## **Rid the Poop Information**

## Summary

Rid the Poop is a dog poop picker with paper bag, carton or cartonboard. It is aimed to reduce the usage of plastic. When we walk the dog, it is a problematic issue to find eco-friendly and practical material. This product is designed to pick poop of dogs while walking.

Another problem is that we may not be able to use our two hands while holding dog collar. 'Rid the Poop' enables users to clean the places by holding dog collar.

## **Green Business Description**

Rid the Poop enables people to clean poop from ground by using eco-friendly materials. Most of people use plastic bags for ridding dog poop and we decide that there is a marketing gap in this process. People need more sustainable and environmentally friendly product while walking dog and cleaning poop. Name of the product is related to its aim and since it sounds good, we decided to give this name to our project.

This product is easy to carry and can be sold as multiple in carton packs or cloth bag. There are different sizes of this product according to dog species to prevent waste of material. If your dog belongs to a small species, using large-sized poop picker may cause wastage, so we decide that this product should have 3 different sizes. (small-medium-large)

We decided cartonboard as main material because it is a cheap option for manifacturing, its form and material structure is suitable for this product. Cartonboard is eco-friendly and it makes processes easier in terms of access of material, manufacturing, processing, marketing and usage. Also, cartonboard can stand up to water and oil, thus rate of users' satisfaction can increase in usage.

Also, while developing this idea, we add a QR code on boxes. When users scan this code on the box, they can see the species of dogs, type of poops, the average measure of time for walking them, and more information about product such as usage of it and sales points. QR code directs users to Canva link and they can see 4 informative banners by scrolling right.

## problem definition:

It is hard to find eco-friendly, portable and light product. Because of that, 'Rid the Poop' solve this problem. Also, people may not be able to use their two hands while holding dog collar. 'Rid the Poop' enables users to clean the places by holding dog collar. It is designed to hold it easily and clean the poop. Sometimes, it may be hard to find a rubbish bin and dog owners carry the poop until finding it. While designing this product, we try to solve this problem by adding handles to carry it. When the cleaning process is done, dog owners can

cover the product with its lock system and throw away. Thus rate of users' satisfaction can increase in usage.

## The Values and Pillars

Thanks to this product, people don't need to plastic materials or products. This is a great step when we consider the number of dog owners and frequency of taking the dog for a walk.

There are lots of statistics about that. There are 471 million pet dogs and dog ownership increased by nearly 11% during the COVID-19 pandemic in 2020. 38.4% of American households own a dog. (<a href="https://www.thezebra.com/resources/research/pet-ownership-statistics/#dog-ownership-statistics">https://www.thezebra.com/resources/research/pet-ownership-statistics</a>)

When the number of dog owners is so high, we created this project in order to fill the gap in the market about poop picker.

Therefore, 'Rid the Poop' can have good impacts on environment. Also, its ergonomic design enables people to use it easily.

## Product/Service description

1. Design

poop picker with cartonboard

## Rid the Poop

eco-friendly and practical



When we walk the dog, it is a problematic issue to





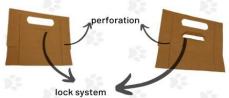
It is aimed to reduce the usage of plastic.





Another problem is that we may not be able to use our two hands while holding dog collar. 'Rid the Poop' enables users to clean the places by using one hand.

### parts of product





handle parts

reservoir part

#### how to make it







add the handle parts by sticking



fold the flips inwards & ready to use



pick the poo from ground



reverse the product



tear perforation



fold the flaps upwards



lock the flaps



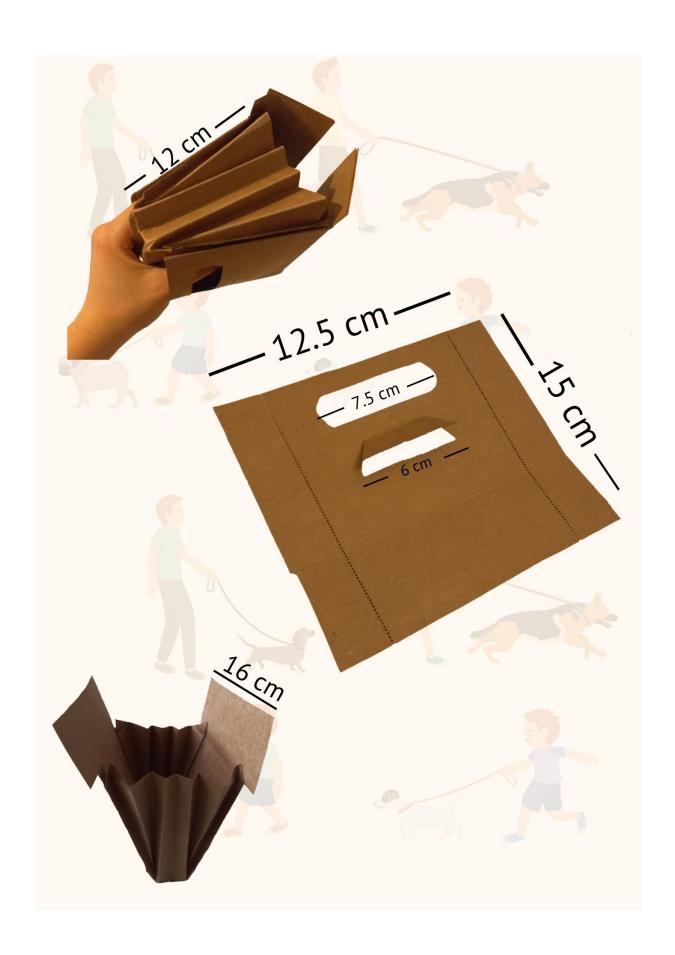
happy dogs & clean environment



scan the QR code and reach more information about dog species, walking time and product sizes



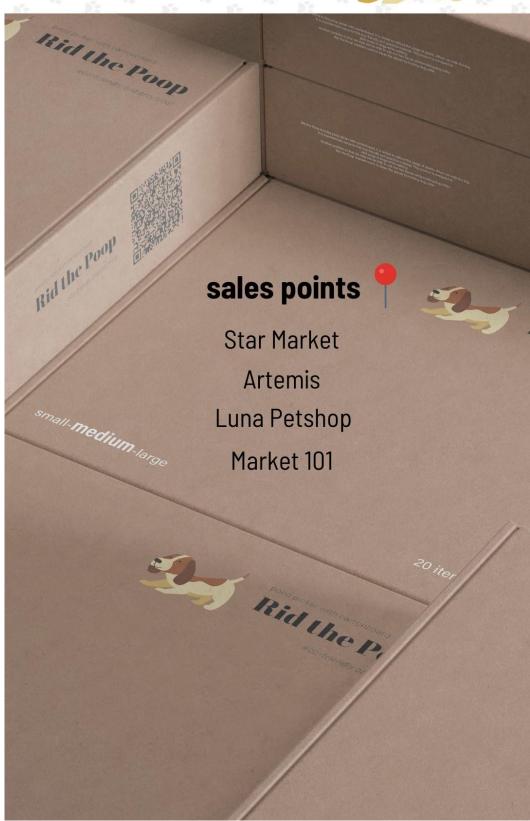
\*There are different sizes of this product according to dog species to prevent waste of material.

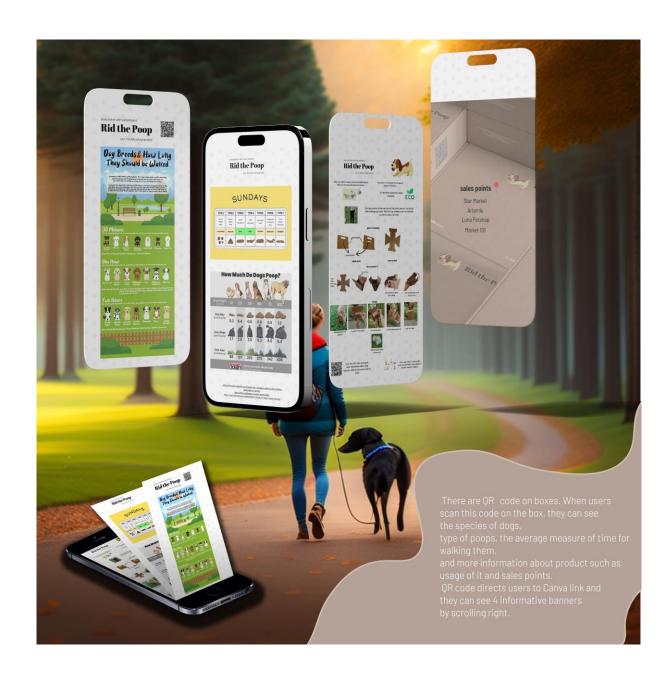


Rid the Poop

eco-friendly and practical







# **Rid the Poop**



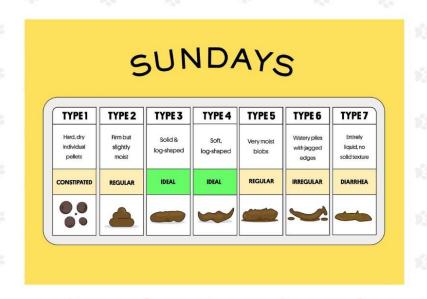
eco-friendly and practical



poop picker with cartonboard

# **Rid the Poop**

eco-friendly and practical





https://www.kennelstore.co.uk/news/your-complete-guide-to-dog-walkingdepending-on-breed/ https://www.clickapro.com/dog-poop-guide/ https://sundaysfordogs.com/blog/what-should-my-dog-s-poop-look-like

## 1. Manufacturing

This product can be produced by using paper bag, carton or cartonboard. We try to produce this project by using cartonboard and prepare boards with images. It can produced by a carton company. The processes how to make 'Rid the Poop' take part in boards with support of images. Poop pickers can be sold in carton packages that has same material with product, so it can be produced by one same carton company. Most of products have plastic packages but 'Rid the Poop' is an eco-friendly product, we decided that it must be a kind of material which does not damage nature in order to carry out the eco-friendly ideology. Every package may include 20 items and be sold in petshops and markets. Also, in marketing processes, usage of QR code and banners that you can reach by QR can be introduced because stressing that this product makes dog owners' life easier can be effective for people.

Manufacturing processes include cutting cartonboard by using CNC machines, folding, sticking flaps, producing handle parts with their handle gaps and sticking handles. Thanks to material, cost of this product is as cheap as possible. Then, by putting about 20 items in one carton box, it is ready to send boxes to petshops and markets.

#### 1. Distribution

'Rid the Poop' may be sold in both virtual markets, shopping apps and petshops, markets. While distrubute them to sales points, they can be packaged in recyclable carton boxes. Thus, every process from producing to distribution can be maintained by using sustainable ways. It can be stressed that this product does not include any plastic or harmful material for nature in all processes.

## 1. Recycling/Repurposing/ Reuse Potential

Carton boxes of the product can be used again in producing processing. Boxes can be evaluated as a box again or poop picker. Because all materials are same in this project. In this way, we can both reduce the cost by reusing and protect the nature and company can save material.

## Recycling of poop with this product

Recycling of dog poop and usage of right product for picking poop are important issues for environment. Even, there is a book which mentions these points totally. (The Pet Poo Pocket Guide: How to Safely Compost and Recycle Pet Waste-Rose Seemann) We can understand that there is need in this field in terms of poop picking products. The summary of book explains this situation clearly:

'Eighty-three million dogs and ninety-six million cats call the US home. Dogs alone produce enough waste to fill more than 1,091 football fields 1 foot deep in a single year. Add billions of plastic pick-up bags to the mix, and season well with tons of litter box waste. Scoop a hefty portion into local landfills and seal it tightly to ensure optimal methane production. Clearly, this is a recipe for disaster.

Dog and cat owners who trash their pets' offerings daily are in denial about how much waste is produced and what happens to it. '

### https://www.amazon.com/Pet-Poo-Pocket-Guide-Compost/dp/0865717931

This book guide dog owners to cycle pet waste back to nature. It supports the opportunity of Rid the Poop's recycling method.

This product enables dog owners to try recycling methods thanks to cartonboard and eco-friendly picking steps.

Also, composting of this product with poop has good impact on nature in terms of germs and parasites. There are lots of composting options according to location such as lawn or apartment. Professor Ackland is keen to reassure owners that compost containing dog poop has little to no odor. "Compost that you make has lost all of its smell because all the molecules have broken down into their individual components," she explains. If anything, it only has an inoffensive earthy aroma within a matter of days. (https://www.akc.org/expertadvice/lifestyle/is-dog-poop-compostable/)

If you can get over the initial "ick" factor, composting your dog's poop is absolutely worth considering. Not only is it environmentally friendly, but it is a simple, natural, and inexpensive option for use as a nutrient-rich and surprisingly odor-free fertilizer that plants love.(
https://www.akc.org/expert-advice/lifestyle/is-dog-poop-compostable/

Also, according to our research, there is a book about that. **The name of the book whose author's name is Roseseemann is** The Pet Poo Pocket Guide: How to Safely Compost and Recycle Pet Waste.( <a href="https://earthhero.com/products/rose-seemann-the-pet-poo-pocket-guide">https://earthhero.com/products/rose-seemann-the-pet-poo-pocket-guide</a>)

In order to use dog poop without harming the environment and without threatening human and animal health, it must be fertilised with composting methods such as bokashi.

(https://www.petlebi.com/blog/kopek-diskisi-gubre-olarak-kullanilabilir-mi-gercekleri-kesfedin#:~:text=K%C3%B6pek%20d%C4%B1%C5%9Fk%C4%B1s%C4%B1%20tek%20ba%C5%9F%C4%B1na%20g%C3%BCbre,bu%2C%20bitkiler%20i%C3%A7in%20sa%C4%9Fl%C4%B1kl%C4%B1%20de%C4%9Fildir

The method of bokashi composting can be used for recycling of this product with poop.

Bokashi is a composting method of fermentation that you can easily do at home with just a few simple steps that involve sealing kitchen scraps and organic waste in an airtight container with a medium.

(https://www.planetnatural.com/composting-101/indoor-composting/bokashi-composting/

(The compost process is explained by using cardboard. Since the structure of cardboard and cartonboard is similar, it can be used for cartonbaord too.)

## **Using Paper & Cardboard in Compost**

Coloured matt cardboard or paper can be used for composting and recycling.

Cardboard packaging usually has plastic tape attached which is best removed before using in the garden. Never shred card with tape attached – thousands of non-degrading bits in the soil that may be harmful to the ecology.

( <a href="https://www.allotment-garden.org/composts-fertilisers/composting-making-compost/paper-cardboard-compost/">https://www.allotment-garden.org/composts-fertilisers/composting-making-compost/paper-cardboard-compost/</a>)

Result: According to this website, usage of shiny cardboard for composting is not suggested. So, we should use matt cardboard. We don't use any plastic material such as tape in order to save environment and support recycling and composting of this product. Also, it is our another marketing strategy.

Roughly torn into pieces cardboard will rot down well in the compost heap so long as it is mixed in with greens and not layered. Corrugated cardboard works even better because the corrugations hold it open until they decompose. Cardboard, especially corrugated cardboard, insulates well which is very useful when you have a compost bin with openings in the sides like my bins made from pallets. In winter I just stuff layers of cardboard down the sides which helps hold the heat in the heap. Sheets of cardboard layered over the top of a compost heap will help hold in warmth but also the water will tend to run off thereby stopping the heap from becoming waterlogged. As the sheets become soaked and start to disintegrate, just add more sheets. They can be incorporated when the heap is turned. (https://www.allotment-garden.org/composts-fertilisers/composting-making-compost/paper-cardboard-compost/)

## Advantages of Cardboard /Cartonboard for the Environment

- Most environmentalists would consider cardboard environmentally friendly.
- It is made from natural materials, and can easily be recycled.
- It is both biodegradable and compostable.
- When cardboard is recycled, it can be made into new cardboard, and when it is composted, it breaks down and becomes food for plants.

## Why Don't We Use Biodegradable Plastics?

Even the very best, most scientifically-proven biodegradable plastics won't degrade in a landfill, where compression and lack of oxygen lead to "mummification" of garbage. To get the best results from earth-friendly poop bags, you have to dispose of them correctly.

Of course, you can also forgo the bag completely. Using a hand-held scoop or shovel to transfer dog waste from the ground to a composting bin, toilet, or hole in the ground may be the most earth-friendly option. But let's be realistic: for those of us living and working in densely populated areas, the poop bag is the way to go. We just need to use them correctly.

## 1. Existing alternatives and your eco-innovative twist

Most of poop pickers are designed for usage at home or garden, so they are big-sized and not suitable to carry while walking. Most of them are not suitable to carry in bags .'Rid the Poop' can be even carried in pocket. Some of broom based designs need electric. Also, broom -dustpan designs are not suitable for using while holding dog collar. When you go to picnic, holiday or walking in parks, they are not practical to carry and use. Other systems which have plastic bags are not sustainable and they are harmful for nature. They can't recycle and plastics damage the nature. When all these factors are considered, we realized that there is a gap in this sector and there is not practical and eco-friendly product to clean poop. In our Project, the advantage is being able to use waste materials and reuse them.

## 1. Value proposition

In designing processes, we considered all the details for dogs, dog owners, nature, companies and manifacturing. Our aim is filling the gap in poop picker sector with sustainable methods. QR code which directs to informative banners helps dog owners with funny and useful images. If dog owners cannot find bin, being able to carry poop picker with its handle and lock system, using it while holding dog collar, having options to reuse and being single sample in terms of all these points make product unique.

## 1. Define the target market and consumer profile

Markets which include dog-related products, sustainable and eco-friendly products, petshops and all visual shopping applications can sell this product.

About attracting customers, the points mentioned above have an important role its marketing field.

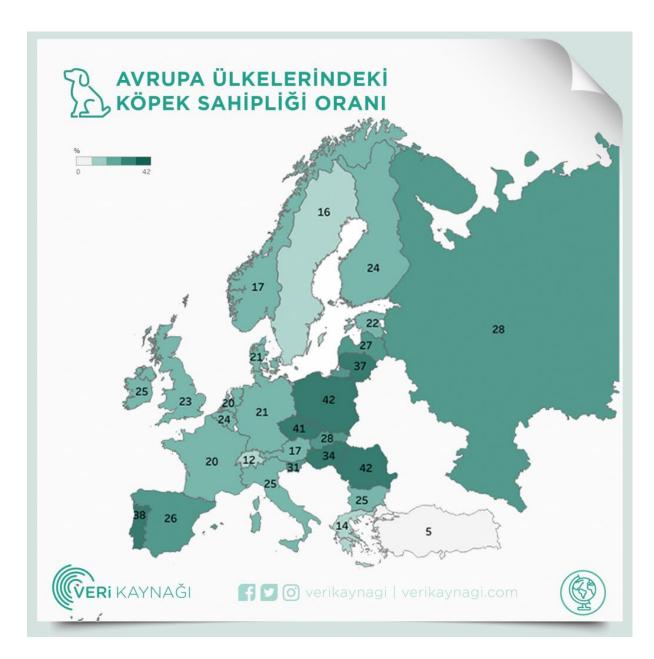
All the dog owners and people who want to have nature-friendly steps to protect the nature can use this product.

'Rid the Poop' can be more attractive for customers who frequently go to travel with their dogs, take the dog for a walk in big parks and fields. In terms of being lightweight, portable, eco-friendly and useful, this Project interests most of dog owners. Also, people who walk the dog alone may need this product because it is hard to clean the area while holding dog. It is easy to take the product from bag, open it, clean the area, close by its lock system and carry with its handles while holding collar.

## 1. Define the marketing strategy

While the number of free-range dogs in the world is approximately 720 million, approximately 200 million of them are stray dogs. The number of domestic dogs in the world is approximately 180 million. (2021) (https://www.drdatastats.com/dunya-evcil-kopek-varligi/#:~:text=D%C3%BCnyada%20serbest%20gezinen%20k%C3%B6peklerin%20say%C4%B1s%C4%B1,kedi%20varl%C4%B1%C4%9F%C4%B1%20ise%20370%20milyondur.)

The rate of houses which have minimum one pet dog is 24% in Europe. The second most common pet is dog after cat as first place.

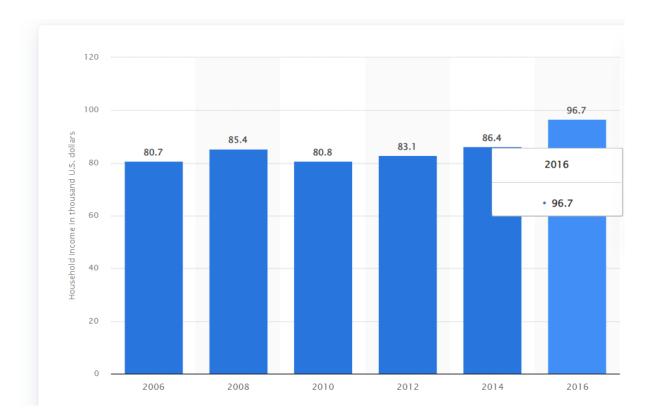


The rate of dog owning in Europe countries.

Considering that an average of 9.2 billion euros worth of pet accessories and 8.5 tons of pet food are sold in a year, we can see that people allocate a high budget for their pets and give importance to their products. Therefore, this product can attract the attention of the target audience.

(https://www.verikaynagi.com/genel/turkiye-ve-dunyada-evcil-hayvanlar/)

Statistic shows the mean dog owner household income in the United States from 2006 to 2016. In 2016, the mean household income for dog owners in the U.S. amounted to about 96,700 U.S. dollars.



Mean dog owner household income in the United States from 2006 to 2016

(https://www.statista.com/statistics/699136/mean-household-income-dog-owners-us/)

Of the 1,066 U.S. consumers surveyed for Jungle Scout's Q2 2021 Consumer Trends Report, 786 said they had purchased pet products like cat food and dog toys this year. Viewed through that lens, we can assume roughly 68% of the U.S. population could be considered pet owners

ROCKVILLE, Md., Feb. 25, 2022 /PRNewswire/ -- In the just-released Pet Litter, Cleanup, and Odor-Control Products: U.S. Market Trends, 3<sup>rd</sup> Edition, Packaged Facts reports that pet cleanup products have boomed during the COVID-19 era, posting double-digit growth in 2020 and 2021, in tandem with general-use household cleaning products associated with personal health and hygiene.

Riding the wave of the heightened interest, marketers continue to upgrade products with innovative formulations and features – from dust-free, lightweight, and natural litters, to biodegradable waste bags and heavy duty training pads, to cleaning products that won't harm the environment, pets, or people. ( <a href="https://www.prnewswire.com/news-releases/pet-cleanup-market-booms-in-age-of-pandemic-301490715.html">https://www.prnewswire.com/news-releases/pet-cleanup-market-booms-in-age-of-pandemic-301490715.html</a>)

Result: This product can be focus of interest in terms of the expectations of consumers.

#### Some other statistics:

1-52% of U.S. consumers who buy pet products in 2021 are between the ages of 25 and 44. Only 4% of these consumers are aged 75 and up.

Result: It can be important to reach the dog owners who are especially between the ages of 20 and 50.

2-55% of consumers who purchase pet products in 2021 identify as female, while 45% identify as male.

3-77% leave home to work, while 23% work from home.

Result: Leaving home to work may mean to need more care for dogs or pets after work. It may result as long-term walking with dog in parks. In this point, they may need this product.

**4-Many pet owners and consumers made big lifestyle changes in the past year.** Overall, 13% of U.S. consumers changed jobs, 12% moved, while another 18% bought or sold their home. 6% got engaged or married, and 6% welcomed a child.

Result: Many pet owners are open-minded to have changes in their life. They may be open to try a new product and new methods in cleaning poop processes.

5-18% of Americans adopted a new pet during the pandemic, including 24% of existing pet owners.

Result: Our target groups for this product has increased and it continues to increase.

## 6-According to percent of pet owners prioritizing this value in 2021

Value	Percent of pet owners prioritizing this value in 2021
Travel	16%
Spending time outside	26%

Result: Remarkable rate of pet owners spend time outside. It may be seen that they need this product outside and 'Rid the Poop' can need their expectations.

## 7)

Consumer spending in Q1 2021	Decreased	Stayed the same	Increased
Overall spending	34%	38%	28%

Online spending	26%	33%	42%
Spending on Amazon	27%	32%	40%
Spending at Walmart (in-store)	32%	38%	30%
Spending on Walmart.com	27%	42%	32%

Result: The rate of shopping online among pet owners is increasing. Having sales points in online platforms can have an important role in marketing. (Also, dog owners are willing to buy something.)

8) Pet owners tend to start their online product researches on Amazon, though many use search engines like Google.

Compared to the average consumer, pet owners are more likely to use other social media channels like YouTube, Instagram, and TikTok to search for products.

Where pet owners search for products online	Percent of pet owners
Amazon	76%
Search engine (e.g., Google, Bing)	50%
<u>Walmart.com</u>	48%
Facebook	40%
YouTube	36%
Instagram	34%
Other brand or retailer's website	23%
Tik Tok	19%
Other social media platform	6%

## Result: These platforms are key points in marketing.

(https://www.junglescout.com/blog/pet-owner-consumer-behavior/)

9)

- Americans spend \$103.6 billion on pet products per year.
- The pet industry is expected to reach \$358.62 billion by 2027.
- Pet industry spending has increased 115% since 2011.
- **86%** of pet owners shop for their pet online.
- The pet industry has grown 450% over the past 25 years

(https://explodingtopics.com/blog/pet-industry-stats)

**Result:**When we consider all these istatistics, it can be seen that there are lots of dog owners and this product can have an important role in marketing field and meet their needs.

### 1. Cash Balance

## Approximate cost calculation

We calculated the cost based on cardboard, but we assumed that cardboard and cartonboard prices are close and both material can be used.

In general, the cost of producing 1 kg of cardboard is between 0.20 and \$0.50

(https://www.quora.com/What-is-the-total-cost-of-production-of-1-kg-of-cardboard)

We used 200 gram cartonboard sheet while trying this product. One 70x100 cm cartonboard sheet costs approximately \$0.1 when it is bought wholesale. From one sheet we can obtain about 3 or 4 piece of 'Rid the Poop' product. One product's material costs about \$0.025-0.03. When we add CNC cutting, sticking and folding processes, one piece of this product costs approximately \$0.04-\$0.08. They can be sold in boxes which include 20 items. One box can be sold approximately \$0,8-\$1.

## Labour safety and Health

A team for controlling produced products and a distribution team are enough for our green business. There is no uncomfortable process in our business because most of the steps are done by machines.

Workers' salary can be distributed according to working hour and productivity.