



Beyond the Bag:

Designing Low-Barrier Public Interactions to Transform Dog Walking into Shared, Sustainable Culture

A Vision in Product Design Exploration for Earth Rated

Master Thesis - 3/09/2025

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Beyond the bag: Designing low-barrier public interactions to transform dog walking into a shared, sustainable culture

Master Thesis Strategic Product Design

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Abstract

In Dutch urban parks there is a societal expectation for dog owners to pick up and dispose of any waste their animals leave behind in public spaces. With the increased focus on sustainable practices, responsible dog ownership navigates complex social, cultural, and environmental factors.

While new sustainable alternatives such as biodegradable and compostable bags are promoted as the solution, the lack of correct circular waste disposal infrastructure, and misconceptions about the bag's disposal and sustainability, hinder the intended environmental benefit.

This research explores the gap between sustainable product intentions and actual user behaviour, within the context of Earth Rated, a leading sustainable dog product brand.

Using the Vision in Product Approach, the study begins with the framing of the actual root of the problem; not as simply making better bags, but as fostering new interventions and rituals and shaping meaningful community engagement. The research integrates theories from environmental psychology, sociology, participatory design during the VIP process to explore how multi-sensory, low-barrier interventions can shift individual and communal behaviour.

The outcome is a 10 year future vision translated into a interactive, multi-sensory booth concept and bio-burner streetlight that blends environmental education with brand storytelling and playful engagement. By hosting the interactive exploration in urban park spaces and implementing bio-streetlight interventions, it creates a shared sense of responsibility within the latent park community, shifting social sustainability norms from compliance to active stewardship beyond participation.

The findings can contribute to broader discussion on public space design, authentic community building and shifting sustainability norms.

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Introduction

Public urban green spaces are shared by people, animals and the environment, leading to potential for both connection and conflict. In the Netherlands, with more than 1.9 million pet dogs living among society, masses of dog owners congregate in urban parks. These public spaces foster opportunities of casual social interactions, expertise and leisure, however dog waste management is a daily environmental issue that persists in these areas.

Current norms and approaches to tackle dog waste management mostly focus on compliance, making sure dog owners pick up after their pets, and product-based solutions, like compostable or biodegradable bags. However, studies reveal that when infrastructure, user behaviour, and cultural norms are not aligned, material innovation alone is not enough. For example, the environmental benefit of compostable bags is often eliminated as they end up in general waste streams (Planbureau voor de Leefomgeving, 2020), instead of correct composting facilities. This reveals a persistent gap between sustainable impact and sustainable intention.

This project navigates these challenges through a case study of Earth Rated, a Canadian brand that specialises in eco-conscious pet products, to explore the broader design question: How can public interventions foster a shared sense of responsibility, community and pride to transform sustainable dog ownership? Using the Vision in Product approach, this research transcends beyond linear problem-solving to envision a 10 year future concept and strategy, where brand intervention in public spaces does not target just marketing purposes, but also social and environmental transformation.

The following research deconstructs the environmental and cultural context to define the problem scope, analyses Earth Rated's current positioning and identifies social barriers hindering sustainable dog ownership. These findings are synthesised through trends analysis, clustering and opportunity mapping to shape design opportunities for a 10 year future vision, translating to an interactive, multi-sensory, public booth concept accompanying a sustainable bio-streetlight implementation.

This introduction marks the start of a process that reframes the simple act of picking up after your dog, into a visible, collective ritual that strengthens community ties as well as environmental stewardship.

Bridging past and future: The VIP Framework

Designing for long-term, societal and behavioural change is not only about addressing the issues of today; it requires reconstructing the conditions that created those issues in the first place. The Vision in Product Design (ViP) (Hekkert & Van Dijk, 2011) approach offers a structured yet flexible framework to develop meaningful future solution pathways. ViP, starts by deconstructing the present: what is happening, how it is being understood, and what social, cultural, and ecological contexts sustain it, instead of focussing on fixed solutions. After reframing the problem, ViP, synthesises both past contexts and emerging trends, into a inspirational, 10 Year design vision.

This project uses VIP as a guiding framework to shape the process of problem definition, future vision creation and concept development. It is applied to explore how dog ownership, public spaces and environmental responsibility could be envisioned in a 10 year future, and how Earth Rated can develop and position themselves in that future context. The VIP structure, transitioning from past context to new activities and meaning, ensures the final design concept is rooted in a deep understanding of the problem scope whilst aimed at transformative futures. This chapter introduces how the VIP approach systematically structures this report and the guiding question that emerge from each section, providing sub-guiding questions for strategic research.

Why VIP?

Earth Rated & the VIP Method

The VIP Method is used in this project to strategically position Earth Rated in the future 10 year context of the sustainable dog waste and pet care market. The VIP Method is chosen as it aligns with this project and Earth Rated in orientation, mission and values. Earth Rated's vision is to keep on innovating, always searching for new ways to improve their products. They don't have a specific, immediate framed problem they need fixing right now, but want to know how they can develop towards the future. This aligns with the VIP method, as it is future oriented. It explores possibilities and shapes interactions around emerging contexts, instead of using current problem-driven approaches.

Secondly, Earth Rated's mission is to make the day to day interactions between dog owner and dog, simpler and better. This is mirrored in VIP's second point, as the VIP method focusses on designing from meaningful interactions, enabling the creating of future designs that connect emotionally and practically with users.

Lastly, Earth Rated holds five important values through their company and products:

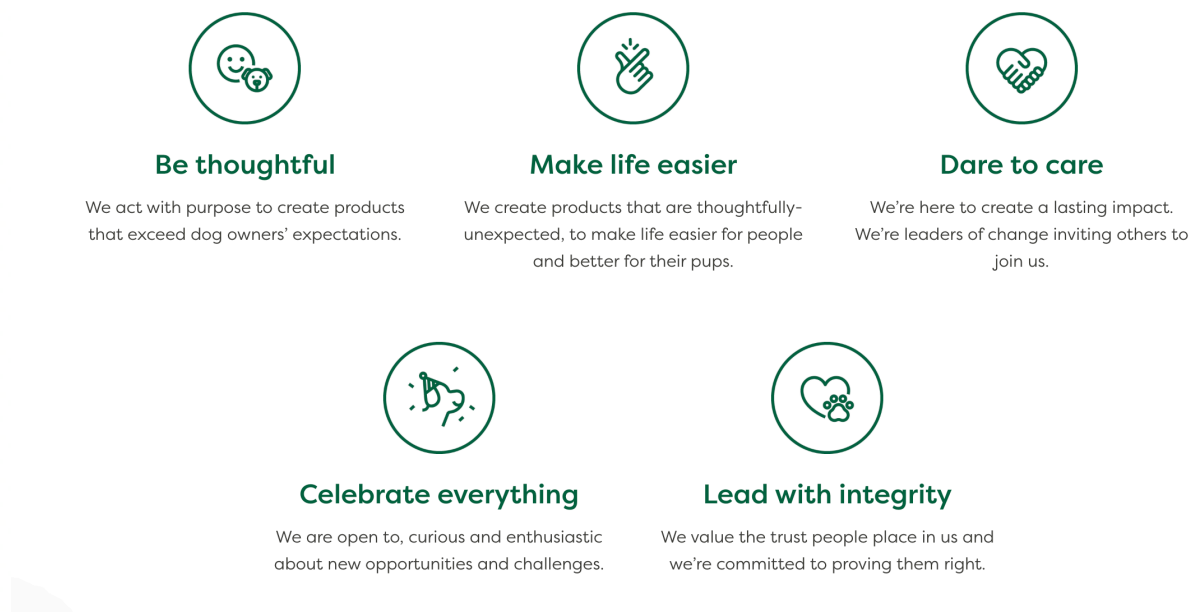


Figure 1: Earth Rated Company Values (Earth Rated, 2025)

Earth Rated's values of caring, integrity, acting with purpose and being thoughtful are mirrored in the VIP's emphasis on designing for meaning, not just function. As a result, the VIP framework acts as a tool to develop designs for Earth Rated that foster more valuable and stronger connections, between brand, consumers and growing community.

Alternative Method Considerations

The Vision In Product method is chosen for this research as it:

- Frames design around future contexts and interactions. Not just the current problems of today. This is important as this research proposes a strategy for a 10 year future.
- Embraces uncertainty, which is important as the future implications of (recycled / bio / single use) plastic in the dog bag industry is uncertain and dynamic.
- Builds meaningful, human-centred interactions. These interactions are meaningful because they go beyond just a functional purpose or solving a task. They connect to user, cultural and social values en resonate with user identities and relationships (Hekkert & Van Dijk, 2011). This is important as Earth Rated's goal isn't just making a product, but fostering community, sustainable values and relationships.

Other possible methods for this research could have been frame innovation (Dorst, 2015) and transition design. Frame innovation could work well to create new frames of understanding why and when current sustainable options for dog bags don't work and reframing the ambiguous dog waste management challenge. However, it focusses too much on dialogue between stakeholders and reframing the problem, instead of creating clear design directions. The reframing is not concrete enough to develop and design tangible products from.

Transition design (Irwin et al, 2015) would also have been a good method option as it focusses on the future and long term societal and sustainability transitions. This aligns well with this project as it sets to create a 10 year vision, however transition design is too large in scale. It operates at a systems-level change, whereas Earth Rated is not

looking to redesign global urban infrastructure , but wants to make small daily interactions between human and dog simpler and better.

In conclusion, compared to frame innovation, VIP is the better choice as it is more design-actionable. Frame innovation does reframe the problem, but lacks structured tools for concrete translation steps afterwards. As for Transition Design, VIP is more scoped and balances practical design outcomes with future vision thinking, whereas Transition design can become too abstract or systemic. This makes VIP the most effective method towards a future ready concept.

Understanding the format of VIP

The VIP (Vision in Product Design) method follows a three step divergent → convergent structure:

First Left Section = Context Exploration

→ Broad research, mapping, and understanding the root of the problem.

Middle Section = Vision Definition

→ Synthesising insights into a future-oriented, conceptual direction.

Third Right Section = Concept Development

→ Translating the vision into tangible products, services, and experiences.

Thematic Framework: Mapping the Journey

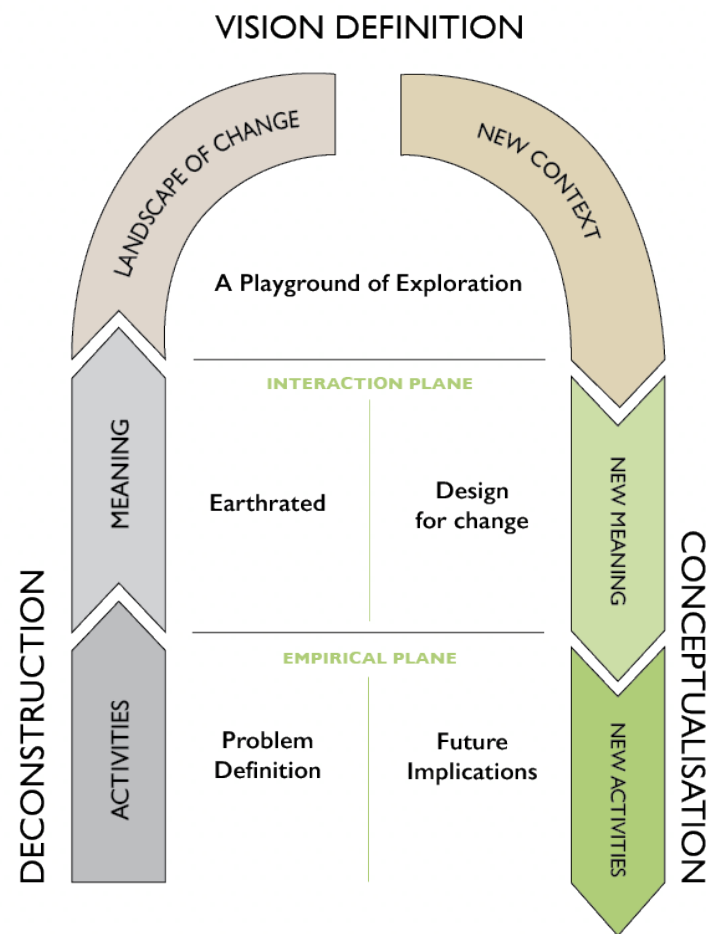


Figure 2: Thematic ViP Framework

This U-shaped framework illustrates the thematic progression of the project from Problem Definition to Conceptualisation.

Deconstruction: Explores the broader practices and challenges of current dog ownership contexts.

The upper section, Meaning, explores the cultural, behavioural, and brand-related significance of these practices, analysing how Earth Rated is positioned within this scope.

Vision Definition: Characterised through the final design direction “Playground of Exploration”, bridges the present and the future by synthesising trend research, system drivers, and Earth Rated’s positioning.

Conceptualisation: Transforms the future vision into a concrete design concept and strategy. By building new meaning through design for change, it generates interventions that shape desired social and environmental outcomes.

Guiding Questions

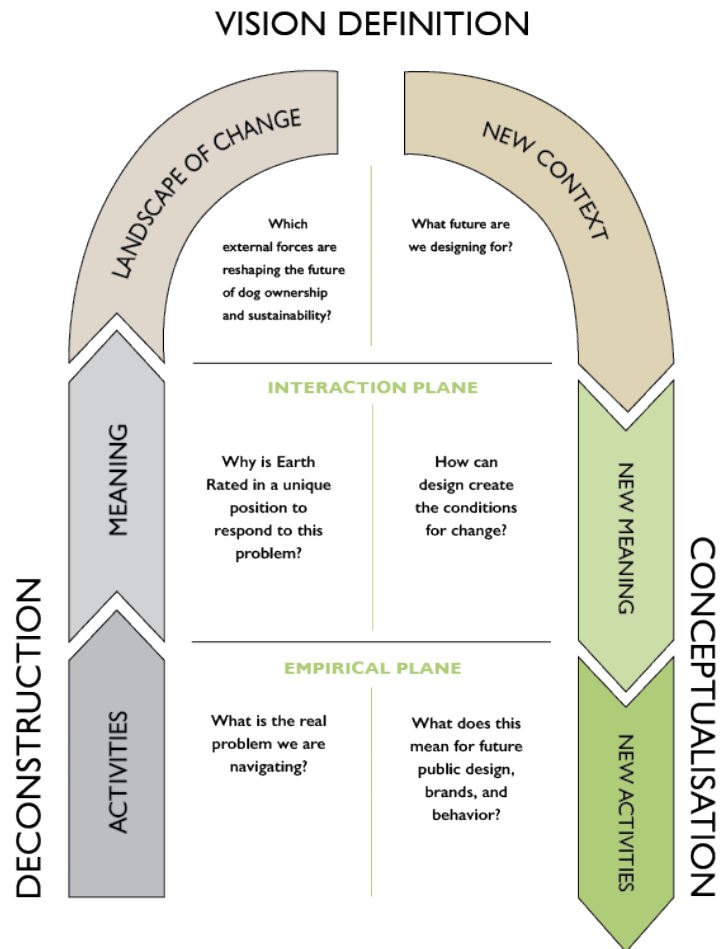


Figure 3: Guiding Question ViP Framework

This framework expands on the themes from the thematic framework. It visualises the research questions that emerged from the themes and previous process steps used to guide and support the following steps, ensuring coherence between problem statement and design outcome.

Deconstruction

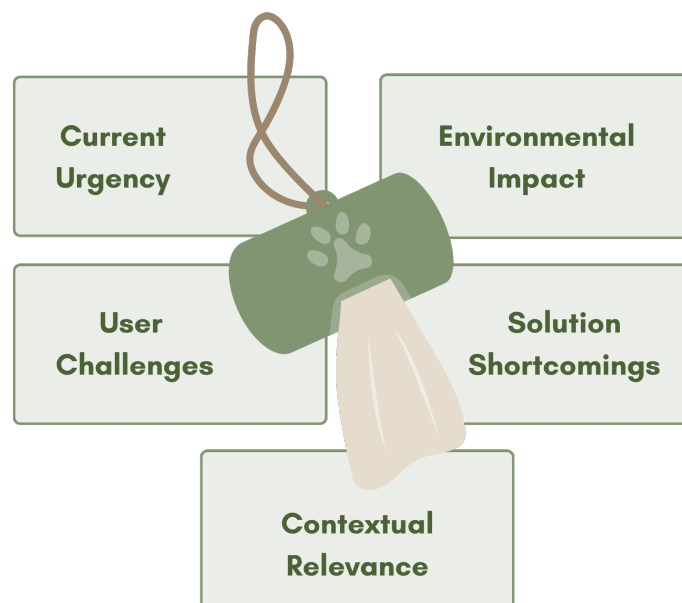
Understanding the present: Activities and Meaning

The first phase of the VIP framework focusses on creating deep understanding of the problem landscape and redefining the problem. By mapping current activities, their associated value and meaning and the social, environmental and culture context they occur in, underlying systems and tensions are identified, that shape dog ownership. This deconstruction ensures no premature solution are made and that the interventions designed actually target the root of the problem.

Problem Definition

What is the real problem we are solving here? The following Problem Canvas addresses the different themes we need to address and analyse in order to navigate the problem scope. Each of the themes translate into guiding questions to help define the final problem statement.

Figure 4: Dog Poop Bag Problem Canvas



Current Urgency: Why does this problem matter now?

Plastic dog poop bags fall into the current larger global plastic crisis. Plastic products are intertwined with our daily life. Manufactures mass produce plastic products to be sold and exported all over the world, due to their durability, low cost and ease to process. In 2019 global plastic production reached 368 million tons (PlasticsEurope,

2020). Over the past decade, global attention has been brought on the critical problem plastic waste generation has created for environmental issues. Large environmental NGO's such as Rethink Plastic, an alliance of leading European NGO's representing thousands of active groups, continue to raise awareness regarding plastic waste and pollution (RethinkPlastic, 2025). In order to reach global sustainability goals international governmental steps have been taken to pave the way towards a more sustainable future. The Global Plastics Treaty has a goal of ending plastic pollution by 2040 through a circular economy where all plastics are responsibly managed during production, use, and end-of-life, enabling a climate-neutral plastics industry (PlasticsEurope, 2025).

However, despite all these actions and steps taken the global plastic production and pollution continues to grow. In 2023, a total of 377 million tons plastics were produced worldwide (PlasticsEurope, 2024). The urgency of this plastic crisis continues to be highlighted in emerging Dutch policies, initiatives and campaigns, focussed on reducing the amount of single-use plastics. The EU Single-Use Plastics Directive (2019/904) has already begun restricting certain disposable products, and municipalities like Amsterdam are increasing enforcement of sustainable waste management in public spaces (Gemeente Amsterdam, 2023). These governmental intentions are mirrored in consumer awareness trends, as the importance of sustainability is gaining traction among users, however a persistent gap between intention and behaviour remains (PBL, 2020).

Finally, the uncertainty of the recycled plastics market and how it will shift towards the future creates a barrier for sustainable material implementation. This uncertainty combined with stricter rules and regulations regarding plastic waste, municipal waste separation and recycling goals, means that Earth Rated and other sustainability minded brands have to stay adaptable in their strategies to remain future-proof.

Environmental Impact: What's at stake ecologically?

Cleaning up after your dog, is a large part of the daily interactions between dog and dog owner. Collecting dog poop with single-use plastic bags had become a common practice nowadays, which has resulted in a large consumption of dog poop bags (DPBs) annually. These DPBs are usually made of polyethylene, a common plastic, that can take up to 1000 to degrade. Each year over 415 billion DPBs, equivalently to 0.76-1.23 million tons of plastics, are used and disposed of globally. These DPBs make up 0.6% of total plastic waste generation (Mai, 2022). Their extremely short life cycle makes them a non-negligible pollution source.

Not only the bags, but the feces itself also create potential ecological problems when left behind. If dog faces is not picked up and left behind, it can contaminate local water, soil and ecosystems with bacteria, pathogens and excess nutrients. These bacteria and nutrient loads like nitrogen that emerge from the feces left behind, can degrade water quality, foster algal blooms and reduce oxygen levels, when entering waterways. This can pose threats to human and aquatic health (USDA, 2011).

User Challenges: What are the user barriers?

Current user misconceptions and behaviours create barriers that hinder the intended impact and use of sustainable poop bags and waste management. To start, there is a gap in the sustainable intention and actual disposal behaviour of dog owners. They believe the purchase of sustainable poop bags is inherently enough to create positive environmental impact and don't realise their impact depends on their disposal

and that disposing the bag in regular bins, deletes the environmental benefits (PBL, 2020) (European Bioplastics, 2022). On top of this many users incorrectly believe dog waste to be a natural fertiliser, when it actually can contaminate water and soil as stated before (USDA, 2011). So users think leaving poop behind to fertilise the soil is a good option.

A qualitative survey was done with 32 dog owners, to further analyse these misconceptions and behaviours. The survey focusses on knowledge and conceptions dog owners have on sustainability, sustainable dog products and sustainable practices as well as analyses their own preferences and actions. The survey helps identify the user barriers towards sustainable practices and dog products. These barriers will help strengthen the problem definition later on in the process and give a better idea of user knowledge to better align with the target market during this project. Certain results visualised below further highlight, confirm and expand on the earlier found misconceptions.

When asked:

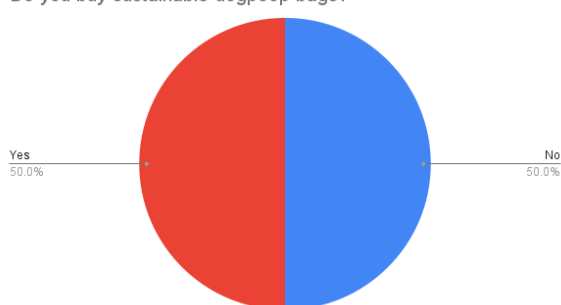
Are you aware of any sustainable options for dog products? What type of sustainable dog products or brands do you know of?

- 19 people: No
- 5 people: Dog food options
- 7 people: know sustainable products exist on that section
- 1 Person: Poop bags

Do you often buy sustainable dog products? If yes, why and which products? If no, why not?

- 19 people: No
- 8 people: Yes, food
- 1 Person: Yes, Poop bags
- 4 people: Only in promotion or not available in their area

Do you buy sustainable dogpoop bags?



Yes: If so which?

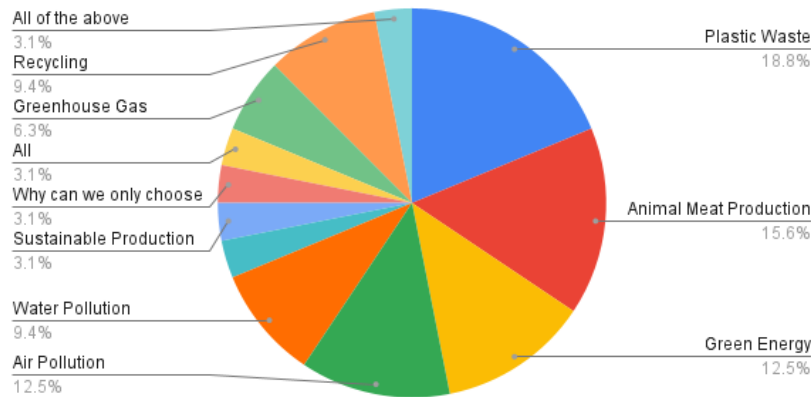
- 3 people: post consumer plastic bags
- 7 people: Bioplastic or compostable
- 5: use them a lot
- 1: sometimes

No: If no, why not?

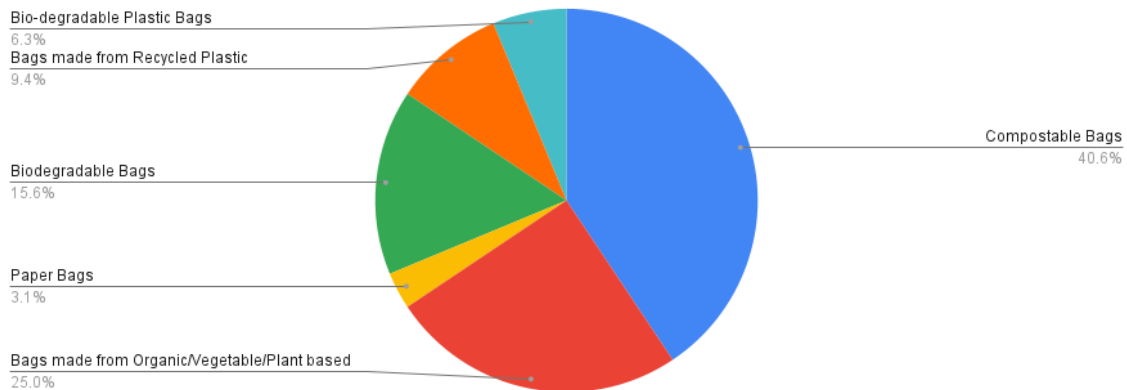
- 2 people: Find it dirty
- 2 People: didn't exist when they had dog
- 4 People: Don't know they exist
- 2 person: doesn't care
- 5: use old ones laying around/get for free/use ones from government dispensers
- 1: not available

Figure 5: User Answers on Purchasing Habits

Count of What environmental / sustainable issue do you find the most important?



Count of Which sustainable dog poop bag do you think has the most sustainable impact?



What type of sustainable dog poop bag would you most likely buy?

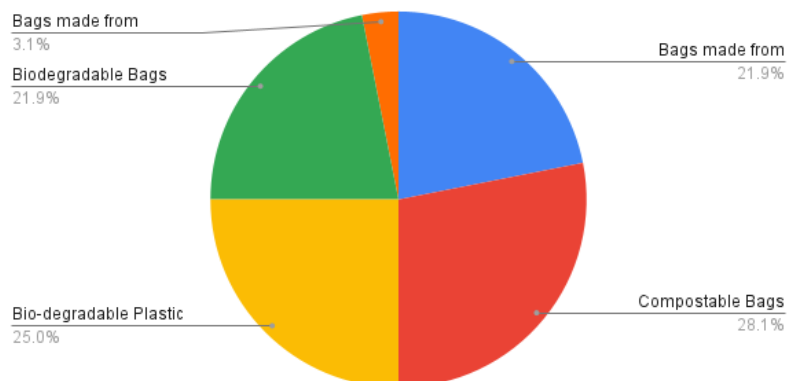


Figure 6, 7 & 8: User Answers on Sustainability Knowledge and Values

These survey results show an interesting tension:

Whilst roughly 31% of participants viewed plastic waste (plastic waste, recycling and sustainable production) as the most important sustainability issue, 50% doesn't buy sustainable bags instead of plastic bags.

10% thought recycled plastic had the best impact, but only 3% would choose recycled plastic bags to purchase.

The results also highlight the knowledge gap, where 90% believes biodegradable, compostable or paper bags have a better sustainable impact, but when asked why:

- 8: I don't know
- 4: Doesn't contain plastic
- 4: Turns into compost for garden
- 6: It will compost or biodegrade in bins and landfills
- 3: Best guess
- 4: Sounds most sustainable
- 3: It sounds organic

56% of participants were just guessing, whilst others had incorrect knowledge on the actual end of life or degradability of the bags, which again highlights the consumer knowledge gap.

All these misconceptions highlight not only a knowledge but also a behavioural gap. Dog owners think they are making responsible choices, but their actions do not align with their intentions or create the intended sustainable outcome. This phenomenon, otherwise known as the "value-action gap", is found in environmental user psychology, and can only be addressed or changed through targeted interventions that connect correct intention with correct action (Kollmuss & Agyeman, 2002). For this research, this gap not only represents the challenge but also an opportunity. Instead of only offering more sustainable products, brands such as Earth Rated can become educators and facilitators of effective impactful behaviour change in public spaces.

Solution Shortcomings: Why are "better bags" not enough?

Due to these sustainability shifts in plastic policies, trends and initiatives, the past years companies have been developing more sustainable alternatives and solutions. This has resulted in the introduction of organic materials such as bio-based, bio-degradable and compostable bags. However, the process of developing sustainable DPBs (dog poop bags) has proven complicated. This is due to the key requirements necessary for a good quality bag: most importantly durability, hygiene, tear resistance and leak resistance.

Whilst material alternatives such as bio-degradable plastic, compostable materials and bio-based material might reduce the amount of virgin plastic produced, these alternative bagging materials generate their own problems. A material analysis is done on seven different bag materials highlight some of the different problems that emerge from alternative materials to virgin plastic. The following figure highlights the main problems emerging from the analysis. The full analysis can be found in the appendix 1.

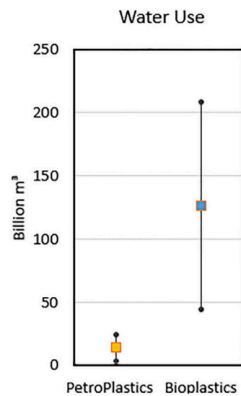
Dog Bag Sustainable Material Options							
	Virgin Plastic	Bio-Based Material Biomaterial vs Bioplastics	Bio-Degradable (Plastic)	Oxo-Biodegradable	Compostable	Recycled Plastic	Paper Bags
Composite							
Production					Composting: Hot vs Cold Composting: (Martin et al., 1992). "Cold" compost systems are smaller more commonly used in backyard composting (Adhikari et al., 2012b; Arrigoni et al., 2018). Compostable bags require "Hot" active composting conditions and temperatures in excess of 60 °C to degrade efficiently (Lucas et al., 2008). Bags can be certified to comply with national and international technical standards (Briassoulis et al., 2010; Rudnik, 2019). To meet these standards, the vast majority of compostable bioplastic bags require industrial conditions where temperature, air flow, and humidity are controlled (Gutiérrez, 2018; Rudnik, 2013).		Production of paper bags can have a massive water & energy footprint Just shifting the environmental problem
End of life		Contamination Risk: Dog feces is considered a biohazardous contaminant. Recycling facilities are not equipped to safely handle organic waste or animal pathogens.					
Recyclability		Bag Type Doesn't Matter: Even if the bag is biodegradable or recyclable, once it contains dog poop, it is treated as residual or general waste, not recyclable. (Drodz-Malinska, 2022)	True for All Bags				
Pro's							
Cons			Many so-called biodegradable dog waste bags contain some petroleum-based plastics, so these plastics are not truly biodegradable because they produce plastic fragments that generate microplastics (Mateos-Cárdenas, 2022).	The Court of Justice of the European Union (CURIA) has backed the prohibition of oxo-degradable plastics on the market, underlining its intent to protect the natural environment and human health and dismissing legal claims made by Symphony Environmental. In 2019, the Directive (EU) 2019/904 was introduced (EuropeanUnion, 2025)	Contamination of Coli bacteria or Salmonella & microplastic pollution Certification tests for plastic biodegradability are conducted under highly controlled laboratory conditions that do not reflect applied industrial or home compost environments (Choe et al., 2021).		Deforestation Not-Leak proof & Stink & Non-hygienic Not a big adaptation and use yet due to manufacturing and durability issues. They are not resistant to moisture en tear easily making them non user friendly and unhygienic
Current Use/ Adaptation			Biodegradable plastics cannot be discarded together with recyclable plastics				

Table 1: Important Insights Material Analysis

Production

Many "sustainable materials" create negative environmental trade offs in their production. Paper and bioplastic bags have a massive water and energy footprint in their production phase which is larger than that of other materials. This increases the risk of burden shifting of environmental impacts. In other words, the increased use of bioplastics will result in additional significant amounts of land and water use. This would increase competition for different land uses and have a negative effect on biodiversity (Brizka, 2020).

On a global level, this picture looks worse. Globally, around 170 Mt of plastic is used for packaging purposes annually (44% of global plastic consumption). Substituting these petrochemical plastics with bioplastics would require 613 Mt of corn (54% of the



current global production), 1.8 Mt of castor beans (12 times current global production), and 21.3 Mt of wood (around 0.8% of current global roundwood production). To satisfy these land-based inputs would require a minimum 61 million ha of land (the size of France) and at least 388.8 billion m³ of water (60% more than the EU's annual freshwater withdrawal) (Brizka .J, 2020).

Figure 9: Comparison Water Use Plastics Production

The table below shows that paper bags are also not an option due to water use, marine eutrophication and fossil fuel depletion.

		Bags considered in study					
		Conventional single-use HDPE bag	Partly recycled single-use HDPE bag	Single-use Paper bag (partly virgin)	Single-use Paper bag (100% recycled)	Reusable LDPE bags	Reusable NWPP bags
Indicators	Climate change						
	Water depletion						
	Cumulative Energy Demand						
	Terrestrial acidification						
	Freshwater eutrophication						
	Marine eutrophication						
	Human toxicity						
	Terrestrial ecotoxicity						
	Freshwater and marine ecotoxicity						
	Fossil Fuel Depletion						
	Photochemical oxidant formation						
Performance Key							
	Best						
	Better						
	Worse						

Table 2: Comparison environmental impact bag materials (Kimmel, 2014)

Oxo-biodegradable materials are also not an option as the production of oxo-biodegradable plastics has been banned in Europe since 2019 (EuropeanUnion, 2025).

End-of-life

The disconnect between the intended end-of-life of sustainable material alternatives and their actual end-of-life also generates negative impact.

To start, a common problem is that few “biodegradable” DPBs correctly meet the requirements to ensure effective biodegradation in municipal or home waste facilities. Most DPBs can’t be degraded within a year or only under very specific circumstances or are not truly biodegradable as they contain petroleum based plastics, so they degrade into plastic fragments that produce microplastics (Mateos-Cardenas, 2022). Consequently many companies do add the label of biodegradable to their bags, but don’t correctly address the level or time of degradability.

This problem continues in the end of life of compostable bags. Compostable bags are usually not compostable. As stated in the table, most at home “cold” compost piles do not reach the required conditions to be able to compost the material and waste or kill the bacteria present (Lucas et al, 2008). Furthermore a study for the European Union in 2020 on the relevance of compostable products in a circular economy was done. The study results indicate that there is little evidence of any agronomic benefits or ecological improvements linked to compostable products and therefore we should prioritise recycling over composting. Industrial composting infrastructure differ considerably across the EU and their effectiveness varies even if the materials do comply with EU requirements. To meet effective degradation, the vast majority of compostable bioplastics require industrial controlled conditions (Rudnik, 2023). The resulting non-degraded compostable plastic residue is a significant risk that cannot be quantified (Han. et al, 2020).

Finally, even if a material truly meets bio-degradability of computable standards, many bags don’t reach their intended end-of life. Compostable or biodegradable bags often end up in regular residual waste streams, where they are incinerated alongside conventional plastic bags and waste, erasing their intended environmental benefit. During this incineration process, the organic waste in the bags contribute to methane emissions, increasing negative environmental impact.

These factors support the problem definition, that the problem is not just what the bags are made of, but how they are used and disposed of.

Contextual Relevance: Why does it matter here?

With an estimated 1.9 million pet dogs in the Netherlands, producing over 100.000 tonnes of waste annually, the environmental footprint can’t be ignored. (CBS, 2022)

To start, the Netherlands, like most countries in Europe does not have the correct waste management system to make biodegrading and composting of poop bags easy and efficient, hindering the intended impact of sustainable poop bags.

Keeping in this infrastructural element, Dutch urban parks are very busy, multi-use spaces where many different users and behaviours intersect, like recreation, biodiversity and pet ownership. Green spaces in cities like Amsterdam, Rotterdam and Utrecht are limited and heavily used (PBL, 2021). When dog waste is not managed correctly in such green spaces, concentrated pressure emerges on park ecosystems. Despite cultural norms, 6-8% of Dutch owners admit to not cleaning up their dog waste (Gemeente Amsterdam, 2023), even though Dutch municipalities invest large resources on signage and management of correct disposal. Incorrect disposal in turn undermines economic, environment and social sustainability efforts.

As said before, the waste left behind, infiltrates the park ecosystem and can create public health problems in water quality in the ponds and canals found in most large Dutch cities (USDA, 2011).

When looking at the behaviour of the Dutch dog owner, they are used to civic responsibilities in public spaces. However there remains a disconnect between basic compliance (picking up poop) and further sustainable action. They either don't buy sustainable bags, or they do buy sustainable options, but throw them away in normal trash bins (Carrington, 2014).

Urban Dutch parks present opportunities for targeted interventions as they contain a latent community of many dog owners in concentrated areas, where the shared physical surroundings enable visibility, peer influence, communication, low-barrier interactions and ritual building. These are essential drivers for behaviour change (PBL, 2020).

Who is the community?

What is the specific Dutch community targeted in this research?
As this research focusses on dog waste, dog owners and their dogs make up the largest part of the targeted community.
Urban Dutch parks prove to have high potential for targeted interventions and as they are the public spaces visited most often daily. As a result the relevant community is based around the context of the Dutch urban park.
As a result the targeted community is not a fixed characteristics-based target group, but a place-based micro-community shaped by daily and repeated encounters. Figure 10 shows the three main players in the targeted community.



Figure 10: Key Players Park Community

Each of these players, have specific characteristic behaviours and rituals that create casual interaction between the players, lacking purpose or meaningful engagement, which are visualised in figure 11. Their shared values however provide the opportunity to turn these casual interactions into meaningful interventions.

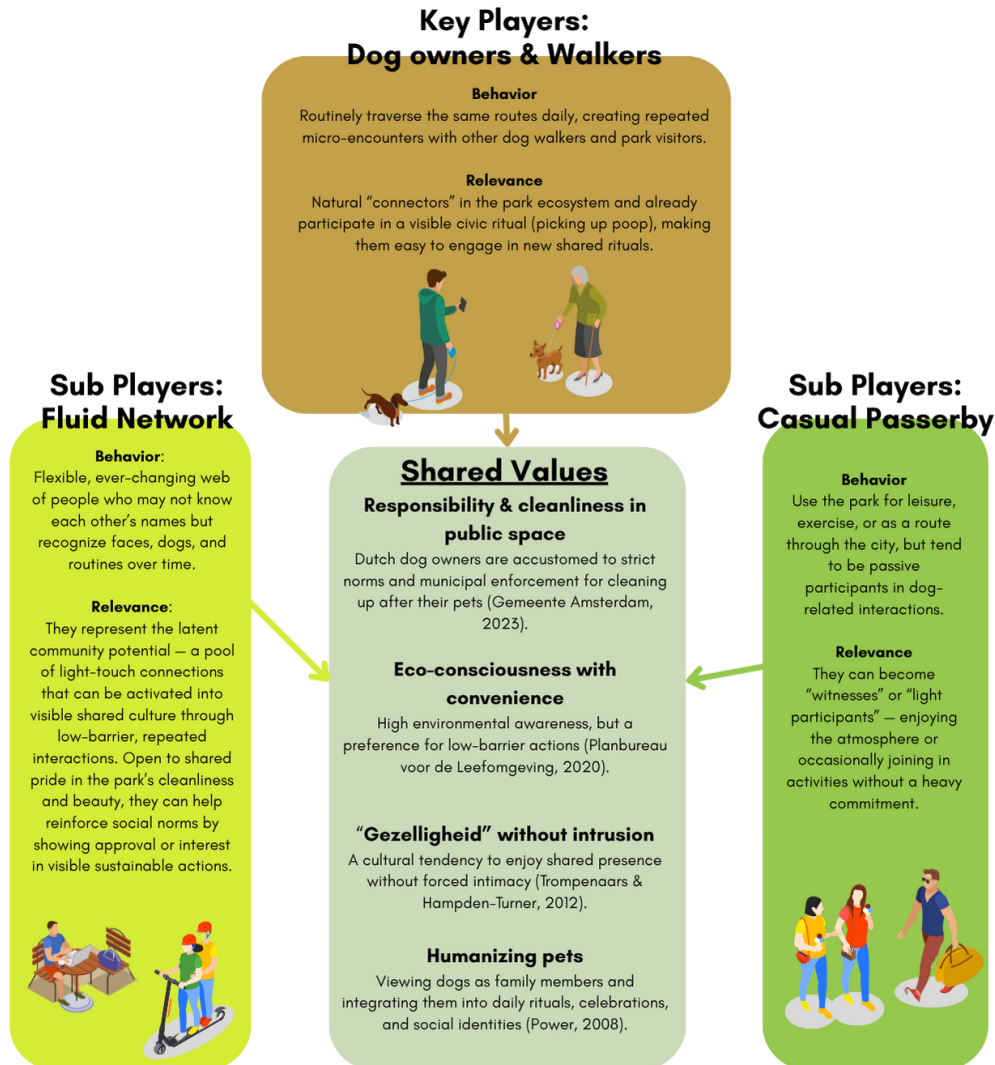


Figure 11: Key Player Behaviour and Values

Dutch urban parks are designed as shared civic spaces where social mixing is encouraged, but necessarily direct engagement. As a result, this community taps into the latent social potential of daily interactions between these three players that form the targeted community, utilising dog ownership as a catalyst for broader social bonding. Leveraging existing civic habits of these key players, such as picking up waste, allows them to be reframed as opportunities for visibility, collective action and pride and low-barrier participation.

Problem Statement

In conclusion, the problem can not be defined as purely poop disposal or poop bags. If we do nothing and no intervention is made, DPB's will continue to undermine global environmental sustainability goals. Degradable bags will keep being incinerated, losing their potential impact. As consumers grow aware of "greenwashing", brands that don't present genuine sustainable actions and benefits will risk reputational damage. Municipalities will have to keep relying on enforcement for behavioural change rather than positive engagement and miss circular waste use opportunities. Doing nothing preserves a flawed system where community, environment, users and brands don't achieve their intended impact.

The defined problem consist of the following elements:

- **User Misconceptions**
- **Value - Action Gap**
- **Weak Social Engagement**
- **Lack of Circular Waste Management Infrastructure**
- **Lack of Visual Responsible Pet Ownership**
- **Material Limitations**

They are summarised in the final problem statement.

Final Problem Statement

In Dutch urban spaces, dog waste disposal remains an environmental challenge. Although dog owners are generally compliant with cleanup norms, common misconceptions on biodegradability and sustainability, unclear packaging claims, and lack of infrastructure lead to improper disposal, hindering potential sustainability benefits. Current material alternatives, though marketed as eco-friendly, fail to provide a solution in the absence of correct circular waste management infrastructure. Behavioural gaps remain, as convenience often outweighs intention, even among environmentally conscious owners. Furthermore, there is a lack of community-driven rituals or shared responsibility that could reinforce sustainable norms and show actions as part of a collective effort. Together, these factors limit the environmental impact of existing solutions and present an opportunity for brands like Earth Rated to facilitate systemic change. The opportunity where they don't just sell sustainable products, but create meaningful engagement around their use, making responsible pet ownership social, joyful and participatory.

Positioning Earth Rated for Impact

From Brand Values to Design Opportunities

This chapter explore Earth Rated's positioning as a brand regarding their potential to shift behaviours, influence culture and create shared meaning in public spaces. The company analysis insights form the boundaries guiding the bridging process from problem context to design direction. They shape the parameters of the domain used during the second part of the VIP Process.

Why is Earth Rated in a unique position to respond to this problem?

Earth Rated has built its reputation on providing eco-conscious dog owners with high quality products that promise to make daily interaction between dogs and dog owners simpler and better. As the sustainability conversations expands, Earth Rated has the opportunity to expand their role beyond a product seller. They already focus on community building and responsibility, but now have the potential to influence norms and behaviours and shape how responsible pet ownership can act in public spaces.

This section examines Earth Rated's current company values, pillars mission, strengths, weaknesses and threats in the cultural and environmental tensions it must navigate. With this understanding of where Earth Rated stands today and where they want to go, opportunities are identified where they can lead the change from better products to better systems, facilitating lasting impact in Dutch urban parks.

Domain

To give purposeful direction to the VIP Method, a domain is formed from a SWOT Analysis and Earth Rated's three Pillars to structure research and trend exploration. This domain shapes the context in which relevant trends are identified, clusters are formed, and opportunities are defined. This is a compacted visual of the SWOT Analysis of Earth Rated. The full SWOT Analysis can be found in Appendix 2.



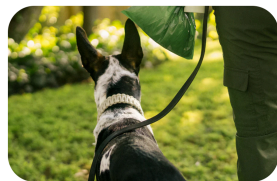
Figure 12: Earth Rated SWOT Analysis

Of the 19 opportunities identified, 10 share a common theme. They all highlight a growing connection between individuals, pets, companies, brands, others, themselves, earth and more.

1. Growing pet ownership
2. Expansion into new markets
3. Product & experience personalisation
4. Compost infrastructure advocacy & partnerships
5. Product-as-a-service systems
6. Pet-friendlier city infrastructures
7. Customised pet products with AI/QR tech
8. Collaborations with circular brands
9. Mindful & ritualised daily routines
10. Pet-fluencers & social communities

All these opportunities highlight the growing need for deeper, more purposeful connections. This importance of “connections” is also mirrored in Earth Rated’s pillar of “Being a better community member”. They aim to grow and improve their connections between community members, within their workplace, between dogs and owners, and between consumers and the earth.

We’re built on 3 pillars



Be a better community member



Be a better environmental steward



Be a better workplace

Figure 13: Earth Rated Company Pillars (Earth Rated, 2025)

From this alignment, the domain for the VIP process is defined as:

“Building Meaningful Connections”

For this domain, this research defines a meaningful connection as a social, experiential or personal bond that extends beyond functional interaction. It creates emotional resonance, personal significance and a sense of belonging or identity for those involved. In design and community studies, such connections emerge through everyday practices reframed as ways to reinforce shared values, recognition between individuals and place or group attachment (Hekkert & van Dijk, 2011; Proshansky, Fabian & Kaminoff, 1983). This domain will later guide the clustering of trends and shape the future interaction context this research will design for.

ViP Statement

Having defined the domain as building meaningful connections, explored the challenges surrounding dog waste management and navigated the problem definition, resulting insights are translated into a guiding vision known as the ViP statement. This functions as a guiding compass that frames what kind of interactions and meanings the design should create, instead of proposing a fixed solution. It frames the design ambition as the creation of interactions in future public spaces, not just product innovation and guides the next steps in the ViP process.

ViP Statement:

This project seeks to design a future-proof strategy for Earth Rated that transforms dog waste disposal in Dutch urban areas from a private, routine task into a visible, collective, and environmentally meaningful ritual. By integrating product innovation, circular waste infrastructure, and community engagement, the goal is to bridge the gap between sustainable intent and sustainable action, fostering a culture where responsible dog ownership is not only expected, but celebrated.

Vision Definition

Reframing the context: From Current to Future

The Vision Definition phase of the VIP approach creates a shift in perspective as it synthesises insights from trend research, company analysis and problem definition into an understanding of where the market is headed, providing a foundation to identify meaningful future visions.

The process transforms static findings into dynamic design directions by mapping clusters into opportunity matrixes. This sets the stage for a purposeful forward looking vision, that can act as an analogy for concept generation and challenges current contexts.

Shaping Forces: System drivers and emerging trends

The current state of dog ownership and waste management is actively being shaped by broader environmental, cultural, and policy shifts. Increasing regulatory pressure on plastic regulations, growing consumer sustainability awareness and innovations in public space design are interact and influence each other to redefine how people interact with pets in urban environments.

This section identifies the key system drivers and emerging trends influencing the future of sustainable dog ownership. By understanding these factors, we can identify not only the constraints and boundaries Earth Rated will face in the future, but also the opportunities to design meaningful interventions for the Dutch urban Dog Owner community in their environment.

Trend research

103 trends are collected that fall in the context of relevant topics for the 10 year future context of this project. The topics are all specifically relevant to this project and the Dutch urban problem statement context navigated earlier. All 103 trends can be clustered into the following themes.

- Consumer Behaviour
- Pet Industry Trends
- Sustainability Trends
- Government Policies & Regulations
- Global Initiatives
- Sustainable Design
- Consumer Values & Needs
- Societal Trends
- City Infrastructural Trends
- Waste Management

All 103 trends found can be found in appendix 3, where they have been clustered together to form nine thematic clusters, which are explained in the next chapter.

Strategic Framing: From Insights to Opportunities

This stage transforms the raw trends into a potential design directions. By mapping findings, clustering related insights, and positioning them on opportunity matrixes, tension patterns emerge that identify potential design areas, that are socially relevant, brand aligned and future oriented. Strategic framing translates these potential design areas into meaningful design directions, characterised by different value analogies. These design directions become an inspiration basis to generate conceptualisation around.

Clustering

As a next step, in order to translate the trends into insights, all of the trends are grouped into thematic clusters. Each cluster represents an interaction theme that can be identified within the future 10 year context, which have potential to generate value and inspire meaningful design directions.

The clusters dimensions are directly based on the domain previously formed: “Building Meaningful Connections”

This means every cluster reflects a specific theme or context in which meaningful connections could emerge.

The complete overview and explanation of the nine clusters including their relevant trends can be found in appendix 3.

The nine clusters are characterised as followed:



Figure 14: 9 Cluster Themes

Opportunity Matrix

The nine clusters are plotted on an opportunity matrix, to reveal how different future connection clusters relate to one another and where the most valuable design space lies. This will identify the most promising directions for meaningful design. The two axes in the matrix encourage meaningful differentiation and insightful positioning, by creating tensions between the quadrants. This structure allows positioning of the clusters of trends along these axes, so the matrix highlights where meaningful design interventions can emerge. This guides the translation from abstract design opportunity areas into actionable design directions.

The axes of the matrix are not arbitrary but are constructed from Earth Rated's mission and strategic goals, to ensure the future design opportunity areas align with Earth Rated identity and long term direction (Hekkert, van Dijk, 2011). Aligning the matrix with Earth Rated's purpose ensures the emerged design directions are not only visionary towards a future Dutch urban context but is also feasible to integrate into Earth Rated's values, products and community vision. The full generation of the various possible axes according to Earth Rated's mission and goals can be found in appendix 4. Multiple matrixes are made to generate various design direction opportunities based on multiple axes combinations. The full plotting of the 9 clusters on all formed matrixes can be found in the Appendix.

In these matrixes, promising areas were identified as quadrants that contained multiple clusters. A successful matrix has evenly distributed clusters across its axes, and the most potential quadrant from that matrix is the quadrant containing the most clusters. Any matrixes that produced uneven distributed cluster positioning is not used, as the axes would not create potential tensions. All five matrixes with potential cluster distribution can be found in the appendix. These five matrixes provided six cluster filled promising quadrants. Each quadrant is translated into a potential design direction based on thematic, emotional, interaction and context patterns found between the clusters present in the quadrant.

Design Directions

The 6 potential design directions are explained below.

Inside Out: Based on the Disney Pixar Movie "Inside Out". In this movie a young girl Riley is influenced by five different emotions in her head, to make choices and actions. These five emotions learn and evolve from Riley's outside experiences and actions and perspectives from the people she interacts with.

The intended interaction: where a user gains knowledge through and is influenced by connections with other people / or a product around her. These other people / or product/service in turn grows and learns themselves through the actions or perspectives of others.

Write your own story: People love to share their own life stories and memories with others. People also seek to follow their own unique path in life and connect with others and are inspired by other people's journeys.

The intended interaction: People share their own choices, adventures, memories and life with others. By seeing everyone's different stories, people inspire each other and connect with each other, creating a community full of personal connections and interactions.

A Playground of Possibilities: “Like a playground for children, explore, grow and learn with others whilst playing in a space that can be anything like a spaceship or a pirate ship. Anything is possible”. A communal area where people can come together, where daily dog walks become chances for connection, joy, and growth. Every interaction whether with your pet, a stranger, or nature feels meaningful and memorable. The intended interaction: moments of open spontaneous play that connect us to others and educate.

A Treasure Map: Like a treasure map, people love going out into the world and exploring and discovering new people, places, products, cultures and more. Slowly collecting more experiences and adventures. You can do it alone, or together but that motivation of finding and exploring new things and rewards excites people to participate, go out and interact.

The intended interaction: turning an everyday walk into a shared adventure, where exploration and interaction leaves a treasure trail for others to follow.

All you need is love: Everyone craves love and connection in some sort of way. If it is family, love, friends or something else.

The intended interaction: Create possibilities for loving interactions, moments, connections and activities based on people’s longing for meaningful connections and actions.

Less is more: Sometimes focussing back to the basics, highlights the beauty of simplicity and can create more meaning and impact. For example, there are trending Michelin star restaurants that create dishes out of just two ingredients, prepared many different ways, to really highlight the beauty of that ingredient and make it shine. By simply making that ingredient the star of the dish without too many other ingredients or flavours distracting it, the beauty of that one ingredient shines through.

Another example are wellness retreats, where people take away distractions like social media/internet/tv and just focus on themselves and meditation. This allows for people to reconnect with themselves, focus on the basics and enjoy the beauty of nature and simplicity, showing them they don’t always need all those distractions.

The intended interaction: Use the beauty of simplicity to make meaningful and impactful experiences for users.

Harris Profile Hierarchy

These directions were compared against each other through the use of a Harris Profile, constructed with a hierarchal ranking established of Earth Rated’s company values and mission. This ranking was defined in a collaborative session with Earth Rated. This ensures the chosen future visionary design direction best aligns with Earth Rated identity and can produce designs that reflect the brand’s core principles of fostering genuine community engagement, and create measurable positive impact in both environmental and social terms.

The final ranking constructed reads:

1. Community First
2. Always Evolving
3. Rooted in Responsibility
4. Be a Better Workplace
5. Be a better Environmental Steward
6. Make life easier: Making interactions simpler
7. Dare to care: Create a positive impact
8. Be thoughtful: Make better products that exceed expectations

All six directions were tested through the Harris Profile, generating the following results.

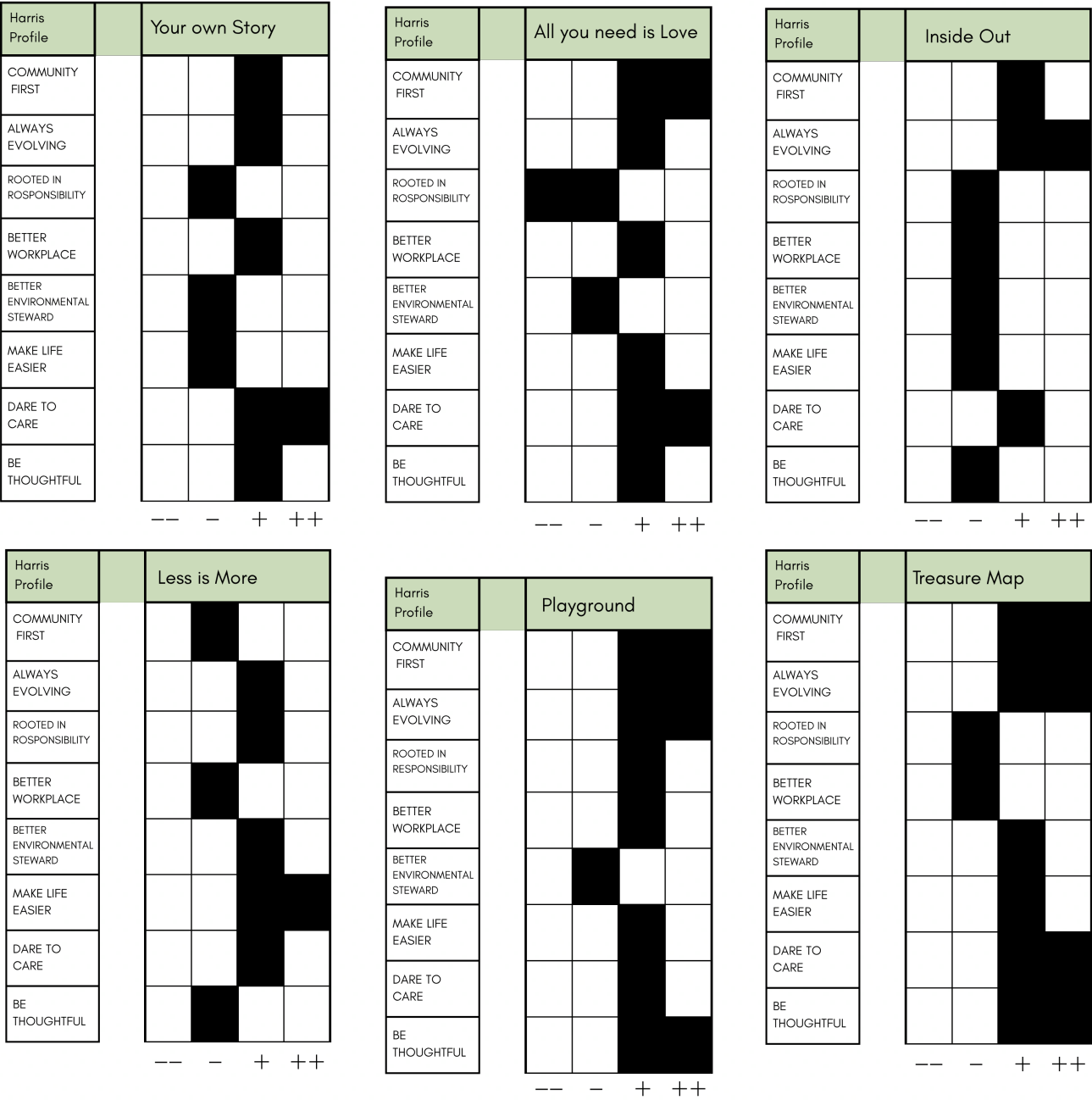


Figure 15: The Harris Profile Results

The Harris Profiles indicate the directions of “Treasure Map” and “Playground of Possibilities” have the most potential as they both align the most with the ranked values. These are presented in a collaborative discussion with Earth Rated to incorporate their preference and feedback into the final direction choice.

Playground of Exploration

The final chosen design direction to further guide design conceptualisation is a combination of the 2 most promising design directions “Treasure Map” and “Playground of Possibilities”.

A Playground of Possibilities



A communal area where people can come together, where daily dog walks become chances for connection, joy, and growth. Every interaction — whether with your pet, a stranger, or nature — feels meaningful and memorable. It creates a micro playful educational spontaneous ecosystem, where people and dogs learn, explore and connect through many possible perspectives together.

Figure 16: Visualisation “Playground of Possibilities”

A Treasure Map



A co-created discovery system that turns public dog-walking into an eco-adventure. Find hidden surprises, explore new places, leave messages for others, complete challenges, whilst building a cleaner, more connected neighbourhood.

Figure 17: Visualisation “A Treasure Map”

Playground of Exploration

In collaboration with Earth Rated a final combined design direction is chosen, which combines different aspects of each of the two directions, to create one final direction: A playground of exploration.

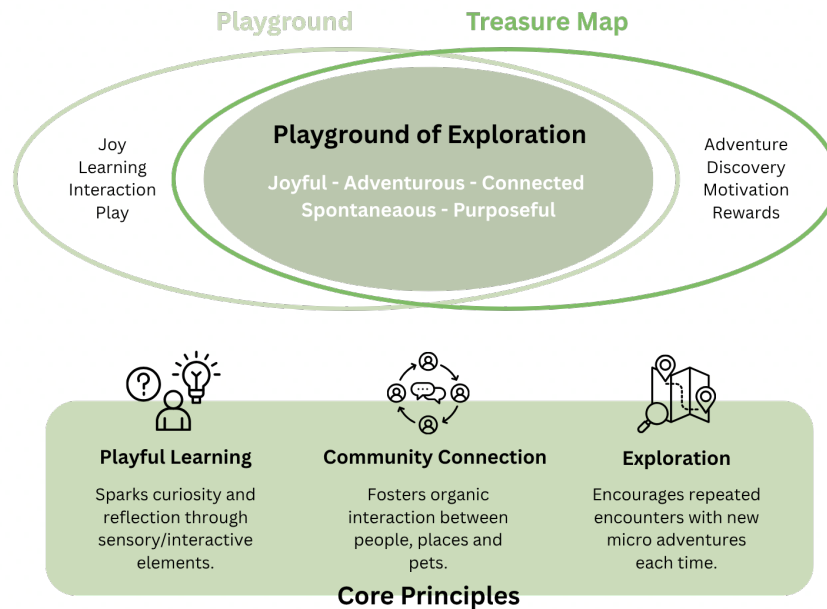


Figure 18: Visualisation Merged Identity "Playground of Exploration"

The final design direction: Playground of Exploration

A communal concept people can visit, come together and explore, where daily dog walks become opportunities for connection, joy and impact. Exploration of the communal concept turns the daily dog walk into a meaningful micro-adventure, where people interact, co-create, learn, play and connect. Using low-barrier, intuitive interactions, it invites effortless participation requiring no preparation, time or energy, yet offering something new to discover every time. This could vary from a new person, to a pet, knowledge or activity, making every experience unique.

Playground Principles

The three principles of this design direction are: Exploration, Community Connection and Playful Learning.

Community Connection directly aligns with Earth Rated's main value and goal of broadening, strengthening and connecting their community. Playful Learning can be linked to Earth Rated's two other values of "always evolving and sustainable responsibility".

These principles provide three central questions to act as guiding questions and building blocks during concept generation:

Design for Change:

1. How do you facilitate community building and social interaction?

Concept Brainstorming:

2. How do you translate the analogy and elements of Playground of Exploration into a concept?

Value Creation:

3. How does playful exploration foster into meaningful, value-led interactions that strengthen community ties and encourage sustainable action?

Conceptualisation

Designing for change: Translating Vision to Intervention

This chapter translates the Playground of Exploration direction into tangible design interventions that can influence consumer behaviour. A community building framework is built based on community design, focussed on public urban park spaces. This framework provides design implications as a basis to design interventions from that strengthen community. The concepts are crafted to activate senses, emotions, and shared rituals that resonate with both dogs, their owners and the wider public.

In this vision, design is positioned as a living system and process that shapes a community's interaction, responsibility, and how they see themselves as part of a sustainable future, instead of just a static product.

Interaction Landscape

A collaborative discussion with Earth Rated led to the insight and agreement that they see the biggest opportunity to apply the Playground of Exploration vision onto the development of their booths and events they currently have at showrooms, events, park, partners locations and stores.

The development of their showroom booth or outdoor events could provide new opportunities for connection, community, education and interaction.

As a result the focus is placed on specifically the development of their park events and park booth elements, for further concept development.

Why the Park?

The Dutch urban public park emerged as a natural focus point during research, and at multiple points throughout the process. Initial exploration into the context of sustainable dog waste solutions revealed that urban green spaces are the most common shared environment where dog owners encounter each other most often, interact and have an existing expectation to act responsibly. In general, dog owners specifically spend significantly more time in urban green spaces than non-dog owners. This highlights parks as habitual intersections of the intended community (Zijlema, 2019). Parks have a high user density and relevance as most Dutch dog owners visit parks daily, especially in environments where private outdoor space is limited, such as large cities. Trend analysis highlighted green urban spaces as key drivers of social interaction and opportunity for community engagement as well.

Public urban Dutch parks are an environment that already facilitate multiple existing social micro-interactions between dog owners and other community members. This ranges from casual greetings, dogs playing together, recreation and repeated encounters which together form a basis for community building without forced socialising (Nyunga, 2025; Chen, 2022).

Design can leverage these existing micro-interactions in shared public space to transform them into purposeful interventions. These interventions become more effective as they can be linked to dog owners' daily rituals already present in this public

spaces, transforming the park into a opportunity space for connection, learning and playful learning. Parks are also directly linked to municipal maintenance, environmental quality, and visible waste management. This links to the problem area of proper sustainable disposal infrastructure and the impact of governmental policies.

In conclusion, these findings affirm that public parks are strategic, socially rich environments that align with both Dutch dog owners behavioural patterns and Earth Rated's desire to redefine dog walking into shared, joyful, and meaningful experiences. By activating these existing latent communal spaces, Earth Rated can root its design interventions in environments that naturally encourage daily interaction and participation.

Design for Change

How can design create the conditions for change?

In order to be able to effectively generate relevant design concepts that foster community building, a theoretical analysis is done on how design can facilitate community building, specifically in public park environments. It touches on sociology, environmental psychology, community theory and participatory design, building a framework to guide the next step of concept development: how to design a space or experience that brings people together and encourages them to interact, collaborate and connect?. This will help answer the first question that emerged from the Playground of Exploration direction:

1. How do you facilitate community building and social interaction?

The framework provides four layered building blocks for creating environments that feel welcoming, spark interaction, and inspire collective action, to use doing brainstorm, ideation and concept detailing. Specifically in the chosen context for Earth Rated's concept development: public parks, where human connection, shared purpose, and playfulness matter.

The four building blocks cover the following factors:

1. Motivation: What benefits are we offering?
2. Interaction: How do we spark a shared moment?
3. Environment: Where do these moments happen?
4. Community & Identity: How do we signal community

These four factors are the building blocks and questions to answer when trying to foster community and social interaction in parks and showrooms. Each of these factors in turn generate design implications and recommendations that turn into a framework for concept creation, ideation and detailing.



Figure 19: Community Building Blocks

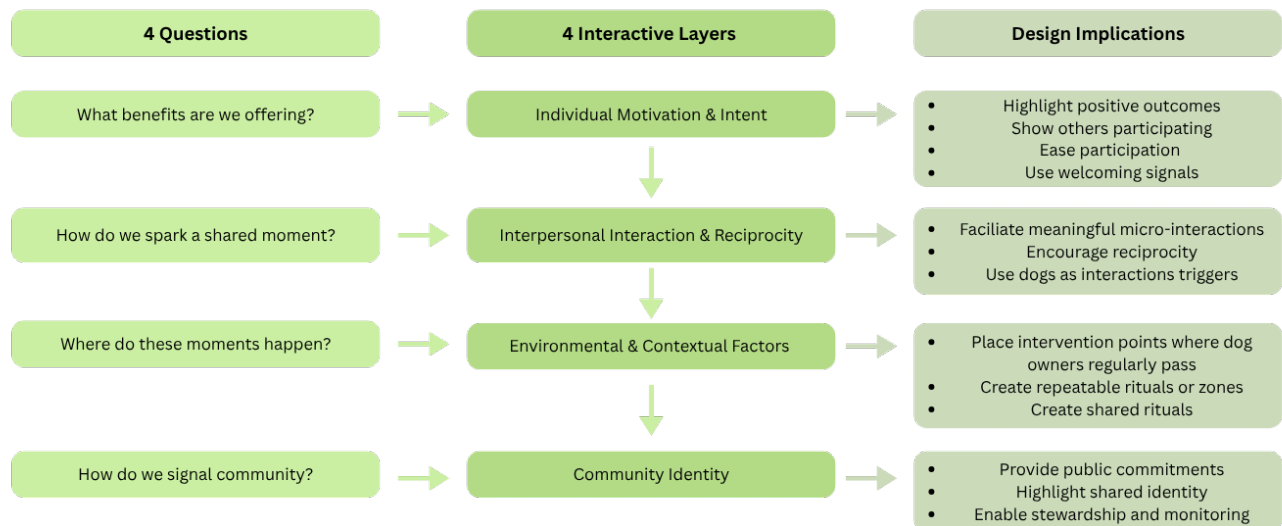


Figure 20: Community Building Framework

This framework will help generate the concepts, interactions and ideas for a successful Earth Rated park intervention: to not just showcase products, but to create a space where dog lovers, passersby, and communities can meet, co-create, and engage around sustainability in fun, spontaneous ways.

Concept Development

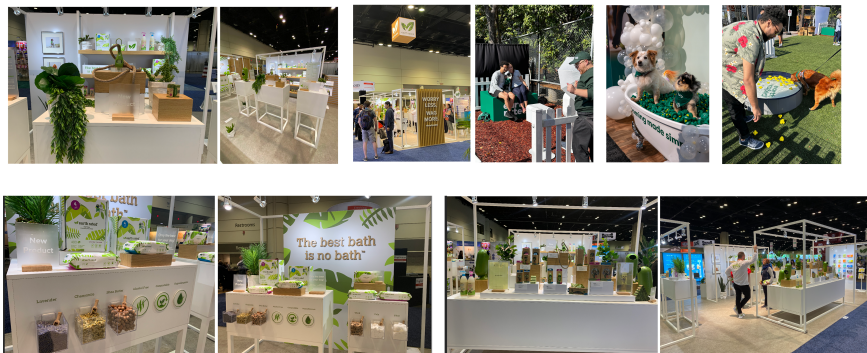
SCAMPER Brainstorming

The community building framework provides a foundation and inspirational design implications to use for the brainstorm and development of booth and park concepts. This bridges question one towards the next question emerged from the playground principles:

2. How to translate a Playground of Exploration into a concept?

A SCAMPER brainstorm is done on the current Earth Rated Booth and its elements, to analyse and explore how to translate the booth and its elements using the “Playground of Exploration” analogy and direction into concepts and ideas.

SCAMPER Method based on the booth



S - SUBSTITUTE Substitute an element for something more playful / emotional / sustainable • substitute the visual posters or banners with audio explanation • substitute shelves with trees or park benches or like dog themes shelves • Substitute brochures with plantable paper seed brochures, poop → flower • substitute sales people with digital dogs as sales reps • substitute human focused booth to dog focused booth	C - COMBINE Merge multiple ideas into one experience • create a scavenger hunt of the booth, people walk around the event with mini mission maps and things to do or find around and in the booth • combine poop and art, make a collaborative mural using poop bag wrappers or rolls or stencils, make something pretty together • combine playground and product, the booth turns into playground for human and dog, with like tunnels and things to climb through, with like hidden elements to find • the booth becomes a mini walk through the park, not just a mini store, but you and your dog follow a path through the booth just like the Solow and Ikea, experiencing things throughout, from start to end of process and product Other ideas: • create different emotive walks in your city, let people create add walks online, that you can follow, an artistic walk, or a sportive walk, or a joyful or inspiring walk based on the things you walk past • a sort of happen for dogs, collar that beep when other earthrated users and dogs are nearby so you can meet up and mingle • fun little magazines or stories or newspaper you receive which you can fold into bag, or has a bag inside so you have reading material during your walk, every week something new	A - ADAPT Take inspo from other context or industries • turn the booth into a mini park you can walk through just like Madurodam • create who are you as a dog wand what dog walker are you quizzes with matching photo booth filters to find out what products fit with you and make it fun • exit through a memory wall with the question Random Adapt Ideas • wearable poop reminder linked to dog, know when dog needs to poop • or like a radar that shows you where your dog often poops • look at strava and create a sort of wearable for your dog so you can track their health and walking and see all the stops they stop to sniff and poop, and share with others you routes as well, reveal hidden routes • a sort of holle bolle gis idea, you put in poop bag, it gets burnt, and you recieve a reward for the dog or you, or a picture you can then scan or take a picture of online • printed poop bags, each poop bag shows a different picture or joke or dog or foto, cvolect them all • link with others across the world walking their dog, talk together and make new friends
M - MODIFY OR MAGNIFY Exaggerate a feature or aesthetic to create drama or wonder • magnify the poop bag roll into a giant installation where people pull out a "poop bag" but its a fun tote bag or a poster or a trash bag, • a giant bag dispenser you can step inside of as a sort of time machine, or you see something fun inside • a giant poop bag in the middle where you throw all you trash in • a giant dog that poops out bag rolls • a giant flower that grows and grows on how much bags gets thrown away in it	P - PUT TO ANOTHER USE Take something familiar and reframe it • use old dog toys to make an artwork, or shred them to make something new • put drinks in empty shampoo bottles • turn old shampoo bottle into toys or planters for flowers Other "Put to Another Use" ideas: • turn the poop / bag to create energy for a : • street lamp • mobile charger in park • fun animation • a fun song or mini dance party • regulate temperature in pollinator hotels • something fun near a park bench like a game you can play • turn the poop bag into a compostable plantable item you can plant the bag to spread flowers or plants everywhere or a community flower garden in park where you can deposit them	E - ELIMINATE Strip things away to simplify or make space for focus, surprise • take away sales people and really let users discover things and products themselves or through virtual help or dogs • take away shelves and walls and make it one interactive park booth Random eliminate ideas: • take away the poop bag and make like a retractable poop holder that picks ups the poop and stores it in a compostable cartridge for in garden R - REVERSE OR REARRANGE • reverse the timeline: show the process from flower to poop to poop bag being made • let the dogs guide the people through the booth , make it dog orientated • follow a dog themed path with paw prints or dog avatars • create a booth so the users must go through the experience as a dog, see everything from a dogs perspective, connect with their dogs experience

Figure 21: Overview of the Earth Rated Booth SCAMPER Brainstorm

Concept Selection

Program of Requirements

A program of requirements is constructed to choose and combine the best concept ideas produced in the SCAMPER brainstorm.

All requirements stem from insights gained from the initial market research, consumer research, user barriers, the VIP Method emerged direction, Earth Rated meetings and Earth Rated company analysis.

Integral Aspect			Nr.	Requirement	Weight (1-5)	Source	
Field	Element	Details					
People	Use	Context	1	The concept doesn't hinder the act of picking up dog poop	5	Earthrated	
		Users	2	The concept is inclusive to all dog owners of any age, background, routine.	4	Earthrated	
		Interaction	3	The concept encourages interaction between at least 2 users (indirect or direct).	4	VIP Method	
			4	The concept is based around a simple interaction.	5	Earthrated	
		Community	5	The concept connects at least two different members of the community	4	Earthrated	
		Behavior	6	The concept does not require major behaviour change to use: First-time users must be able to engage with the concept during their usual dog-walking routine without needing to adjust their route, timing, or equipment."	3	User Research	
		Experience	7	The concept must evoke at least one of the following emotions within the user: playfulness, wonder or curiosity.	4	VIP Method	
			8	The concept should offer a moment of surprise. A first-time user should be surprised when encountering the concept.	3	VIP Method	
Market	Production	Material	9	The concept is not dependant on the growth of the recycled plastics market.	2	Market Research	
Environment	Implementation	Context	10	The concept must work in public outdoor spaces.	5	Earthrated	
		Responsibility	11	The concept must not cause visual or physical pollution or crowding	4	Responsibility	
Technique	Working	Main Function	12	The concept doesn't depend on building an own digital platform.	5	Earthrated	
			13	The concept can be moved easily to be placed in different contexts	3	Earthrated	
			14	The concept has at least one interactive element between user and concept or different users.	4	VIP Method	
	Production	Material	15	The concept if physical uses low-impact or sustainable materials.	4	Earthrated	
			16	The concept should be weather-resistant or durable.	4	Viability	

Table 3: Program of Requirements

The program of requirements is used to produce a ranking of the brainstormed concept. This PoR ranking shows multiple promising concepts to choose from, which all have a similar high potential to be the best concept, all highlighted in green.

Requirement	Weight (1-5)	Concept	Park themed shelves	Plantable Seed Brochures
Score			Score 1-5	Score 1-5
The concept doesn't hinder the act of picking up dog poop	5		5	5
The concept is inclusive to all dog owners of any age, background, routine.	4		3	5
The concept encourages interaction between at least 2 users (indirect or direct).	4		2	1
The concept is based around a simple interaction.	5		4	3
The concept connects at least two different members of the community	4		3	1
The concept does not require major behaviour change to use"	3		4	2
The concept must evoke at least one of the following emotions: playfulness, wonder or curiosity.	4		3	3
The concept should offer a moment of surprise.	3		4	5
The concept is not dependant on the growth of the recycled plastics market.	2		4	5
The concept must work in public outdoor spaces.	5		4	3
The concept must not cause visual or physical pollution or crowding	4		3	2
The concept doesn't depend on building an own digital platform.	5		4	3
The concept can be moved easily to be placed in different contexts	3		3	4
The concept has at least one interactive element between user and concept or different users.	4		4	3
The concept if physical uses low-impact or sustainable materials.	4		3	4
The concept should be weather-resistant or durable.	4		3	2
Final Score			222	197

share different themed walks in every city	add interactive emotive quizzes and photobooth	Magnify bag dispenser into giant installation	interactive poop bag bin with rewards	giant flower/art that grows with more bags disposed in it
Score 1-5	Score 1-5	Score 1-5	Score 1-5	Score 1-5
4	2	4	3	3
4	3	4	4	4
2	1	1	2	5
3	3	4	5	3
4	1	1	4	5
1	2	3	5	3
4	5	3	4	4
3	4	2	5	2
4	4	2	5	3
2	3	3	4	2
4	4	1	3	1
1	2	4	4	4
2	4	2	4	2
4	5	4	5	4
4	4	3	3	5
2	4	3	3	3
8	188	180	244	211

Dog focussed experience booth	Scavenger hunt booth	Collaborative Poop bag art	Booth = playground for human and dog	Booth becomes mini walk through park
Score 1-5	Score 1-5	Score 1-5	Score 1-5	Score 1-5
3	2	5	3	4
2	2	5	2	4
3	3	4	4	3
1	2	2	2	4
2	2	4	5	2
2	2	2	2	4
5	5	3	5	5
5	5	1	3	5
3	5	3	4	5
3	3	3	4	4
3	3	1	3	3
3	2	3	3	4
3	2	2	3	3
4	5	5	5	5
4	5	5	3	3
3	3	1	3	3
190	194	198	212	238

burn the poop/bags to create energy for something else	recycle old toys/products into art at booth	interact with dog owners around the world	remove sales people at booth	experience the dog perspective	reverse proces timeline
Score 1-5	Score 1-5	Score 1-5	Score 1-5	Score 1-5	Score 1-5
4	4	4	4	4	3
5	4	2	2	2	4
4	2	5	1	4	1
5	3	3	3	1	2
4	1	5	2	3	2
4	2	2	4	1	3
3	2	3	3	5	4
4	2	4	3	4	2
3	2	4	4	5	4
4	2	2	2	2	3
3	3	3	4	3	3
4	4	1	1	4	3
3	3	3	2	3	3
5	5	5	5	5	4
5	5	2	2	5	3
4	2	4	2	4	3
256	186	201	169	213	183

Table 4: Program of Requirements ranked concepts

Final Concept:

An Interactive Exploration

The final concept is a combination of multiple of the most potential SCAMPER ideas that came out of the PoR ranking. These are merged into a development concept of Earth Rated's outdoor booths and events. Multiple ideas proved to have high potential, so these could be collectively integrated and combined into the different elements of the current booth and event set-up, to create once cohesive, interactive and multi-sensory concept. Multiple of the promising design concepts are combined together, instead of picking just one, as Earth Rated wants a new perspective on their booth and event. By combining multiple of the most promising concepts, the entire booth is transformed instead of just one element, improving cohesiveness and generating a whole new experience for visitors. The multiple interactive and multi-sensory concepts can work together this way to strengthen each others impact and the user experience as a whole.

An Interactive Adventure System



Figure 22 & 23: AI Example Visualisations Park Booth

Instead of having to build new park set-up and event decor every time, based on the context, a booth system is created where the different elements are individual units so they can be rearranged in any form, shape or space necessary. This provides Earth Rated with dynamic, interactive elements they can adapt to indoor and outdoor spaces to build their booth and events in new variations every time, depending on the size and audience.

The individual elements its can be combined together to create new communal areas of adventure in every space they are installed.

The elements are designed to mimic outdoor natural elements you can find in the park, so together they can create a playground of exploration where users feel as if they are exploring their park in a new and exciting way. A new micro-adventure users can walk through and experience, that fosters interaction, connection, education and play.

The six individual elements are expanded on below.

Pop Quiz Plants

Various sculpture plants are spread out at the start and throughout the path to communicate and engage with dog owners and visitors. The plants test their knowledge and are interactive quiz questions. By lifting up the pedal you can reveal the answer.

This creates an engaging, explorative way of communicating the sustainable issue regarding dog poop bags, and lets visitors explore and learn on their own, during their adventure through the booth..



Toy Tree

Tree/Rock Product Shelves: Displays Earth Rated's toys and bags in trunks and rocks. Mirroring the park adventure theme and helping create a park decor in the booth.

Cleaning Scents

The 3 Scents of the Cleaning Wipes are displayed through multi sensory sculptures. Each plant gives off the matching smell to its exterior appearance.

The wipes come out of rock sculptures to integrate into the park adventure theme.

The scented plants and wipe rocks are placed around a small shallow pond shaped pool, where dogs can splash in. This mirrors the "bath or cleaning" purpose the wipes have, and ties within the park adventure theme..

This creates a fun interactive multisensory experience for both dogs and dog owners.



Figure 24: Quiz, Tree and Scent Elements Visualisation, AI Supported

Refreshing Bags

Mist Arch: A playful, refreshing sensory break that adds magic and serves as a thematic transition in the path towards the tree of bags, releasing a lavender scented mist to match the lavender scented bags.

Bag Branches: The 2 different bags hang from the branches to be picked like apples, and taken with you to the next part of the path

Multi sensory experience through touch and smell.



Bio-Burner Bin Streetlight

Bioburner Trash Bin with Lamp:

A large modular burner bin that digests poop and converts it into biofuel to power a neon pawprint lamp.

- Handle to activate anaerobe digestion
- Fun poop-to-light process illustrated (Visualise and instruct sustainable interaction)

The energy is stored during the day and using a timer the light burns during the night , showing the collective participation of people throwing away their dog poop, literally highlighting community.



Walk of Fame

Live Paw Printing:

Dogs can press their paws into biodegradable clay tiles and the owners can add them to the Paw Walk of Fame. The tiles are made from a mix of Biodegradable Clay composite and local seeds. A large walk of fame is formed from all the dogs in the community.

Paw Walk of Fame:

People can adventure over the path during their walks, spot different dogs, visit their own tiles, and take pictures. After a few months the tiles biodegrade and leave behind a path of flowers from the sprouted seeds in the tiles. This way the collective impact and community is visible even after the path has faded.



Figure 25: Arch, Lamp and Paw path Elements Visualisation, AI Supported

Multi-sensory Adventure

The six elements can be combined and placed in different variations to create a new experience and playground each event. However, just making the elements look like nature doesn't capture the full analogy of a Playground of Exploration. Exploration highlights using all your senses to experience the world around you. Your sense of smell, touch and sight all work together to make adventures more engaging and interactive.

The importance of multi-sensory design has gained increasing attention across disciplines such as environmental psychology, marketing, and experience design. As society becomes more saturated with visual inputs, engaging the other senses is a powerful strategy to deepen user engagement, enhance memory retention, and foster emotional connection (Spence, 2020). Multi-sensory experiences have also gained popularity in social media trends marketing, so a multi-sensory booth provides new opportunities for social media promotion (Krishna, A. 2012).

The modular booth invites immersive interaction through tactile materials, natural scents, temperature contrasts, and physical activity. This strategy fosters not only product education and brand recall but also works to Earth Rated's broader goal: fostering spontaneous social interaction and emotional resonance among their connected dog owner community.

By integrating multi-sensory principles, the booth creates an environment that is not only informative, but also playful, memorable, and inclusive (Shams, L., & Seitz, A. R. 2008; Hollins, M. 2010).

This aligns with Earth Rated's mission of "community-building" and "always evolving" and the Playground of Exploration pillars of "Playful Learning" and "Exploration".

Walk of Fame

The imprinted tiles left behind after the event form a pathway of all the dogs present in the dog owner community of that city. Other dogs, dog owners or members of the community can come and explore the different names, paws and prints or search their own.

The tiles biodegrade in a quick sustainable way, so Earth Rated will have more ease gaining a permit for a semi-permanent installation, which differs per municipality. The flowers that bloom from the seeds in the tiles, leave behind a beautiful trace of the Earth Rated community and create a place for members of the community to come back to, enjoy all the beautiful flowers, and visually see the beauty their community has made. It highlight the beauty of waste and participation and identity of the community. Municipalities can also choose to leave out the flower seeds, if they do not have the capacity to maintain the flowers.

The material choice for the biodegradable tiles is a biodegradable clay composite, combining clay, local seeds and biodegradable natural binding. An analysis was made on six possible materials for the tiles. The different materials were compared based on their durability, feasibility to print dog paws into the tiles live during the event, their end of life and dog safety. For the booth, a tile material is needed that can;

- Easily and quickly be imprinted by a dog paw
- Cures or hardens quickly
- Is safe for dogs to touch
- Biodegrades easily
- Stays intact outdoors in the park for around 3 - 6 months.

3 to 6 months is taken as the period the tiles stay intact as the path should be semi-permanent and not leave an invasive permanent trace. However it should stay for long

enough for everyone in the community to visit the path and become a part of dog walkers everyday walking paths and rituals.

MATERIAL	DURABILITY	LIVE PAWPRINT FEASIBILITY (No curing of tile)	END OF LIFE	DOG SAFE?
Compressed Paper Pulp / Recycled Paper with Biodegradable Binder (Kattas, L., & Deng, Y. 2009; Patterson, p. 2020)	2-4 Months	Okay - Easy paw print live in fresh tile made in mold but imprint is vague and fades fast in rain	Fully Biodegradable	YES IF UNTREATED WITH CHEMICALS
Bio-resin with Natural Fibers (Fast-curing) (eg: Hemp, Flax) (Regazzi et al., 2018)	1-2 Years	Bad - Needs molds and is hot when poured	Compostable or recyclable in industrial settings	NO
Mycelium Tiles (Mushroom/Fungus root systems/Organic Waste) (Volk et al., 2024; Alemu et al., 2022)	6-12 Months	Good - Can be molded into tiles and imprinted during specific growth stage, but has a narrow time window	Fully Biodegradable	YES
Biodegradable Clay - Seed Composite (Biodegradable clay, natural binder (eg: cornstarch) & local seeds) (Burk et al, 2021)	3-6 Months	Very Good - Print paw at event in clay and let air dry for 24 hours.	Tile degrades and leaves flowers behind	YES
Recycled Plastic Composite (Debele et al., 2024)	25 - 50 Years	Not Possible - Tile non-malleable after production	Can be recycled again depending on type of plastic	NO
Recycled/Sustainable Concrete (Dias et al., 2021; Schepper et al., 2014)	30-60 Years	Good - Imprint tiles within a few hours of pouring	Recyclable as new concrete	NO

Table 5: Tile Material Options

The table shows the analysis on the six different materials. Biodegradable clay was the best option mainly due to its live paw-print feasibility, durability and flowers it leaves behind.

Bio-Burner Lamp

During the booth event at a (dog)park, Earth Rated together with the park or municipality, will reveal and promote a special bio-burner powered street light that has been installed in the area where the event takes place. This bio-filed streetlight will stay installed and functional in the park after the event is done. This bio-burner anaerobically digests dog poop, through mixing, so methane gas is released. This methane gas is stored and then burned to create light and convert the methane into CO₂ and H₂O. Using a timer, the methane is stored until night so the lamp conserves energy and only lights up at night. The trash-bin displays simple graphics to inform and educate the user on the process. The process is visualised below.

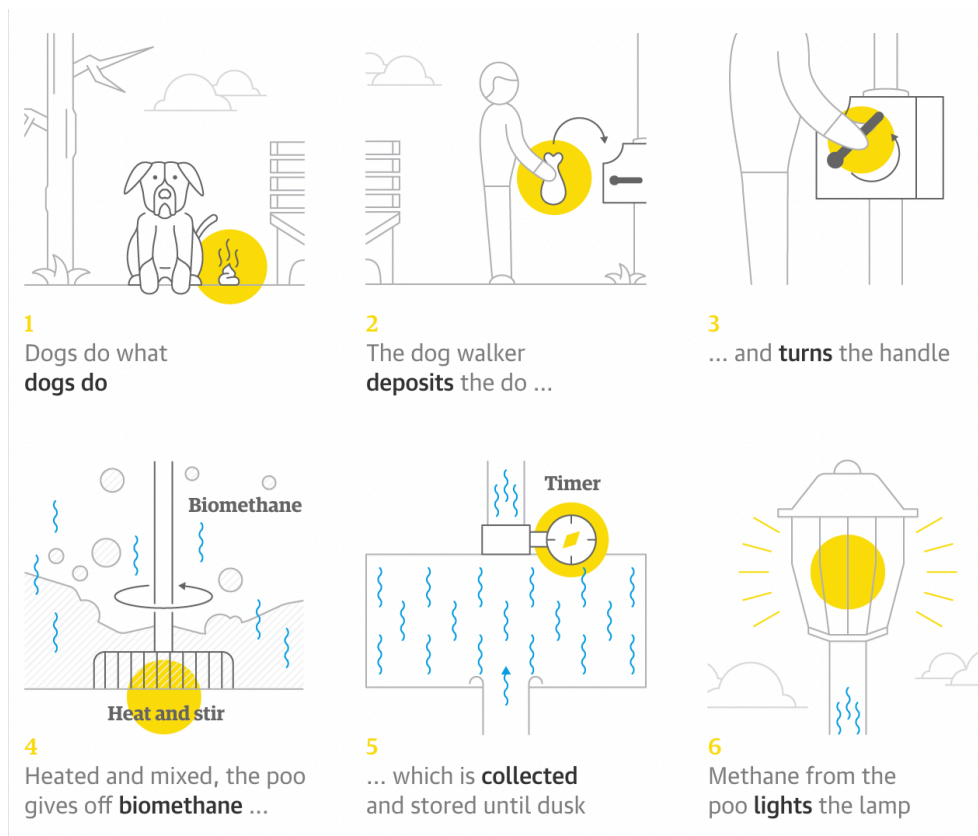


Figure 26: Process of Poop to light (The Guardian, 2018)

The potential of poop and waste as a renewable energy source has been widely explored. Examples range from human excrement used to create biofuel for cooking and lighting in India (Yadav, K. D., Tare, V., & Ahammed, M. M. 2010) to Chinese researchers exploring using panda excrement and leftover bamboo as feedstock for producing bio-methane fuel (Wang, X., Yang, G., Feng, Y., Ren, G., & Han, X. 2012).

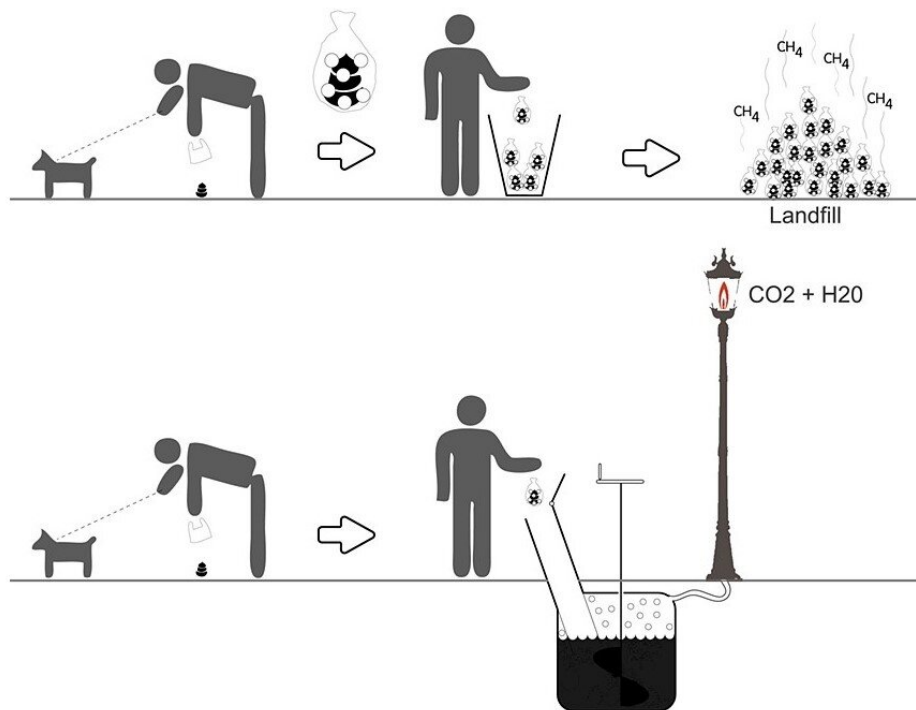
The purpose of using waste to specifically power street lights has also gained traction in the past years by various individuals and organisations and proved its feasibility. One example is the Park Spark Project by artist Matthew Mazzotta, installed in a park in Cambridge, Massachusetts in 2010. A large specially designed anaerobic digester allowed dog owners to deposit bagged waste, which was then converted into methane gas. This gas powered a small streetlamp turning waste into conversation (Mazzotta, 2010).

A similar smaller DIY initiative was developed in the UK by Brian Harper. His dog waste-powered biogas lamp, installed on the Malvern Hills, also allows dog owners to contribute waste to a sealed bio-digester that produces methane, which in turn fuels a streetlamp (Taylor, 2018).

Sustainability

Not only is a poop powered street light feasible but is also also a much more sustainable end of life than composting or biodegrading the bag of poop. As stated in the initial research, most bags end up in landfills as there are almost no facilitations for biodegradable and compostable dog poop bags in the Netherlands, as the industrial waste system doesn't support it. So most poop bags, sustainable or not, end up in landfills. As the dog poop digests, methane gas is released. However methane is known to be 30-70 times more potent and harmful to the environment as a greenhouse gas than carbon dioxide. When the methane is burned in the bio-burner, it separates into CO₂ and H₂O, which are much less harmful in comparison. Organisations can even earn

credits for burning methane, strengthening the value for cities to want these lamps in their parks (Parkspark, 2025).



When methane (CH₄) collected from dog waste is burned, it is reduced to CO₂ and H₂O

Figure 27: Landfill vs Bio-burner methane release (Parkspark, 2025)

This way Earth Rated can leave a lasting community and sustainable impact wherever they have their events. Even after their events have finished and the walk of fame have biodegraded, the impact of the dog owner community is still active and highlighted through the street light. This motivates other community members to also make the same sustainable waste disposal choice. Every time someone throws away their poop in the lamp or sees the lamp shining in the dark, they are reminded of the community they are a part of and gain a sense of pride.

The decision on what interaction the energy produced in the Bio-burner trash bin would power, was made using a program of wishes.

As the main modular booth concept covered the mission, goals and pillars necessary requirements of community, interaction, exploration and play, the bio-burner purpose was chosen based on the remaining important wishes of Earth Rated. Earth Rated wants to make interactions simpler and better. They also promote sustainable behaviour. These wishes of a simple but better interaction that promotes sustainable community behaviour together constructed a program of wishes.

Integraal Aspect			Nr.	Wish	Weight (1-3)	Source
Field	Element	Details				
People	Use	Interaction	1	The concept is intuitive and easy to understand. A first time user must be able to understand the interaction within 15 seconds, without explanation.	1	User research
		Communication	2	The concept communicates / encourages at least one sustainable dog routine choice.	1	Earthrated
		Interaction	3	The concept communicates or visualises the participation of other users	2	User Research
	Management	Maintenance	4	The concept should be able to be mostly self-sustaining. Not needing refill/maintenance/upkeep more than 1 times per 6 months. (except if broken)	3	Earthrated
Environment	Use	Impact	5	The concept-user interaction has an instant positive impact on the direct surroundings	2	Stakeholders
		Interaction	6	The concept allows the user to help build the park experience	3	User Research
Market	User Trends	Interaction	7	The concept must allow for either brand-user cocreation or participation.	3	Trend Research
		Promotion	8	The concept can be promoted with influencers and digital platforms	3	Earthrated
		Experience	9	The concept use creates a sense of belonging/identification within the user	2	User Research

Table 6: Program of Wishes Bio-Burner Function

The full brainstorm on what to power using the energy from the bio-burner trash bin can be found in appendix.

Using a program of wishes, final scores showed four potential opportunities, highlighted in green.

Discussions with Earth Rated, community visibility preference and simplicity priority, asserted the Street lamp as the best option.

Value Creation

This section outlines how each individual element of the booth contributes to the total value creation. It translates theoretical roots into concrete interactions that facilitate social, emotional and environmental meaning.

The following canvas maps each of the six modular booth elements to the layers of value they produce. It bridges the type of intervention and interaction connected to the element to Earth Rated and user values and finally the resulting deeper cultural and social meaning. Illustrated in the figure below, are how these interventions form the foundations for long term value generation and community emergence.

Value Creation & Meaning

Pop Quiz Plants	Intervention	Linked Value	Why Meaningful?
	Lightweight Interaction	Always Evolving & Thoughtful	Quick, low-barrier Engagement / Entry Points → Increase participation in community activities (Davies et al., 2012). → Repeated Micro-interactions spark curiosity & increase sense of shared ownership (Foth, 2011).
	Third Place Pausepoint	Community-first & Simplicity	Adapts "third place" concept → micro-scale intervention (Oldenberg, 1999). → Provides physical "pause points" → Light-touch repetitive encounters → build weak-tie social networks (Aalbers & van Beekhoven, 2005). → Strengthen local micro-communities.
	Sensory Triggers & Affective Atmosphere	Sustainable Responsibility & Thoughtful Design	Memory anchors → Evoke positive emotions and form lasting place associations (Herz, 2004). Sensory landscape → Positive feelings of care and nature connection. Influence mood, perceived safety, and attachment to place in public environments (Spence, 2020) → "Affective Atmosphere" (Anderson, 2009).
	Atmosphere & Play	Always Evolving & Joy in Daily Moments	"Experience Economy": Small surprises → lasting emotional associations (Pine & Gilmore, 1999) Playful features increase time in park → More incidental social interaction (Whyte, 1980). Temporary, low-barrier interactive installations → Increase perceived liveliness and public space inclusivity (Gehl, 2010).
	Visualizing Community & Collective Participation	Sustainable Responsibility & Community-first	Waste → Visible, collective achievement → Feedback loops: visible results motivate continued participation (Kurz et al., 2015). Public, shared environmental actions with immediate feedback → more effective changing behavior than private actions without visibility (Thøgersen, 2006).
	Shared Ritual	Community-first & Sustainable Responsibility	Recurring ritual → Participation visible → Reinforce social norms (Cialdini et al., 1990). Shared symbolic co-creation in public space → "Emotional Place Attachment" & "Perceived Stewardship" & "Collective Ownership" (Altman & Low, 1992) (Tidball, 2010) (Manzo & Perkins, 2006). → Long-term pro-environmental behavior (Lewicka, 2011).

Figure 28: Value Creation Canvas Modular Elements

Path of Intervention

The following visual maps the intended journey community members follow past all the different interventions, to create a purposeful path of exploration, with each element building forward from the previous element. The path follows an intentional sequence, designed to gradually deepen engagement, layer meaning, and foster collective social and emotional impact. The six elements are all made as individual modules, so that it is easier for Earth Rated to build and arrange the intended path, depending on size and area of events and parks.



Figure 29: Path of Intervention

Community Impact

Building on these individual interventions, this section highlights the community impact and outcomes that may emerge over time. It explores how the repeated interactions can scale into shared norms, collective stewardship, identity and place attachment

How exactly does community emerge?

A common mistake in community design is assuming that interaction automatically results in connection. Not all forms of interaction lead to long-term engagement. There is

a difference between bonding social capital (strong ties among similar people) and bridging social capital (weak ties across diverse groups) (Putnam, 2000). Where the focus lies, is based on the design purpose.

The Dutch Urban park is a public space, where bridging social capital is often most valuable but proves more difficult to foster. Purely proximity to others does not guarantee engagement unless specific interventions, such as shared rituals, storytelling opportunities, and mutual recognition are incorporated into the design.

Most effective is placing these interventions in “soft edges” in public space, or zones of semi-permanence that encourage people to pause, observe, and interact casually (Jan Gehl, 2010). This shows fostering community is not just about making people engage, but also about creating a situation where these low-stakes interactions can happen naturally. The Earth Rated booth’s paw-printing and scent zones are examples of this lens: they are not just playful features, but tools for inviting weak-tie interaction through shared actions (Granovetter, 1973).

The following visual maps how community emerges over time from repeated low-barrier interactions through Earth Rated’s interventions in urban parks. It builds from individual engagement to shared practices, to lasting social shifts, showing community is not an instant product but a gradual process through interconnected experiences.

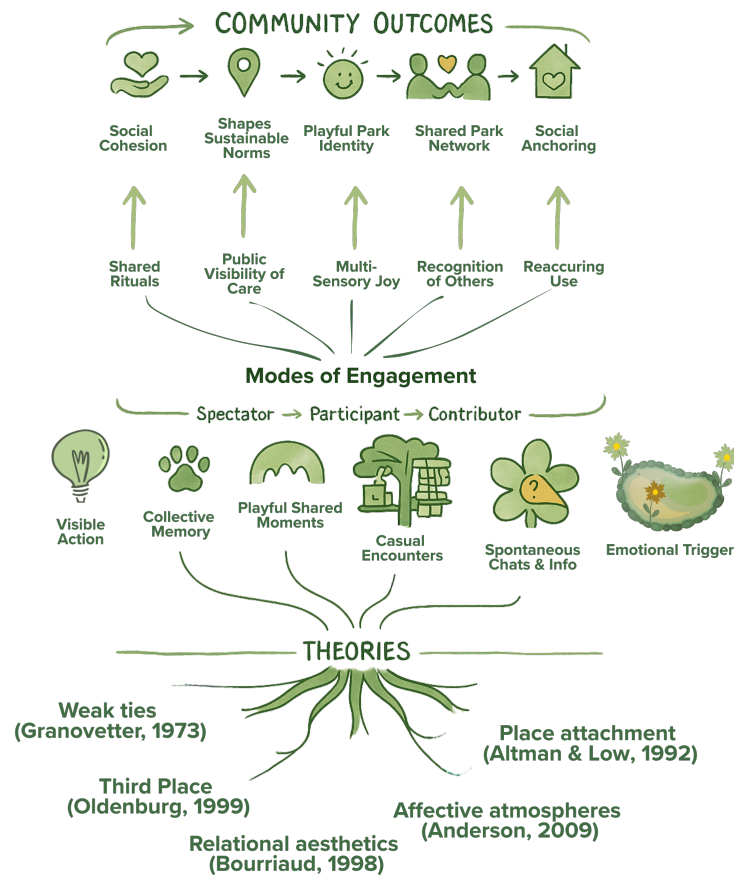


Figure 30: Community Emergence Model Booth Elements

A more detailed sequence theory of change in the park event is shown through the example of the paw-printing:

Paw-print tile activity → Shared ritual → Low-barrier visibility of others → Feelings of co-presence → Social anchoring → Emotional resonance → Return visits → Community emergence.

When people see their actions, such as a paw print here, embedded in a space, it transforms the environment from a neutral backdrop to a shared emotionally charged landscape. The rich, storytelling memory all these booth interactions leave behind, together help transform the park into a shared narrative site (Proshansky et al, 1976). Of course, realistically not all users might experience every intended reaction of the theory of change during an interaction with a booth element. A visitor could go through all the steps and feel emotional resonance, however if they don't live in that area, that might hinder the intended effect of return visits. The theory of change might not work on everyone and not each element will always reach all the intended theory of change steps. That is why the booth and event consists of six different interactive and connected elements, so there are multiple opportunities for the users to interact with the elements and be impacted by their theory of change. The collective effect of all six elements help strengthen the theory of change as a whole.

What happens after?

Community for community's sake is hollow. Earth Rated's goal is to engage and strengthen their community. But what happens for community members after these latent communities are intervened. For the local communities in parks the following outcomes pursue:

After community forms:

- Dog owners better self-regulate sustainable behaviour
- Increased care for shared spaces
- A green behavioural shift becomes embedded in local culture

Looking more broadly:

- Micro-communities form regarding dog care and dog ownership
- The Bio-Burner lamp and paw-print path become a catalyst for community, visibility and identity.

These outcomes reflect the Dutch cultural norms around participatory public space and their idea of co-living, which focusses on shared responsibility and mutual benefits (Van Hulst, 2016).

Why would the community want this?

The following visual maps the different value gains between the stakeholders and their collective gained value through this concept. Each players and their gained values interact with each other, strengthening the impact of the booth interventions.



Figure 30: Stakeholder Value Gain

Validation

To validate the credibility and feasibility of this concept, this section provides a validation process, based on user responses, precedents and theoretical arguments. Based on theoretical research and the resulting community emergence models, community could emerge from the interactions around the elements of the booth and bio-burner light. However to validate these community emergence claims and acceptance of the concept, initial interviews are done with users, regarding their reactions and associations with the bio-burner lamp. In order to generate deep routed validation and large scale user feedback on the multi-sensory adventure booth and interactive elements, further user testing and research needs to be done. However this project does not allow time for that, so an initial small-scale research is done, only regarding the bio-burner lamp, as that is the interactive element that stays in the park after the booth event has finished.

14 casual interviews were held with dog owners regarding their feedback and use of the bio burner. First only a foto of the bio-burner is shown without context, followed by a few questions regarding they initial reactions and assumptions, generating the results in green. Afterwards, in the second part of the interview the users were told the context and functionality of the bio-burner. They were then asked questions about their expected use, acceptance and impact regarding the bio-burner. These results are shown in beige. General critiques are shown in red. Full results can be found in appendix 7.

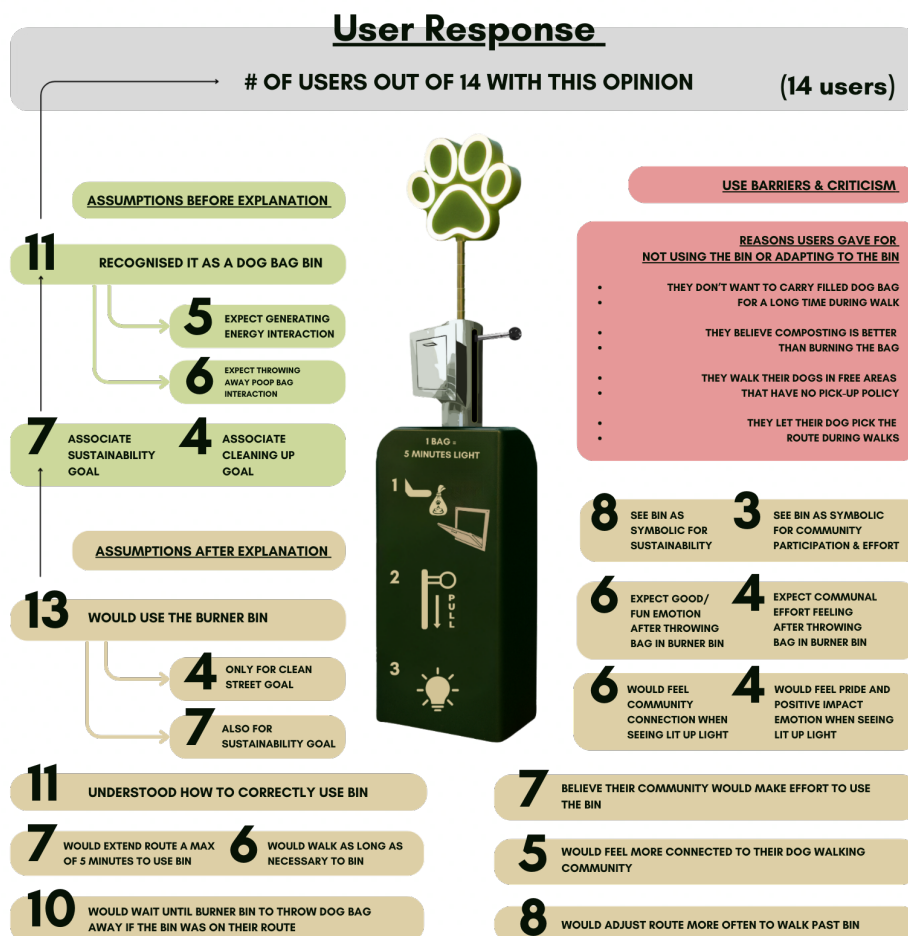


Figure 31: User Response Overview

Insights

Only 1 of the 14 users interviewed had a mostly negative opinion on use of the bio-burner bin. This was because they didn't believe sustainability was a current global problem. The other 13 users, all had critical feedback regarding a maximum of 1 or 2 questions mainly regarding impact on their walking route and community feeling.

Looking at these results, the following conclusions can be made regarding bio-burner installation and its community and user impact:

1. People are open to adapting their walking route to walk past the bio-burner but no more than 5 minutes, so the bio-burner should be placed on a popular, high-usage dog walking route.

2. People are open and excited to use it even if they think it is just fun or to promote cleaner streets and they haven't realised yet that it produces clean energy. So, use of the bio-burner isn't reliant on promoting the bio-burner's sustainability but does help with highlighting the sustainable identity of Earth Rated, park or municipality.

3. While most users don't think they will directly be more connected to specific other individual dog owners in the community, most users do indicate they would feel a general sense of pride or connection to the community as a whole. So, the first step towards community emergence could be on a more broad scale regarding pride and collective participation, whilst Individual interaction and connection emergence might come at a later stage. This can be taken into consideration when measuring the amount of community emergence after different periods of time. Another take-away could be to first focus on interactions that promote broader pride and participation as a brand or organisation wanting to build community and later focus on interactions between individuals.

4. The only critical feedback on not putting their bag in the bin was because 2 users thought composting was a better options. Communicating the challenges surrounding dog waste composting, discussed during the problem definition, could boost use of the bio-burner and stimulate a more informed community.

Implementation

This chapter translates the bio-burner lamp concept from a speculative design proposal into a feasible intervention, aligning economic feasibility and strategic business proposal. The feasibility of this intervention has to navigate between the limited budgets municipalities and parks operate on and Earth Rated's sustainability and community building positioning. As a result, this section integrates and cost estimate for prototype and scaled production with a business case assessment for implementation. This aims to show how the bio-burner lamp is both financially realistic and brand relevant, creating an impactful intervention.

Economic Viability

Municipal Economics

Municipalities work with strict budgets regarding management, waste and sustainability that differ each year. To ensure sales of 1-3 bio-burner units to municipalities, they need to have enough allocated budget to install bio-burners in one or more of their parks. Looking at a few larger municipalities in the Netherlands, they have large enough budgets to be viable customers of the bio-burner. Dutch municipalities spend significant money on public space amenities, sustainability, and education. Amsterdam alone spends tens of millions annually on green space maintenance and innovation. In 2023, €93 million was allocated for green, recreation, and biodiversity projects (Gemeente Amsterdam, 2023).

Another example is Utrecht's "Healthy Urban Living" program which allocates €16 million a year toward green, climate, and circular projects (Gemeente Utrecht, 2022). Dutch municipalities are also eligible for EU Green City funding and Dutch national circular economy subsidies (RVO, 2024).

Furthermore, dog waste is consistently ranked as a top three nuisance in urban surveys (PBL, 2021; Gemeente Amsterdam, 2023). This shows the current demand for innovative dog waste managements systems. Some municipalities have already invested and funded previous visible, experimental, dog waste management projects such as Parkspark, which has the same price range of around 4000 euro (Parkspark, n.d). This however was an large art-installation, not a fixed infrastructure.

In conclusion, dutch municipalities can afford an installation in the €5–10k range if it aligns with their sustainability goals. The first pilots are best targeted towards larger municipalities such as Amsterdam, Utrecht or Rotterdam, as larger cities have larger budgets to work with, so a higher chance they will purchase multiple units.

Important to keep in mind though, is that realistically municipalities might indeed buy or fund 1-3 bio-burner units as a pilot or small-scale awareness project in their city. However, municipalities will for now probably not buy bio-burners as a mass standard waste management tool, as a normal dog waste bin retails around €400 (EcoGreenEquipment, 2023).

In conclusion, selling 1-3 units to municipalities is not a scalable business. Margins are low and sales cycles are very slow. For both municipalities and Earth Rated this is not a problem, but rather a win-win situation. Earth Rated gains visible flagships in each municipality, providing constant visibility which works as a strong engagement,

marketing and educational tool, whilst municipalities gain new fun and interactive interventions to promote awareness, clean streets and sustainable behaviour.

Cost Estimate (CAPEX & OPEX)

The following table shows the cost estimate for production of one bio-burner unit. This is based on a bio-burner design that can digest approximately 100 poop bags a day.

The feasibility of small-scale anaerobic digesters in the 1–2 m³ range has been widely tested for agricultural and household use, showing stable operation and relatively low build costs when designed simply (Bond & Templeton, 2011). This table is based on main cost drivers such as the vessel, gas handling and quality and safety assurance. Previous studies of agricultural digesters highlight how gas scrubbing and maintenance significantly affect lifecycle costs (Lansing et al., 2008).

To optimise costs, the design is kept simple and with easily replaceable parts, as cost reductions are typically achieved through design simplification, modular components, and pre-assembly (Ward et al., 2008).

CAPEX						
Capital Expenditure: One time Building Cost						
Category	Component	Description	Low Estimate (€)	High Estimate (€)	Notes	Source
Vessel & Mixing	IBC / steel drum digester	1000 L food-grade HDPE IBC (preferred) or steel drum	600	1,200	Must be sealed + durable	Food-grade IBC totes (BiogasWorld, HomeBiogas)
	Manual crank & rake	Stainless shaft, PTFE gland seal	700	1100	Mixing to prevent floating bags	Industrial mixing shafts (RS Components)
	Feed chute & tearing grate	Laser-cut stainless grate, latch hatch	400	800	Breaks open bags to expose poop	Fabrication cost from Dutch shops (Metaalwinkel)
Gas Handling & Storage	Pre-assembled gas module	Moisture trap, non-return valves, regulator on a backplate	200	400	Ensures safe gas flow	Biogas equipment kits (BiogasWorld)
	H ₂ S scrubbing cartridge (swappable cannister)	Iron-oxide media canister + spare media	300	600	Removes toxic H ₂ S from gas before burning	Small-scale scrubbers (BiogasWorld, RS Components)
	Flexible gas bag	1–2 m ³ PVC/TPU bladder with relief	500	1,000	Stores daily biogas for night burning	Gas balloons (HomeBiogas, BiogasWorld)
Burner & Safety	Standardized Lamp head + column kit, Paw Casing	Biogas-compatible mantle lamp + flame arrestor	1,000	1,400	Visible flame, symbolic payoff	ParkSpark project + biogas-compatible lamps
	Safety & control Electronics harness	CH ₄ /H ₂ S detectors, manual + solenoid shutoff, alarm	650	1,200	Essential for public safety	Detectors & valves (RS Components)
	One piece housing / enclosure	Powder-coated steel cabinet, lockable casing	400	900	Prevents tampering, improves aesthetics	Street furniture shells (Jora Vision, ORYX)
	Educational signage	Process diagram + safety notices on panel	200	400	Adds storytelling & branding	Weatherproof signage (Sign & Print Rotterdam)
Commissioning	Leak testing + SOPs	Gas-tightness testing, documentation, training	500	900	Required for public safety approvals	Consultant rates for AD pilots (ParkSpark precedent)
Total CAPEX Cost range in €			5450	9,900		

Table 7: CAPEX One Bio-Burner Unit

The next table shows the ongoing operational costs per year once it has been installed in the parks. This table is based on the assumption that municipalities will buy and own the bio-burner so they don't have to pay for permits, as that is their own responsibility as park owners. The staff time is calculated at 15 minutes per week, which

is needed to clean out the remnants of the poop bags in the bio-burner. The removal of the plastic bag remnants can be done by hand and then either thrown away or recycled. The digested slurry left behind at the bottom can be used to fertilise vegetation in the surrounding park.

OPEX Operational Expenditure: Ongoing annual running costs						
Category	Item	Description	Low Estimate (€)	High Estimate (€)	Notes	Source
Ongoing Costs	Media & consumables	Iron sponge, mantles, PPE	400	700	Needs replacing every 6–12 months	Iron-oxide media for H ₂ S scrubber (BiogasWorld); mantles from lamp suppliers
	Maintenance	Seals, calibration, valves	500	1,500	Annual technical upkeep	Annual calibration & upkeep (RS Components)
	Staff time (daily)	15 min/week -> 13 hours/year at €25/h	300	400	Empty basket + check system working	Municipal staff hourly rate ~ €25 (Gemeente Amsterdam)
Total OPEX Cost range in €			1200	2600		

Table 8: OPEX One Bio-Burner Unit

Scaling Scenarios

If you were to scale the production of the bio-burner units from 10 to 100 units after the production of the first prototype, the production cost would significantly decrease. This could create the opportunity for larger gain margins for Earth Rated, but more importantly, more smaller municipalities with lower budgets could afford to purchase one, spreading the awareness and impact in the Netherlands. This would benefit Earth Rated as their goal is to grow their community and impact, and not to earn more money through this project. Their mission is rather to expand and grow their impact and visibility as a brand.

The following table shows estimated CAPEX price per unit in three different scaling scenarios. The cost reductions are based on economies of scale and industrial cost-scaling rules such as: Wright's Law (Nagy et al, 2013), bulk purchasing, standardised assembly, and learning curves (Irwin & Klenow, 1994). The OPEX costs would stay the same.

Scale Factor			
Production Run: # of units	Estimate Range € / unit	Range	Key Saving Drivers
1	€5450-9900 / unit	baseline	Custom fab, 1-off sourcing
10	€4500-7900 /unit	~15-20% savings	Bulk buy IBCs, detectors, lamps; shared commissioning docs
50	€3800-6600 /unit	~ 30-35% savings	Tooling for enclosures, prefab harnesses, assembly line
100	€3400-5900 /unit	~ 40-45% savings	Large bulk contracts, in-house fab, streamlined labor

Table 9: CAPEX Estimate Three Scaling Scenarios

Strategic Business Case

Long term success of the implementation of the Bio-burner depends not only on financial feasibility but also on its strategic positioning. The following business canvas highlights how Earth Rated can position their bio-burner sales offer and collaboration to municipalities and park organisations. The idea is that Earth Rated organises a pop-up of their interactive booth event next to the functional bio-burner lamp after its installation in a park. It shows how the bio-burner streetlight can serve not only as a waste-management tool for parks, but as a branded collaborative community intervention and event, creating partnerships, public value and visibility.



Figure 32: Bio-Burner Business Canvas

Final Proposed Model

There are multiple revenue models possible for the implementation, management and sales of the bio-burner lamp. However the most strategic and final proposed implementation model for Earth Rated is for the municipality to purchase one or two bio-burner units from them. The municipality then owns the Bio-Burner Lamp as a permanent addition to their park infrastructure. Doing so, Earth Rated does not have to navigate the responsibilities and permits regarding the bio-burner installation, as these will fall under the municipality's own existing public space managing systems and process.

In return, Earth Rated organises and sponsors an opening event around the bio-burner installation for the park or municipality with their pop-up interactive booth event. Earth Rated can leverage this event for community-building, flagship activation, public visibility and reinforcing sustainable brand identity. The municipality in turn receives a free organised community event, that promotes their sustainability goals progress and communal connection and participation.

Doing so, Earth Rated minimises their long-term liability as the municipality is responsible for the lamp's upkeep and management, whilst maximising their own visibility, community outreach and public impact.

Critical Discussion

Retrospective

Methodological Reflection

ViP Method

Reflecting back on the use of the ViP method there is primarily one strong positive element and one critical element to be discussed. The ViP provided a well structured method to move beyond Earth Rated's current broad question of what can we do to improve and imagine future context of interaction where they could strengthen their brand. It gave the possibility to frame "community emergence" as a design goal, aligning with their future mission, rather than a marketing claim or technique which often happens due to brands community-washing. Using other methods that focussed on initial product iteration or current problem solving would not have provided the same potential to design a concept where Earth Rated helps shape future context.

However, this topic of community emergence links to the critical perspective on the use of ViP. ViP generates strong visionary statements but can be weaker in producing empirical backing data and validation, as it focusses less on testing and iteration. This research proposes and expects how community will emerge from the designs. However within the time-frame and process of using ViP, this research leaves the question if community will actually emerge as predicted. This research uses an expert interview, theoretical proof and small-scale user feedback on the bio-burner to touch on empirical validation, however continued feedback, user testing and iteration outside of the scale of the ViP method would produce deeper empirical validation.

Research Depth & Complexity

This research speculates and designs how community could emerge from low-barrier interactions in the Dutch dog owner community and park environment. However the complexity of community emergence as a whole is much larger than one master project can cover. A critique could be made on the logic of merely saying "when you design community, community emerges", which is why this research addresses this critique by grounding the community emergence claims and model and designs in established community theory, such as weak ties, place attachment and stewardship. However, more ethnographic and participatory research with dog owners, product testing and long-term research would be needed to strengthen the claim of community emergence.

Design Reflection

A design reflection is done based on looking back at the initial ViP statement.

ViP Statement:

This project seeks to design a future-proof strategy for Earth Rated that transforms dog waste disposal in Dutch urban areas from a private, routine task into a visible, collective, and environmentally meaningful ritual. By integrating product innovation, circular waste infrastructure, and community engagement, the goal is to bridge the

gap between sustainable intent and sustainable action, fostering a culture where responsible dog ownership is not only expected, but celebrated.

The final bio-burner and multi-sensory booth strongly achieves the goal of transforming dog waste disposal beyond a routine task into a visible, collective and environmentally meaningful ritual. It does so, as the disposal action is made visible through light, it is powered by the collective disposal of the community and it becomes meaningful as the bio-burner bin moves beyond just the function of a bin, to an interaction that resonates with Earth Rated and their users' values of sustainability and responsible dog ownership. Meaning arises when products embody values and connect to users' identities, not just functions (Hekkert & van Dijk, 2011).

This research may have not directly innovated a product of Earth Rated, but it did innovate their outdoor booth system. Future research could look into how their current products could be developed further to integrate into the booth and other interactions.

If the culture of sustainable dog ownership is actually celebrated throughout the entire targeted community is not something this research can prove yet. The product and booth do celebrate sustainable dog ownership through rewards, lights and fun interactions, but if this is continued between individuals of the community is something a future research would have to test over a longer period of time. User feedback did reveal users would associate a sense of joy and pride when seeing the lamp lit up.

Finally, as for community engagement and emergence, one of the theories this concept is built on is "place attachment" (Proshansky et al, 1983), where repeated shared experiences strengthen community bonds. In theory community would emerge from interacting with the booth and lamp, and individuals interacting with the lamp is in itself the first layer of engagement, however both these claims should be analysed and strengthened through empirical research and data in further research.

Assumptions & Blind Spots:

The Limits and Risks of "Community"

Alienation: Do people actually want community?

While community-building is often celebrated as unquestionably good, do people actually always want or benefit from more community connection?

Designers often assume everyone wants to engage, but the desire for community varies socially and culturally. However, not all individuals feel comfortable or safe in social interaction, or they might not have interest in connecting with new people. Belonging is political and can be shaped by inclusion or exclusion, identity, and affect (Yuval-Davis, 1998). Not every individual seeks interaction during daily routines, so forcing interactions or connection can risk alienating certain groups who value privacy or autonomy in your event.

Not everyone is seeking community in the same way, so the booth acts as lowering the barrier to interact rather than trying to force community creation. This creates "relational aesthetics", where design creates situations rather than just objects (Bourriard, 1998). These can be seen as open-ended encounters rather than scripted outcomes. The Earth Rated booth mirrors this by not enforcing connection, but keeping the barrier for interaction low and enabling a spectrum of participation, ranging from passive spectatorship to shared acts like dog-paw printing or mist-walking. This lowers the chance of alienating certain solo-oriented groups.

Community Washing

One thing Earth Rated must stay clear of is "community washing". "Community" is often

used as a brand, especially in urban placemaking and public spaces (Zuni, 2010). Here “community” becomes a product rather than a living process or value. To stay clear of “community washing”, the booth set up makes sure to not sell community or market the booth as a community, but rather uses interventions to facilitate conditions for interactions, co-creation, and recognition. Community should stay a desired outcome and a process, and not a marketing tool to get users to buy products and feel a fake sense of belonging.

Prospective

Pilot Test: Kralingen

Looking forward, this research could be continued and the design could be tested with a pilot in “het Kralingse Bos” in Rotterdam, the Netherlands. “Het Kralingse Bos presents as a suitable pilot site for Earth Rated’s Bio-Burner Lamp as is the largest and most popular park for walking dogs in Rotterdam. Having high dog-walker usage and visibility, it creates opportunity for practical engagement. The park has established known dog walking paths, routes and patterns and Rotterdam’s openness to civic innovation shows promising potential for piloting a playful, eco-conscious intervention in this public park.

Furthermore, the park is very family-oriented and well-used, with lots of recreational areas like a lakeshore, playgrounds, and cafés. A visible, community targeted and environmental installation would compliment the park’s identity as a established social hub and shared public space in Rotterdam.

The bio-burner lamp installation would also fit with Rotterdam’s Innovation-Friendly Governance, where Rotterdam is known for running numerous small-scale innovative projects (Appleton, 2020).

Finally the lamp and interactive event would continue the symbolic legacy “Kralingse Bos” has as an inspiration and place of waste transformation. The park itself was built using harbor sludge and debris from its own city (B, z.d.-b), so this installation would celebrate and continue this identity of creative waste transformation.

The visual below shows 3 proposed spots where the bio-burner lamp could be installed together with the interactive booth event. The spots are placed in dog poop clean-up mandated areas that are not yet oversaturated with trash bins due to restaurants or cafes, so there are less options of other trash bins to use. They are also placed on spots where multiple walking paths converge to maximise visibility, exposure and usage regarding dog walkers and other community members.

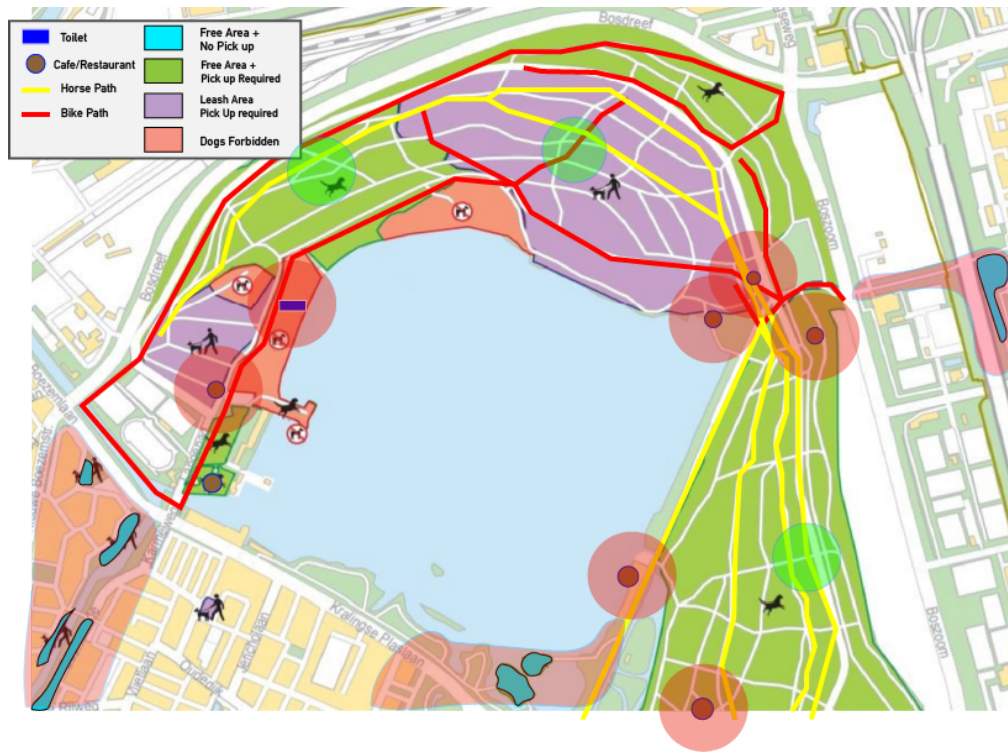


Figure: Visual Proposed Installation Spots for Bio-burner Lamp

Beyond the Booth: Transferability

The booth is more than an event installation, it is a new perspective for designing interactions between community, brand, and public space. How can this perspective be adapted and scaled beyond the specific context of sustainable dog ownership? When consider long-term impact and transferability, this perspective can be applied to a spectrum of public spaces and their interaction points. The interaction of low-barrier interventions can be applied to any daily ritual spaces like recycling bins, newspaper stand, community walls, shared benches where there is opportunity to foster small interactions to build a participatory culture. It could also be applied to other latent low interactive communities like supermarkets.

This bio-burner model could also prove as an intervention to inspire other small bio-digester fuelled designs or interactions. Other elements of the booth like the paw-print tiles work as an example for other co-created installations that promote latent communities and serve as a way of connecting with others.

In general, whilst developed in the context of sustainable dog ownership, the interactive, multi-sensory elements that make up the booth carry transferable urban and civic design concepts: making invisible sustainable actions visible, turning responsibility into a shared ritual and using multi sensory experiences to heighten community pride. These principles can be applied to broader public, sustainability and social challenges like cigarette waste or plastic water bottles.

Theoretical Contribution

This perspective highlights how brands can change their use of community from a product or marketing point of view to a natural process or outcome, so their community value becomes more authentic. Instead of claiming community as a brand or product, brands can design conditions where community could emerge by facilitating repeated low-barrier interactions.

This model also shows how brands can shift from product-delivery to public facilitation, shaping environments that encourage ethical behaviour through shared experience and

social proof, rather than persuasion. Companies can become enablers and facilitators instead of just sellers or providers, impacting their market. This extends on the theory of nudge design (Thaler, Sunstein, 2008) and social norms theory (Cialdini et al, 1990), showcasing how visible acts of responsible and communal stewardship, such as the paw-print tiles or burner lamp can shift individual compliance into a collective culture.

Doing so, brands can become enablers of responsible urban life instead of just market players, which continues on the theory of relational aesthetics (Bourriaud, 1998) and affective atmospheres (Anderson, 2009). Design interventions can make everyday sustainable actions tangible and emotional. Brands and organisations can use this to responsibly influence public space instead of falling into community washing.

Conclusion & Future Projects

In retrospective, this project shows the potential of design to frame new meanings around everyday simple interactions. Looking forward, it proposes new pathways for Earth Rated and other brands to scale interactions and interventions into visible, credible, and community-centred futures.

As for continuation on this research or future projects, there are a few different options possible. The main proposed future research for the upcoming 1-3 year period, would be a longitudinal study on the effect of the bio-burner lamps and interactive events on dog walking communities. It would cover building a prototype of the bio-burner and hosting the intended interactive booth event around it and researching the effects on the targeted community over a longer period of time. This would allow the project to research if these micro-interventions take place as often as expected and their impact on the emergence of community and building of weak-tie networks. This could be a basis for empirical backing data for the community emergence model proposed in this research. This could be done through the pilot in “Kralingse Bos” in Rotterdam.

Looking further into the future on a 3-10 year basis, projects or research could build on this work by testing its design principles across other waste streams or latent communities to deeper ground and test the theory that brands can act as public facilitators to influence and promote intended behaviour and strengthen community, instead of just selling products. This could be continued into further research projects that aim to build a framework to help companies and brands shift from a community marketing to a community facilitating perspective.

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1. Full Material Analysis

[illegible]

2. Full Swot Analysis

Full SWOT Analysis

Strengths

- Strong Retail Presence - Earth Rated's products are available in over 4,900 stores across North America and parts of Europe, ensuring wide accessibility for consumers.
- Eco-Friendly Product Design - The company utilizes 65% certified post-consumer recycled plastic in its poop bags, repurposing over 5 million pounds of landfill-bound plastic annually.
- Certified B Corporation - Earth Rated is a certified B Corporation, reflecting its commitment to high standards of social and environmental performance, accountability, and transparency.
- Multiple Product Sizes - Earth Rated sells products individually, in bulk, refillable, large packs, small packs. A size for every different target group.
- Positive Customer Reviews - The company's products have received favorable reviews for their durability and eco-friendliness, with Earth Rated Poop Bags being recognized as a top choice by various reviewers.
- Advocate of change
- Community Building
- Emotional Storytelling

Weaknesses

- Limited Product Diversification - While Earth Rated has a strong presence in the poop bag market, its product range remains relatively narrow, potentially limiting market share expansion.
- Challenges in Compostability Claim and communication - Despite offering compostable bags, the lack of widespread industrial composting facilities that accept pet waste means many of these bags still end up in landfills.
- Reduced Online Sales Focus - The company's strategic shift away from online sales may limit its reach to digitally inclined consumers who prefer e-commerce platforms.
- Consumer Connection (Consumer Knowledge and Awareness and Interaction) - Earth Rated promotes interaction and awareness within consumers own dog community but they should interact more with these individuals in the communities themselves.
- Visual Communication on Product of its Sustainability - The packaging doesn't communicate the sustainability of the products

Opportunities

- Growing Pet Ownership
- Expansion into New Markets
- Product Line Diversification
- Leveraging E-commerce Platforms
- Compost Infrastructure Advocacy & Partnerships - Earth Rated can collaborate with municipalities or private composting services to pilot pet-waste-specific compost systems, especially in urban parks.

-Climate-positive Packaging

- Products Service Systems - Launch a refill subscription system for dispensers (like reusable bag canisters + refills) to reduce plastic waste and boost loyalty.

- Growth in Urban Pet Ownership - tap into the booming demographic of urban, millennial pet owners who prioritize sustainability and convenience (e.g., launch urban-specific formats like compact eco-refill packs).

-Pet Wellness Integration -

- Pet-Friendlier City Infrastructures - Work with local governments or parks to co-design smart dog waste stations or branded dispensers for public spaces — becoming part of the built environment.

- Conscious pet consumption 'Green Pet Parent'

- Customized Pet Products with AI/QR tech -

- Dog waste upcycling

- Cross collab with circular brands

- Mindful & Ritualized Daily Routines

- Gen Z & Millennial Eco Behavior

- Petfluencers & Social Proof Loops

- Leader towards green initiatives (government regulations)

Threats

- Intense Market Competition - The pet waste bag market is highly competitive, with numerous brands offering similar products, potentially impacting Earth Rated's market share.

- Recycled Plastic Market Fluctuations - The recycled plastic market is fluctuating a lot in the past years. If it collapses or grows depends on regulation of governments, production costs, demand and trends the coming years. But for now the recycled plastic market is not in high demand, in contrast to government future goals.

- Regulatory Challenges - Changes in environmental regulations and standards can affect product compliance and necessitate adjustments in manufacturing processes.

- Consumer Skepticism - Reports questioning the compostability of certain pet waste bags may lead to consumer skepticism regarding product claims.

- Economic Fluctuations - Economic downturns can influence consumer spending habits, potentially reducing expenditures on premium pet products.

3. Clusters & Trends

A CHILD AT HEART - No matter how old people age, people always connect to their inner child in their heart through enjoying exciting, comical or new experiences that inspire them or leave them in awe. In tougher times people also often reminisce back to simpler younger times.

Digital simplicity
Businesses bombard people with information and the psychological cost of this is only starting to be understood. Brands that can offer simplicity and much-needed respite will resonate with the 88% of people who wish life could be simpler (Chiu., Stafford, 2025)

The trend of elevating life's more humble moments continues to play out, offering a movement toward emotionally relatable, humorous, and humble branding that engages with its sense of recognition. (Chiu., Stafford, 2025)

Proud gen Zers seeking a bargain are celebrating brand imitations and fakes, with 61% saying they often seek out cheaper dupes of brands or products they like. For years, counterfeits have been a thorn in the side of brands, but now some are embracing dupe culture and fueling a new wave of comedic campaigns. (Chiu., Stafford, 2025)

Retailers are emphasizing "awesperiences"—immersive experiences that inspire a sense of wonder—to drive footfall and buck a wider downward trend. Consumers are craving sensory and tactile stimulation: 85% of global shoppers say the great thing about physical stores is that stores can engage all their senses, and 84% say browsing in store is the best way to get inspired while shopping. (Chiu., Stafford, 2025)

The Analog Movement
In a backlash to the ever-more frantic pace of the digital world, analog pursuits are booming. Walters' observations align with a global sentiment: 84% agree that people are less present these days because of increased technology, and 88% wish that life could be simpler sometimes. Alongside the opportunity that such activities present for "more meaningful connection," Walters Digital detox hangouts, The Offline Club CULTURE THE FUTURE 100 36 also notes that analog activities create a sense of comfort and nostalgia. "As infants we all started by playing with objects, not by looking at screens," he says. "There is something very primal and engaging about returning to these sorts of activities." (Chiu., Stafford, 2025)

Chaos Packaging
Brands are using packaging to play with audiences' expectations. Gravy in a beer can. Tampons in an ice cream tub. Coffee in a tube. "Chaos packaging" is leaping onto shelves in stores—and helping challenger brands cut through in a crowded market. (Chiu., Stafford, 2025)

Artful Stays
As the intersection of art and hospitality deepens, leading hotels and travel experience providers are redefining what it means to provide a memorable stay. Brands are moving beyond standard luxury to collaborate with artists, transforming spaces into immersive, art-filled environments that engage guests on an emotional and sensory level personal and emotionally resonant experiences (Chiu., Stafford, 2025)

Retail spaces and brands are dazzling visitors with minimalist, inspiring features, captivating consumers by reducing the noise around them and allowing simplicity to shine (Chiu., Stafford, 2025)

A movement toward truly idiosyncratic, human-centered architecture with a personality of its own aims to elicit a positive and uplifting response. People are on a mission to engage their senses and want buildings they visit to spark positive emotions. (Chiu., Stafford, 2025)

As consumers are increasingly looking for culinary experiences that are new, unique, and exciting, reality-defying products that challenge the perceptions of our senses can help food and drink brands meet these elevated expectations. In the future, advances in tech could further bend reality. (Chiu., Stafford, 2025)

Best Friends Forever - Brands, companies, influencers and organisations are connecting more personally with their consumers to create meaningful long lasting consumer connections. In turn consumers are connecting their own values, emotions and trust to the brands they use. This integration of hyper-personal interactions between brand and user creates a best friend type connection that infiltrates day to day life and builds brand-customer loyalty.

Personalized Consumer Experiences
Consumers expect personalized experiences from brands, with AI-driven customization becoming a key differentiator in the marketplace. Source: Biznip., 2024

Integration of AI in Marketing
Artificial intelligence is increasingly utilized in marketing to deliver hyper-personalized content and predict consumer behavior, enhancing engagement and efficiency. (Pati, 2024)

consumer eccentricity
Brands need to anticipate consumers' desires in order to differentiate themselves - they need to know the customer, because it will no longer be enough to simply react.

By moving away from purely functional communication and embracing experience-led branding, banks are reflecting a broader financial-services trend toward customer-centricity (Chiu., Stafford, 2025)

Ultimately, brands that successfully connect with gen Z through platforms such as TikTok and Pinterest—and align with their values of personalization and social relevance—will capture a substantial share of the back-to-school market. As students seek products that express their individuality and enhance their daily routines, these platforms and brand partnerships will be crucial in shaping the back-to-school landscape for 2025 and beyond. (Chiu., Stafford, 2025)

redefining motherhood as otherhood
According to 68% of women globally, "the brands I buy say a lot about me and my identity." Brands must adapt to reflect the diverse realities of women's lives, acknowledging and celebrating their choices. Marketing, product development, and service offerings need to move beyond the nuclear family model and embrace the inclusivity of otherhood (Chiu., Stafford, 2025)

ICONIC HANGOUTS
Inspired by celebrity and pop culture, travel is leaning in to fandom. Two phrases have gained significant traction in recent years: "Swiftie mania" (Taylor, of course) and "set-jetting" (traveling to TV and movie locations). These terms reflect how culture and fandoms are increasingly influencing and promoting travel destinations and experiences (Chiu., Stafford, 2025)

This multi-layered psychological process will mean that the handling of personal data will take on new forms. Consumer data will no longer be viewed solely in terms of data protection, but increasingly as a commercial product of digital interaction. More and more companies will develop capabilities and services that enable users to manage and potentially monetise their personal data as a form of intellectual property. Detsu, 2024

As shoppers trade down and opt for cheaper product lines in the tough economic climate, brands cannot rely on price as their main differentiator—they will have to work harder to communicate their added value to savvy shoppers (Chiu., Stafford, 2025)

Advancements in Pet Health Technology
The integration of technology into pet care is on the rise, featuring innovations like AI-powered wearables, smart collars, and health-monitoring devices. These tools enable real-time tracking of dogs' physical and emotional health, reflecting a trend towards proactive and personalized pet care. <https://lindsayangelo.com/tthinkingcont/pettrends/> (Steinburg, 2025)

Hyper-Personalization in Retail
Retailers will leverage AI to offer hyper-personalized shopping experiences, tailoring products and services to individual consumer preferences. Source: Datafloq, 2024

Millennials are the most contented generation when it comes to feeling positive about their lives. They are driven by values, health, and experiences: 81% want to spend on brands that reflect their values; 88% say people should take more responsibility for their own health and 75% prefer to spend money on experiences rather than things. (Chiu., Stafford, 2025)

The Creator Economy
Today's consumers have the tools and platforms to become creators in their own right - whether through small businesses, freelance work, or innovative products. This shift challenges traditional business models, but it also creates opportunities. Companies that embrace this wave of consumer entrepreneurship can integrate these creators into their supply chains, empowering them to contribute while benefiting from their creativity. Arkap, 2025

Fandoms move the world, shaping culture and informing lifestyles, and 65% of global gen Z and millennials would consider joining their favorite brand's fan club.

Now companies are tapping into that power as a route to deeper consumer engagement. Experts say that being a fan is rewarding, nurturing our need for identity, self-care, and social connection. The degree of commitment might vary, but almost everyone is in the game: according to research published in 2024 by YouTube and Smith Geiger, 85% of people aged 14 to 44 are fans of someone or something. As mass reach grows ever harder and people withdraw from the big social platforms, fandoms offer an alternative route to connection for brands. (Chiu., Stafford, 2025)

ALL OF ME – People are recognizing the importance of reconnecting with yourself. All parts of yourself. Connect with your mind, body, senses, thoughts, even the parts very deep you don't connect with often. Self-reflection, meditation, mental health, wellness are hot topics for self connection.

Mindfulness and Wellness Focus
The mindfulness market continues to grow as consumers prioritize mental health and well-being in their lifestyles and purchasing decisions.
Source: *Exploding Topics*, 2024

Sexy Invigorated
In the United States, sales of romance and erotica titles reached 39 million in 2023 according to Circana Bookscan, almost doubling since 2020. Sexuality is spilling into design too. Decor is a getting a raunchy makeover thanks to Central St Martins graduate Kacper Motyka's "sex-centered furniture" designed specifically for "elevating intimate experiences." Brands such as Fleur du Mal and Savage X by Fenty are channeling lace and velvet lingerie for men. Behavioral psychologist Jo Hemmings tells VML Intelligence that the return to romance is a form of escapism. It may point to unmet emotional needs, the impacts of a rapidly changing world, and a recalibration of how intimacy is expressed and experienced.
Another interpretation is that a new generation wants to see their sexuality represented more broadly, or through a different lens to the traditional male gaze.

Sex is back but this time through an inclusive lens, symbolizing empowerment, escape, autonomy, and joy
(Chiu., Stafford, 2025)

The Wellness Economy
The concept of health is expanding to include mental, emotional, and even social well-being. People want to live longer, healthier lives and will increasingly look for tools and services to help them achieve that. Businesses can play a critical role in democratizing access to these solutions, supporting holistic health goals for everyone.
(Arkap, 2025)

A robust, balanced, and clear mind is a much-valued asset. That's why so much of the rapidly expanding wellness market is geared toward cultivating emotional health (see "The Future 100: 2022" Emotional health trend). Now evidence is mounting that people can derive real mental wellbeing benefits from community-based activities—even more so when such actions involve helping others.
(Chiu., Stafford, 2025)

Undertired by tight budgets, cost-conscious consumers are splurging on everyday products. The following out of the middle market continues at pace. In the face of the save-and-splurge mentality of consumers, brands have an opportunity to provide premium products for those willing to splash out on functional and affordable treats for themselves.
(Chiu., Stafford, 2025)

Solitude is now a purposeful form of leisure. Hospitality brands and travel providers are designing with solitude and aloneness in mind, crafting experiences that offer tranquility and space for reflection.
(Chiu., Stafford, 2025)

In the metacrisis:
Anxieties on money, self, security and climate weigh heavy
Future 100 2025

WORK RESORTS The five-star office has further elevated into wellness sanctuaries and purpose-driven community hubs. By prioritizing human wellness and purposeful communities, the workplace expands beyond the office to align with sentiments around the potential for work to play a positive role in people's lives. Eighty-six percent of people globally say they enjoy a good work-life balance and 93% say businesses should take more responsibility for the health of their employees, according to VML Intelligence's October 2023 study featured in "The Future 100: 2024." Why it's interesting Companies and developers are aware that a space to work is not enough. In response they are creating "office resorts" and lively neighborhoods.
(Chiu., Stafford, 2025)

The boundaries between beauty, wellbeing, and food and drink are blurring. Hospitality brands must consider how they can fuse elements of each to meet the demands of wellness-focused consumers.
(Chiu., Stafford, 2025)

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(Chiu., Stafford, 2025)

DARK MATTER
In chaotic times, popular culture is mining a darker seam. Amid political turbulence and climate breakdown, people are seeking comfort in discomfort, leaning into dark stories and experiences that offer a form of catharsis. Experiences mining a darker seam offer ways for people to process complexity, experience an adrenaline rush, and gain a sense of mastery by overcoming the challenge. Brands tend to lean in to darkness just for Halloween but tapping into eustress could be a year-round opportunity
(Chiu., Stafford, 2025)

Sensory design has been permeating the digital space for some time, but brands, products, and designers are increasingly enriching storytelling by leveraging sound, smell, and touch in physical spaces and products. They're tapping into the 73% of global consumers who agree that brands should aim to engage all their senses.
(Chiu., Stafford, 2025)

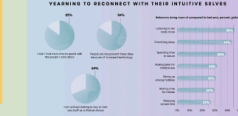
CONSUMERS PRIORITIZE ESSENTIAL SPENDING. HEALTH IS A KEY OCCUPATION



PEOPLE ARE SEEKING GROWTH AND FULFILLMENT



AGAINST A BACKDROP OF CHAOS AND CHANGE, PEOPLE ARE YEARNING TO RECONNECT WITH THEIR TRUESELVES



In uncertain times, people are turning to the spiritual guidance offered by astrology for both reassurance and meaning. With increasing workloads and rising costs, vacations are no longer a frivolous decision but an opportunity to integrate holistic self-care. Hotels are taking an adaptive approach and providing playful, personalized spiritual narratives through an astrological lens.
(Chiu., Stafford, 2025)

Electrical Veins – More and more of our daily interactions and products are being connected to digital links or are digitally connected through AI/ Internet/Data/Social Media/Automatisation and more. It seems we are slowly becoming dependant of all these digital connections, slowly turning into a digital human cyborg with electrical veins we need to survive.

Digital Governance and Data Privacy
Governments are developing frameworks to manage digital transformation, focusing on data privacy, cybersecurity, and ethical AI deployment.
Source: *Brookings Institution*

THE INTERCONNECTED WORLD INCREASES INTERDEPENDENCE
Our World in Data
A global community facilitated by advancing communications, information, and mobility capabilities results in higher levels of political and economic interdependence. This brings about the need to share resources and to interconnect systems in global partnerships.
(Incoe, 2025)

Industry is in the process of reinventing itself by adjusting to new societal and technological challenges. Global interaction and interdependencies of machines, warehouses, logistics systems, and engineering within cyber-physical systems create unbounded flexibility of self-standing automated processes. The German Academy of Technology (Acatech) coined this development "Industry 4.0."
(Incoe, 2025)

COMPUTING, MOBILE, AND WEARABLE DEVICES
Computing, mobile, and wearable devices which have sophisticated computation, sensor, and communications capabilities.
(Incoe, 2025)

ENERGY NETWORKS
Energy networks that are necessarily systems of systems, consisting of geographically and managerially distributed elements comprising generation, transmission and distribution, supported by intelligent sensors, energy management processors, and sophisticated logistical and cyber-security systems.
(Incoe, 2025)

The delegation of tasks: The digital AI clone
In future, consumers will place more and more trust in new technologies and, in particular, entrust AI assistants with a large proportion of their daily tasks. The willingness to do so has increased significantly in connection with the launch of ChatGPT in November 2023.
(Dentsu, 2024)

The Automation Economy
With time becoming a precious resource, many people are looking for ways to automate daily chores and repetitive tasks. Emerging technologies like artificial intelligence will help free up time for more meaningful activities. Businesses that focus on convenience and efficiency, while fostering a balance between technology and human connection, will thrive in this space.
(Arkap, 2025)

Rise of Subscription-Based Pet Product Services
Subscription models for pet products, such as auto-ship services for dog food and supplies, are gaining popularity. These services offer convenience and ensure consistent care, with companies like Chewy reporting substantial revenue from such models.
(APPA, 2025)

ROBOT REDUX - Make room for humanoid robots—they could soon be a staple in all homes. It might be the most unsettling sci-fi cliché of all, but it's drawing inevitably closer. Humanoid robots are coming to factories, offices, cities, and—possibly—homes in the coming years. Mechanical companions will assist with the drudgery that most of us would rather avoid, like hefting items around in a house move, administering medication to aging (and cranky) seniors, or simply keeping up with the cleaning.
(Chiu., Stafford, 2025)

Autonomous innovation was a prominent feature during the 2025 Consumer Electronics Show (CES). McKinsey has predicted autonomous driving could create \$300 billion to \$400 billion in revenue by 2035.
The age of autonomous everything has arrived. Having the foresight to embed autonomous technology into robots will be part of a future that builds ease into consumers' lives, allowing them free time to do more of what they want.
(Chiu., Stafford, 2025)

SMART HOUSES
Smart houses containing heating, air-conditioning, lighting, and security subsystems, controlled by smart thermostats and a spectrum of sensors, which are frequently connected to the internet and mobile phones, to optimize energy consumption, comfort, safety, and other functions.
(Incoe, 2025)

Society 5.0 explicitly looks to a future of socio-cyber-physical systems. That is, a human-centered society that balances economic advancement with the resolution of social problems by a system that highly integrates cyber-space and physical space. In Society 5.0, data from sensors in physical space are accumulated in cyber-space, analyzed by artificial intelligence (AI), and results are fed back to humans in physical space in various forms.
(Incoe, 2025)

Brain-Computer Interfaces (BCIs)
The convergence of humans and machines through BCIs will revolutionize communication, work, and entertainment by enhancing cognitive capabilities.
Source: *The Digital Speaker* (2024)

LONELINESS IS A SILENT KILLER - Humans are group animals based on natural instinct and origin. We find ourselves looking for new ways to connect with friends, family or new people to surround ourself with meaningful connections.

The Connection Economy
Despite living in an age of digital connection, many people feel more isolated than ever. Loneliness is becoming a growing issue, affecting people of all ages. Businesses and organizations have an opportunity to bridge this gap by creating spaces, products, and services that bring people together and foster genuine connections.
(Arkap, 2025)

Home as a Central Hub
The home is becoming the central hub for various activities, including work, fitness, and entertainment, influencing consumer behavior and product demand.
Source: Exploding Topics, 2025

NEW DATING PARADIGMS
With interest in dating apps waning, people are finding new ways of seeking out connections. Younger generations are seeking connections at in-person events, while for older generations, forming connections, both romantic and nonromantic, in diverse ways takes priority. Dating platforms are evolving to capture these multifaceted relationships.
(Chiu., Stafford, 2025)

SOCIAL HOBBY APPS
Meaningful connections and love are being found on hobby apps that elevate social experiences. People are moving away from larger social media platforms and turning to smaller, focused hobby apps such as AllTrails for hiking, Strava for fitness, Airbuds for social music listening, and Letterboxd for cinephiles. These apps support the 67% of individuals globally who are making or maintaining more effort to meet new people. By transforming personal interests into social, connected experiences with like-minded people, hobby apps offer deeper connection. So when Strava, which has 125 million members in more than 190 countries, introduced a direct messaging app in December 2023, some people started using it to find dating partners. Bigger platforms such as Facebook, Snapchat, and TikTok have become impersonal spaces flooded with corporate, paid-for content, whereas smaller, apolitical, less divisive hobby apps mimic how we interact socially as human beings—in smaller numbers.
(Chiu., Stafford, 2025)

Pets as Emotional Support and Stress Relievers
Pets have become primary sources of emotional support, with many individuals preferring to de-stress with their pets over human companions. This trend underscores the deepening emotional bonds between humans and their canine companions.
(Kibel, 2025)

BRAND BELONGING
With loneliness becoming a major problem, brands are tackling social isolation. It is a modern paradox. As Monika Jiang, founder of the Sharing Our Loneliness initiative, puts it: "We live in a very connected and very disconnected time." Loneliness is starting to be thought of as a contagion, and Jiang tells VML Intelligence that it is not only a personal and health concern, it also extends into societal and political issues. Sixty-seven percent of people believe loneliness is an epidemic and 70% say there is no sense of community anymore. Brands are taking steps to alleviate the loneliness epidemic.
(Chiu., Stafford, 2025)

EARTH IS OUR MOTHER - More people are connecting to Earth from different perspectives. They connect to her as mother earth, a cherished person they need to protect and take care of by adopting more sustainable behaviour, practices, initiatives and more, individually or as groups. We are also connecting to earth as a role model mother, who we can take inspiration from, or admire its authentic beauty.

Shift Towards Circular Consumption Models
There is a growing trend of consumers participating in circular economy practices, such as product-as-a-service models, to reduce waste and promote sustainability.
Source: Bain & Company – Future Consumer Economies, 2024

Growth of Sustainable Dog Waste Solutions
Environmental concerns are driving the demand for eco-friendly dog waste products. The market for compostable and biodegradable dog poop bags is expanding rapidly, with projections indicating significant growth in the coming years
(Patel, 2025)

Expansion of Climate Tech Market
The climate technology sector is projected to grow significantly, reaching an estimated market size of \$220 billion by 2035, encompassing innovations in energy, mobility, and carbon capture.
Source: Future Market Insights – Climate Tech Market Trends, 2024

elemental elegance
A wave of new neutrals makes headlines as color specialists rally understated hues that evoke comfort, harmony, and nature. This is good news for paint companies, shifting those warm, homely palettes onto walls—and bad news for brat green, which feels so... last year
The mood for 2025 is set around enriching comforts (think indulgent coffees or desserts) as well as sophistication and confidence (that's the understated luxury speaking up). Be prepared for a grounding experience that shifts away from maximalist glitz and bright, brash bolds to homey and humbling elegance
(Chiu., Stafford, 2025)

Rise of the Conscious Consumer
Consumers are increasingly considering sustainability in their purchasing decisions, with a significant number willing to change habits to reduce climate impact.
Source: Deloitte – Sustainable Consumption Trends, 2025

With increasingly urbanized environments, it is vital to reassess what livability looks like. Blue infrastructure can cool cities and citizens, and provide habitats for wildlife, all while reframing the concept of public space.
(Chiu., Stafford, 2025)

Some businesses are already investing in supporting habitats and regenerating biodiversity, but this concept is in its infancy. A formalized economy could pave the way for more projects that support rewilding animals and spur the maturity of the biodiversity credits market.
(Chiu., Stafford, 2025)

Sponge Cities for Flood Management
The sponge city model, using permeable infrastructure and green roofs, is being adopted across Europe and Asia to reduce flooding and water runoff.
→ Source: Financial Times. (2023)

Smart Waste Management Systems
The global market for smart waste management is expected to reach USD 13.99 billion by 2035, with cities increasingly using IoT and AI to improve collection efficiency and reduce environmental impact.
→ Source: Future Market Insights. (2025)

The trend toward "lean luxury" is set to reshape the landscape of high-end retail, particularly in markets such as China. This shift reflects a broader cultural movement prioritizing practicality and durability over ostentatious displays of wealth, with younger consumers leading the charge. Brands that adapt to these changing values by emphasizing quality, authenticity, and thoughtful design are poised to thrive in the evolving luxury market.
(Chiu., Stafford, 2025)

Retailers are trimming the number of lines they carry and, in the economic downturn, shoppers are trading down and adopting thrifter habits. This is creating challenges for brands vying with own-label ranges to keep their space on the shelves, as reported by the Wall Street Journal.
(Chiu., Stafford, 2025)

we are all connected from the same origin story, all humans are connected from within - we are one family

Inclusive Policy Development
There is a growing emphasis on inclusive policy development that considers diverse stakeholder perspectives to create equitable and effective governance.
Source: KPMG – Future State 2030

THE CONNECTED HEATH
The home is becoming ever more intuitive, connected, and helpful to people of all ages. A household that could organize itself is a dream that might be nearing reality. Panasonic Well announced Umi at the Consumer Electronics Show 2025—a digital assistant that the company calls a “family wellness platform and coach.” Umi aims to build stronger families by creating healthy habits, bettering communication, and simplifying organization
(Chiu., Stafford, 2025)

Pet-Friendly Urban Design
More cities are integrating pet-friendly amenities—dog parks, walking paths, waste stations—into public spaces to reflect growing pet populations.
→ Source: Future Market Insights. (2025)

With more than a billion individuals in this cohort, supporting neurodiversity is not just about inclusivity—it's a strategic advantage. By designing for neurodiverse needs, retailers can attract a broader customer base, drive loyalty, and establish themselves as leaders.
(Chiu., Stafford, 2025)

While Asia is more accepting of male beauty, consumers globally agree that there's now much more pressure on men to look good than there used to be (72%). And with 65% of men saying they are comfortable buying beauty products advertised for a different gender so long as it matches their needs, there's an opportunity to uplevel provision too. The conversation around masculinity is becoming more nuanced, and aesthetic options for men are more diverse. Brands have an opportunity to support men through this evolution as well as step up provision for every kind of masculinity. future of masculinity?
(Chiu., Stafford, 2025)

The Silver Generation Economy
In the next 25 years, the number of people aged 60 and above is expected to double. This group won't be a monolith – some will continue to work, travel, and enjoy active lifestyles, while others will need more care and support. Beyond addressing traditional aging needs, businesses can play a role in helping people redefine their purpose, navigate multigenerational caregiving, or even prepare for the uncertainties of living longer, healthier lives.
(Arkap, 2025)

The Evolving Family Economy
Traditional family structures are changing. Single-person households, blended families, multigenerational living, and even “chosen families” are becoming more common. Businesses will need to rethink their offerings to suit these diverse family dynamics – whether that means creating single-portion products, flexible housing options, or fostering new traditions that bring people together in new ways.
(Arkap, 2025)

Seventy percent of millennials (and 65% of the global population) believe that AI tools will allow us to be more creative and progressive in imagining the future of beauty. Brands and AI-creators have the opportunity to set the next generation of digital beauty ideals —making the landscape more inclusive and diverse, and perhaps taking further leaps to go beyond the human form. This is where the next iteration of digital beauty could excel.
(Chiu., Stafford, 2025)

Humanization of Pets and Elevated Health Priorities
A significant majority of dog owners now regard their pets' health as equally or more important than their own. This shift has led to increased spending on premium nutrition, supplements, and wellness services, with many owners willing to make substantial personal sacrifices for their dogs' well-being.
(SWNS, 2025)

The jet-setting pet market is soaring as petrents lovingly and lavishly spend on the best of the best for their fur babies. This is reflected in the \$500 billion valuation of the pet industry by 2030, a significant uptick from its \$320 billion value in 2023, according to Bloomberg Intelligence.
(Chiu., Stafford, 2025)

Innovation in garment and footwear is powering up human performance, benefiting everyone—from those with mobility limitations or muscle loss to athletes looking to improve their form. Being superhuman never looked so good.
(Chiu., Stafford, 2025)

ASPIRATIONAL AGING
Society is developing a healthier relationship to getting older. Brands have a longstanding obsession with youth. Their strategy in broad terms is target young people, ignore anyone over 50 —and 65% of people globally perceive this as the case. But a quiet revolution is gathering pace, which goes beyond tokenistic efforts such as fashion magazines dedicating a single issue to older people.
(Chiu., Stafford, 2025)

Increased Pet-Friendly Travel and Services
As pet ownership among younger generations grows, there's a notable increase in demand for pet-friendly travel options and services. This includes accommodations, transportation, and recreational activities designed to accommodate dogs, reflecting the integration of pets into various aspects of owners' lifestyles. (BCG, 2025)

Increased Pet Expenditure
Consumers are spending more on their pets, with a focus on premium products and services, reflecting the growing importance of pets in households.
(Martin, 2025)

TEAMWORK MAKES THE DREAMWORK - When we join and connect together as people, communities or even nations we can make a larger impact as a whole. We can inspire and connect with each other to create impact and change from a personal individual level to large scale issues.

Global Collaboration on Climate Action
International cooperation is intensifying to address climate change, with countries aligning policies and regulations to achieve shared environmental goals.
Source: OECD – Global Scenarios 2035

Stricter PFAS Regulations
The U.S. and EU are implementing stricter limits on per- and polyfluoroalkyl substances (PFAS) in drinking water, indicating a trend towards tighter environmental regulations.
Source: IDTechEx Report, 2024

The rising popularity of agrifood living is indicative of a growing disillusionment with modern lifestyles and food systems. Brands in all categories can take inspiration from the authenticity, community, sustainability, purpose, and lifestyle offered by life on a community farm
(Chiu., Stafford, 2025)

Zero-Waste Municipal Initiatives in Europe
Almost 500 cities in Europe are actively pursuing zero-waste goals, reducing reliance on incineration and promoting recycling and segregation.
Source: Reuters. (2024, April 22).

EU's Commitment to Climate Neutrality by 2050
The European Green Deal outlines the EU's strategy to become climate-neutral by 2050, with intermediate targets including a 55% reduction in greenhouse gas emissions by 2030.
Source: European Parliament – Green Deal, 2025

Community-Based Urban Greening
Collaborative greening initiatives are increasing urban resilience, improving air quality, and promoting biodiversity in European cities.
→ Source: Świąder, M. et al., 2025

INCENTIVIZED GOOD BEHAVIOR
Cities and travel companies are taking a carrot rather than a stick approach in the face of overtourism, by incentivizing good behavior.
(Chiu., Stafford, 2025)

Strengthening of ESG Reporting Standards
Companies are increasingly required to disclose environmental, social, and governance (ESG) metrics, with the EU implementing stricter reporting standards to promote transparency and accountability.
Source: Reuters – Business Commitment to Sustainability (Brown, 2025)

Destination Earth Initiative
The EU's "Destination Earth" project seeks to create a digital twin of the planet to simulate and predict environmental changes, aiding in climate resilience planning.
Source: European Commission – Destination Earth, 2025

Whether motivated by finances, sustainability, or sheer overwhelm at consumer culture, a powerful voice on social media is emerging to push back against overconsumption while consumers of all ages are trying to make do with less.
(Chiu., Stafford, 2025)

Climate Policy Mandates
Governments are introducing regulatory mandates to enforce the adoption of clean energy technologies, aiming to create 'positive tipping points' in climate action.
Source: (Gayle, 2023)

Circular Economy Implementation
The EU aims for a 65% recycling rate of municipal waste and a maximum of 10% landfill usage by 2035, promoting sustainable product design and waste reduction.
Source: European Parliament – Circular Economy, 2025

THE MULTIVERSE

Living Movies and Interactive Entertainment
Entertainment will evolve into interactive, AI-driven experiences where viewers influence outcomes, blending virtual reality and real-time adaptations.
Source: [The Digital Speaker](#), 2025

REALITY SHIFT
Generation Z's embrace of different realities is a manifesto for hope in a chaotic world. In July 2024 Dazed magazine explored the practice of reality shifting, in which participants try to transfer their consciousness to become aware of a desired reality. Shifters use various methods to experience alternative realities, which might be fictional worlds like the Marvel Universe or the Harry Potter stories, or an imagined reality. There is global appetite for alternative realities: 67% of generation Z say they like the idea of escaping to a different reality using technology, compared to 56% for all ages. T-Generation Z's embrace of "delulu" culture and reality shifting is about optimism, not opting out. Brands can help by working towards better real-life futures with and for them, and saving their sense of detachment by fostering real-world connection and community with their peers (Chiu., Stafford, 2025)

curator economy
In this era of generative creativity, AI "artists" like AI-Da are provoking a dilemma. If machines are taking over the creative process, what does this mean for human artists? Some see the emergence of AI as blurring the lines between creator and curator. Where once artists and creators needed craft skills, now the artist's role is increasingly about taste, curation, and refinement—becoming a decision-maker who guides and prompts the tools. Nevertheless, there will be a growing appetite for the unexpected from tastemakers, experts, and mavens, from audiences who feel trapped in a lifestyle foisted on them by an algorithm (Chiu., Stafford, 2025)

digital immortality
At a time when 71% of people globally think that the line between what is human and what is technology will blur in the future, the possibility of immortality could lie in the technology that is rapidly being created around us. Are we prepared for a generation of digital citizens? (Chiu., Stafford, 2025)

Consumers are increasingly keen to move seamlessly through realities; 43% of generation Z already say they don't see a difference between the virtual or physical—it's all real to them (Chiu., Stafford, 2025).

The Moving Economy
As people relocate more frequently – whether across cities, countries, or continents –driven by factors like climate change, economic pressures, or lifestyle choices, consumption patterns will shift. Businesses will need to adapt to changing demands, redesign their distribution networks, and offer products that reflect a mix of cultures and traditions. At the same time, growing inequality may require companies to design solutions that address the diverse needs of both wealthier and less privileged groups living side by side. (Arkup, 2025)

Regular migration: Labour migration will remain mainly driven by demand in EU Member States, as the existing migration system is tied to employers. Whether the EU will become more attractive, in particular for highly-skilled immigrants, depends on whether the returns to skills in the EU can become more competitive relative to the USA, UK, and China. This is directly related to the development and regulation of innovative industries (see the Chapter 4). As outlined above, one can expect a rise in family migration in the coming years proportional to the number of asylumseekers recognised from 2014 to 2017. **Irregular migration:** African countries are often considered the main source of future irregular migration to the EU. Although the peak population growth rate in the continent occurred in the mid-1980s, Africa will keep experiencing steady population growth until 2100. The majority of population growth will be concentrated in Sub-Saharan Africa, where the low quality of institutions makes it challenging to 'convert' population growth into economic growth. This raises concerns about future migratory pressure on the EU. (Gross, 2018)

A new class of "living computers" and biohybrid robotics has emerged, with alternatives that offer sustainability and efficiency. As companies start incorporating living materials, ensuring consumer trust and transparency will be paramount. Brands embracing these technologies will need to communicate how these advancements responsibly benefit consumers, communities, and the planet. (Chiu., Stafford, 2025)

4.1 Axis Exploration

Axis 1 : Mission

Simplified interactions / products / product use
 Better quality products / interactions / product system
 improve everyday experiences
 Better functioning products or interactions
 Better sustainability
 Less is more
 Improve everyday moments
 Simpler everyday moments

Axes opposites Possibilities:

Explore new interactions vs simplify current interactions

Increase feeling of luxury and quality vs simplify as less is more

Better individual user experience vs better the system as a whole

Matrix 1:

explore new experiences vs simplify current interactions

vs

improve sustainability of product system (production/end-of-life/use/...) vs improve sustainable awareness and behavior of user

Axis 2 : Goals & Values

- Consumer Awareness and Communication is lacking. Improve both, so consumers are educated

- Improve DPB Sustainability impact somewhere in lifecycle
- Act with purpose , sustainable or
- Empathic & Emotional Design: Care, integrity, trust

so improve sustainability
 be purposeful / emotional / empathic
 improve communication

Matrix 2:

better individual user experience vs better the system as a whole

vs

improve product/packaging visual communication (sustainability/impact) vs improve social communication (mission/brand/sustainability awareness)

Axes opposites Possibilities

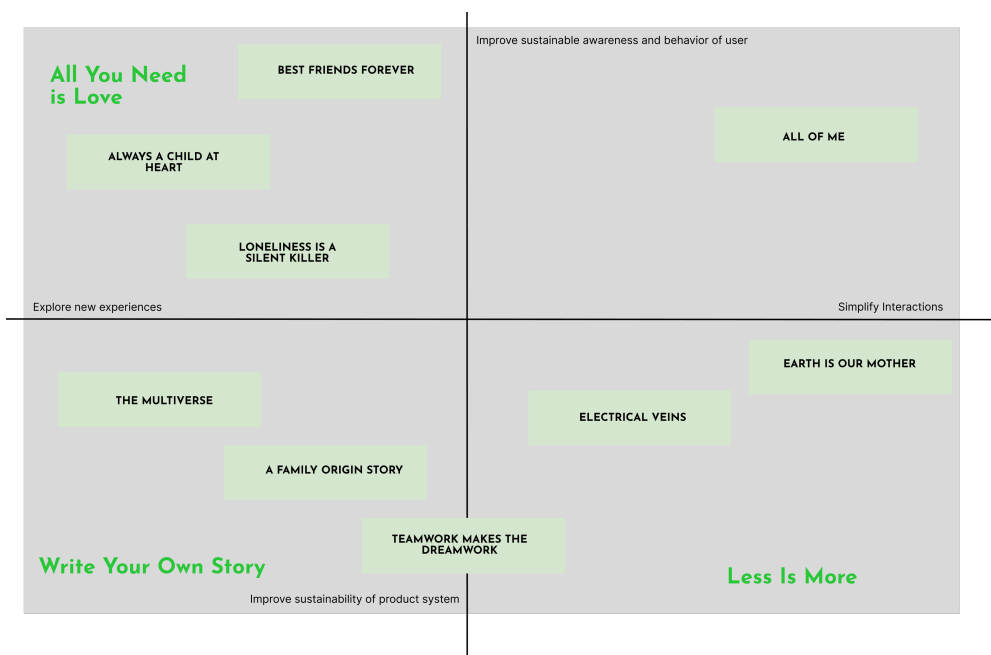
Improve sustainability of product system (production/end-of-life/use/...) vs improve sustainable awareness and behavior of user

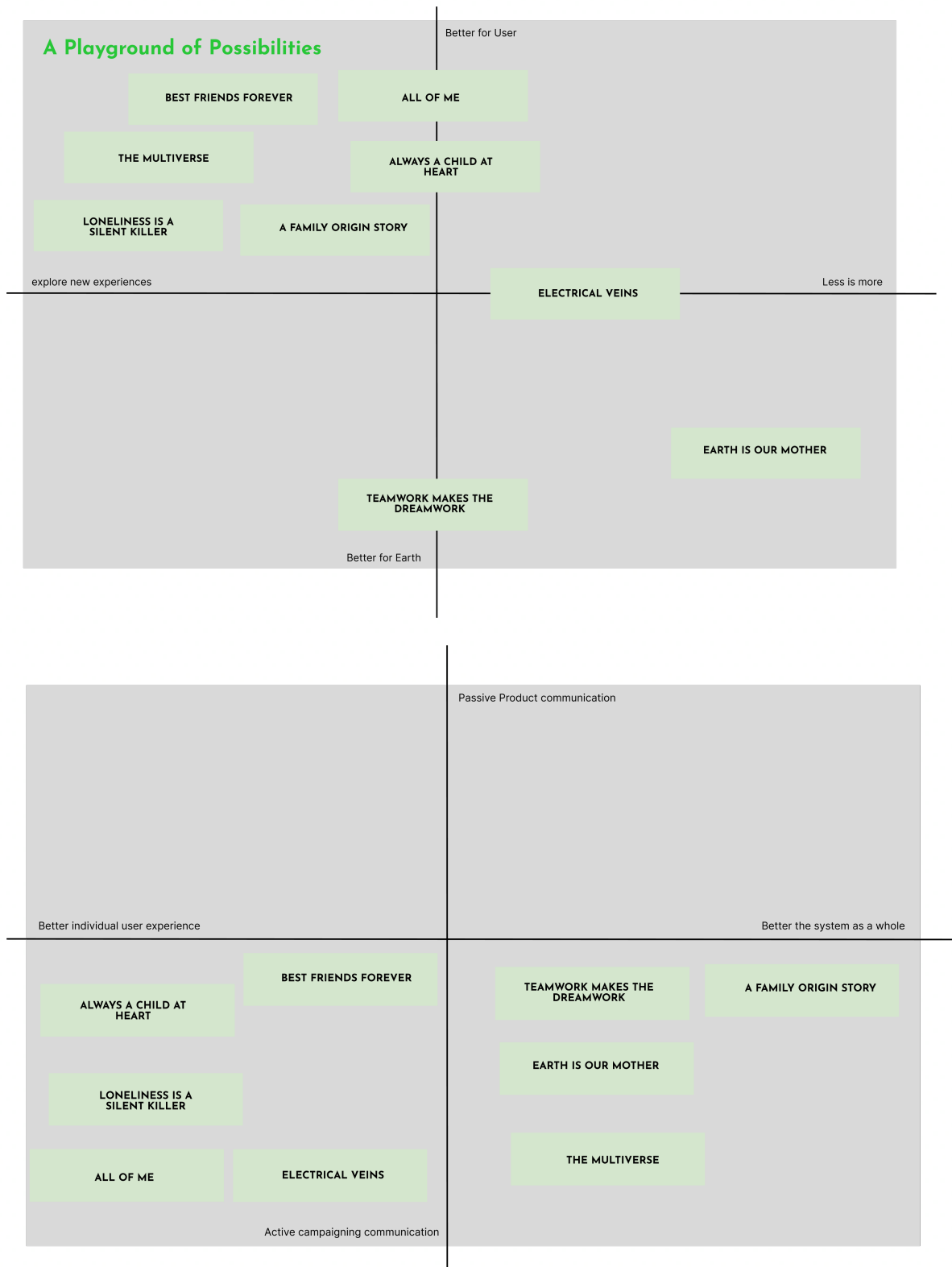
Improve current factors of sustainability vs introduce new element of sustainability

Be a leader for all vs focus on personal individual consumer connections

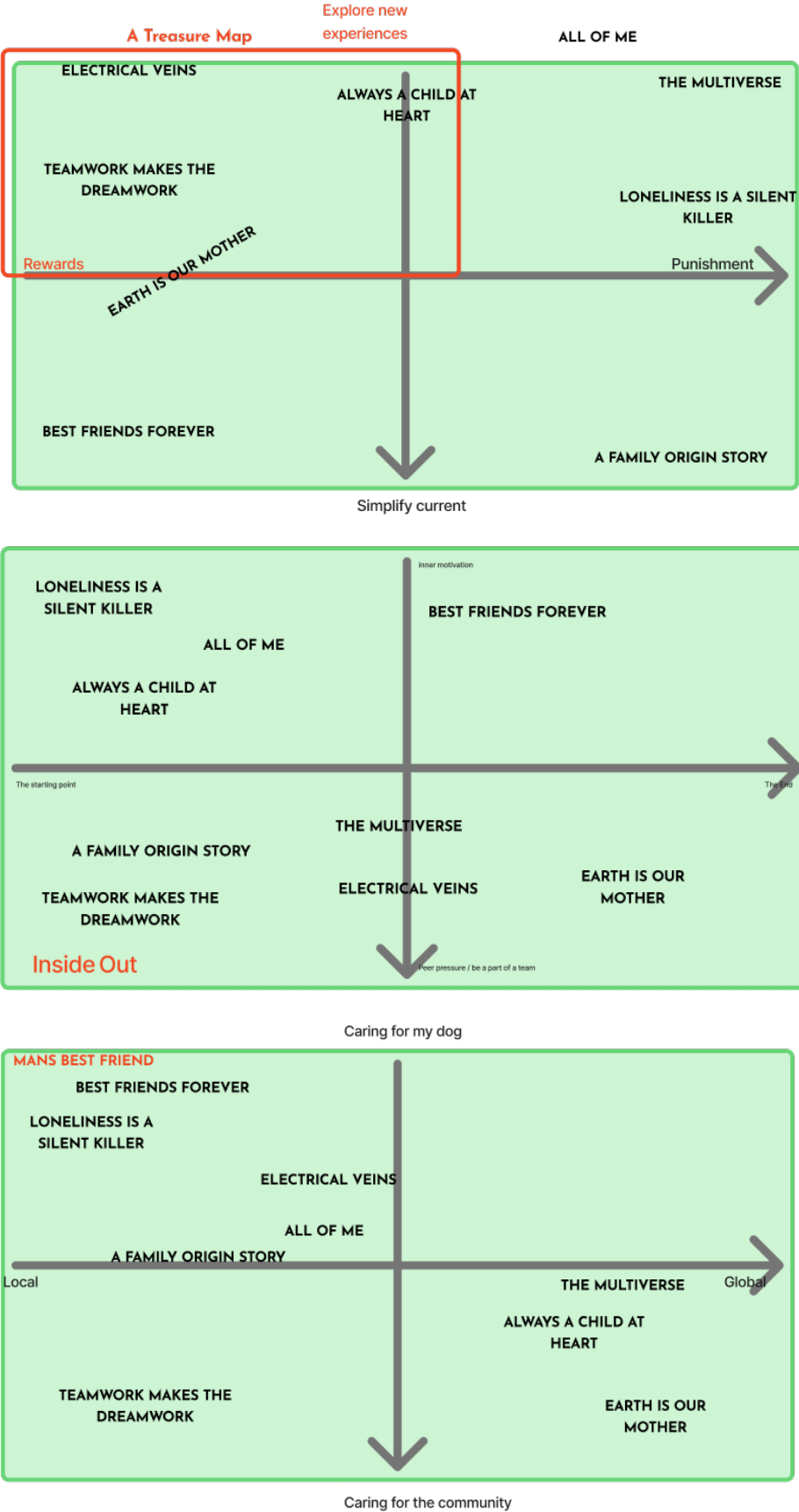
Improve product/packaging visual communication (sustainability/impact) vs improve social communication (mission/brand/sustainability awareness)

4.2 Opportunity Matrixes





In a two collaborative workshops with Above designers multiple extra axis were generated, creating more design directions, however their axis exploration was documented though discussion and is not recorded.



5.1 SCAMPER

SCAMPER Method based on the booth



S - SUBSTITUTE

Substitute an element for something more playful / emotional / sustainable

- substitute the visual posters or banners with audio explanation
- substitute shelves with trees or park benches or like dog themes shelves
- Substitute brochures with plantable paper seed brochures, poop → flower
- substitute sales people with digital dogs as sales reps
- substitute human focused booth to dog focused booth

C - COMBINE

Merge multiple ideas into one experience

- create a scavenger hunt of the booth, people walk around the event with mini mission maps and things to do or find around and in the booth
- combine poop and art, make a collaborative mural using poop bag wrappers or rolls or stencils, make something pretty together
- combine playground and product, the booth turns into a playground for human and dog, with like tunnels and things to climb through, with like hidden elements to find
- the booth becomes a mini walk through the park, not just a mini store, but you and your dog follow a path through the booth just like the Solow and Ikea, experiencing things throughout, from start to end of process and product

Other ideas:

- create different emotive walks in your city, let people create add walks online, that you can follow, an artistic walk, or a sportive walk, or a joyful or inspiring walk based on the things you walk past
- a sort of happen for dogs, collar that beep when other earthraters users' and dogs are nearby so you can meet up and mingle
- fun little magazines or stories or newspaper you receive which you can fold into bag, or has a bag inside so you have reading material during your walk, every week something new

A - ADAPT

Take inspo from other context or industries

- turn the booth into a mini park you can walk through just like Madurodam
- create who are you as a dog wand what dog walker are you quizzes with matching photo booth filters to find out what products fit with you and make it fun
- exit through a memory wall with the question

Random Adapt ideas

- wearable poop reminder linked to dog, know when dog needs to poop
- or like a radar that shows you where your dog often poops
- look at strava and create a sot of wearable for your dog so you can track their health and walking and see all the stops they stop to sniff and poop, and share with others you routes as well. reveal hidden routes
- a sot of holle bolle gjis idea, you put in poop bag, it gets burnt, and you recieve a reward for the dog or you, or a picture you can then scan or take a picture of online
- printed poop bags, each poop bag shows a different picture or joke or dog or foto, ccollect them all
- link with others across the world walking their dog, talk together and make new friends

M - MODIFY OR MAGNIFY

Exaggerate a feature or aesthetic to create drama or wonder

- magnify the poop bag roll into a giant installation where people pull out a "poop bag" but its a fun tote bag or a poster or a trash bag,
- a giant bag dispenser you can step inside of as a sort of time machine, or you see something fun inside
- a giant poop bag in the middle where you throw all you trash in
- a giant dog that poops out bag rolls
- a giant flower that grows and grows on how much bags gets thrown away in it

P - PUT TO ANOTHER USE

Take something familiar and reframe it

- use old dog toys to make an artwork, or shred them to make something new
- put drinks in empty shampoo bottles
- turn old shampoo bottle into toys or planters for flowers

Other "Put to Another Use" ideas:

- turn the poop / bag to create energy for a :
 - street lamp
 - mobile charger in park
 - fun animation
 - a fun song or mini dance party
 - regulate temperature in pollinator hotels
 - something fun near a park bench like a game you can play
- turn the poop bag into a compostable plantable item you can plant the bag to spread flowers or plants everywhere or a community flower garden in park where you can deposit them

E - ELIMINATE

Strip things away to simplify or make space for focus, surprise

- take away sales people and really let users discover things and products themselves or through virtual help or dogs
- take away shelves and walls and make it one interactive park booth

Random eliminate ideas:

- take away the poop bag and make like a retractable poop holder that picks ups the poop and stores it in a compostable cartridge for in garden

R - REVERSE OR REARRANGE

- reverse the timeline: show the process from flower to poop to poop bag being made
- let the dogs guide the people through the booth , make it dog orientated
- follow a dog themed path with paw prints or dog avatars
- create a booth so the users must go through the experience as a dog, see everything from a dogs perspective, connect with their dogs experience

6. Brainstorm Burner

FOR DOGS

Self-Refilling Dog Water Fountain

A motion-activated or timed pump dispenses fresh water for dogs.

“Hydration Station” — Self-Filling Dog Fountain

Powered by poop → activates a low-energy pump that refills a public dog water bowl.

A gentle motion sensor or button (paw-press or human push) makes it interactive.

Could feature a cooling mist arch on summer days!

Dog + owner feel rewarded for good poop disposal.

Scent Misting Arch for Dogs

Releases safe, dog-enticing scents like lavender or peanut for sniffing enrichment.

Dog Treat Dispenser

– Every poop bag triggers a small treat release for dogs.

Poop-Energy Agility Button

A playful pressure button dogs can tap to activate a scent, sound, or light path in an agility trail.

FOR DOG OWNERS

Heated “Pawse Benches” for Humans + Dogs

Use digestion heat to gently warm benches near walking trails or poop bins.

Small engraved text: “Warmed by your walk.”

cozy, community-loved spot.

Aroma Therapy Poles

Releasing relaxing herbal scents for dog owners: eucalyptus, pine, etc.

Scented Community Wind Chime or Misting Arch

A small sculpture powered by biogas releases soft herbal or floral scents periodically.

Could also trigger wind chimes, soft air gusts, or essential oil diffusers.

each poop powers one “mist” moment.

turns dog walks into multisensory moments.

“Did You Know?” Scroll Sign

Gas pressure activates a mechanical scroll that rotates sustainability facts or fun dog trivia.\

Community Whisper Totem

Plays pre-recorded community audio snippets, reflections, or “thank-you” messages after waste disposal.

“Message Totem” or “Whisper Pole”

A vertical sculpture that, when powered by biogas, plays random voice messages from other dog owners.

“Hi from Berlin! Our dog likes acorns.”

“Leave a stick here for someone new!”

spontaneous, community interaction.

FOR THE ENVIRONMENT

Native Plant Irrigation Pump

Watering pollinator-friendly plants or a flowerbed from stored rainwater using the gas-powered pump.

Compost-Activated Aroma Garden

A small herb garden nearby gets watered or aerated by the digester’s energy.

Visitors can smell, touch, and pluck a leaf for their tea.

Helps connect the dots: waste → growth → joy

Community-maintained

Mini Greenhouse Heater

A tiny biodome with native seedlings warmed to extend growing season.

Seed Ball Vending Tube

Seed Dispenser: “Plant with Your Poo”

Each time someone disposes their waste properly, the system releases a wildflower seed ball or native plant seed capsule.

Can be taken home or thrown into a special flowerbed zone.

A counter shows how many blooms the community has planted.

care today → nature tomorrow.

Compost Mixer Drum

A slow-turning composter drum that auto-rotates using biogas.

Moss Wall Humidifier

Gas powers a tiny mist system to maintain moss growth and air moisture.

FOR COMMUNITY & FUN

Mechanical Sculpture or “Wagging Dog Tail” like Holle Bolle Gijs in Efteling

A kinetic sculpture moves in response to added compostable bags.

Streetlight or Fairy Path Lighting

Low-energy, dog-height LED lights along the path that flick on when poop is added.

Poop-Powered Bubble Machine

Releases biodegradable bubbles as a celebration or “thank you” after a deposit.

Music-Box Bench

Plays soft melodies or ambient sounds when activated by the gas flow.

Poop-to-Art Spinner

A vertical disc or flag spins with light breeze from biogas, displaying evolving patterns like a dog mandala.

7. User Interview Results

Timestamp	Wat is het eerste wat in je opkomt / waar je aan denkt / wat je denkt als je dit voorwerp ziet?	Zijn er bepaalde emoties / gevoelens / gedachten / thema's / associaties die naar boven komen als je hiernaar kijkt?	Is er een bepaalde functie / interactie / actie dat je bij dit voorwerp verwacht? Wat moet je met/bij dit voorwerp doen denk je?	Wat is het achterliggende/diepere doel van dit voorwerp denk je?
9/1/2025 17:31:56	Informatief	Sustainable	Zakje erin gooien en daarmee electricity maken	Duurzaam bezig zijn
9/1/2025 17:46:28	Wat is dit?	Leuk pootje	Poep opruimen?	Hondenpoep opruimen
9/1/2025 18:10:49	Had niet meteen door wat het was maar daarna dacht ik superidee! Leuk design	Leuk, vrolijk	Poepzakje van de hond weggooien. Hopelijk kan het met een hand. Zo te zien klep openen dan de hendel naar beneden en klaar	Dat je het met één hand kan doen? En misschien mensen meer uitnodigen de hondenpoep op te ruimen?
9/1/2025 18:15:27	Hondenpootjes	Afvalzakjes weggooien	Hondje wandelen	Houdt de straten en bossen schoon
9/1/2025 18:32:27	Een prullenbak voor hondenpoep wat duurzaam wordt verwerkt	I like it! Helemaal van nu en stimuleert om poepzakjes weg te gooien!	Poepzakje erin, aan hendel trekken en lampje gaat branden?	Mensen op ludieke wijze stimuleren om hun dogsshit op te ruimen
9/1/2025 18:57:55	Leuk hondenpootje. Te moeilijk voor hondendrol zakjes, maar wel leuk gevonden.	Spoorzoeken door het hondenpootje. En het geluid van een kassa die opengaat door de handel.	Door de handel naar beneden te trekken komt er een zakje tevoorschijn om de hondendrollen in te doen.	Stimuleren van het gebruik van hondendrol zakjes.
9/1/2025 19:05:12	Knipper om briefjes te bewaren	Vreemd voorwerp, verbazing	Het is vast een voorraad box voor hondenpakjes	Geen idee
9/1/2025 19:08:24	Honden poepzakjes prullenbak	Groen (eco) pootje (leuk) aluminium (koud)	Zakje, hendel naar beneden	Schone straat, energie neutraal
9/1/2025 19:25:09	Ben blij dat dat hier bij ons niet nodig is.	Wat is het nut hiervan?	Een zakje met een hondepoepe erin in het apparaat gooien en de hendel overhalen. Dan gaat de lamp branden.	Dat mensen die normaal vertikken om die zakjes weg te gooien, dat nu wel gaan doen want ze krijgen een verrassing.
9/1/2025 20:11:37	Poepzakjes	Handig maar wel duur	Ern zakje pakken, poep opruimen en weggooien	Burgerlijke gehoorzaamheid
9/1/2025 20:12:41	Wat een raar ding.	Totaal niert	Complete onzin	Geen idee, zonde van mijn tijd
9/1/2025 20:19:29	Is afvalbak voor hondenpoepzakjes	Lief, de voetafdruk afbeelding. Verder gewoon handig om zakje weg te gooien	Ja, voorwerp wekt stroom/energie op door deponeren van het zakje. Zelf alleen weggooien/hendel naar beneden duwen	Energie opwekken
9/2/2025 10:31:40	Iets voor honden	Positief	Weggooien voor poepzakjes	Opgeruimd staat netjes
9/2/2025 11:04:16	Iets om poep zakjes in te doen?	Nee	Ik denk dat je hier een poep zakje in kan doen i.p. v. In een gewone prullenbak	Dat poep zakjes apart ingezameld kunnen worden door afvalwerking

Zou je deze prullenbak gebruiken?	Waarom wel of niet?	Hoe moet je deze prullenbak gebruiken denk je? Wat zijn de stappen?	Hoelang ben je bereid om te lopen of je gevulde honden zakje vast te houden totdat je bij deze prullenbak komt?	Als je weet dat je ergens tijdens je wandeling deze prullenbak tegenkomt, zou je wachten met je zakje weggooien? Of zou je bij een eerdere normale prullenbak je zakje weggooien?	Hoezo?
Ja	Goed voor het milieu!	Poep in het zakje, zakje in schuif, doortrekken	5 minuten	Wachten tot Lamp Prullenbak	Goed bezig
Ja	Hondenpoep moet opgeruimd worden en als dat extra straatverlichting geeft is het een win-win situatie	Zwarte handend naar beneden duwen en dan gaat er een laadbakje open waar je het poepzakje in kunt doen	1-2km	Wachten tot Lamp Prullenbak	Mooi doel toch? Maar geeft het overdag oogklachten of spaart het energie op en geeft het dan in de avond licht?
Ja	Prachtig initiatief! Helemaal omdat het schone energie geeft	Bakje open, zakje erin, bakje dicht, hendel naar beneden duwen en klaar (misschien de hendel weer omhoog doen maar misschien gaat dat vanzelf)	Zolang als nodig. Ik zou de gewone prullenbak overslaan om deze te gebruiken	Wachten tot Lamp Prullenbak	Alle kleine beetjes helpen
Ja	Ik houd het graag schoon op straat	Trek aan de hendel, doe de zak erin en als beloning gaat er een lamp branden?	300m	Wachten tot Lamp Prullenbak	Het lampje voelt als een beloning
Ja	Geweldig leuk en stimulerend	Poepe erin, hendel naar beneden en klaar	Nou als je gaat wandelen... dan loop je sowieso al dus extra leuk rondje.	Bij eerste beste prullenbak weggooien	Rondlopen met een vol poepzakjes is geen pretje
Nee	Het zakje past niet in de opening wanneer het goed gevuld is. Geen idee waar de lamp is geïntegreerd, in de poot? Denk dat het beter voor de natuur is om de drol terug te brengen naar een soort compost bak. Het proces in de bak om het om te zetten in energie lijkt me te complex.	De hond poept waar hij wil. Op die plek stop je het in een drollen zakje. Indien je daarna zo'n apparaat tegenkomt dat trek je de klep open om het zakje erin te doen waarna je aan de handel trekt.	Zolang als nodig is om bij een afvalbak te komen. Maakt niet uit of die specifiek bestemd is voor dit soort zakjes.	Bij eerste beste prullenbak weggooien	Het gaat om het zo snel als mogelijk dumpen van zo'n zakje.
Ja	Mooi idee dat de poep voor goed doel wordt gebruikt	Poep zakje erin gooien handel naar beneden duwen zodat het zakje naar beneden valt en licht kan gaan branden	5 minuten	Wachten tot Lamp Prullenbak	Leuk dat daardoor het licht gaat branden
Ja	Ik ruim altijd op, maar er moet er wel 1 op "korte" afstand zijn, 2-3 min max	Dat staat toch op de voorkant	3 min, misschien 5	Bij eerste beste prullenbak weggooien	Heb je zelf een hond? Die lucht! OMG
Ja	Gewoon 1 x voor de lol.	Klepje openen Zakje met poeie er in gooien De hendel overhalen	Niet te gek lang. Dan neem ik het wel mee naar huis.	Bij eerste beste prullenbak weggooien	Weg is weg.
Ja	Waarom niet als hij er toch staat	Staat op het apparast. Stap1 2 en 3	50 meter?	Bij eerste beste prullenbak weggooien	Gemak
Nee	Waarom niet in een gewone prullenbak voor honden-poepzakjes?	Niet geïnteresseerd	Tot de eerst volgende prullenbak	Bij eerste beste prullenbak weggooien	Waanzin
Ja	Win win. Je gooit je zakje weg en tegelijk goed bezig voor milieu	Zakje in bak en dan hendel naar beneden	Ik zou hier niet voor omlopen maar als het op de route is zou ik het vasthouden tot ik er ben	Wachten tot Lamp Prullenbak	Waarom niet dit is een kleine moeite voor een goede bijdrage
Ja	Fijn als er voldoende bakken staan	Trekken aan de hendel	Redelijke tijd	Wachten tot Lamp Prullenbak	Daar hoort het
Ja	De poep wordt apart ingezameld en het is een duurzaam alternatief voor straatverlichting alles wat duurzaam is, draagt bij	Poep zakje erin stoppen en aan de handel trekken	Niet te lang :)	Wachten tot Lamp Prullenbak	Als deze lamp prullenbak op mijn route ligt wel.
Ja		Klepje open, zakje erin, hendel naar beneden duwen.	1 km.	Wachten tot Lamp Prullenbak	duurzaam karakter van de prullenbak
Ja	Ik vind het belangrijk dat het schoon blijft. Mijn hond poept al drie keer per dag. Dat is ongeveer 1000x op jaarbasis. En dat met 40 honden in onze buurt, dan lijkt mij opruimen echt hard nodig.	Klep openen met handvat. Zakje erin doen. Klep weer dicht doen. Aan hendel trekken om door te trekken. Lampje gaat branden als het goed is gegaan.	Lang. Ik loop net zo lang tot ik bij de bak ben.	Wachten tot Lamp Prullenbak	Dan wordt het in de gewone bak niet zo vol.

Wat vind jij dat deze lamp prullenbak symboliseert?	Welk gevoel zou jij krijgen bij het weggoien van je hondenpoep zakje in deze poep naar licht omzettende prullenbak?	Wat voor een gedachte / gevoel / betekenis zou bij jou omhoog komen bij het zien van de verlichtte lamp van deze prullenbak? Dus als je savonds de lichtgevende lamp ziet op de prullenbak?
Betrokkenheid bij de planeet	Goed gevoel	Wij (hondeneigenaren) zijn weer goed bezig geweest.
2 vliegen in 1 klap - schone stoep en extra straatverlichting	Top	Fijn dat mensen meedoen
Hoe slim mensen zijn en een fijne gedachte dat er zoveel over nagedacht wordt hoe we zuinig kunnen met het milieu	Een positief gevoel	Ik zou blij zijn dat er meer mensen aan meedoen, saamhorigheid
Ik moet toch denken aan Wicky de Viking of een slim idee	Beter dan wanneer ik het in de prullenbak gooi	Fijn gevoel
Duurzaamheid	Glimlach	Een tevreden gevoel en trots omdat het van jou komt
Het aanzetten tot het opruimen van de drollen van de hond.	Hetzelfde als bij een andere prullenbak.	In ieder geval heeft iemand de drol van zijn of haar hond opgeruimd.
Mooi groen initiatief	Dat je iets doet voor het milieu	Fijn dat mensen hier hun zakje weggoien
Fun necessity	Tevreden	Lekker bezig met z'n allen
Echt iets voor domkoppen die op deze manier geholpen moeten worden om een beetje op het milieu te letten. Beetje jammer.	Ik zou me denk ik een beetje Mr. Bean voelen.	Daar gaat weer een poepie.
Netheid	Geen	Geen
Totaal niet	Geen idee	In mijn wijk staan er genoeg prullenbakken speciaal voor honden
Duurzaamheid en schoon milieu	Een goed gevoel	Leuk
Duidelijkheid	Geen idee	Herkenningspunt
Duurzaam en milieubewust	Goed gevoel, je draagt bij aan milieubewuste keuzes	Zie vorige antwoord
vernieuwing en verduurzaming	een gevoel dat je iets bijdraagt	een blij gevoel
Let op, hier moet je zijn.	Voldoening	Leuk verzonnen

Denk je dat meer mensen in je omgeving moeite zouden doen om hun zakjes hierin weg te gooien?	In hoeverre zou je je meer verbonden voelen met andere honden eigenaren in je buurt door deze prullenbak lamp?	Zou je vaker je honden uitlaat route aanpassen om langs deze prullenbak te lopen, als deze in jouw buurt/park geplaatst zou worden? En in hoeverre?
Ja	Niet meer dan normaal	Ja, 5 minuten
Vast wel	Weet ik niet	Ja
Ik hoop het maar eerlijk gezegd heb ik weinig vertrouwen in de welwillendheid van een heleboel mensen	Zeer verbonden, kan ook weer aanleiding zijn voor een gesprekje	Ja hoor maar ik zou niet met de auto gaan
Zeker!	Niet beter, dat maakt mij niet uit	Een beetje
Ja vast!	Niet	Nee
Waarschijnlijk wel totdat ze er weer aan gewend zijn. En daarna is elke prullenbak weer een optie.	Indien de buurt erg vies is door hondendrollen dan zou er een bepaalde verbondenheid kunnen bestaan. Onze wijk is gelukkig erg schoon.	Mijn hond bepaald meestal waar hij naartoe wil gaan. Correcties zijn er bijna niet. Dus de route wordt er niet voor aangepast.
Denk het wel	Fijn gevoel als meerdere mensen daar hun zakjes weggoien	Zeker
Geen idee	Het zo wel een leuk gesprek onderwerp zijn. (lpv het weer)	Dat weet ik niet, mijn hond mag zelf vaak kiezen hoe hij wil lopen
In mijn omgeving is dit niet nodig. Ik weet het niet.	Niet.	Nee
Wellicht	Niet	Nee
Geen idee	Totaal irrelevant	Nonsens
Ja	Niet	Alleen als het ook een handige en leuke route is voor de hond
Dat hoop ik	Niet	Ja
. Vast wel	Niet	Nee
zeker	weet ik niet	jazeker
Ik hoop het, maar weet het niet zeker.	Niet	Nee