick up after their pets on the go, while simultaneously creating a brand for people to buy into that can be overlaid onto secondary product lines.

5.1.2 Vision

Alphaskoop seeks to create a lifestyle brand that provides products with empowering side effects.

5.1.3 Values

Alphaskoop is committed to delivering highly effective, yet simply designed products to consumers with maximum quality and utility. Alphaskoop believes in viewing problems at the fundamental level in order to continuously deliver value in a streamlined manner.

Furthermore, this organization will maintain respect for all ethical and moral values while continuously seeking to enhance the lives of pet owners.

5.2 Business Proposal

This section will provide insight and strategy for bringing this product to the consumers. In order to ensure understanding of the market opportunity and target market, consumer behaviors and beliefs are analyzed and used to draw conclusions for connecting the brand to consumers.

5.2.1 Product Concept

The Alphaskoop was designed as a solution for active pet owners to pick up after their pup on the go. The design provides supreme convenience for the mobile and active users. The leash mounting and one-hand loading features form the unique selling proposition by offering a seamless solution for the target user during the entire using experience. The

unique selling proposition, a statement to embody for differentiation from competitors (Kumar, 2021), is “The Alphaskoop empowers you to keep pushing forward”.

5.2.2 Insights & Market Opportunity

The insight for this business opportunity comes from the observation of data and the practical nature of the problem being solved.

Situation

The role that pets play in the lives of humans has been significantly increasing in the past years with 54% of household in the United States now owning dogs (Meyers, 2021)! This trend in ownership is of course positively correlated with spending, as the money spent on pets has more than doubled since 2010 with Americans being among the highest spenders (Mitic, 2022). When looking more closely at the dog owning situation, another curious trend emerges with respect to the pet owners. Studies show that dog ownership is creating a positive health trend, with owners being up to 77% more likely to achieve recommended levels of activity than non-dog owners (Cutt, Giles-Corti, Knuiman, Timperio, & Bull, 2008)!

Insight

Many dog owners perform their daily physical activity accompanied by their pet and would benefit from a cleanup solution that is designed for the entire duration of this activity, not just the moment of use.

Explanation

As a dog owner, getting out on a walk or run together is important for the health of each party involved! Pet owners, especially in urban areas, are normally obligated to pick up their pet's feces in public. For the consumer that prefers not to pick up after their pet by hand, this situation presents desirable features when looking into a potential product. Not only does the active dog owner seek a highly functional scooping device for the moment of use, but there is portability and aesthetics to consider as well! It is critical to realize that the consumer experience extends beyond just the moment of use. Before and after cleaning up the feces, pet owners are still engaged with the product and therefore it should fulfill the consumers' needs in this condition as well.

Key Takeaways

The trends and insights surrounding the situation outlined above sheds light onto a few key recommendations for entering this market.

- Pet ownership is an emotional experience and financial investment, so products should not only fulfill the function, but adhere to the consumers style of living as well.
- The solution to this problem is not optimized if only the moment of use has been considered in the design. Ensure that the design considers the entire duration of an owners outing with their pet.

Next Steps

The recommendations above lead to the practical next step of identifying the target market, while ensuring that the product features and brand image are effectively exposed to them through the marketing strategy.

5.2.3 Target Market

This section is going to describe the target customer segment, which will allow for an effective implementation of the marketing materials and ensure a good product market fit. Baseline attributes that will likely define every Alphaskoop customer are dog-owners that love their pet and taking them outdoors on a walk or run. It is possible to specify this baseline a bit further when considering the target customer's experience and needs. As mentioned in section 5.2.1 above, the scenario presenting the greatest need for user's generally arises when users are out in public with their pets, not on private property, so it is likely that the target customers will frequently go into public with their pets.

There are a few more targeted characteristics that emerged from the insights in section 5.2.2 above as well. The age and psychographic profile of the customers are of particular interest here. The millennial generation is the highest age group for percentage of pet owners (Spots.com, 2022). This age group takes up 35% of the pet owners in the US. Table 2 displays the characteristics within this millennial age group. The high percentage of pet ownership for home-owning millennials helps to specify the target market even further. People of age 18-34 are also found to be among the most generous spenders on pet products (Mitic, 2022).

Table 2: Summary of Pet Ownership among Millennials. (Spots.com, 2022)

Consumer Profile	Pet Ownership
Millennials	73%
Home-owning Millennials	89%

There is now a strong basis in the target demographic for this product, but the psychographic profile of the target consumers is also critically important. As discussed in the previous section, a significant feature of this product is the increased mobility due to its

compact size and ability to connect to dog leashes, making it a valuable solution for dog owners who enjoy exercising with their pets. The target customer is one who leads an active lifestyle and is engaged in consistently improving themselves in the company of their pet. As the unique selling proposition states, “The Alphaskoop empowers you to keep pushing forward”. These customers will have the need for a solution whose features meet their active lifestyle and whose brand appeals to their determination.

The final insight is based in anecdotal evidence, but it seems that dog owners with large dogs are most likely to feel discomfort in picking up feces using their hand inside of the bag. This leads to the insight that most potential customers will be owners of large dogs and therefore should be targeted as well.

5.3 Marketing Mix

The marketing mix seeks to identify the product, price, place, and promotions for Alphaskoop. The formulation of these concepts is a crucial step in creating a comprehensive strategy to get this product to the target market in the most effective way. Furthermore, these answers will ensure that Alphaskoop’s product directive is clear, concise, and strategic.

5.3.1 Product

The product being offered by Alphaskoop is clear and simple. It is a device for cleaning up your dog feces. Secondary and complimentary products will be sold alongside the primary offer: feces collection bags, Alphaskoop harnesses, and Alphaskoop heavy-duty leashes.

The Alphaskoop product is of high quality and will be surrounded by empowering and forceful branding. The Alphaskoop brand, name, and colors will also play a role in adding value to the product. Figure 5 below shows the Alphaskoop logo composed of the colors red and black. It is known that colors are correlated with different emotions depending on where one is in the world, and it is said that 90% of first impressions of brands are due to color (Acolad, 2020). With that being said, a sentiment analysis may be done regarding the Alphaskoop logo in the context of the United States. The chart in Appendix VIII shows that red may be associated with emotions of love, passion, and excitement, while black symbolizes power and force. Furthermore, the root word of the product name, “Alpha”, comes with connotations of being elite and high performing. Purchasing Alphaskoop products demonstrates commitment to being the best version of oneself and showing your canine friend how they are worthy of nothing but the best.



Figure 5: Alphaskoop logo

The brand and product features combine to create a unique and impactful experience for the target customers. This business will capitalize on the value added from the brand by mapping it onto the secondary products to increase customer retention and transaction prices. All products offered will be built to last. The other unique features that differentiate Alphaskoop from others on the market are the ability to mount onto the owner's leash, and the ability to load the dog poop bag onto the claw with a single hand. This creates a unique selling point of a premium product that provides an easy, convenient, and mobile solution.

5.3.2 Price

The pricing strategy deployed by Alphaskoop is influenced by the desired positioning of this product. As detailed in section 5.3.1 above, Alphaskoop will be positioning itself as a high-quality brand for dog owners committed to enhancing themselves and their experience with their canine companions. With that being said, the type of pet owners being targeted are willing to spend on their pets and will have no problem paying for the best product. The product will be priced accordingly.

5.3.3 Place

This section will identify and analyze each method that will be deployed to reach customers and make sales. The two categories of places are in-person and online. A word should be spent on the priority with which each of these channels should be treated with. With United States pet owners shopping online having increased to 86% (Meyers, 2021), this demands that online channels be the top priority for the Alphaskoop marketing plan. However, this should not diminish the importance of the partnerships with brick-n-mortar stores that will be described. Online marketing channels will be discussed first to maintain the consistent hierarchy of emphasis.

The online channels will be of utmost importance for exposing customers to Alphaskoop. Table 3 below illustrates the various channels and their basic function for this marketing strategy. Chewy.com, petsmart.com, and petco.com will be of major priority. These three e-commerce platforms have the highest net sales in the United States pet supplies with \$9.832M, \$1.150M, and \$640M revenues in 2021 respectively (Peters, 2022).

Table 3: Marketing Channel Descriptions

Channel	Function
E-Commerce: Chewy.com, Petsmart.com, Petco.com	Expose a wide range of potential customers to the product on a relevant platform.
Search Engine Optimization, Pay-per-click	Reach relevant potential consumers through targeted advertising and search engine optimization.
Company Website	Provide useful information on company details: contact, product descriptions, policy, communities, etc.
Social Media Platforms	Distribute valuable marketing content to relevant customer segments through targeted advertising. Alphaskoop social media profile will be used to provide customer service and facilitate community discussions

The next marketing channel will be pay-per-click advertising (PPC) and search engine optimization (SEO). Since they are found to produce the highest return on investment (Shirey, 2020), these two channels will be allotted the largest portion of the marketing plan budget. PPC and SEO each utilize strategies like Google Ads, keywords, and machine learning to target customers. PPC is said to target “bottom-of-the funnel” users that are ready to make purchases, while SEO targets each stage of a user experience (Shirey, 2020). These investments are effectively amplifying traffic to the websites in which Alphaskoop will be selling. A more detailed strategy for SEO and PPC can be found in section 5.4.2 below.

The company website will be a key resource for this marketing plan. It will allow the customers to visit and learn more about the brand and who Alphaskoop really is, which is not so clearly illustrated on e-commerce sites like those mentioned above.

Social media marketing is being used by billions of people worldwide and can therefore not be ignored by any business. A blog by Neal Schaffer states, “52% of brand discovery happens in social media. So don’t underestimate the power of keywords, relevant hashtags,

and engagement on your social media posts as they help to boost your reach” (Schaffer, 2022), showing the major role this channel can play. While the details of this strategy will not be explicitly detailed, it is important to note that insights from keywords analysis are multipurpose and will fuel the social media marketing strategy as well.

Notice that the company website and social media platforms can be utilized to fulfill the customer relationship vision. They will allow for direct contact and be highly accessible to the customer to inquire product warranties, feedback, questions, and more.

Finally, the retail store partnerships will take place in PetSmart and Petco, for they are the two largest pet store chains in North America (Bedford, 2022). These pet stores can be seen as the go to place for the basic needs of many pet owners, making their partnership advantageous for exposing Alphaskoop to more customers. Furthermore, Alphaskoop will also seek to partner with specialty pet stores located in various strategically chosen US cities. These stores are for the consumers willing to go the extra mile for their pets, offering things like gourmet foods and personalized service. These partnerships will be key in reaching the target customers who want nothing but the best for their dog and are willing to pay for it.

5.3.4 Promotions

As section 3.1.4 detailed the technological factors that may influence Alphaskoop, the advantages of big data and digitalization may now be discussed. Modern marketing now appears more like data analytics than an emotional endeavor, so this business will recognize the trend and form a strategy to take advantage of it. The following section will outline the keywords and SEO strategy that will boost awareness for this business against the competitors.

The finding from the SEO strategy will also be utilized to form a preliminary content creation and social media strategy. They are related because the SEO will reveal what the most relevant queries and interests of the potential customers are and can therefore inform the strategy for creating content.

5.4 Marketing Strategy

This section will perform a keyword analysis that is followed with strategy informed by the analysis.

5.4.1 Keywords and Search Intent

The first step of the online marketing strategy will be to identify the keywords that are surrounding the relevant market that Alphaskoop will be operating within. These are done

in order to form a strong online presence among the pet product industry. The process began by identifying “seed keywords”, which suggest how people may search for your product in a search engine (keywordtool, 2022). The relevant seed keywords were deemed as follows:

- Pooper scooper
- Dog poop clean up
- Dog waste removal

These seeds were then fed into a keyword tool, by Wordstream, in order to identify the most popular keywords surrounding the Alphaskoop product. Figure 6 below shows the top five keywords by volume and level of competition that have been distilled from the three seed keyword searches (raw data, Appendix IX).

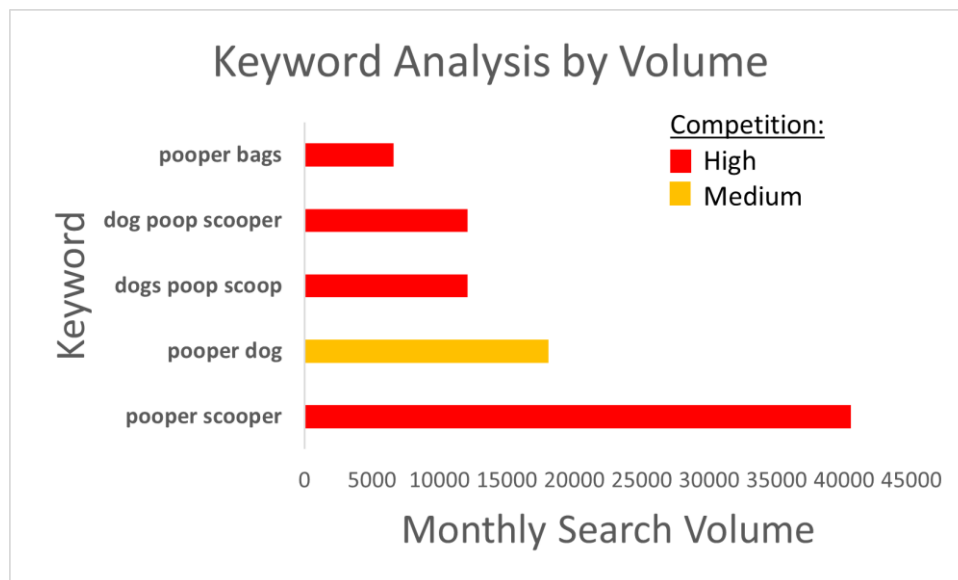


Figure 6: Keyword Analysis by Volume. (Free Keyword Tool, 2022)

This search provides several valuable insights. Firstly, it was found that “pooper scooper” is by far the most popular search term. This will be very valuable knowledge when creating content so that it may be the primary term used in any writing done online. Next, notice that “pooper bags” is also among the top five key words. This is helpful for identifying customer intent and potential for converting on more of the Alphaskoop complimentary product, dog poop bags. Lastly, the term “pooper dog” is ranked second in volume but has a lower competition index. This indicates a potential opportunity for the Alphaskoop marketing plan if this term can be integrated into the content. Lower competitive index indicates a higher likelihood of being suggested near the top of search results for a user.

Another critical step in crafting a strong online marketing scheme is knowledge of the customer's intent. This study seeks to answer the question, "Why is the user searching?". The tool from *answerthepublic.com* was used to identify the top questions and prepositions being asked around keywords. The search intent reveals the thought process of the potential customer, thus providing insight into how and where to make online presence known. Figures 7 and 8 (Appendix X) visualize the findings. From the data on questions and prepositions the top queries by category in are extracted to Table 4 below.

Table 4: Pooper scooper question and preposition research findings. (Ubersuggest, 2022)

Category	Search question / preposition
Question (Product)	“what’s pooper scooper” “how do pooper scoopers work” “Do pooper scoopers work” “why poop scoop” “which pooper scoopers” “where to store pooper scooper” “are pooper scoopers worth it” “where are pooper scoopers in Walmart”
Question (Service)	“is pooper scooper a good business”
Prepositions	“pooper scooper with bag” “pooper scooper with rake” “pooper scooper is best” “pooper scooper no touch” “pooper scoopers on amazon” “pooper scoopers for dogs” “pooper scoopers for walks” “pooper scoopers near me”

Notice that many questions are seeking information about pooper scooper definition, usefulness, and functionality, with a few questions regarding the location of such products. This highlights a curiosity among many individuals to learn more about solutions to this problem. Alphaskoop content can be created to inform these customers about what pooper scooper products are, what they should look for in a product, and why Alphaskoop may be a good option for them.

Alternatively, the prepositions seem to be more pointed inquiries by individuals who may already be knowledgeable about pooper scoopers and are now on the market to purchase. This clearly reveals an intent to learn more, if not purchase, about available pooper scoopers on the market.

With the insights gained from the keywords and search intent studies, the strategy for creating online content and search engine optimization may now be discussed.

5.4.2 PPC, SEO, Content Creation, and Social Media Strategy

This section is extremely important because it will detail how the Alphaskoop online marketing plan will put the research insights into action. The keyword analysis in section 5.4.1 above revealed the top five keywords that should be used to funnel traffic towards the created content.

The keywords will help the PPC efforts most efficiently convert bottom of the funnel customers into transactions, since they will be directed to the company website during the

final stage of their search for a product. The SEO strategy will also benefit from the keywords, ensuring that the content created will keep the popular search terms in mind and strategically integrate them in order to funnel user traffic from all stages of the buying process to the company's content.

Finally, the keywords and search intent will be critical in the overall content creation and how the social media strategy is addressed. The user search intent can be of particular help. For example, the section above showed many queries regarding the usefulness and functionality of a pooper scooper. Alphaskoop social media content can easily include captivating content that is not only informative to the subject as a whole, but spotlights the Alphaskoop product as a prime example in its descriptions. The marketing content will also include longer form material such as blogs. The topic of these blogs may also be informed by user search intent, providing product comparisons, industry news, answers to common questions, etc.

These are all manners in which the research insights can feed into a marketing strategy and ultimately lead to more traffic and higher conversion rates for the business.

6 Operations Plan

The operations plan will include the most concrete description of actions and resources that will be needed in order to realize the business strategy that has been laid out thus far.

6.1 Main Business Activities

A major and obvious necessity for a business selling a physical product like Alphaskoop is the location and resources to be able to manufacture the product. These activities are key to creating value in the business and can be initiated as follows:

- **Physical Location:** There will be a single physical location to begin this business. It will be a small workspace that has only the necessary machinery to execute the manufacturing process, inventory space, and finally a small office. This resource will place a key role in nearly all business activities, including logistics, operations, administration, human resources, etc.
- **Equipment & Manufacturing Process:** The manufacturing process can be put into four primary activities: 3D printing, machining, assembly, and packaging. The necessary equipment and resources will need to be sourced in order to fulfill these operations.
- **Supply Chain & Relationships:** A valuable resource for this company will be the reliable relationship with suppliers. An agreement should be made that allows for timely delivery of raw materials that minimizes the time and space wasted in Alphaskoop business operations.
- **Human Resource Management:** The recruiting of talented individuals will be critical in the scaling of this business. While the founder will wear many hats in the early stages, specialized individuals shall be recruited to assist in marketing, social media, and operations activities to begin with.
- **Virtual Presence:** The company website and social media platforms shall be established and consistently managed. This will be a key pathway to reaching customers and providing valuable material to engage with them.

6.2 Porter's Value Chain for Alphaskoop

The main idea of a business is to take inputs to the existing system and convert them into outputs through some value-added process. Michael E. Porter describes a powerful tool for analyzing business systems from a value perspective, Porter's Value Chain, in his 1985 book "Competitive Advantage" (Porter, 1985). The method demands that sub activities for each primary and support activities are identified. The primary and support activities, which are common to most organizations, can be found in Figure 9 below.

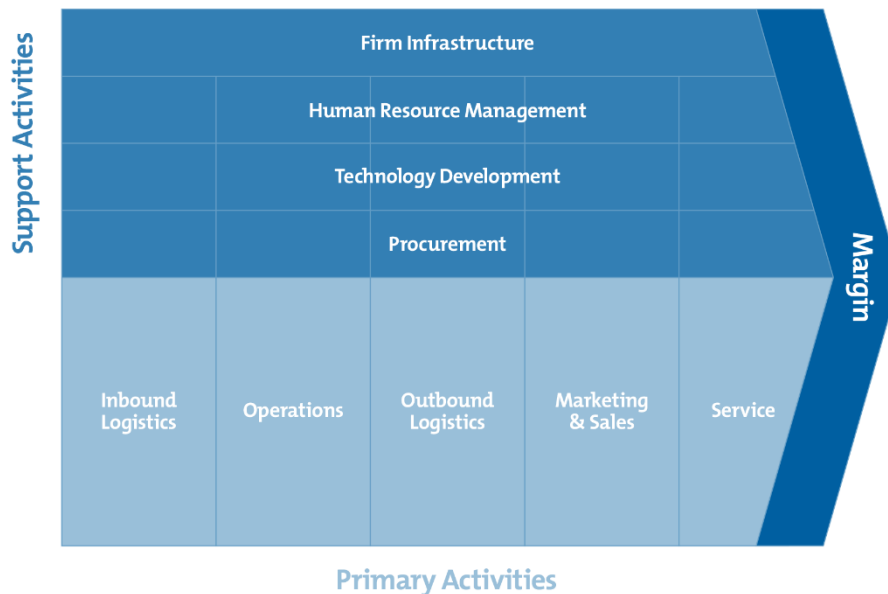


Figure 9: Porter's Value Chain (Mind Tools, n.d.)

Primary activities are those which contribute directly to the creation and maintenance of all value adding systems that get the product to the consumer. Intuitively, support activities are those which contribute to the primary activities (Mind Tools, n.d.). The following section will focus on the interesting primary activities, support activities, and the relationship between them. This in turn will provide specific insights into the value creation and opportunities for improvement. This analysis will be done based on the assumption of the minimum activities needed by the founder to produce and begin distribution of products to customers. With that being said, the nature of the business at this point in the analysis is undoubtedly immature and the analysis should be updated as scale is achieved.

6.2.1 Primary, Support, and Linking Activities

The inbound and outbound logistics will be core activities in the successful implementation of this business. These logistical activities provide value themselves in the efficient receipt, storage, and distribution of inputs and outputs. If these activities are done without organized logistical processes, there will be lots of waste. This goes for the operations that will take

place in material transformation as well, which must be done skillfully with an emphasis on quality. The support activity of material procurement plays a major role in these logistical and operational value adding activities. The procurement links directly to Alphaskoop's ability to obtain resources economically and transform them into a valuable solution for consumers at a profitable rate. It should also be noted that all logistics and operations will be carried out by the founder to begin with, so there is room for establishing more dignified systems to support such activities as the sales and company personnel grow.

The marketing and sales are the other interesting processes to consider in how the business is adding value. These activities, if implemented effectively, can have a direct relationship to the growth of revenue streams. They include the distribution of marketing materials via channels and the interaction with potential customers. Human resource management then arises as a crucial factor for these activities. Highly skilled staff will ensure that resources are put towards the company mission effectively and efficiently to create a high value added for every marketing and sales dollar spent. The development of the human resource base in Alphaskoop will need to be managed as scale is achieved and will likely serve as a company weakness in the early stages.

These operations will all be quantified in the following section for the financial analysis. The combination of Porter's Value Chain and the financial plan will help reveal insights to adding higher value per input into the business system.

7 Financial Plan

This section will provide all necessary information regarding the financial goals of this company. There will be expected expenses, sales forecast, funding options, sensitivity analysis, and an overall investment analysis.

7.1 Description of Assumptions

Alphaskoop is a start-up with no historical sales figures, so there will be several underlying assumptions made throughout this financial analysis. The nature of accounting assumptions can have a significant impact on the projections of a business and should therefore be done with a best- and worst-case scenario so as not to mislead potential investors or cloud the judgement of the company. The analysis of best and worst scenarios was limited to the sales forecasting, whose assumptions can be found in the corresponding section 7.3.1. The sales forecast employed a sales mix of 5:5:1:1 for the Alphaskoop device, feces collection bags, leash, and harness, respectively. This is because the Alphaskoop is the primary product, and the bags will frequently be sold alongside of it. The leash and harness are secondary products that will likely be appealing to the customers who enjoy the Alphaskoop branding or the want to experiment with the product lines after trying the Alphaskoop device. All other figures are based on the conservative sales forecast.

There are other significant figures that have been created with underlying assumptions that should be mentioned. The start-up expenses, fixed costs, and variable costs all include assumptions based on various sources or methods. A more detailed description, along with reference material can be found in the respective sections where the calculations reside below.

Finally, it should be mentioned that Alphaskoop seeks to remain very lean during the initial phases. With the founder having access to significant resources to assist in business operations (space, machinery, tooling, etc.), nearly all business activities will be done from the founder's home. This does not mean that relevant costs are not considered, but it does effectively drive down certain expenses, specifically in the fixed annual costs. This assessment was done with the reality of the scenario in mind in order to provide the most applicable analysis possible.

7.2 Start-up Expenses

There are two primary requirements to begin operations and distributing products. The first is the necessary business registration in the state of Minnesota where the owner will reside. This simply requires that a sole proprietor's business and name to be registered (Minnesota

Secretary of State, n.d.). The initial website, rent, and utilities payments are also considered necessary to begin the business operations. The second primary need comes from the manufacturing operations. This start-up will begin with low volume production and will therefore utilize 3D printing technology to produce the custom components of the assembly. The other components required for starting inventories will be purchased as stock material or wholesale, the detailed breakdown of which can be found in section 7.3.2 below for variable costs. Table 5 below shows the breakdown of Alphaskoop start-up expenses.

Table 5: Start-up expenses

Investment	Price
Start-Up Expenses	
Business Registration Fees	\$ 135
Name Registration	\$ 35
Website Set-up	\$ 247
Rent Down Payment (6-Months)	\$ 2,100
Utilities (6-Months)	\$ 475
Starting Inventory & Labor (6-Months)	\$ 1,245
3D Printer	\$ 1,999
Patent (Filing, Search, Examination)	\$ 510
Total	\$ 6,746

7.3 Incomes and Expenses Analysis

The forecasts presented in this scenario are worst-case scenario and will allow for a conservative risk assessment for the founder and potential investors.

7.3.1 Expected Incomes

As seen in the business model canvas of section 4 above, Alphaskoop will generate revenues through the sale of primary, secondary, and complimentary products. The products and their categorization can be found in Table 6 below.

Table 6: Alphaskoop product offerings and categorizations

Product	Category
Alphaskoop Clean-up Device	Primary
Feces Collection Bags	Complimentary
Alphaskoop Heavy Duty Leash	Secondary
Alphaskoop Dog Harness	Secondary

The sales forecast (Table 7) for the first four years of operation makes the following assumptions:

- Initially low sales volumes for each product, 21, 21, 8, and 8 units monthly for the Alphaskoop device, feces collection bags, leash, and harness respectively
- The secondary products will not be sold until the third quarter of 2023
- Sales will increase 5% per quarter for the first year and 15% yearly for the next three years
- Superior forecast scenario can be found in Appendix XI

These figures illustrate the how the revenue will be generated, while the profitability can be seen clearly in the profit and loss statement of section 7.4 below.

Table 7: Sales forecast, worst-case scenario

Worst-Case Scenario Forecast							
Year	2023				2024	2025	2026
	Q1	Q2	Q3	Q4			
Alphaskoop Device							
Units Sold	65	68	72	75	322	371	426
Unit Price	\$ 35.00	\$ 35.00	\$ 35.00	\$ 35.00	\$ 35.00	\$ 35.00	\$ 35.00
Revenues	\$ 2,275.00	\$ 2,388.75	\$ 2,508.19	\$ 2,633.60	\$ 11,276.36	\$ 12,967.82	\$ 14,912.99
Clean-Up Bags							
Units Sold (3-pack)	65	68	72	75	322	371	426
Unit Price	\$ 2.50	\$ 2.50	\$ 2.50	\$ 2.50	\$ 2.50	\$ 2.50	\$ 2.50
Revenues	\$ 162.50	\$ 170.63	\$ 179.16	\$ 188.11	\$ 805.45	\$ 926.27	\$ 1,065.21
Alphaskoop Heavy Duty Leash							
Units Sold	0	0	25	26	59	68	78
Unit Price	\$ 20.00	\$ 20.00	\$ 20.00	\$ 20.00	\$ 20.00	\$ 20.00	\$ 20.00
Revenues	\$ -	\$ -	\$ 500.00	\$ 525.00	\$ 1,178.75	\$ 1,355.56	\$ 1,558.90
Alphaskoop Dog Harness							
Units Sold	0	0	25	26	59	68	78
Unit Price	\$ 25.00	\$ 25.00	\$ 25.00	\$ 25.00	\$ 25.00	\$ 25.00	\$ 25.00
Revenues	\$ -	\$ -	\$ 625.00	\$ 656.25	\$ 1,473.44	\$ 1,694.45	\$ 1,948.62
Total Revenue	\$ 2,437.50	\$ 2,559.38	\$ 3,812.34	\$ 4,002.96	\$ 14,734.01	\$ 16,944.11	\$ 19,485.72

7.3.2 Expected Expenses

This section will be used to analyze the expenses required to maintain operations on an annual basis. The figures seen in Table 8 were estimated from online quotations and personal knowledge. It should be noted that these fixed costs are for 2024 and beyond, since 2022-23 makes certain website, rent, and utilities payments up front.

Table 8: Fixed costs, annual

Fixed Annual Costs	
Website	
Domain	17
SSL Certificate	130
Hosting	100
SEO & PPC	1200
Office Supplies	360
Owners Salary (Starting in 2024)	2500
Rent	4200
Overhead	
Electric	900
Telephone	50
Total Costs	\$ 9,457

In order to get an accurate estimation on the detailed cost of production and distribution, the variable costs per unit were also outline in Table 9. These estimates will be considered in the cost of goods sold for the profit and loss statement.

$$Labor\ Cost = (\$15/hour) / 3\ Units\ per\ hour$$

The labor estimates for fabricating the Alphaskoop device were calculated using the equation above. Since the other products are not manufactured in-house, the labor estimates were excluded and considered negligible.

Table 9: Variable Costs, per unit

Variable Costs	
Alphaskoop Device	
Plastic Extrusion Material	0.075
Printing Filiment	1.266
Miscellaneous Material	2
Labor	5
Total	\$ 8.34
Cleanup Bags	
Wholesale Unit Price	0.19
Distribution/ Packaging	0.25
Total	\$ 0.44
Alphaskoop Heavy Duty Leash	
Wholesale Unit Price	4.29
Distribution/ Packaging	0.75
Total	\$ 5.04
Alphaskoop Harness	
Wholesale Unit Price	4.96
Distribution/ Packaging	0.75
Total	\$ 5.71

7.4 Financing the Business

The founder will be working for a salary under another employer as this business develops in the early stages. This salary could supply the majority of funding required to operate the business, but instead the founder will seek financing from friends, family, and fools (FFF).

Table 10: Funding sources

Finance the Business	
Friends, Family, Fools	5000
Owner's Equity	5000
Total Sources of Financing	10000

The funding amount is \$10,000 and will include a loan amount of \$5000 at 5% interest rate to be paid back over four years (Table 11). The remaining \$5000 will come from the owner's capital and be injected into the business over the first two years. The cash flow statement can be found in Table 12 (Appendix XII).

Table 11: Repayment of the FFF loan

Repayment of the Loan					
	Initial (2022)	2023	2024	2025	2026
Total Payment		\$ 1,500.00	\$ 1,437.50	\$ 1,375.00	\$ 1,312.50
Interest		\$ 250.00	\$ 187.50	\$ 125.00	\$ 62.50
Principle		\$ 1,250.00	\$ 1,250.00	\$ 1,250.00	\$ 1,250.00
Unpaid Balance	\$ 5,000.00	\$ 3,750.00	\$ 2,500.00	\$ 1,250.00	0

7.5 Sensitivity Analysis

With the forecasting now complete, the sensitivity analysis can be performed by calculating the break-even points. Table 13 illustrates the contribution margin and sales mix formulation that is used when finding the break-even point.

Table 13: Contribution margin calculation

Contribution Margin				
	Alphaskoop Device	Clean-up Bags	Alphaskoop Heavy Duty Leash	Alphaskoop Harness
Selling Price	35.00	2.50	20.00	25.00
Variable Cost/ Unit	\$ 8.34	\$ 0.44	\$ 5.04	\$ 5.71
Contribution Margin	\$ 26.66	\$ 2.06	\$ 14.96	\$ 19.29
CM (%)	76%	82%	75%	77%
Sales Mix	5	5	1	1
Unit Sales Mix Ratio	0.42	0.42	0.08	0.08
Total Fixed Cost:	9457			

Weighted Average Contribution Margin/ Unit				Weighted Average CM per Unit (Total)
Alphaskoop Device	Clean-up Bags	Alphaskoop Heavy Duty Leash	Alphaskoop Harness	
\$ 11.27	\$ 0.87	\$ 1.16	\$ 1.49	\$ 14.79

The break-even points are then found for the individual products, as well as total, in Table 14 and 15. These tables show the break-even point in units and dollars respectively, which were found to be 640 total units and \$12,362 in revenues. This point could reasonably be achieved by Q4 of 2023 according to the sales forecast.

Table 14: Break-even point, in units

Break-Even Point in Units				
Alphaskoop Device	Clean-up Bags	Alphaskoop Heavy Duty Leash	Alphaskoop Harness	BEP (Total Units)
270	270	49	49	640

Table 15: Break-even point, dollars

Break-Even Point in Dollars				
Alphaskoop Device	Clean-up Bags	Alphaskoop Heavy Duty Leash	Alphaskoop Harness	BEP (Total Revenue)
\$ 9,461	\$ 676	\$ 989	\$ 1,236	\$ 12,362

7.6 Profit & Loss and Balance Sheet

The profit and loss statement and balance sheet will now be shown based on the forecasting from above. Table 16 below shows the profit and loss statement. Notice that the depreciation of the 3D-printing machine was calculated using the following equation for straight-line depreciation. This calculation assumes 7 years useful life and \$400 residual value.

$$\text{Depreciation (Annual)} = \frac{\$1999 - \$400}{7 \text{ years}} = \$ 228.43$$

The profit and loss statement also assumes a tax rate of 21% on the business. This is due to the regulation in the state of Minnesota, which indicates that a sole proprietorship will pay based on the personal income tax rate of the founder.

The profit and loss statement also reflects the assumptions made for the start-up expenses and operations. These expenses are reflected in the year 2022, in which the pre-operating costs for six months of inventory and set-up are included. The total amounts of cumulative start-up expenses shown in Table 5 above.

Table 16: Profit and Loss Statement, 2022-2026

Profit & Loss Statement	2022	2023	2024	2025	2026
Net Sales	\$ -	\$ 12,812.18	\$ 14,734.01	\$ 16,944.11	\$ 19,485.72
Material Costs		\$ 1,001.61	\$ 1,702.13	\$ 1,957.45	\$ 2,251.06
Labor Costs		\$ 839.33	\$ 1,760.53	\$ 2,024.61	\$ 2,328.30
Rent + Overhead		\$ 2,575.00	\$ 5,150.00	\$ 5,150.00	\$ 5,150.00
Depreciation		\$ 228.43	\$ 228.43	\$ 228.43	\$ 228.43
Pre-Operating Costs	\$ 5,744.07				
COGS	\$ -	\$ 4,644.37	\$ 8,841.09	\$ 9,360.48	\$ 9,957.79
Gross Profit	\$ -	\$ 8,167.81	\$ 5,892.92	\$ 7,583.62	\$ 9,527.93
% Gross Profit		64%	40%	45%	49%
Organization Costs		\$ 927.00	\$ 247.00	\$ 247.00	\$ 247.00
Selling & Marketing Expenses		\$ 1,200.00	\$ 1,200.00	\$ 1,200.00	\$ 1,200.00
Administrative Expenses		\$ 360.00	\$ 2,860.00	\$ 2,860.00	\$ 2,860.00
Other Income		\$ -	\$ -	\$ -	\$ -
Operating Expenses	-	\$ 2,487.00	\$ 4,307.00	\$ 4,307.00	\$ 4,307.00
E.B.I.T	\$ (5,744.07)	\$ 5,680.81	\$ 1,585.92	\$ 3,276.62	\$ 5,220.93
% E.B.I.T	-	44%	11%	19%	27%
Financial Income			\$ -	\$ -	\$ -
Financial Expenses		\$ 1,500.00	\$ 1,437.50	\$ 1,375.00	\$ 1,312.50
E.B.T.	\$ (5,744.07)	\$ 4,180.81	\$ 148.42	\$ 1,901.62	\$ 3,908.43
% E.B.T.		33%	1%	11%	20%
Income Tax		\$ 877.97	\$ 31.17	\$ 399.34	\$ 820.77
Net Profit	\$ (5,744.07)	\$ 3,302.84	\$ 117.25	\$ 1,502.28	\$ 3,087.66
% Profit & Loss	-	26%	1%	9%	16%

Next, the balance sheet for the next four years can be found in Table 17.

Table 17: Balance sheet, 2022-2026

Balance Sheet	
Assets	
	2022
Total Assets	7000.00
CURRENT ASSETS	2426.00
Cash & Cash Equivalents	1255.93
Receivables	
Prepaid expenses	
Inventories & Labor	1170.07
NON CURRENT ASSETS	4574.00
Property & Equipment, net	4574.00
Accumulated depreciation	
Intangible Assets	
Other Long-term Assets	
Liabilities & Equity	
LIABILITIES	5000.00
CURRENT LIABILITIES	0.00
Interest Payable	
Taxes Payable	
Finance Lease Obligations due within one year	
LONG TERM LIABILITIES	5000.00
Long-term Debt	5000.00
Equity	2000.00
Shareholders Equity	2000.00
Profit	
Other	
L+OE	7000.00

8 Conclusions & Insights

Conclusions

The idea of Alphaskoop's primary product offering stems from the lack of easy and portable options on the market for active dog owners. The founder immediately began prototyping after recognizing this issue and will be initiating product testing with consumers in the coming months. This testing will reveal important consumer responses to the product image and functionality.

While the feasibility of this business also depends on the response in the product testing, the analyses performed in this study suggest a viable market entry for Alphaskoop. The competitive comparison revealed that Alphaskoop can leverage several advantages to outperform other organizations. Once this is achieved and a customer base is established, secondary products will be released to the market. These products will capitalize on the established brand image of Alphaskoop, offering elite quality products for passionate pet owners. If the marketing and operational strategies are successfully implemented, the financial projections suggest this business will remain solvent even in the worst-case scenario.

Insights

This study has not only developed a strong plan for constructing this business but has also revealed several insights surrounding the pet product industry and business trends as a whole.

One of the major reasons for the growth of this industry was found to be the increase in pet ownership in recent years for the United States. Furthermore, this has been closely coupled with the increase of online shopping for these products, creating an even playing field for entrepreneurs seeking to provide valuable solutions. An industry which is heavily focused in e-commerce requires specialized skills, the marketing section of this study found insights to better reach the target customer segments.

Lastly, these target customer segments were established based on two foundational insights. First, the active pet owner needs an easy and convenient solution for the entire duration of their outings with pets. Second, consumer spending trends have revealed the willingness of some pet owners to spend on quality products for their pets. This is a trend in which Alphaskoop seeks to take advantage of through its strategic pricing and branding.

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Annexes

Appendix 1



Traditional leash style (left) and retractable leash style (right).

Appendix II

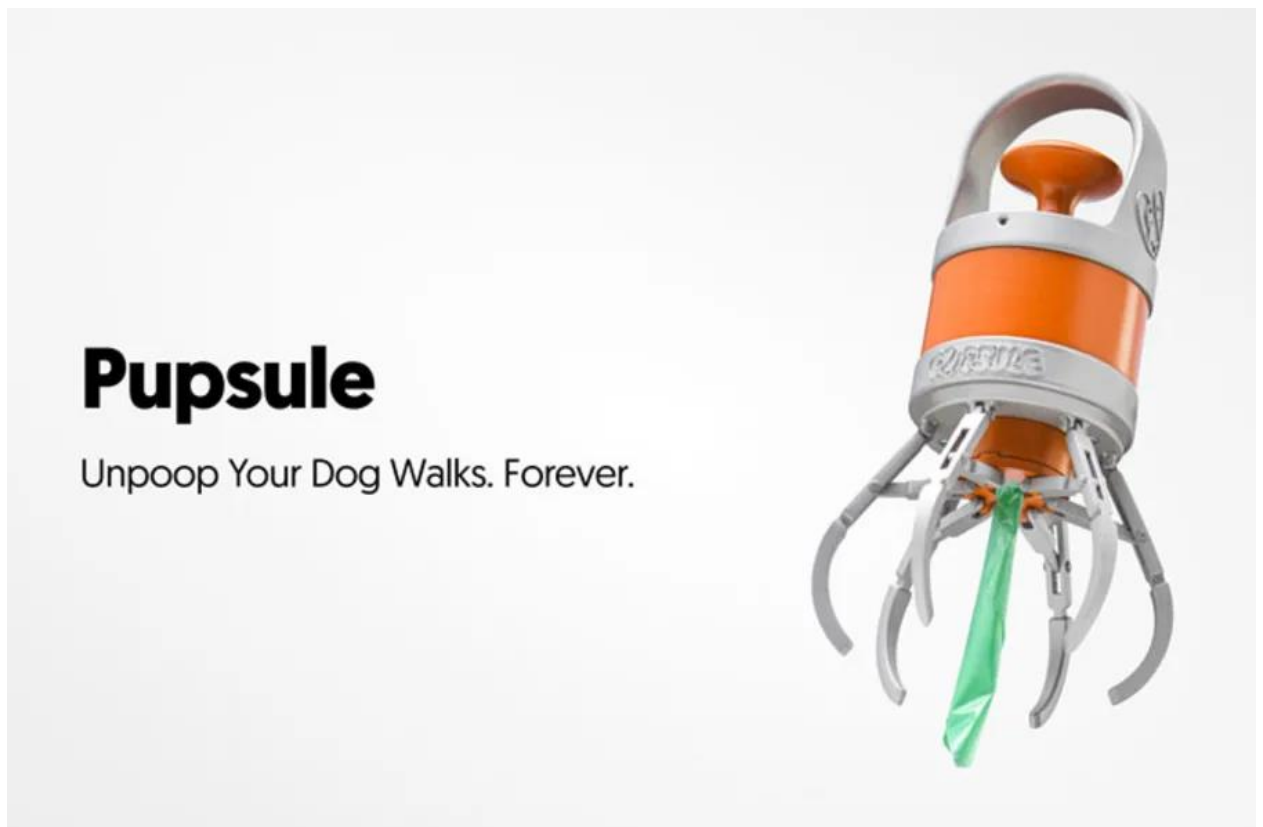
<p>Key Partners </p> <ul style="list-style-type: none"> • PetSmart • Petco • Specialty pet stores • Wholesale suppliers 	<p>Key Activities </p> <ul style="list-style-type: none"> • Production • Distribution • Marketing • Platform Management 	<p>Value Proposition </p> <ul style="list-style-type: none"> • Best user experience, including before, during, and after picking up after your pet 	<p>Customer Relationships </p> <ul style="list-style-type: none"> • 1 - Year product warranty • Reactive conflict resolution via email & social media community 	<p>Customer Segments </p> <p>Dog Owners who are...</p> <ul style="list-style-type: none"> • Physically active • Investing in quality pet products • Urban/ Suburban dwellers • Online shoppers
<p>Key Resources </p> <ul style="list-style-type: none"> • Brand • Patented product • Production <ul style="list-style-type: none"> ◦ Facilities ◦ Machinery 	<p>Channels </p> <ul style="list-style-type: none"> • Company website • Social media • Email • Partner... <ul style="list-style-type: none"> • Specialty pet store • E-commerce platforms 			
<p>Cost Structure </p> <ul style="list-style-type: none"> • Fixed production & operating costs • Selling & marketing expenses • Variable material costs 		<p>Revenue Streams </p> <p>Asset Sales</p> <ul style="list-style-type: none"> • Alphaskoop device • Feces collection bags • Alphaskoop heavy duty leash • Alphaskoop Dog Harness 		

Appendix III



Potty Mouth pooper scooper. (Potty Mouth Pooper Scooper, 2022)

Appendix IV



Pupsule dog clean-up device (Indiegogo, n.d.)

Appendix V



DogBuddy dog pooper scooper (DogBuddy Dog Pooper Scooper, n.d.)

Appendix VI



Grab-N-Gone Sport No Mess Dog Pooper Scooper (Grab-N-Gone Sport No Mess Portable Dog Pooper Scooper, 17-in, n.d.)

Appendix VII

Competitive Analysis, Raw Data						
	Alphaskoop	Pupsule	DogBuddy	Grab-n-Gone	Potty Mouth	
Price		35	\$59	14.99	33.99	24.89
Mobility						
Weight (oz)			8.5	8.64	10	8.78
Size (length, inches)		7	9.6	7.1	17	6.9
Durability	Medium	Medium	High	Low	High	
Place						
1-2 platform (Score =1)		X		X		
3-4 platforms (Score =4)						
5-6 platforms (Score =7)	X					
6+ platforms (Score =10)			X		X	

Sources for Competitive Analysis	
Company	Source
Pupsule	https://www.indiegogo.com/projects/pupsule-all-in-one-solution-to-clean-up-dog-poop
Dog Buddy	https://www.amazon.com/DogBuddy-Portable-Sanitary-Dispenser-Included/dp/B074115FTG
Potty Mouth	https://www.amazon.com/Potty-Mouth-Scooper-Portable-Hygienic/dp/B081D65DDQ?th=1
Grab-n-Gone	https://www.grabngone.com/where-to-buy.html https://www.chewy.com/s?query=grab-n-gone&nav-submit-button=

Appendix VIII

Color	Western European & North American	Eastern & Asian	Middle Eastern
Red	Danger, anger, love, passion, excitement	Joy, happiness, celebration, luck	Danger, evil
Yellow	Hope, caution, joy, happiness	Sacred, honor, royalty	Mourning, loss
Blue	Masculinity, sadness, authority, trust, calm	Femininity, immortality	Protection, safe, heaven, immortality, spirituality
Black	Power, formality, force, death, mourning	Masculinity, wealth, health, prosperity	Mystery, evil, mourning, rebirth
Green	Nature, progress, luck	Youth, future, energy, exorcism, infidelity	Fertility, strength, luck, wealth, spirituality
White	Peace, holiness, sterility, cleanliness	Death, mourning, misfortune, humility	Purity, mourning

Sentiment analysis table by geography. (Eriksen Translations Inc., n.d.)

Appendix IX

Keyword	Competition	Search Volume (monthly)
pooper scooper	HIGH	40500
pooper dog	MEDIUM	18100
dogs poop scoop	HIGH	12100
dog poop scooper	HIGH	12100
pooper bags	HIGH	6600
pooper scooper service	LOW	5400
pick up dog poop	HIGH	3600
dog poop pick up	HIGH	3600
dog poop clean up	HIGH	2400
pick up dog poop service	LOW	2400
doggie poop pick up service	LOW	2400
pooper scooper near me	MEDIUM	1900
remove dog poop	LOW	1900
dog poop removal	LOW	1900

Keyword volume data from top seed keyword searches, (Free Keyword Tool, 2022)

Appendix X

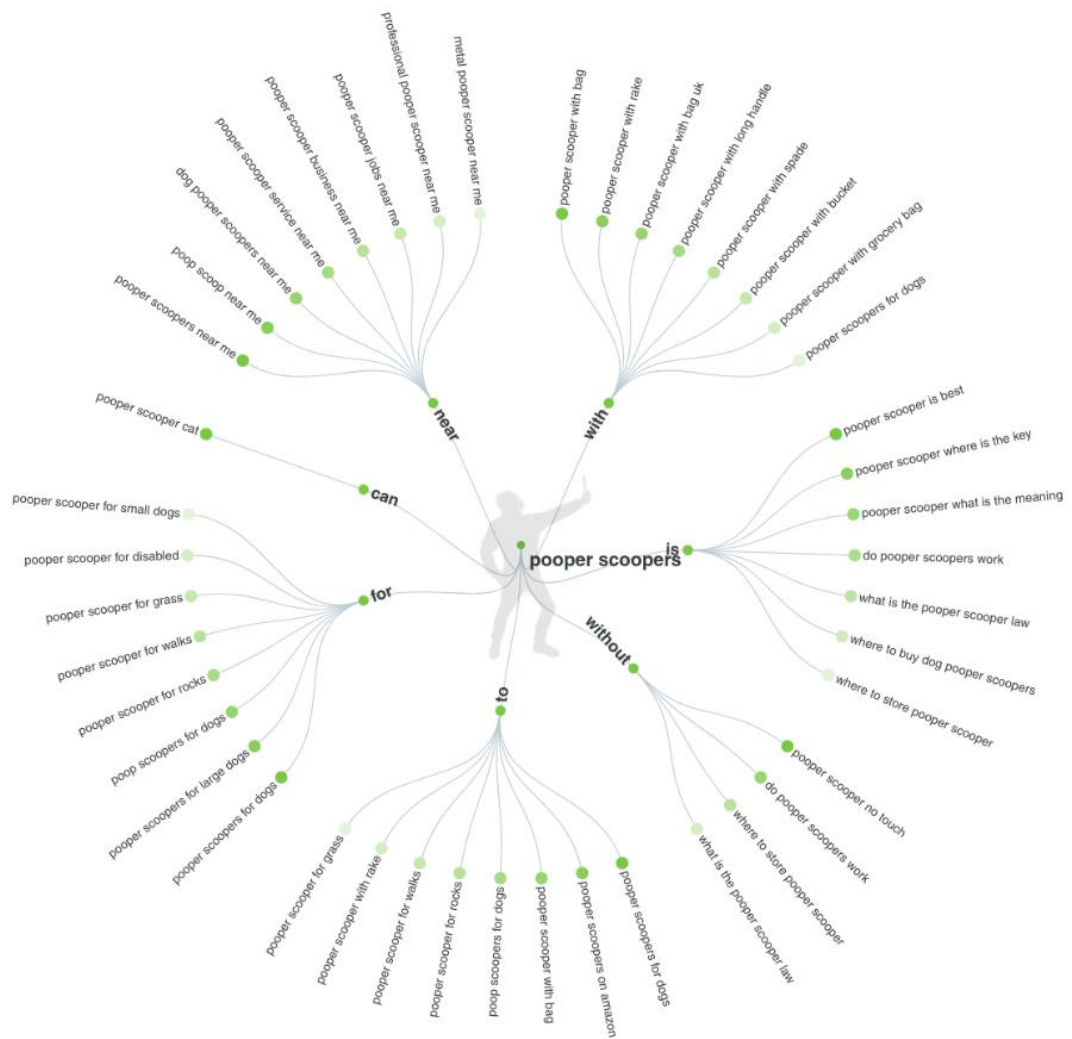


Figure 7: Pooper Scooper related questions for search intent. (Ubersuggest, 2022)

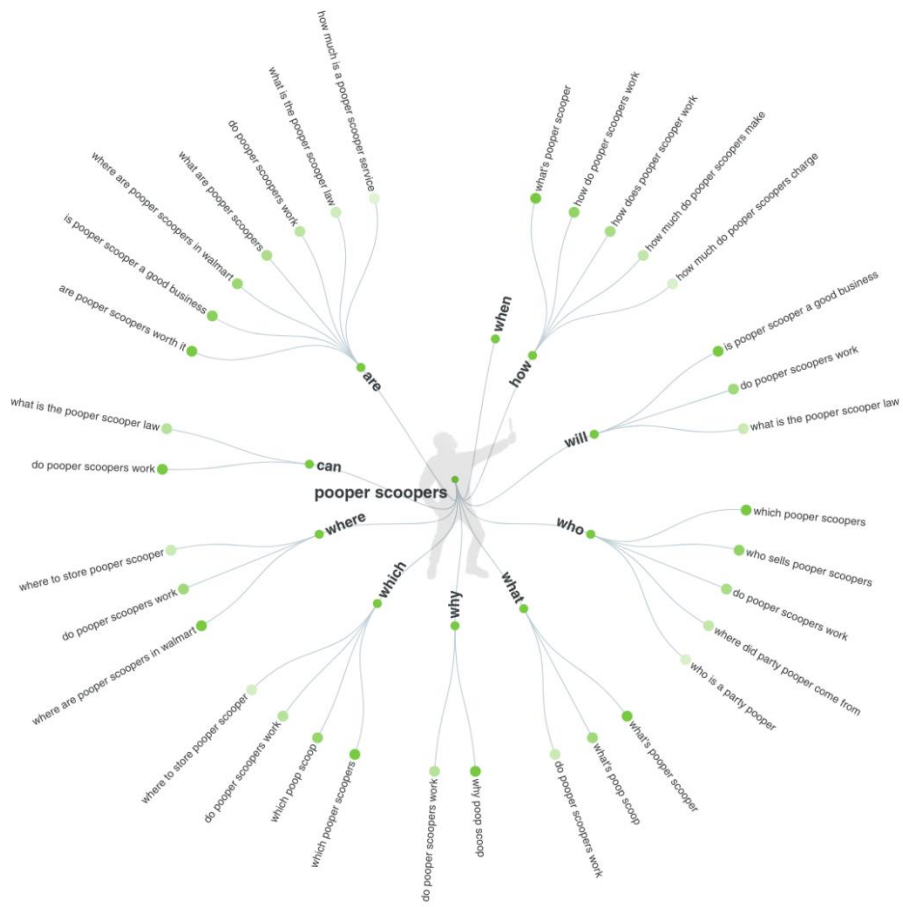


Figure 8: Pooper scooper related prepositions for search intent. (Ubersuggest, 2022)

Appendix XI

Superior Forecast Scenario							
Year	2023				2024	2025	2026
	Q1	Q2	Q3	Q4			
Alphaskoop Device							
Units Sold	100	110	121	133	557	668	802
Unit Price	\$ 35.00	\$ 35.00	\$ 35.00	\$ 35.00	\$ 35.00	\$ 35.00	\$ 35.00
Revenues	\$ 3,500.00	\$ 3,850.00	\$ 4,235.00	\$ 4,658.50	\$ 19,492.20	\$ 23,390.64	\$ 28,068.77
Clean-Up Bags							
Units Sold (3-pack)	100	110	121	133	557	668	802
Unit Price	\$ 2.50	\$ 2.50	\$ 2.50	\$ 2.50	\$ 2.50	\$ 2.50	\$ 2.50
Revenues	\$ 250.00	\$ 275.00	\$ 302.50	\$ 332.75	\$ 1,392.30	\$ 1,670.76	\$ 2,004.91
Alphaskoop Heavy Duty Leash							
Units Sold	0	0	40	44	101	121	145
Unit Price	\$ 20.00	\$ 20.00	\$ 20.00	\$ 20.00	\$ 20.00	\$ 20.00	\$ 20.00
Revenues	\$ -	\$ -	\$ 800.00	\$ 880.00	\$ 2,016.00	\$ 2,419.20	\$ 2,903.04
Alphaskoop Dog Harness							
Units Sold	0	0	40	44	101	121	145
Unit Price	\$ 25.00	\$ 25.00	\$ 25.00	\$ 25.00	\$ 25.00	\$ 25.00	\$ 25.00
Revenues	\$ -	\$ -	\$ 1,000.00	\$ 1,100.00	\$ 2,520.00	\$ 3,024.00	\$ 3,628.80
Total Revenue	\$ 3,750.00	\$ 4,125.00	\$ 6,337.50	\$ 6,971.25	\$ 25,420.50	\$ 30,504.60	\$ 36,605.52

Appendix XII

Table 12: Cash flow statement, 2022-2026

Cash Flow Statement					
	2022	2023	2024	2025	2026
Operating Activities (CFO)		\$ 5,031.27	\$ 1,783.18	\$ 3,105.71	\$ 4,628.59
Investing Activities (CFI)					
Initial Investment	\$ (6,671)				\$ 400.00
Cash Flow of the Business (Free CF)	\$ (6,671.07)	\$ 5,031.27	\$ 1,783.18	\$ 3,105.71	\$ 5,028.59
Payback Period	1 Year				
IRR	43%				
Financing Activities (CFF)					
Owner's Equity	2000	1500	1500		
Dividends					
Loan	5000	\$ (1,250.00)	\$ (1,250.00)	\$ (1,250.00)	\$ (1,250.00)
Loan Interest		\$ (250.00)	\$ (187.50)	\$ (125.00)	\$ (62.50)
Total Cash Flow of the company	\$ 328.93	\$ 5,031.27	\$ 1,845.68	\$ 1,730.71	\$ 3,716.09