

Balancing Business and Animal Welfare

A strategic design approach for
animal-friendly sale of rodents and rabbits



Master thesis

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Front page photo: Sophia Vereeniging (2025)

Preface

Hello!

Welcome to the report of my graduation project for the Master Strategic Product Design: “*Balancing Business and Animal Welfare: A strategic design approach for animal-friendly sale of rodents and rabbits*”. This project not only served as the closing chapter of my studies in Industrial Design Engineering, it also became a bit of a passion project. During my studies, I discovered that I would really like to make positive change for animals, and this graduation project provided the perfect opportunity.

I chose to focus specifically on rodents and rabbits. As I became more aware of developments within the sector regarding animal welfare, I identified an opportunity within pet retail. I wanted to explore how animal welfare could be improved within this complex context. To do so, I aimed to dive deeply into the sector by engaging with a wide range of stakeholders, gaining insight into the inner workings of the industry, and understanding the differing challenges and values across perspectives. This proved to be both an interesting and challenging starting point for design. At the same time, it made the process even more exciting, as it reflects what I enjoy most about design: finding solutions within complex systems and striving to create a positive impact for all stakeholders involved.

This project would not have been possible without the help and contributions of many people. I would therefore like to thank my supervisors, Ellis and Emma, for guiding me throughout this challenging experience. You helped me stay focused and on track, particularly during the converging phases of the project. I appreciated your critical feedback, as it allowed me to improve the overall quality of the final outcome. I would also like to thank everyone else who supported me along the way, especially those who offered fresh perspectives when I felt stuck.

To all participants and others I spoke with during this project, thank you for your interest, willingness, and enthusiasm. It was truly rewarding to connect with so many people who share a passion for animal welfare. Although this project will not be continued further, your feedback has shown me that it holds real value. Please feel free to reach out if you would like to learn more or share ideas on improving animal welfare within the context of pet retail!

I am grateful to have worked on a project I genuinely care about, while also connecting with and learning from others along the way. I hope you enjoy reading!

To protect participant anonymity, the appendices have been omitted from this publicly available version of the thesis. Readers interested in additional materials or information may contact the author or supervisors.

Executive summary

Although animal welfare practices have improved in recent years and awareness continues to grow, uncertainty remains as to whether humans are consistently able to meet animals’ needs in domestic settings, particularly within the retail context.

This project therefore began with an analysis of the current pet sales system and the key factors influencing it. A literature review on animal welfare and husbandry practices provided foundational insights, showing that while existing guidelines offer a solid basis for proper animal care, greater consideration must be given to animals’ intrinsic value and broader ethical implications.

These insights informed an exploration of current husbandry and sales practices for rodents and rabbits. This phase involved field visits and interviews with a diverse range of stakeholders within the sector. The findings revealed several underlying frictions and challenges in existing sales practices, which were grouped into three overarching themes. These themes formed the basis for identifying design opportunities and ultimately led to the formulation of the central design problem: how pet stores can fulfil their exemplary role in promoting responsible animal sales within the constraints of a physical retail environment.

Building on this, the project identified a key design opportunity: enabling pet stores to set a good example in animal housing and care, by guiding stores towards practices that better reflect the care needs of rodents and rabbits. To explore this, a series of co-creation sessions and individual ideation activities were conducted. This process resulted in four concept directions, which were evaluated using criteria derived from the co-creation sessions. Based on this evaluation, the most suitable concept was selected for further development.

The final design consists of three interconnected components. First, example habitats are implemented within the store environment to demonstrate appropriate animal care. Second, these habitats form the basis for in-store workshops, where customers are guided through key aspects of animal care and the process of acquiring a pet. Third, an online community platform supports continued learning and engagement, while also offering incentives such as discounts. An implementation strategy and underlying business model were developed to support the concept.

Finally, the concept was evaluated through interviews to assess its feasibility, desirability, and viability, as well as to identify areas for improvement. This evaluation provided insights into both the strengths and limitations of the individual components and the overall concept. These insights were translated into recommendations for future development. The report concludes with a discussion of the project’s limitations and reflections on the design process.

List of definitions

Animal welfare

There are many definitions for animal welfare. Within this project the following definition will be used: “A state where an animal is both healthy and has what it wants” (Stamp Dawkins, 2021, p.11).

LICG

Landelijk InformatieCentrum Gezelschapsdieren (LICG) is a widely used platform that provides evidence-based guidance on companion animal care. The LICG is developed by professionals from across the sector, including universities, veterinarians, Dibevo (the sector organisation) and the animal welfare organisation Dierenbescherming.

Pet husbandry

The day-to-day care of pets or companion animals, which includes their living environment, daily activities, diet type and practices, and veterinary care, including preventive health and treatments (Prata, 2020).

List of stakeholders

Animal shelter

A non-profit organisation that takes in animals (including rodents and/or rabbits) and rehomes them.

Dibevo

Sector organisations (branche organisaties in Dutch) represent the collective interests of companies from the same industry. For pet specialists (including pet stores), Dibevo is the sector organisation. They give entrepreneurs professional guidance with the focus on animal welfare.

Hobby breeder

A small-scale breeder that breeds a certain animal species as a hobby. They sell the babies either to pet stores or customers directly.

Large scale breeder

Breeders that are specialised in breeding one or more species of animals on a big scale.

LID

The Landelijke Inspectiedienst Dierenwelzijn is an independent foundation that enforces animal welfare legislation in The Netherlands and monitors compliance with it. The inspectorate focuses on the welfare of hobby and companion animals (LID, 2026).

NGO

This is a broad term, but for this report it includes organisations that are committed to preventing animal cruelty, or raising awareness for animal welfare. Organisations that fall under this are the Dierenbescherming, Stichting Dierenlot, the Sophia Vereeniging, but also the LICG (Landelijk InformatieCentrum Gezelschapsdieren) for example.

NVWA

The Nederlandse Voedsel- en Warenautoriteit monitors compliance with the legal requirements for keeping, housing and caring for animals. The NVWA carries out inspections, particularly at commercial animal-keeping establishments, such as livestock farmers and breeders (NVWA, 2026).

Pet owner

Someone that currently owns one or more rodents or rabbits.

Pet store

A business that sells animals and/or animal-related products. Ranging from small specialty stores to pet store chains and garden centres.

RDA

The Raad voor Dierenaangelegenheden is an independent council of experts that advises the Minister for Agriculture, Fisheries, Food Security and Nature, either at the minister's request or on its own initiative, on multidisciplinary issues relating to animal welfare, including animal health and ethical issues (Raad voor Dierenaangelegenheden, 2026).

Rodents and rabbits

Rodents include many different species of animals, but in the context of this report, the term is mainly used for hamsters and guinea pigs, as these are the rodents that are most commonly kept as pets. Rabbits are not rodents, but they are the most commonly kept pets after cats and dogs and are therefore also included.

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Chapter 1

Introduction

Although animal welfare practices have improved over the years and awareness continues to grow, the sale of animals remains a sensitive and sometimes controversial topic. A key contradiction persists: many people who work with animals do so out of genuine care, yet it remains uncertain whether humans are always able to meet animals' needs when keeping them in domestic settings. This tension between good intentions and actual welfare outcomes forms the basis of this project, which aims to explore how humans and animals might coexist in a more balanced and responsible way.

This first chapter introduces the context of the project and explains why change is needed within this sector. It also outlines the research questions, focus and approach that guides the project.

1.1 Context

Growing awareness of animal welfare

Living with an animal offers many benefits for humans (Aragunde-Kohl et al., 2020). However, in a study done by Fenton et al. (2025), European veterinary experts rated the severity and prevalence of a large number of issues in several species of small animals (including hamsters, guinea pigs and rabbits). They concluded that many owners often fail to meet their pets' welfare needs. Similarly, Grant et al. (2017) identified a major threat to pet welfare arising from owners who lack the knowledge or facilities to meet animals' specific needs in captivity. These studies, as well as other experts in the field (Roney, 2017), highlight the importance of educating owners to prevent neglect or rehoming of their pets.

At the same time, animal welfare is receiving growing attention through awareness weeks (SPRAW, 2025), company blogs (Ownat, 2025; Pet Hero, 2021), and efforts by municipalities and online platforms to share expert information (Huisdier Informatie Punt, 2025; Platform Verantwoord Huisdierbezit, 2025; RSPCA, 2025). Social media, awareness campaigns (Den Haag Newsroom070, 2024), and pet ownership programmes (Purina, n.d.; FOUR PAWS International, 2023) further amplify this message. Because of this growing awareness, governments and other organisations are introducing stricter laws and regulations on pet care (Stamp Dawkins, 2021).

Pet stores play a key role in informing customers about animal welfare, as they are often the primary point of contact for customers and can influence responsible purchasing behaviour (von Jessen, 2020). But on top of welfare, business viability remains a major concern for them (Rijksoverheid, 2020). Meanwhile, the main priority for animal welfare organisations is the health, safety, and ethical treatment of animals during and after sales (Dierenbescherming, n.d.; Sophia Vereeniging, n.d.; Stichting DierenLot, 2024).

The pet store's role

Within this problem space, there is an underlying assumption that because of the growing awareness of animal welfare and the amount of information online increasing, former pet store customers will turn to the internet and other resources for advice, but also for buying pets and products, instead of going to pet stores. This assumption suggests that the pet store's advisory role is shifting, meaning that they will not be the primary source of information for many customers anymore.

This situation is not only problematic for pet stores, but also for customers. Because within the network of organisations involved in the sale of animals, there are many different opinions about animal welfare. In combination with all the different opinions from experts and other people online, there is a lot of (mis) information out there, which makes it difficult for prospective pet owners to make decisions about buying animals (Black, 2024). On top of that, with regulations getting stricter and consumer behaviour changing, pet stores are pushed to raise their standards, constantly changing their approach of selling pets according to new consumer trends, while also embracing their role as advocates for animal welfare (Precious Petite Puppies, 2023). And with online sale of pets increasing, pet stores should be extra mindful of maintaining their advisory role, as well as maintaining business viability.

1.2 Project focus

The assignment

With awareness increasing, pet stores will have to keep up with changing husbandry needs. Based on this issue, an initial assignment was constructed:

Design a strategy that will help pet stores cater to upcoming needs of customers regarding buying rodents and rabbits, so that they will be able to seamlessly adapt to growing animal welfare needs and regulations, while maintaining business viability

Research questions

Question 1

What do **pet stores** that sell rodents, rabbits and/or related products have to do to keep up with changing consumer trends and maintain business viability?

- 1.1 How do different types of pet stores and organisations within the industry regard the well-being of rodents and rabbits?
- 1.2 How does the growing awareness on animal welfare influence the advisory role of pet stores?
- 1.3 What are pet store's current issues, wants and needs regarding regulations and guidelines for keeping and selling rodents and rabbits in the store and how do these regulations influence the approach on selling pets in-store?

Question 2

How are **customers** informed about animal welfare, how do they inform themselves, and what effect does it have on buying pets and taking care of them responsibly?

- 2.1 What does the system of stakeholders that are involved in informing customers about rodents and selling rodents look like?
- 2.2 How did customers experience the purchasing process for their pet, and how do they think it could be improved?

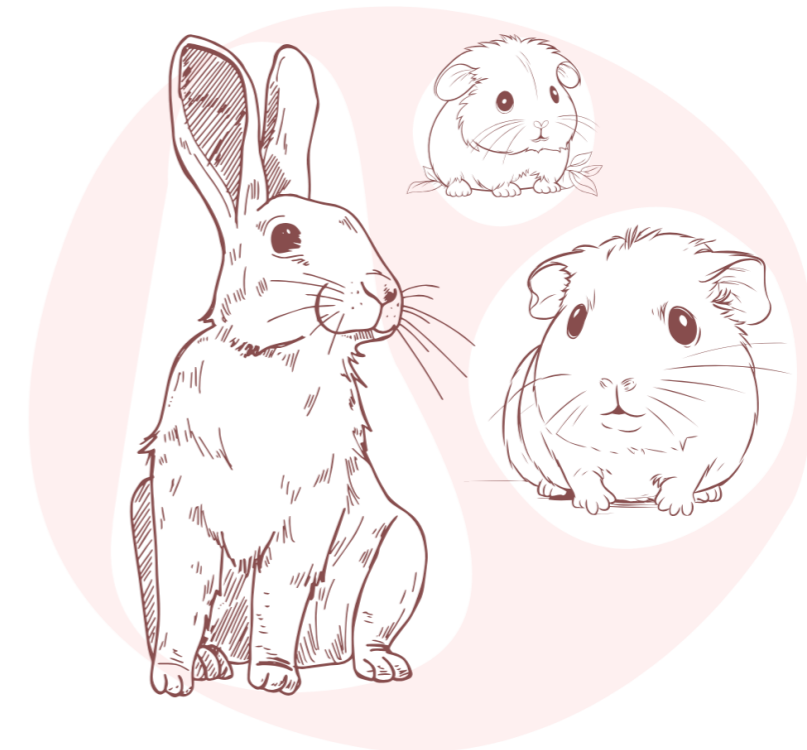
Focus on rodents and rabbits

The project focuses specifically on rodents and rabbits, with rodents defined as guinea pigs and hamsters. This was a deliberate decision, as rabbits, guinea pigs and hamsters are the most commonly kept pets after dogs and cats. Unlike dogs and cats, however, these animals are still widely sold through pet stores as well as online platforms. In particular, online sales often involve insufficient provision of information, which can result in serious animal welfare issues (Ebbs, 2019).

In addition to the sales process, attention must also be paid to the husbandry practices of these small animals. As previously mentioned, Fenton et al. (2025) concluded that many owners frequently fail to meet their pets' welfare needs. For rabbits, guinea pigs and hamsters, the most impactful welfare issue identified was insufficient living space. Other significant issues included inappropriate diets, limited opportunities to express species-specific behaviours, improper handling, and a lack of environmental enrichment. Although the study included several other species (rats, mice, chinchillas, degus and gerbils), it is notable that the welfare issues identified for rabbits, guinea pigs and hamsters were rated as the most severe. For context, as the research was conducted in the UK, these needs were assessed according to the Animal Welfare Act (Gov.UK, 2006). This act defines adequate welfare in terms of a suitable environment and diet, the ability to express normal behaviour, appropriate social housing, and protection from pain, suffering, injury and disease.

Another reason for focusing on small pets is their relatively low initial purchase cost. Although prices vary considerably (for example, hamsters may cost only a few tens of euros, whereas rabbits can cost up to 80 euros (LICG, 2026)), the initial investment remains comparatively small. Combined with the animals' small size, this often leads owners to underestimate both the time and level of care required, as well as the long-term financial costs involved. For instance, veterinary care for these species is often more expensive than for cats and dogs due to the need for veterinarians specialised in exotic animal medicine (Pollard-Post, 2022).

Overall, the widespread availability of rabbits, guinea pigs and hamsters through pet stores and online platforms, combined with their low purchase price and the frequent underestimation of their husbandry needs, makes these species particularly vulnerable to welfare problems and therefore a relevant focus for this project.



1.3 Project approach

Double diamond

For the design approach of this project, the double diamond method was used (figure 1). This method consists of two consecutive phases, each represented by a diamond shape. Within each diamond, an initial diverging phase is used to explore a broad range of information and possibilities, followed by a converging phase in which insights are analysed, refined and narrowed down. The first diamond represents the research phase of the project, focusing on understanding the problem and gathering relevant information. The second diamond represents the design phase, in which potential solutions are developed and refined.

Exploration

The first phase focuses on analysing the current system of pet sales and exploring the key factors that influence it. A literature review was conducted to establish a foundational understanding of animal welfare and appropriate husbandry practices for rabbits, guinea pigs, and hamsters.

Based on this foundation, key questions were formulated regarding perspectives on animal welfare, consumer behaviour, and the roles of different stakeholders. These questions guided the exploratory research, which included field visits and interviews. Together, these activities provided a comprehensive understanding of the current pet sales system.

Problem definition

Building on the exploratory phase, this stage adopts a more analytical approach. The data collected through field visits and interviews was analysed and synthesised to identify underlying issues within the pet sales sector.

This process involved clustering insights into themes and examining relationships and tensions between them. These tensions revealed key problem areas and opportunities, which informed the formulation of the final design problem.

Ideation

In this phase, the defined design problem and identified opportunities were used to explore potential solutions. A wide range of ideas was generated through a combination of co-creation sessions and individual brainstorming.

These ideas were subsequently evaluated using a set of criteria, leading to the selection of the most promising future direction and corresponding concept.

Solution development

In the final phase, the selected concept was developed into a comprehensive design proposal. This included detailing the service, its implementation, the required strategy, and the underlying business model.

The concept was evaluated through interviews to assess its feasibility, desirability and viability and identify areas for improvement. The insights gained were translated into recommendations for future development. Finally, the limitations of the project and reflections on the design process were discussed.

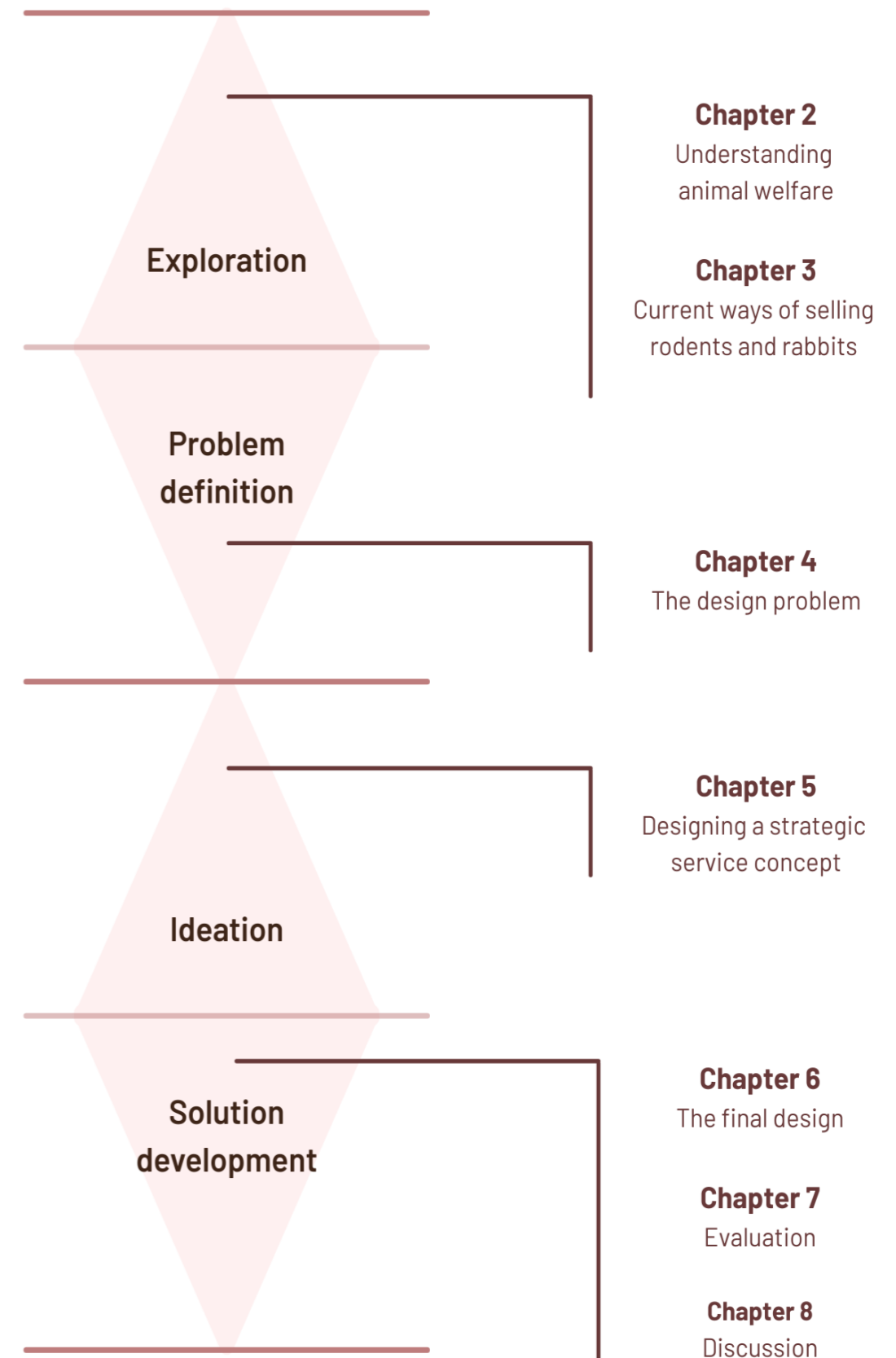


Figure 1: Double diamond

Exploration

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Chapter 2

Understanding animal welfare

This project aims to explore how humans and animals can live together in a more balanced and responsible way. Achieving this balance requires a clear understanding of animal welfare and the conditions necessary to support it. Before animal welfare can be optimised through design, it is therefore essential to establish what the concept entails and how it is applied in practice, particularly in relation to pet husbandry.

Accordingly, this chapter reviews relevant literature on the concept of animal welfare, the ethical considerations surrounding the keeping of animals as pets, and established husbandry practices that contribute to improved animal welfare.

2.1 Animal welfare

Understanding what animal welfare means

One of the earliest formal considerations of animal welfare occurred in 1965, when a committee chaired by Professor Roger Brambell was appointed by the British Government. The resulting Brambell Report stated that animals should have the freedom “to stand up, lie down, turn around, groom themselves and stretch their limbs” (Brambell, 1965). In response to this report, the Farm Animal Welfare Council was established to monitor welfare within the livestock production sector. In 1979, the council refined these initial principles into what became known as “Brambell’s Five Freedoms”, which are shown in figure 2 (Elischer & Michigan State University Extension, 2019).

Although the Five Freedoms have had a substantial global impact, several researchers have critically examined their limitations. McCulloch (2012) argues that the idealised nature of these freedoms limits their ability to define what constitutes an ethically acceptable level of animal welfare. Similarly, Mellor (2016) suggests that the Five Freedoms do not fully reflect current scientific understanding of animal welfare. He proposes that, beyond avoiding negative states, animals should be provided with “lives worth living”, in which positive experiences are actively promoted alongside the minimisation of suffering.

A more recent framework that reflects this broader perspective is the six leading principles developed by the Raad voor Dierenaangelegenheden (RDA). These principles were established at the request of the Minister of Agriculture, Nature and Food Quality and, while originally intended for livestock, are also applicable to companion animals. A translated overview of these principles is also shown in figure 2 (Raad voor Dierenaangelegenheden, 2021).

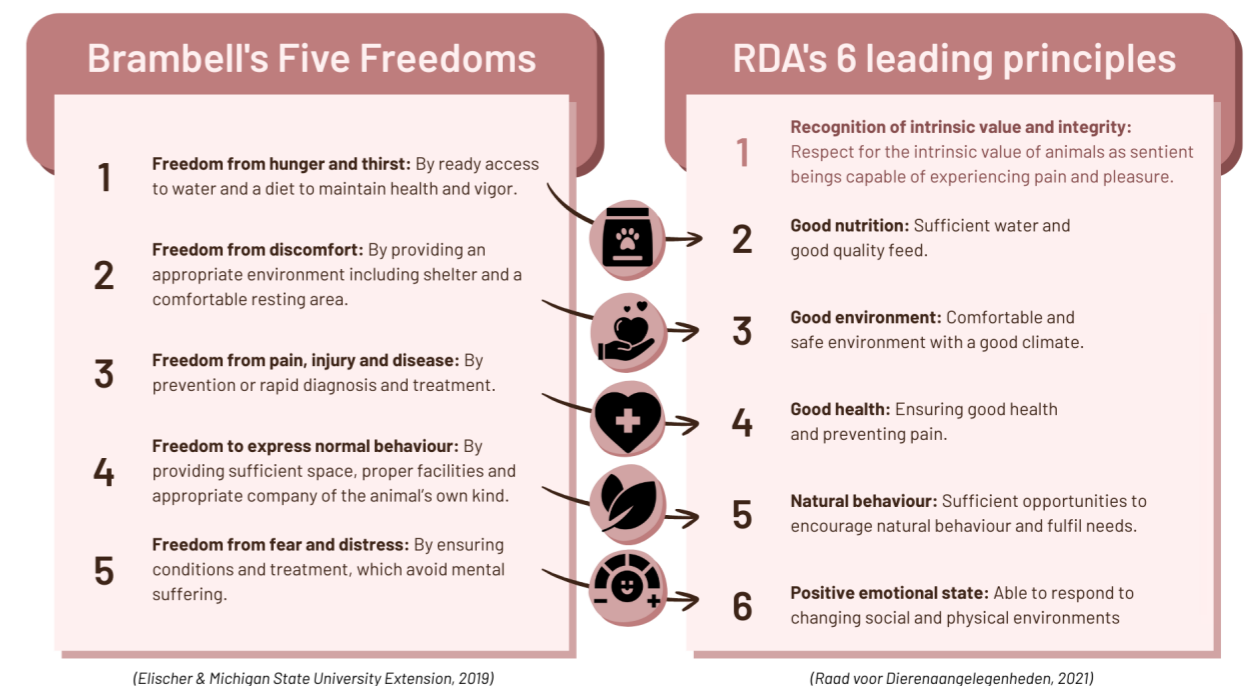


Figure 2: Brambell's Five Freedoms & RDA's six leading principles

The similarities between “Brambell’s Five Freedoms” and RDA’s six leading principles shows that Brambell has had an enduring influence as a foundation for understanding animal welfare. A key distinction, however, is the explicit recognition of animals’ intrinsic value within the RDA framework, emphasising the moral status of animals as sentient individuals.

While both frameworks provide valuable guidance, they primarily represent ideals rather than operational definitions. For this reason, it is useful to adopt a clear and practical definition of animal welfare that can be consistently applied throughout this project.

A “simple” definition of animal welfare

As discussed previously, there is no single, universally agreed-upon definition of animal welfare, as the concept can be interpreted differently depending on context and perspective (Hewson, 2003). To arrive at a concise and accessible definition for use in this project, the work of Stamp Dawkins (2021) is particularly relevant.

Dawkins argues that there is no agreed upon definition, partly because the term carries such emotionally laden words with it, but also because there is no agreed definition of consciousness. Many scientific approaches to assessing animal welfare focus on observable and measurable factors, such as physical health and the ability to express natural behaviour (Fraser, 2008). Dawkins acknowledges the importance of these measures but also emphasises that subjective experience plays a role in welfare assessment. At the same time, she recognises that consciousness is not yet fully understood in humans, let alone in non-human animals. To avoid making unsupported assumptions about conscious experience, she proposes a definition that remains practical and measurable.

According to Dawkins, animal welfare can be defined as “a state where an animal is both healthy and has what it wants” (Stamp Dawkins, 2021, p. 11). This definition addresses the complexity of welfare assessment by grouping indicators into two broad categories: physical health and the animal’s evaluation of its situation as positive or negative. Importantly, having “what it wants” implies not only access to resources but also that these resources contribute positively to the animal’s experience. This definition provides a clear and workable framework of what animal welfare means, without making it too complicated and is therefore adopted throughout this project.

Animal welfare
 “A state where an animal is both healthy and has what it wants”
 (Stamp Dawkins, 2021, p. 11)

2.2 Keeping animals as pets

Pet husbandry practices

To improve pet health and welfare, it is essential to understand the specific care needs of companion animals. Each species has evolved within a distinct ecological and behavioural context, which influences its needs and results in differences in behaviour, housing requirements and care practices.

Before examining these differences in detail, it is important to clarify what is meant by “pet husbandry”. In this project, pet husbandry is defined as the day-to-day care of pets or companion animals, which includes their living environment, daily activities, diet type and practices, and veterinary care, including preventive health and treatments (Prata, 2020).

Pet husbandry
 The day-to-day care of pets or companion animals, which includes their living environment, daily activities, diet type and practices, and veterinary care, including preventive health and treatments
 (Prata, 2020)

As outlined previously, this project focuses on rabbits and rodents, with rodents defined as guinea pigs and hamsters. Before attempting to optimise animal welfare through design, a foundational understanding of expert-recommended husbandry practices for these species is required, as appropriate care differs between them. To establish this understanding, information was drawn from the Landelijk InformatieCentrum Gezelschapsdieren (LICG), a widely used platform that provides evidence-based guidance on companion animal care. The LICG is developed by professionals from across the sector, including universities, veterinarians, Dibevo (the sector organisation) and the animal welfare organisation Dierenbescherming.

Based on this source, a matrix was created, summarising key aspects of housing, nutrition and associated costs for rabbits, guinea pigs and syrian hamsters (figure 3). This overview is intended to place the required effort, space, materials and financial investment into perspective and serves as a reference framework for the subsequent stages of the project.




| | |  Rabbits | | | |  Guinea pigs |  Syrian hamsters |
|-------------------|--------------------------|---|------------------|------------------|-------------------|---|---|
| | | Dwarf (<1,7 kg) | Small (1,7-3 kg) | Medium (3-5 kg) | Big (5 kg >) | | |
| Natural behaviour | | Big groups with hierarchy | | | | Groups with strict hierarchy | Solitary |
| | How to keep them | • Minimum of two (preferably a castrated male and a female) • Either only outside or only inside | | | | | • Alone • Inside |
| Housing | Basic housing dimensions | 160 x 60 x 50 cm | 220 x 80 x 60 cm | 250 x 90 x 70 cm | 300 x 100 x 80 cm | • 0,9 m2 for 2 pigs • 0,3 m2 for each extra guinea pig | 100 x 50 cm + |
| | Cage furnishing | • Multiple shelters/hidey houses • Chewing material | | | | | • Free roaming space of 4-7 m2 • Grains/Sawdust with a layer of hay or straw bedding |
| Nutrition | Basic | • Unlimited fresh roughage • Pellets (containing crude fibre) | | | | Plenty of vegetables | • Pellets • Hay/Branches |
| | Extra | Suitable vegetables like chicory or endive | | | | Vitamin C | Vegetables or fruit |
| Costs | Purchase | ± €20-80 | | | | | < €20 |
| | Neutering/Spaying | • Male neutering: ± €90 • Female spaying: €90+ | | | | | |
| | Housing | • Basic cage: €60+ • Basic cage + run: €135+ | | | | | Furnished cage: €140+ |
| | Recurring | Monthly costs for 2 rabbits/guinea pigs or 1 hamster: • Bedding: ± €15 • Feeding: ± €35 | | | | | |

Figure 3: Husbandry practices per species recommended by LICG (LICG, 2026)

The ethics of keeping pets

The practice of keeping animals as pets raises longstanding ethical questions, particularly concerning autonomy, dependency, and the moral justification of confining animals for human benefit. This raises the question of whether humans should be permitted to keep animals if they are unable to provide appropriate care and living conditions (Osebor, 2024).

Why do we keep pets?

Why do humans keep animals as pets in the first place? As previously mentioned, animals have a positive effect on human well-being. Research suggests that conditions such as heart disease and some forms of cancer, which are often exacerbated by loneliness, may be mitigated by human-animal companionship (Beck & Katcher, 1996). Indicating that animals offer benefits for people's physical well-being. However, animals also offer emotional benefits for humans. Although pets are sometimes defined as "animals we live with that have no apparent function" (Herzog, 2014) and relationships between humans and pets often require the human to devote a lot of their time, energy and resources into them, humans nonetheless continue to find pet keeping worthwhile. Nowadays, people seek an animal not just for status or aesthetic appeal, but mostly for affection and long-lasting relationships. Humans seek to form a lasting emotional bond with another animal. This becomes apparent when looking for example at how humans name their animals, feed them human food and celebrate their birthdays. On top of forming a bond, animals also offer humans a certain kind of constancy in an ever changing world, they offer humans someone to talk to and confide in, despite the fact that animals do not understand human language. Pets seem to live in their own time, bringing humans back to the present instead of worrying about the past or future (Beck & Katcher, 1996).

These motivations reveal that keeping pets primarily serves human psychological and social needs. This complicates the moral justification of keeping pets when viewed from the animal's perspective. Figure 4 illustrates this. While owning animals highlights the benefits experienced by humans, it is argued that the relationship between humans and animals is built on dependency and power imbalance whenever animals are kept as pets. This raises the underlying moral question of whether humans can take ownership of animals at all, and calls into question the idea of animals as property instead of family.

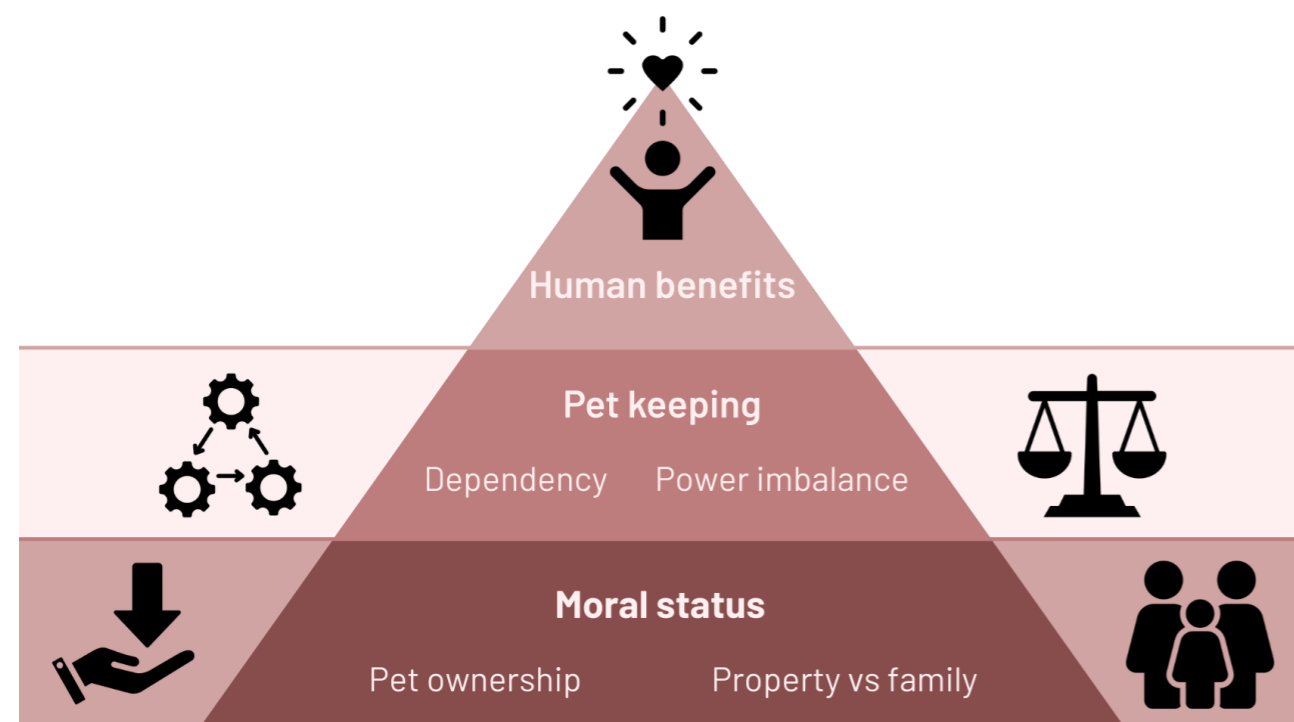


Figure 4: Ethical tensions of keeping pets

A relationship built on dependency

Many aspects of the human-animal relationship indicate how the relationship is not completely equal. We as humans have to make a lot of decisions for our pets and their well-being is largely dependent on human provision. Even when people think they are making the right decisions, they may unknowingly make harmful choices, such as overfeeding their animals. On top of that, humans can just sell their animals and discard them whenever they want (Chou, 2012). This puts forward the ethical issues of human-animal relationships. After all, even though these animals provide humans with unconditional love and devotion and many people treat them as members of their family, it is still a relationship that is first and foremost built on dependency. An argument that animal activists put forward against pet ownership is that because of the power imbalance and structural dependency on humans, the human-animal relationship is inherently flawed. Animal activists argue that this power imbalance effectively conditions animals to display affection in exchange for basic necessities such as food and shelter (Lin, 2018). On the other hand, it is argued that despite acknowledging that our animals are dependent on us, caregivers can still find ways to give them as much physical and behavioural freedom as possible within the relationship, making them less our property and more part of our family (Oven, 2018).

Forming a friendship with an animal

In discussions of the ethics of human-animal relationships, philosophers have examined whether it is possible to form genuine friendships with animals, by specifically looking at it from the perspective of neo-aristotelian friendships. Aristotle characterises three different kinds of friendships: friendships of utility, which are characterised by giving and receiving certain goods; friendships of pleasure, which involve reciprocal pleasure; and friendships of virtue, which are built on shared values and striving to be better together, for your own sake. While Sigsbee (2025) argues that human-dog relationships exceed mere utility or pleasure due to their moral demands, he questions whether they can qualify as friendships of virtue, given Aristotle's requirement of moral equality. Therefore, although neo-Aristotelian theory provides useful context, it does not offer a definitive answer as to whether humans can form friendships with animals.

Pet ownership and abolitionism

Apart from the relationship between humans and animals, people have also questioned whether humans should have ownership of animals and whether it is ethical to treat animals as property. Abolitionists think it is not. They see the state of dependency as problematic, as well as the fact that humans can "own" a sentient individual with its own rights, as property (Salkeld, 2024). They think that animals should have a moral right not to be treated exclusively as human resources. Animals should have the right to not be property, because they are not things. "If animals are property, they can have no inherent or intrinsic value. They have only extrinsic or external value" (Francione & Charlton, 2016).

From this perspective, improving welfare conditions is insufficient, as the core moral issue lies in the legal and moral status of animals as property. For an overview of the different perspectives on keeping animals, see figure 5.

| | Key concern | View on pet ownership |
|------------------|-------------------|--------------------------|
| Welfare-based | Quality of care | Conditionally acceptable |
| Neo-Aristotelian | Equality & virtue | Morally ambiguous |
| Abolitionist | Property status | Inherently unethical |

Figure 5: Table of ethical perspectives

2.3 Conclusion

This chapter has explored animal welfare from both a conceptual and practical perspective, linking theoretical definitions to the everyday realities of pet husbandry and the ethical implications of keeping animals.

While early frameworks such as Brambell's Five Freedoms established an important foundation, more recent approaches, such as the RDA's principles, emphasise not only the prevention of suffering but also the promotion of positive experiences and the recognition of animals' intrinsic value. In line with this development, Dawkins' definition of animal welfare as a state in which an animal is "healthy and has what it wants" provides a practical and applicable framework for this project, bridging measurable conditions with the animal's subjective experience.

Applied to pet husbandry, this definition highlights that welfare requires more than physical health alone. While suitable nutrition and housing, as outlined by the LICG, are essential, welfare also depends on opportunities to express species-specific behaviour and experience positive emotional states. Enrichment, social interaction and environments that support natural behaviour are therefore critical components of good care. However, meeting these standards does not resolve the ethical tensions inherent in keeping animals as pets.

LICG guidelines can thus be understood as defining necessary conditions for acceptable care, but not sufficient conditions for achieving the ethical ideal of "wanting the best" for animals. They help prevent poor welfare and establish a baseline for well-being, but do not guarantee lives that fully reflect animals' intrinsic value or maximise positive experiences. This limitation is further emphasised by arguments that some species are inherently unsuited to captivity (Overall, 2017), and that even for long-domesticated species such as rabbits and guinea pigs, commonly accepted housing conditions may restrict the expression of natural behaviour (Spencer et al., 2006).

Consequently, there is no single "correct" way to keep animals as pets. Scientific knowledge can guide healthier and more enriching care, but ethical questions, including the power imbalance within human-animal relationships and the moral status of animals as property, persist. Recognising these tensions is essential when evaluating both husbandry practices and the broader system in which animals are kept and sold.

Main takeaways

1. Animal welfare requires more than physical care

Respecting welfare means recognising animals' intrinsic value and addressing their physical health, behavioural needs, and emotional experiences.

2. Meeting husbandry guidelines does not guarantee a good life

Guidelines can support health and basic needs, but health indicators alone cannot demonstrate that an animal experiences positive welfare or that it "has what it wants" and that its motivations and preferences are fulfilled.

3. Good intentions do not eliminate welfare limitations

Even when owners provide appropriate care, animals in human environments may still be unable to achieve optimal welfare.

4. Pet keeping is both a welfare issue and an ethical issue

Ensuring good welfare through appropriate husbandry addresses how animals live, but not whether it is morally justified to keep them under human control. Because pet ownership inherently creates dependence and a power imbalance, ethical responsibility extends beyond meeting physical and behavioural needs. It requires recognising animals as sentient individuals with intrinsic value, whose interests may not always align with human use. Consequently, responsible pet keeping demands not only the provision of good care, but also critical reflection on the legitimacy and limits of human authority over animals' lives.

Chapter 3

Current ways of selling rodents and rabbits

To gain insight into current husbandry and sales practices involving rodents and rabbits, field visits and semi-structured interviews were conducted with a range of stakeholders within the sector. These interviews explored how animals are currently kept, stakeholders' attitudes toward animal welfare, and the practical realities of daily care. In addition, attention was given to the purchasing process, including how customers experience different points of sale and how they obtain, or are provided with, information when purchasing a pet.

In chapter 3.1, the applied research methodologies are explained. Chapter 3.2 to 3.4 present a summary of the key findings emerging from the interviews. The findings outlined in these chapters serve as a foundation for identifying underlying frictions and challenges within current sales practices, which are structured into three overarching themes presented in chapter 3.5. These frictions are subsequently used to inform and identify the final design problem, which is presented in chapter 4.

3.1 Methodology

Initial exploration through field visits

To explore the current landscape of rodent and rabbit sales, field visits were conducted at pet stores. These visits provided insight into the diversity of husbandry and sales practices, as well as the practical limitations and challenges faced by stores in their daily operations. In total, six pet stores were visited, including small specialty pet stores, chain stores, a garden centre and the largest pet store in the Netherlands (figure 6). This variety allowed for a broader understanding of how animals are housed and sold across different retail contexts.



Figure 6: Pet store field visits

In-depth exploration through interviews

Semi-structured interviews were conducted to gain a deeper understanding of current husbandry practices and purchasing experiences from the perspectives of different stakeholders. These interviews aimed to uncover underlying issues within the sector of animal sales through qualitative analysis.

The network of stakeholders

Figure 7 visualises the network of stakeholders involved in the pet sales system. The network is structured across three levels (micro, meso, and macro) to clarify the relationships and distribution of responsibilities within the system.

At the micro level, the focus is on direct interactions surrounding the animal. This includes the animal itself, the pet owner, the veterinarian, and the breeder. Breeders vary widely in scale and motivation, ranging from hobby breeders to large-scale commercial operations.

The meso level comprises the organisations that mediate between individual actors and the broader system. This includes pet stores, animal shelters, veterinary clinics, and sector organisations such as Dibevo. These actors shape how animals are distributed, how information is communicated to consumers, and how welfare standards are interpreted and applied in practice. Non-governmental organisations such as Dierenbescherming also operate at this level, influencing practices through advocacy, guidelines, and public awareness.

At the macro level, governmental bodies establish the regulatory framework within which all other actors operate. Advisory councils such as the RDA (Raad voor Dierenaangelegenheden) advise the minister on animal welfare, animal health and ethical issues. The LID (Landelijke Inspectiedienst Dierenbescherming) monitors the welfare of pets kept by private individuals, pet stores and pet boarding facilities. The NVWA (Nederlandse Voedsel- en Warenautoriteit) carries out inspections, particularly at commercial animal-keeping establishments, often focused on food safety.

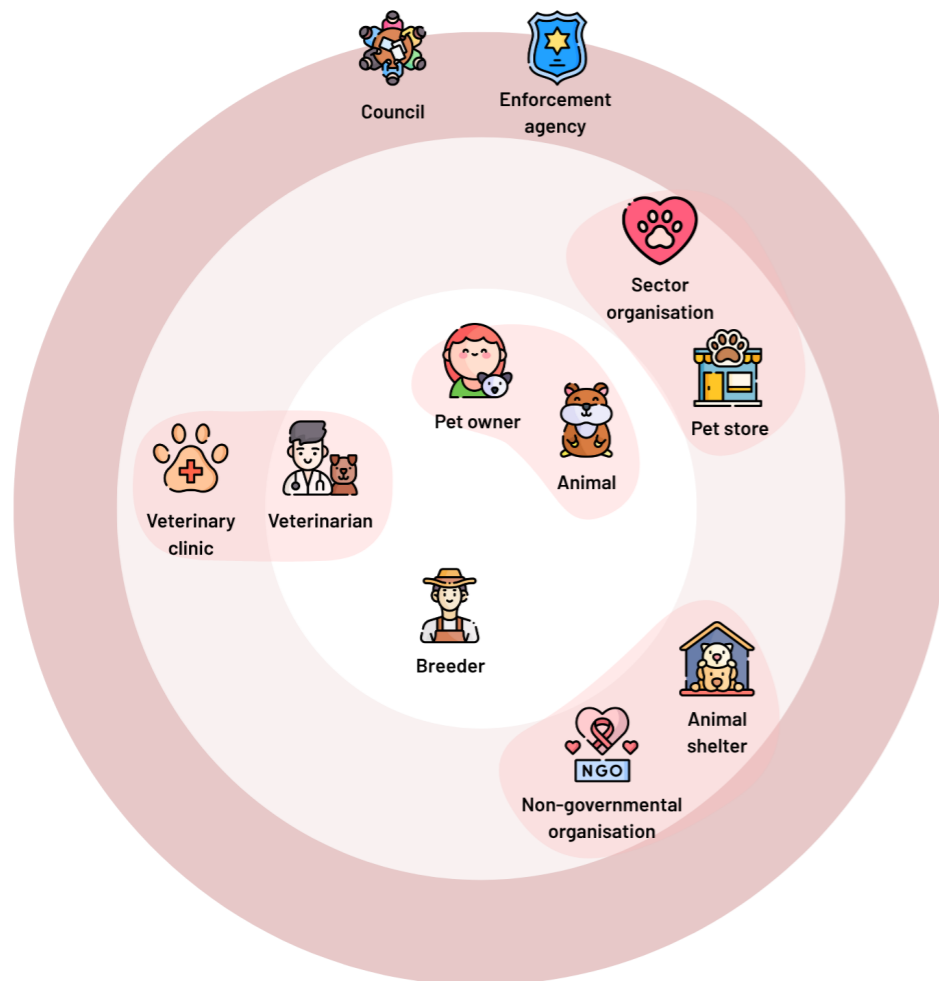


Figure 7: Network of stakeholders

Based on this network, a selection of stakeholders was made to enable an in-depth qualitative analysis while capturing perspectives from different positions within the system. In total, 20 interviews were conducted with stakeholders across these levels, including pet owners, pet store owners, animal shelter representatives, breeders, and a representative from the sector organisation.

Interviewees



To understand how the purchasing process could be improved, it was important to examine both customer experiences and perceptions of animal welfare. Therefore, twelve pet owners were interviewed, of whom six own guinea pigs and six own rabbits. There were no interviews with people owning hamsters, as rabbits are the most commonly kept of the three species and guinea pigs are generally kept more often than hamsters (UK Pet Food, 2026).



As many pet stores are moving away from traditional sales models and some no longer sell live animals, it was also essential to explore how pet stores themselves view current sales practices and their future role. Two pet stores that continue to sell guinea pigs and rabbits were interviewed. In addition, one former pet store employee was interviewed to provide an insider perspective.



Beyond pet stores, animals are also provided through shelters and breeders. To incorporate these perspectives, one animal shelter owner and one animal shelter board member were interviewed. Given the diversity among breeders, one hamster hobby breeder and the chairperson of a breeder's association were included in the research.



The sector organisation Dibevo represents another key stakeholder in the pet sales network. It aims to promote responsible pet sales and animal welfare by providing professional guidance to pet stores. As a result, Dibevo maintains a close relationship with retailers and offers a sector-wide perspective. For this study, a Dibevo employee was interviewed.

Although non-governmental organisations (NGOs) play a significant role in animal welfare advocacy, they were not included in this study to maintain focus on the commercial sale of pets rather than the enforcement of welfare standards.

Conducting and analysing the interviews

Pet owners, animal shelters, and breeders were recruited through guinea pig and rabbit-related Facebook groups. This recruitment method resulted in a sample of participants who are likely more actively engaged with pet care and welfare than the general population of pet owners. As such, this should be considered when interpreting the findings. However, the purchasing locations and prior experience with pets varied considerably among interviewees. Further details on individual experiences and husbandry practices are provided in chapter 3.2.

Pet stores and Dibevo representatives were contacted through field visits and email. The willingness of these stakeholders to participate suggests a potential bias toward openness and engagement with animal welfare topics. Additionally, as only two pet stores were interviewed, the findings do not aim to represent the full diversity of pet retail practices.

The interviews were conducted via phone calls, which enabled efficient data collection within a limited time frame. Interviews lasted between approximately 40 minutes and 1.5 hours and were audio-recorded. All participants provided informed consent prior to participation. An interview guide was used to ensure consistency across interviews while allowing flexibility for stakeholder-specific topics (see appendix A).


The interviews addressed the following themes:



During each interview, notes were taken and subsequently expanded using the audio recordings, from which key findings could be extracted. The following chapters include a summary of these key findings. The findings serve as a foundation for identifying underlying frictions and challenges within current practices, which are analysed in greater depth in chapter 4.

3.2 Current practices of keeping pets

The pet owners were asked about what animals they keep and how they keep them, which gives insight into the pet owner's different experiences with owning animals. As care differs depending on the species, the results are displayed in two separate tables (figure 8 and 9)



| | Animals | | Care | | | Acquisition process | |
|-----------------------|---------|---------------------------------------|----------------|----------------------------------|------------------------|-------------------------------|---|
| | Amount | Experience | Inside/Outside | Habitat set-up | Extra care/nutrition | Acquisition pathway | Main way(s) of informing |
| Rabbit owner 1 | 2 | Had rabbits since they were a child | Outside | 3 connected cages + outdoor run | | Pet store + an acquaintance | Expert websites, social media |
| Rabbit owner 2 | 1 | Dad has a pet store | Outside | Cage + 2 x 3 m outdoor run | Grass, sunflower seeds | Been given | Animal management studies + facebook |
| Rabbit owner 3 | 3 | First time owner, months of informing | Inside | 9 m2 indoor run + free roam | | Small scale breeder | Books, internet, online groups |
| Rabbit owner 4 | 2 | Had a rabbit for 8 years | Outside | Cage + 6 m2 outdoor run | | Animal shelter | Animal care studies |
| Rabbit owner 5 | 2 | Has had rabbits previously | Inside | Indoor run | | Animal shelter | Internet, facebook, talking with other owners |
| Rabbit owner 6 | 2 | Has had rabbits previously | Outside | 2 x 3 m cage + 20 m2 outdoor run | | Pet stores but wants to adopt | Internet, facebook, talking with other owners |

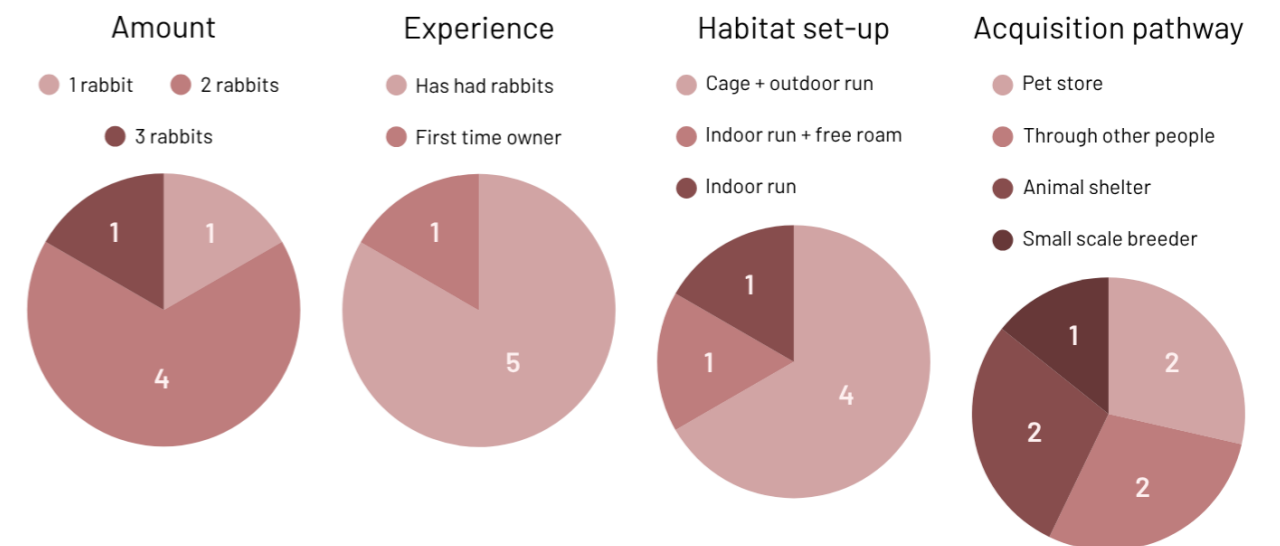



Figure 8: Care practices of the six rabbit owners



| | Animals | | Care | | | Acquisition process | |
|--------------------|---------|---|----------------|--|----------------------------------|--------------------------------------|---|
| | Amount | Experience | Inside/Outside | Habitat set-up | Extra care/nutrition | Acquisition pathway | Main way(s) of informing |
| Guinea pig owner 1 | 2 | Has had guinea pigs previously | Inside | 150 x 80 cm + free roam time in the room | Vitamin C, cut nails and hair | Animal shelter | Internet, social media |
| Guinea pig owner 2 | 2 | Had guinea pigs since they were a child | Inside | C&C cage + free roam time in the room | Types of hay, monitor weight | Animal shelter | Internet, reddit, animal shelter |
| Guinea pig owner 3 | 5 | Dad has a pet store | Outside | Cage + 4 x 6 m run | Natural feed | Animal shelter | Animal management studies + facebook |
| Guinea pig owner 4 | 40 | Has had and sold many guinea pigs | Outside | 2 cages (2,5 x 1,25 m) + 1 cage (1,25 x 62 cm) + 20 m2 run | Vitamin C drops | People bring pigs to them | Internet, vet |
| Guinea pig owner 5 | 4 | Had guinea pigs since they were a child | Inside | Converted closet, 2 stories | Vitamins, greens | Small scale breeder + animal shelter | Internet, vet |
| Guinea pig owner 6 | 4 | First time owner | Inside | 122 x 104 cm cage + free roam in room | Medicine, cut nails, check teeth | Pet store but knows the breeder | Courses, books, internet, talking with vet friend |

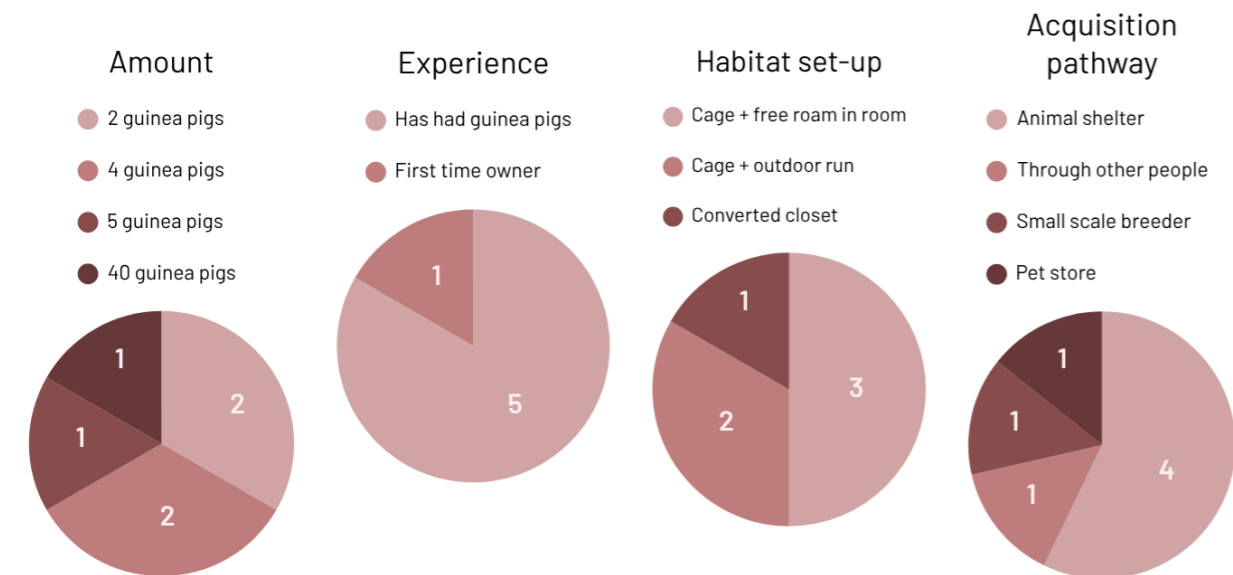


Figure 9: Care practices of the six guinea pig owners

The sample shows substantial variation in the number of animals owned per participant, ranging from single-animal households to one participant keeping as many as 40 guinea pigs. This variation is reflected in the diversity of housing arrangements, which differ considerably in scale and complexity. Despite these differences, all participants, except one, reported providing some form of additional space beyond the primary enclosure, such as free roaming within a room or access to a designated run.

The sample also includes a wide range of acquisition pathways. Both rabbit and guinea pig owners reported obtaining their animals through pet stores, breeders, animal shelters, or private individuals (e.g. acquaintances). This diversity allows for comparison between different purchasing routes and their associated experiences.

It is important to note that the sample consists predominantly of experienced pet owners. For both rabbits and guinea pigs, only one out of six participants had no prior experience with the species. This reflects the recruitment strategy, as participants were primarily reached through species-specific Facebook groups, which tend to attract more engaged and knowledgeable owners. As a result, the sample may overrepresent individuals with a higher level of involvement in animal care and welfare, which should be considered when interpreting the findings.

How should pets be kept?

All stakeholders were asked about how pets should be kept. Responses included for example one animal shelter owner emphasising housing, nutrition and keeping track of weight. Whereas the representative of Dibevo mentioned the 6 leading principles of the RDA.



"An animal should not be stressed and should always have access to high-quality food, hygiene, love and plenty of space."
Representative of an animal shelter

"In an ideal world, every animal would have a large enclosure and live in pairs or groups with good food and care."
Pet store owner

Change in awareness about care

Pet owners were asked about whether they see a change in awareness about care and welfare for small animals. One pet owner said that there are still many people who quickly lose interest in owning rodents in particular. However, other owners see that awareness is growing and people are putting more effort into properly informing themselves before buying an animal. Some pet owners mentioned how their own awareness has changed as well. After owning pets for some time, pet owners absorb information from for instance talking to veterinarians, following online courses and taking part in online forums.



"With rodents, there is often the problem that people lose interest in them later on."
Pet owner

"I gave myself nine to ten months to think it over and I gave myself time to read up on it."
Pet owner

Care in practice

Lastly, when asked about specific care practices, there were some pet owners who expressed that there are some discussions going on about what products to use.



"Water bowls are more in line with the animal's natural behaviour than water bottles."
Representative of Dibevo

"Pellets and snacks are the wild west, especially with snacks you have to be careful, there are many bad products out there that contain too much sugar."
Pet owner

3.3 Different views on selling animals and animal welfare

Views on animal welfare

Mimicking nature

When asked about the meaning of animal welfare, pet owners, as well as pet store owners and one breeder mentioned the animals being able to display natural behaviour and mimicking nature at home.

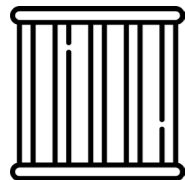


"I think it's important that all animals have the best possible environment, like in the wild. That's difficult to replicate at home, but you can at least ensure they have the right amount of space and food."

Pet owner

Cage sizes

Several pet owners, one breeder and one pet store owner mentioned however that pet stores often do not have enough space for animals to behave naturally, which they think is concerning.



"I agree that the animals do not have optimal space with us, but they are young animals and they are only here temporarily. We are looking into how we can increase the space."

Pet store owner

Lack of regulations

Another concern that was brought up by the representative of Dibevo is that there are not any regulations on cage measurements for stores yet. So even though the pet stores comply with all rules, there is no real guidance for stores as for how the cages have to be set up exactly.



"Pet stores should set a good example by showing the best way to set up the animal's living space, however, it is practically impossible to demonstrate the correct dimensions"

Representative of Dibevo

Stakeholders

Within the sector of animal sales, visions of keeping and selling animals differ quite widely between the different stakeholders. Each of the stakeholders have different roles within the sector, they all have different goals and have to deal with different challenges. A summary of these roles, challenges and goals as well as relations between the stakeholders are visualised in figure 10.

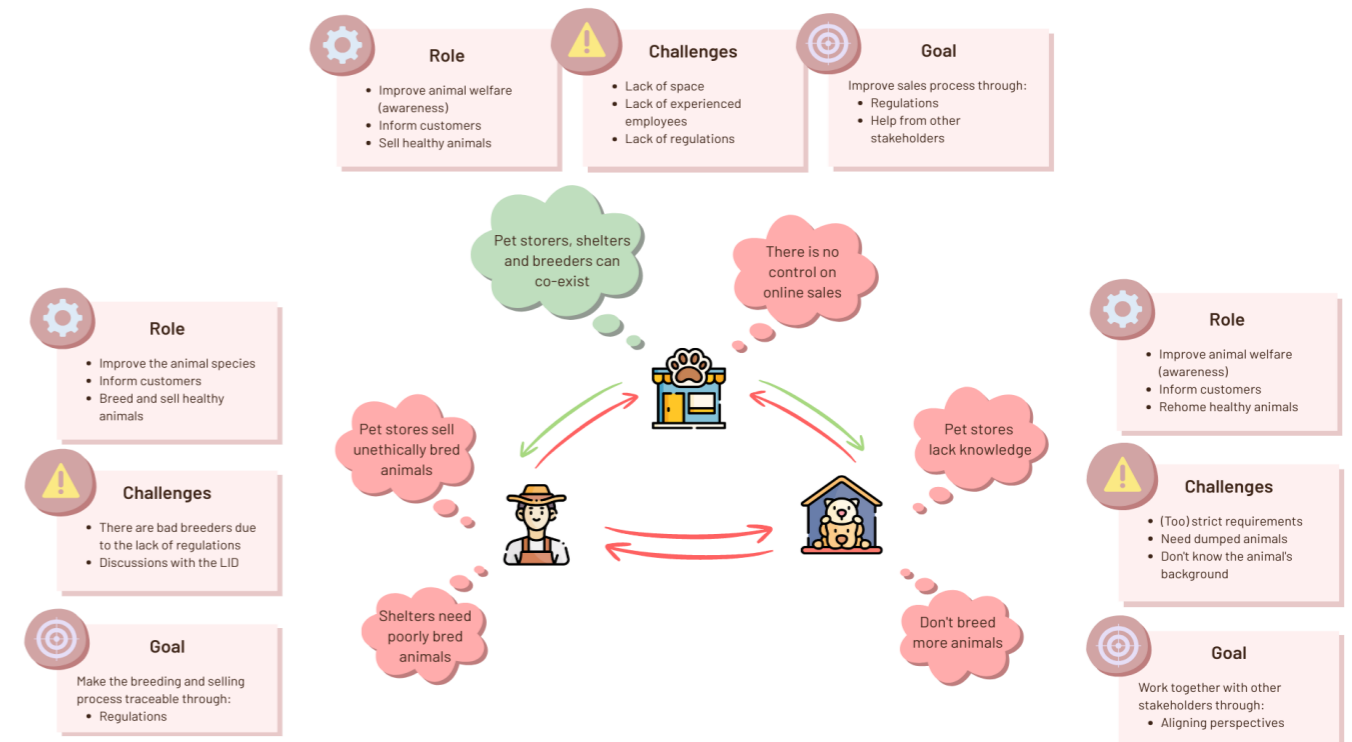


Figure 10: Stakeholder relations, roles, challenges and goals

The main differentiations between visions are about where and how animals are kept, sold and bred. The breeders association representative recognises a difference in how breeders keep their animals versus the average pet owner. One pet store owner exclaimed how although they comply with all the rules, some of their customers still don't agree with how the pets are kept within the store. Within animal shelters there are also some discrepancies, one shelter owner expressed that they don't want to work together with another shelter because every shelter operates differently.

However, there are also instances where stakeholders are already working together to reach shared goals. For example, breeders are working together with food suppliers to prevent sicknesses and are providing animals and knowledge to pet stores. Additionally, some pet stores are working together with animal shelters to make sure that abandoned animals could get a home more easily.



"We often encounter differences during brainstorming sessions between breeders and the LID, especially regarding cage sizes, but it is gradually improving."

Breeder

"It is best if they can refer customers to each other, which would be possible then because they share the same way of thinking, and this also creates more trust for the customer."

Representative of Dibevo

3.4 The process of purchasing an animal

The business behind selling animals

Because the animals are sold for relatively little money compared to the costs of care, housing and vet bills, selling animals is not profitable for pet stores, animal shelters or breeders.



"Most of the revenue comes from the range of products for dogs and cats, which always need new items, the revenue does not come from rodents."
Representative of Dibevo

Although most pet sellers do not earn money from selling animals, it is good to get an understanding of how the system works and where the animals actually come from. Figure 11 shows an overview of the money and product (animal) flow between the stakeholders. In the figure, large scale breeders and wholesalers are also depicted. These stakeholders have not been integrated within this research. Therefore it is not known whether these stakeholders are generating profit from the sales of animals or not.

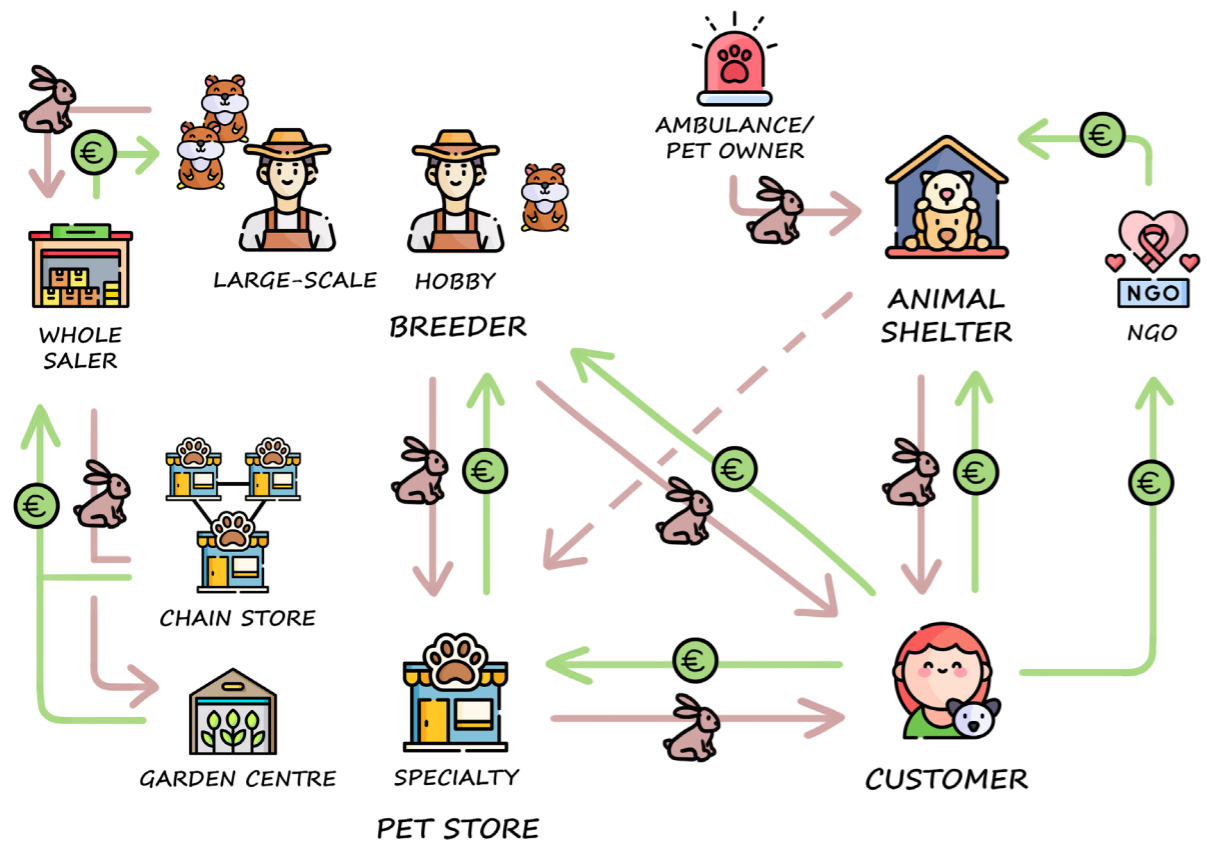


Figure 11: Overview of money and animal flow between stakeholders

The reality is that there are bigger pet stores and garden centres out there that get their animals from wholesale breeders. However, one of the pet stores that was interviewed gets their animals from hobby breeders they know personally, while the other pet store breeds the animals themselves.

The rehoming process

Not only the visions between stakeholders differ, the way that they inform customers and sell/rehome animals differs as well. Figure 12 shows an overview of these distinctions for each interviewed pet provider.

Interviewees were asked whether they perceive a balance between the rehoming/sale of animals and the safeguarding of animal welfare. This question addresses a key tension within the system, as ensuring appropriate care during the rehoming process can be resource-intensive, while financial returns (if present at all) are often limited (see the next page for more information about this).

| | Background | | Sales process | | | | |
|----------------|-----------------------|-----------------------|--|--|--|---|--|
| | Position | Experience | Pets | Main way of informing customers | Role within the sales process of pets | Balance: sales vs welfare | |
| Pet store | Pet store 1 | Store owner | Own since 2016, worked there since 2000 | Rabbits, rodents, reptiles, fish and birds | A long talk in store and answering questions via text | Keep up animal welfare by giving the right advice | "Good, we keep welfare in mind while selling" |
| | Pet store 2 | Store owner | Owned for 33 years | Rabbits, rodents, reptiles, fish and birds | Giving honest information and asking questions | Giving advice and meeting regulations and standards | "Good, I don't care about money" |
| | Ex-pet store employee | Employee | Worked there for 2-3 years | Rabbits and rodents | Give detailed information, never refuse to sell a pet | | "Pets should have enough space in store" |
| Animal shelter | Animal shelter 1 | In the board | Previously owned a shelter | Birds, rodents, rabbits | Give info, ask photo's, ask questions, check up after adoption | Support customers in providing proper care and housing | "No balance, selling pets costs money" |
| | Animal shelter 2 | Shelter owner | Had guinea pigs since they were 12 years old | Guinea pigs | Info brochures and moments, fill out an adoption form | Take care of guinea pigs and provide a good home for them | "Terms and conditions are needed" |
| Hobby breeders | Hobby breeder 1 | Breeder | Breeding for 8 years (did pet related studies and internship in a pet store) | Hamsters | Refer customers to website for info, ask photo's of their cage | Make sure people get healthy hamsters that have a good past | "Pet stores lack knowledge and profit from pets" |
| | Hobby breeder 2 | Chair of breeder club | Involved with legislation and communication | Guinea pigs | Refer pet owners to vet (articles) for info and advice | Make sure the population of guinea pigs stays healthy | "No balance for hobby breeding, no profit" |

Figure 12: Stakeholders' sales processes

The balance between rehoming animals and animal welfare

The interviewed pet store owners did not perceive a conflict between selling animals and maintaining their welfare, despite also indicating that animal sales generate little to no direct profit. One possible explanation for this is that animals serve an indirect role within the retail environment, for example by attracting customers or supporting the sale of related products. As this was not explicitly stated by participants, this interpretation remains tentative. Alternatively, the absence of a perceived conflict may reflect how welfare is evaluated in pet stores. If animals are seen as being housed only temporarily, or if current practices are considered sufficient, potential welfare limitations may be viewed as minimal or acceptable.

In contrast, animal shelter representatives and breeders generally indicated that such a balance is difficult to achieve. From their perspective, meeting welfare standards throughout the rehoming process requires significant time, space, and financial resources, without necessarily generating corresponding income. As a result, the provision of high welfare standards is often experienced as being in tension with economic sustainability.



"The balance is good, animal welfare and a pet store go hand in hand, we generate enough revenue, we clearly show what we are doing in terms of animal welfare."

Pet store owner

Lack of knowledge and space in pet stores

One breeder, as well as some pet owners, expressed their concern for the lack of knowledge in pet stores. This issue is also felt by pet store owners themselves, as finding people who are skilled in informing customers, as well as knowledgeable in pet care, are hard to find. Another issue that pet store owners have to deal with is a lack of space in the store. A motivation to keep selling animals in stores is that it is controlled, in contrast to selling animals online for example.



"Finding high-quality people is difficult; to be able to give advice, you need experience and intrinsic motivation. Running a pet store is a demanding profession."

Pet store owner

"There will always be another place to sell animals besides the shelter, so you would rather have it be controlled."

Representative of Dibevo

Preferences for ways to acquire an animal

Pet owners have different preferences for ways to acquire their animals, as each pet provider operates a bit differently. Experienced pet owners mention how they prefer animal shelters, as they want to help an animal out and give them a loving home. While other pet owners prefer a breeder, they want to know the background of the animal. However, there are some discussions about the ethics of breeding, as the animal shelters are full of animals already.



"I would prefer to adopt rabbits from shelters, but many shelters have requirements that I disagree with."

Pet owner

"A breeder is ideal, at least they check the conditions, what kind of enclosure they are going into and the reason behind the purchase. The store just sells to anyone who wants to buy."

Pet owner

Introducing regulations for pet stores

As mentioned previously, there are not any regulations on cage measurements for stores yet. Even though the LID carries out checks regularly, pet stores have no definitive rulebook to follow, making it difficult for them to determine whether their level of animal care is sufficient or not. The representative of Dibevo thinks that new regulations have to be set up, preferably by an independent sector with both practical and scientific knowledge.



"If new regulations are introduced, stores will need to invest and have the space available, so stores will need to be taken along in small steps."

Representative of Dibevo

Informing customers

Pet owners were asked how they informed themselves, or were informed by outside sources, before, during and after purchasing an animal. Figure 13 shows an overview of this.

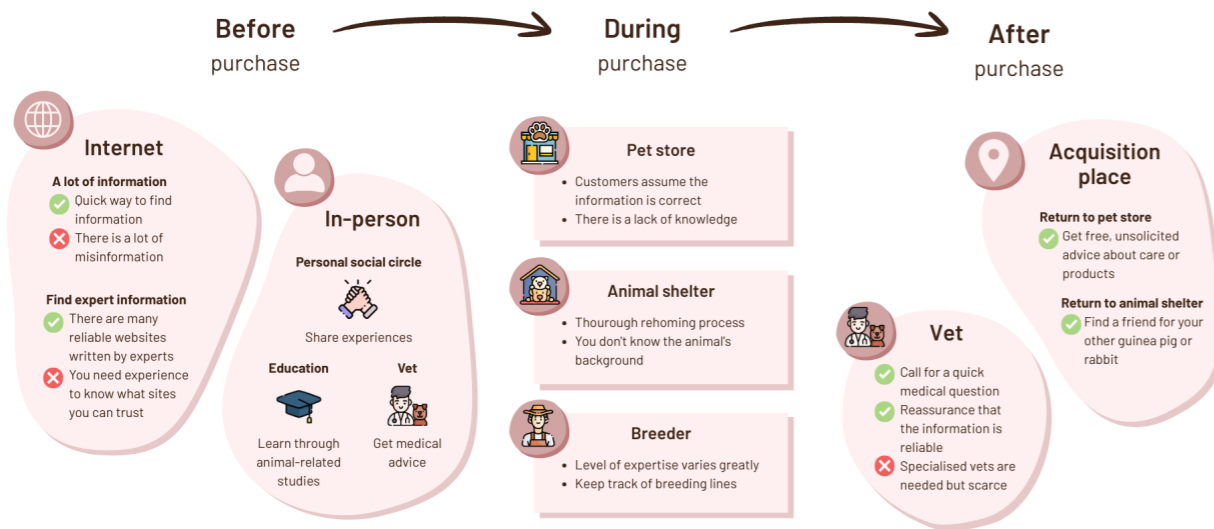


Figure 13: Ways of informing before, during and after purchase

Informing before and after purchase

Pet owners have a lot of different ways of informing themselves, of which the internet might be one of the most troublesome. Although the internet is full of information, pet owners mention that a lot of the information is subjective or just not correct. Making it extra difficult for pet sellers to refute misinformation and inform customers correctly. More experienced pet owners see that it takes experience and knowledge to find correct (expert) information.



"Sometimes it's difficult because websites say different things, you really have to dig deep and try to find scientific information."

Pet owner

"If a customer has found something on the internet that is incorrect, you have to refute it."

Representative of Dibevo

Personal contact

Personal contact with the pet provider is often appreciated during the purchasing process. Pet owners mentioned that most animal shelters and breeders inform them extensively about care practices. Most of the time pet owners are able to ask the pet providers as many questions as they want as well. However, for most pet owners, the preferred way of obtaining trustworthy information about pet care is by personally contacting their veterinarian.



"The adoption process was good. I was allowed to look around and ask questions. They were very open and had nothing to hide. They check what you know and don't just give the animals away."

Pet owner

"I obtain information from reputable sources, the vet is an important resource, and it's great that they can be reached by telephone."

Pet owner (pet from breeder)

3.5 Themes and frictions

The key findings derived from the exploratory field visits and interviews were synthesised and structured into three distinct themes, each addressing a different aspect of the animal sales sector (figure 14).

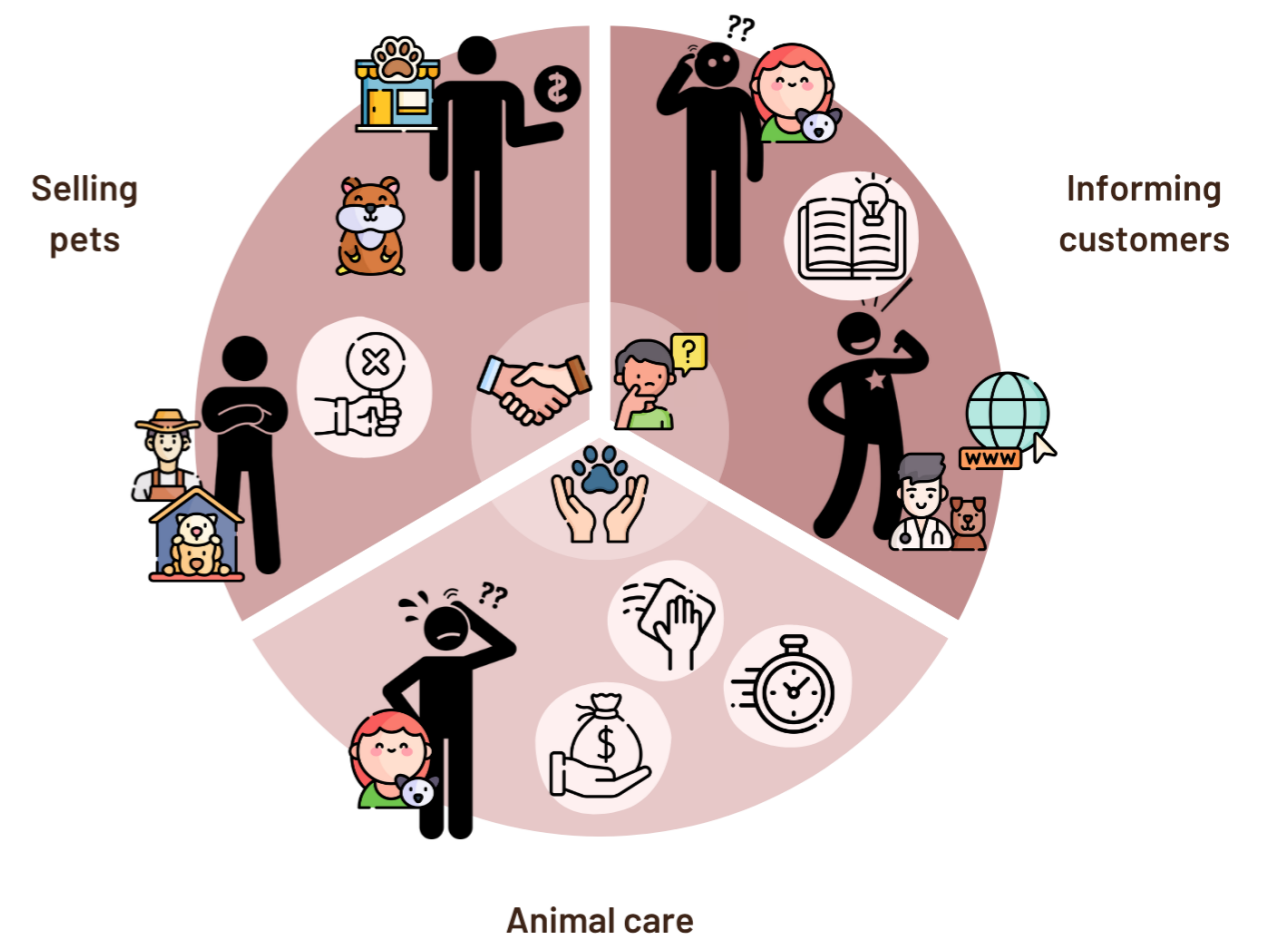


Figure 14: Three themes of animal sales

Within these themes, four key frictions are identified. These frictions are subsequently translated into four corresponding design problems and design opportunities. Each opportunity addresses a specific part of the sector and has the potential to benefit different stakeholders involved in the sale and care of animals.

Key findings on animal care

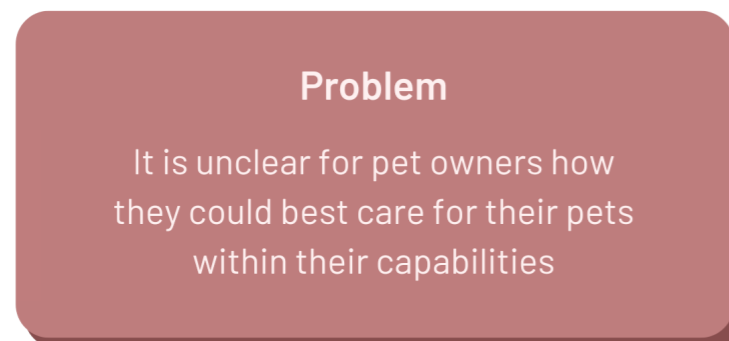
The first theme highlights findings related to animal care (figure 15).



Figure 15: The theme of animal care

From the interviews, it was concluded that there is a general agreement that pets must be kept in a way that provides them with everything they need to be able to live a good life. However, what this means exactly depends on who you ask. Pet owners all have different preferences, budgets, time for cleaning, etc., as well as abilities to provide space for their pets. The ability to provide enough space for an animal is important, because animals need a certain amount of space and enrichment to be able to express natural behaviour.

Combining this with the fact that there are no official guidelines or standards for pet care, the following problem was formulated:



With this problem in mind, the following friction arose. On the one hand, pet owners search for information on official, trustworthy sites written by experts and veterinarians. But at the same time, pet owners also like to get their information by simply asking the vet or talking to other pet owners (figure 16).

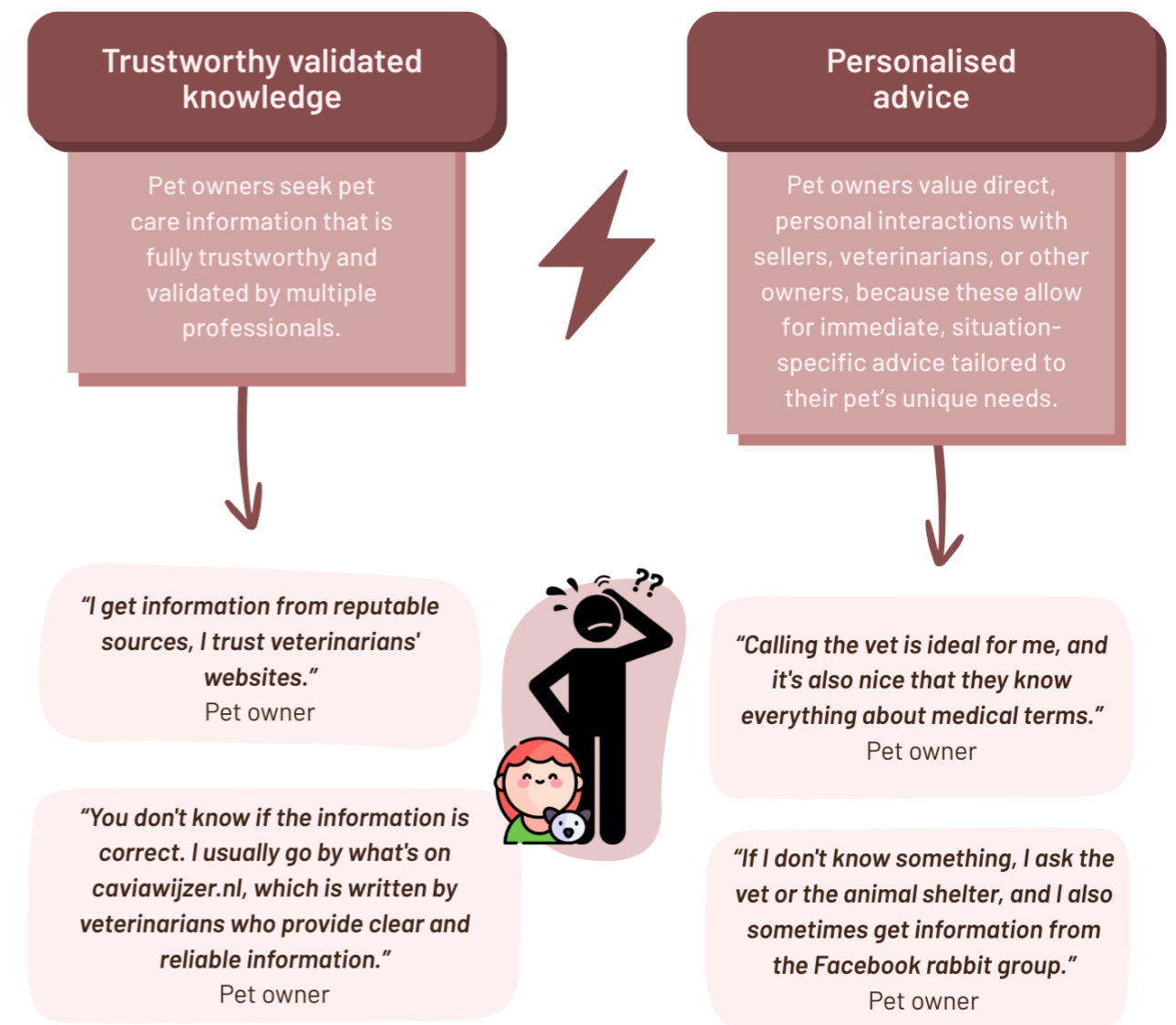


Figure 16: The friction of animal care

Key findings on stakeholder views

The theme of selling pets highlights how within the sector of animal sales, visions between pet sellers differ (figure 17).

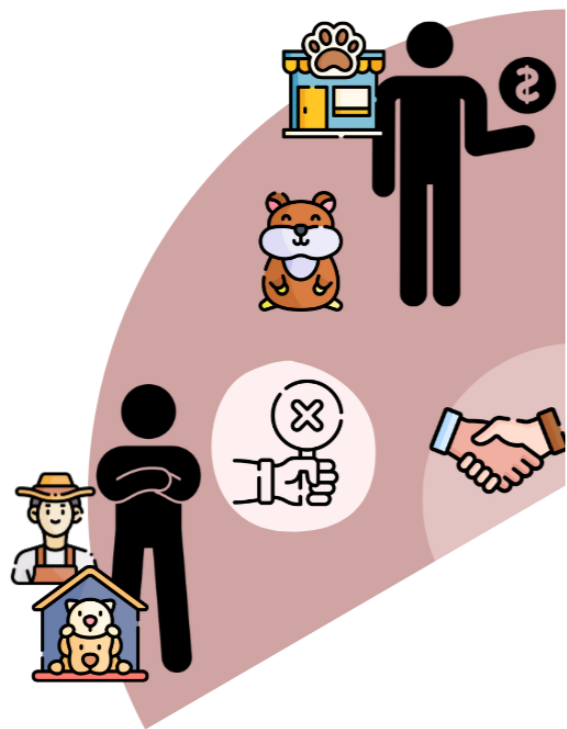
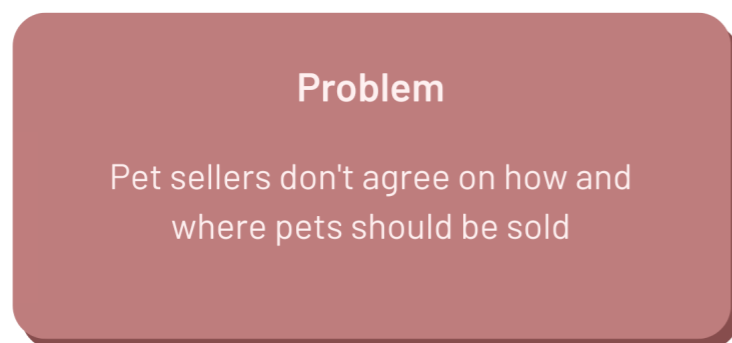


Figure 17: The theme of selling pets

Many pet stores stopped selling pets, as keeping pets in stores is too much work and not profitable, however some pet stores still want to keep selling them. Other pet providers do not agree with that, as they think that stores sell animals at the expense of the animal's welfare. However, although visions differ between pet providers, as they all have their own experiences and way of operating, they all share the same goal of keeping up animal welfare and informing customers correctly and effectively.

From this, the following problem was formulated:



Here, it is apparent that pet providers all care about animal welfare. At the same time however, pet providers criticise each other on welfare and selling practices. Meanwhile, pet stores think they should work together with other pet providers (figure 18)

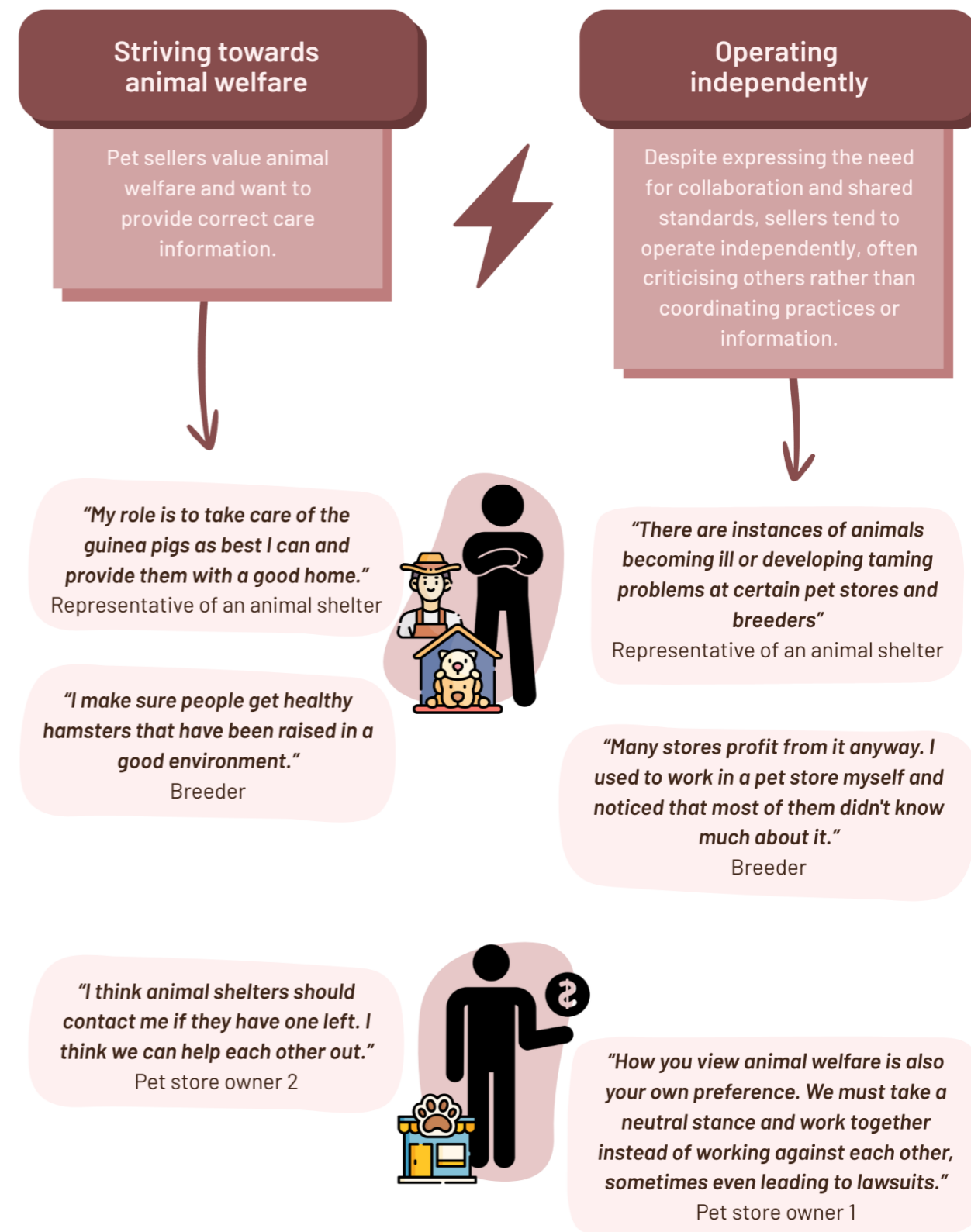


Figure 18: The friction of stakeholder views

Key findings on selling pets in store

Apart from differing stakeholder views, there is another issue within the theme of selling pets (figure 19).



Figure 19: The theme of selling pets

Pet stores still want to sell pets in their store, as it helps with giving personal advice in a visual way. Having pets physically in the store helps with getting customers to understand and implement the advice that is given. However, for pet store owners it is difficult to determine how to properly sell pets in their store, as there is still no guidance, regulations or standards for keeping and selling pets in pet stores.

Another issue also came to the surface, because to encourage an animal's natural behaviour, it is required to imitate nature as closely as possible by providing enough space and enrichment. However, pet stores often do not have much space to keep the pets in large cages in the store.

Leading to the following problem:



This friction highlights how although pet stores want to keep selling animals, they also have an exemplary role. However, pet stores need space and expertise to set a good example for customers (figure 20).



Figure 20: The friction of selling pets in store

Key findings on informing customers

The last theme focuses on how and where customers are informed about buying an animal and caring for animals (figure 21).



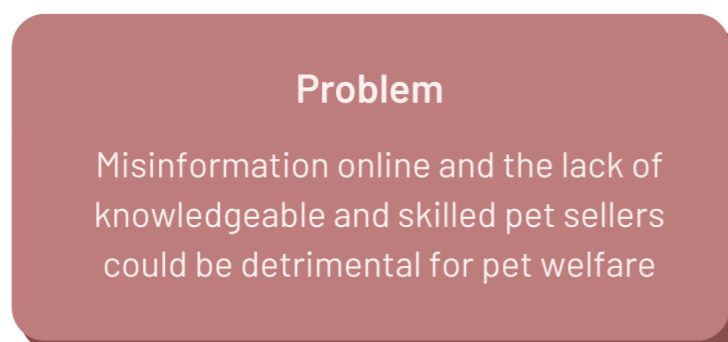
Figure 21: The theme of informing customers

From the interviews, it became apparent that general awareness and perceptions of animal welfare have already changed for the better, and are still rapidly changing. But the time and money it takes to take care of animals is still often underestimated, which results in many animals still being dumped and having to be taken in by shelters.

On top of that, although the internet is full of information, a lot of the information is subjective or just not correct. It takes experience and knowledge to find correct (expert) information (preferably provided by vets). It can be difficult for pet providers to refute misinformation and inform customers correctly.

This highlights another finding from the interviews. Although pet stores think that selling pets and giving advice through stores is needed to prevent pets being sold online and to keep control on giving the correct advice, many customers said to avoid advice from pet stores as they have experiences of not being properly informed by pet stores.

From this, the following problem was formulated:



This problem highlights the issue of people working in pet stores because they love animals, as they may lack the necessary experience to provide customers with the correct information. Some pet owners who were interviewed said that they had experienced being given incorrect information in pet stores. Pet stores can attest to this, as they find it difficult to recruit people who are both knowledgeable about pet care as well as skilled at selling pets (figure 22).

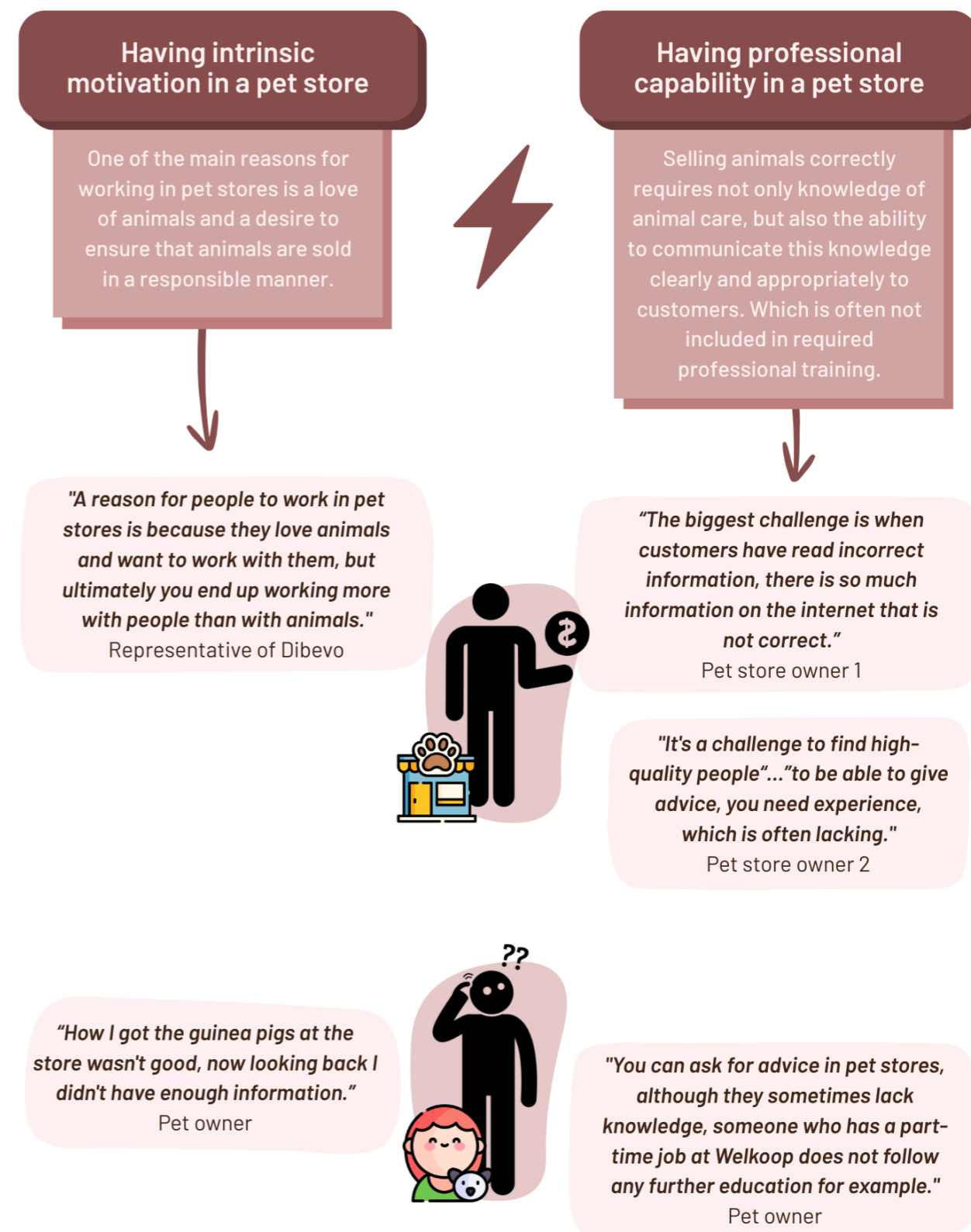


Figure 22: The friction of informing customers

Problem definition

Building on the exploratory phase, this stage adopts a more analytical approach. The data collected through field visits and interviews was analysed and synthesised to identify underlying issues within the pet sales sector.

This process involved clustering insights into themes and examining relationships and tensions between them. These tensions revealed key problem areas and opportunities, which informed the formulation of the final design problem.

Chapter 4

The design problem

All collected data was synthesised and structured into three overarching themes, within which four key frictions were identified. For each of these frictions, corresponding design problems and design opportunities were formulated.

Subsequently, the initial assignment was revisited to define a refined project goal. This goal was used to evaluate the four identified design opportunities, ultimately resulting in the selection of one final design direction. This direction forms the basis for the exploration of potential solutions in the following phase.

Chapter 4.1 describes how, from the four frictions that were established, four design problems and design opportunities were formulated and one was chosen. In chapter 4.2, the choice for the final design problem and design opportunity is further explained.

4.1 From frictions to design opportunities

In the previous chapter, four key frictions within the system of animal sales were identified. These frictions highlight underlying issues that require intervention. To translate these insights into actionable design directions, each friction was reframed into a corresponding design problem and opportunity (figure 23). From these, one is selected as the starting point for the remainder of the project.

The formulation of design problems and opportunities was based on an analysis of the identified frictions in combination with supporting interview data. By revisiting key quotes and contextualising them within each friction, the issues were reframed in a way that could inform meaningful and actionable design opportunities (see appendix B).

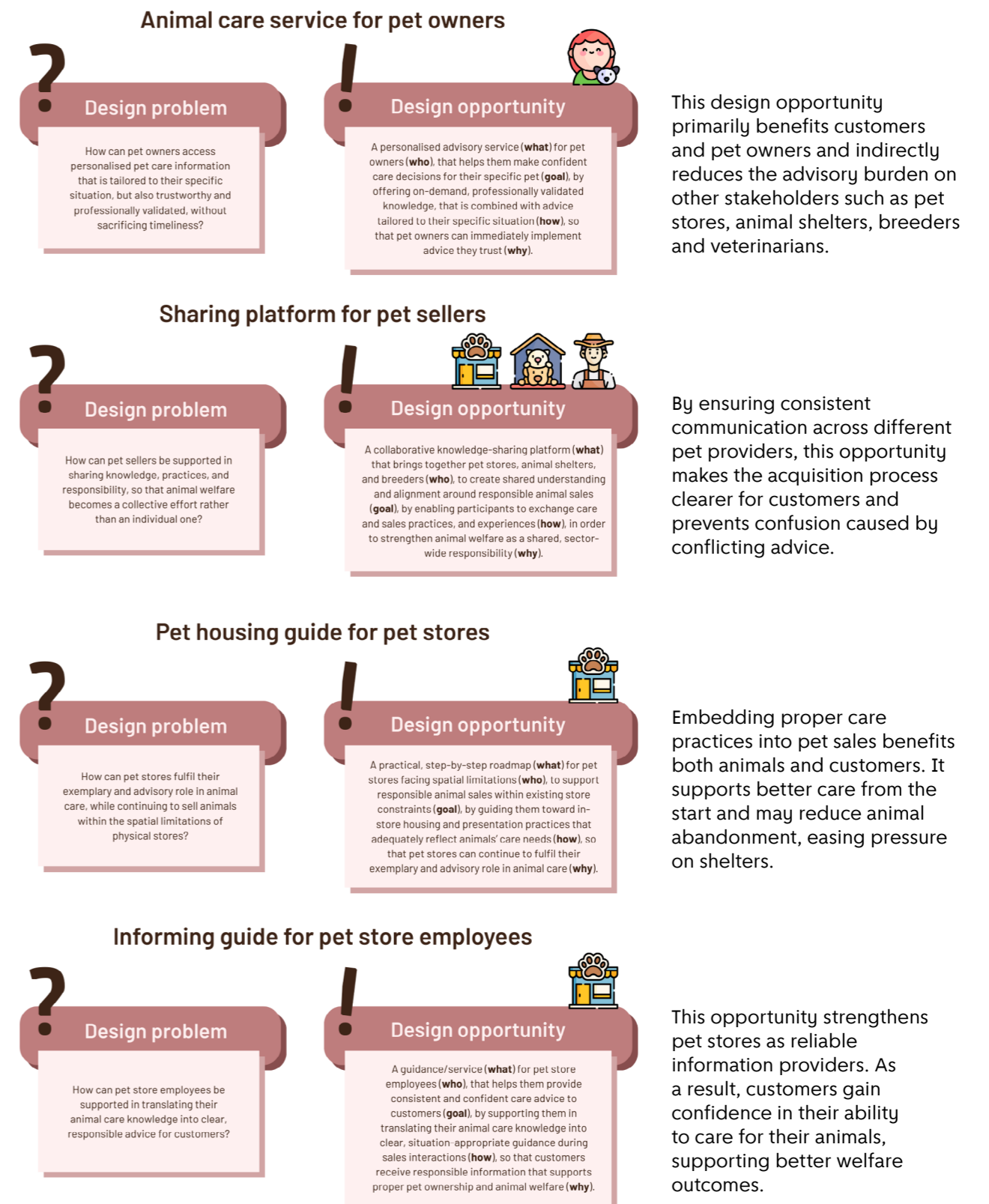


Figure 23: Design problems and opportunities

Before selecting a final design direction, the overall project goal was revisited and refined (figure 24). Drawing on both the initial assignment and research insights, it was concluded that the demand for pets will persist, and pet stores will continue to sell animals. Consequently, the focus of this project is not to eliminate animal sales, but to ensure that they are conducted in a responsible and animal-friendly manner. Ultimately, this aims to enable pet owners to provide proper care for their animals and contribute to improved animal welfare.

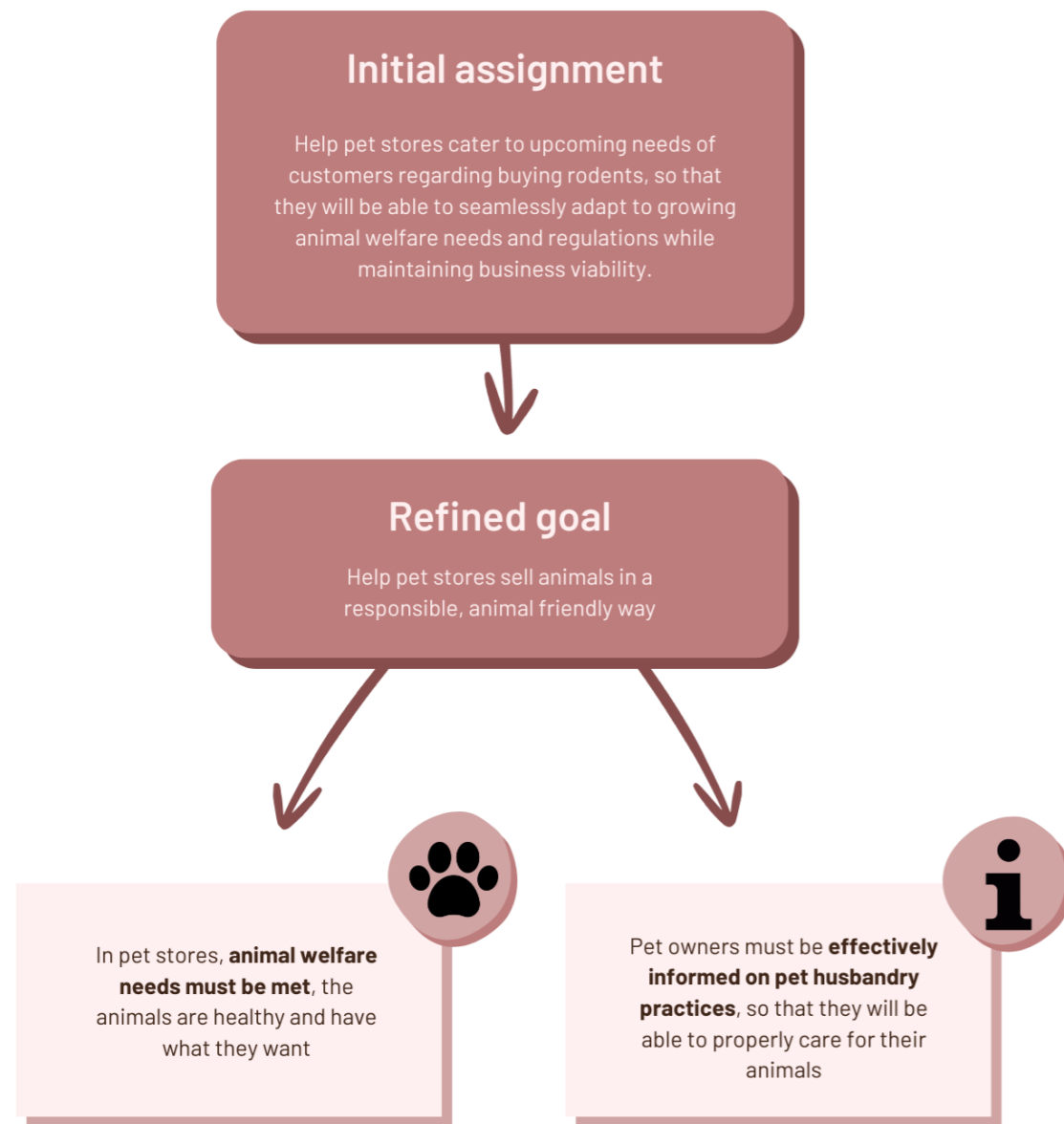


Figure 24: Refined goal

Based on this refined goal, two key design conditions were established. First, the design must improve animal welfare in pet stores. The research revealed that the animals should be healthy and have what they want, both in pet stores and with pet owners at home. Second, the design must effectively inform pet owners about proper husbandry practices, enabling them to care for their animals appropriately.

With these conditions in mind, the four design opportunities were systematically assessed (figure 25).

| | Animal welfare needs are met in pet stores | Pet owners are effectively informed | Conclusion |
|--|--|--|---|
| Animal care service for pet owners | The service is not catered to pet stores, so there is no influence on animal welfare in stores | The service directly influences pet owner's knowledge and animal care, but it does not influence how pet stores inform their customers | Although the design opportunity directly influences how pet owners are informed, therefore improving their pet's welfare, it does not help pet stores improve animal welfare in the store |
| Sharing platform for pet sellers | The platform helps pet stores get a better understanding of animal welfare, but improving animal welfare in stores is not its main focus | The platform does not inform pet owners about husbandry practices | Although the design opportunity makes animal welfare a collective responsibility, which will in the end improve animal welfare overall, it does not provide information to pet owners |
| Pet housing guide for pet stores | The guide directly helps pet stores improve animal welfare in the store, even when they might be facing spatial limitations | The guide directly influences how pet store customers are informed on husbandry practices, as it helps pet stores present the right husbandry example | This design opportunity has a positive influence on animal welfare in stores, as well as informing customers effectively about husbandry practices |
| Informing guide for pet store employees | The guide helps employees get a better understanding of animal welfare, but improving animal welfare in stores is not its main focus | The guide directly influences how pet store customers are informed on husbandry practices, as it helps employees effectively provide responsible information | Although the design opportunity improves how pet owners are informed, it does not focus on helping pet stores improve animal welfare within the store |

● Potential design could **directly** meet the condition
● Potential design could **indirectly** meet the condition
● Potential design could **not** meet the condition

Figure 25: Assessing the four design opportunities

Based on this assessment, the design opportunity 'Pet housing guide for pet stores' was selected as the most promising. The following chapter explains this choice.

4.2 The final design direction

From the assessment of the four design opportunities, the design opportunity 'Pet housing guide for pet stores' fits the goal of the project the best. The friction of this design opportunity consists of the following two components.

Selling animals

Firstly, the design opportunity focuses on stores that will keep selling animals. Although only two stores were interviewed, they both indicated that they want to keep selling animals because they want to work with animals, that is the whole reason they have the store in the first place. On top of that, the animals in the store allow them to give advice effectively and sell products more easily. Another argument to keep selling animals in stores is that the sales process is controlled. Stores are public places where animal welfare organisations can keep an eye out on welfare practices, so that bad situations can be prevented. This control can not be guaranteed when animals are sold through individual breeders for example.

"There will always be another place to sell animals besides the shelter, so you would rather have it be regulated."

Representative of Dibevo

"If things go wrong, it is immediately apparent; if pet stores were to stop selling animals, this would no longer be visible, because after all, the amount of people that keep pets will not be declining."

Representative of Dibevo

Set a good example

Secondly, customers coming to pet stores expect the store to be knowledgeable and give the right husbandry example. However, to set a good example of housing practices, space is needed. As established in chapter 2, even small animals need a lot of space (for example two rabbits or guinea pigs need at least 0.9 square metres of space). This space takes up valuable retail space that stores need for products, among other things. There is already a trend of more and more pet stores discontinuing the sale of animals, partly because of this reason (AnimalsToday, 2018; Partij voor de Dieren, 2013; Omroep West, 2013). However, as established, there are still pet stores that want to keep selling animals, and because of the limited amount of space, it will be difficult for them to set a good example for proper housing practice. Therefore, a solution needs to be found.

"We no longer sell animals. Ever since you need certificates to sell animals, we realised that animals cannot actually be kept properly in the store."

~ Pet owner, dad has a pet store

"Pet stores should set a good example by showing the best way to set up the animal's living space, however, it is practically impossible to demonstrate the correct dimensions"

Representative of Dibevo

Final design problem and design opportunity

With these two components in mind, the final design problem and design opportunity were established (figure 26).

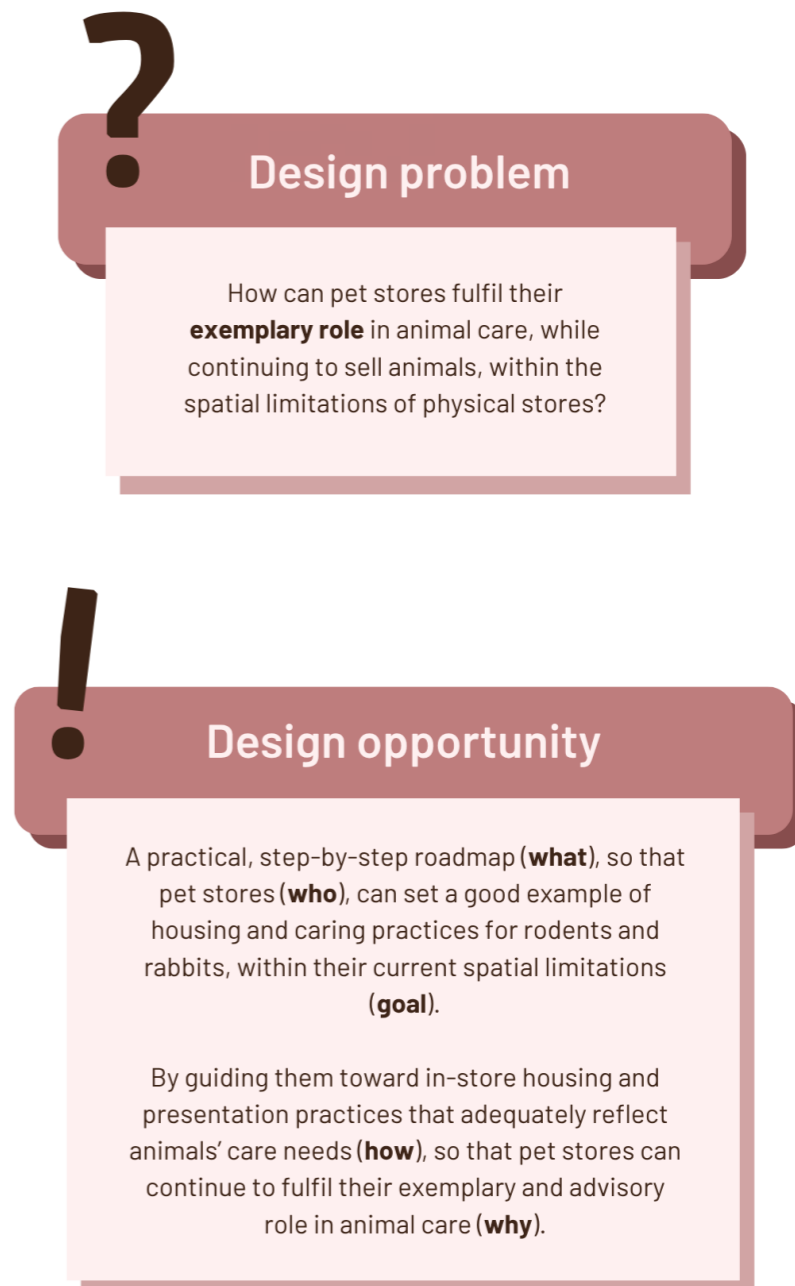


Figure 26: The final design problem and design opportunity

Ideation

In this phase, the defined design problem and identified opportunities were used to explore potential solutions. A wide range of ideas was generated through a combination of co-creation sessions and individual brainstorming.

These ideas were subsequently evaluated using a set of criteria, leading to the selection of the most promising future direction and corresponding concept.

Chapter 5

Designing a strategic service concept

Designing a strategic service concept for pet stores required addressing the previously defined design problem through a structured ideation process. This process combined co-creation sessions with individual brainstorming. Insights from the co-creation sessions served as a foundation for further individual exploration, during which ideas were clustered, refined, and evaluated, resulting in multiple concept directions.

In addition, the co-creation sessions informed the development of evaluation criteria, which were subsequently used to assess the most promising concepts. Based on these criteria, the concepts were consolidated into four distinct future directions. From these, the most suitable direction and its corresponding concept were selected.

Chapter 5.1 outlines the methodology behind the co-creation sessions and individual brainstorming, as well as the development of the evaluation criteria. Chapter 5.2 presents the four future directions and explains the rationale behind the final selection.

5.1 Methodology

Co-creation

To ensure that the ideation process resulted in a concept that is desirable for both pet stores and customers, a co-creation approach was adopted. This approach actively involved pet store representatives, customers and Dibevo in generating ideas to address the design problem.

Following a pilot session conducted with an industrial design student, a total of eight one-on-one sessions were carried out. These included four online sessions and one in-person session with pet owners, two in-person sessions with pet store owners, and one in-person session with the same representative of Dibevo that was interviewed already. The online sessions were conducted via phone calls, while the in-person sessions took place in a library, pet stores, or at the Dibevo office. All participants provided informed consent prior to participation. A structured script was used to ensure consistency across sessions while still allowing flexibility to address stakeholder-specific topics (see appendix C.1).

During the co-creation sessions, participants completed a series of templates designed to elicit both current experiences and future aspirations (see appendix C.2). The structure of these templates was based on the path of expression framework by Sanders and Stappers (2012), which supports the exploration of experiences over time. This framework consists of first letting the participant describe present and past experiences, allowing them to access underlying needs and values, which are the basis for exploring ideal, future experiences.

The framework was implemented through a mind-mapping exercise, followed by an exploration of the current and desired situations regarding the sale of animals. These activities not only stimulated creative thinking, but they also provided insight into the needs and values of pet stores, customers, and Dibevo, which were subsequently translated into design criteria.

Idea generation was guided by two “How might we” questions, which encouraged participants to propose creative solutions. Participants were also encouraged to build on previously mentioned ideas, resulting in a broad range of potential directions.

Individual brainstorming

Following the co-creation sessions, an individual brainstorming phase was conducted to further develop the generated ideas and explore more unconventional directions. Figure 27 provides a schematic overview of this process.

First, all ideas from the co-creation sessions were clustered based on the type of value they add to the animal sales process (see appendix D.1). Four initial categories were identified: (1) improving animal welfare in stores; (2) enabling stores to demonstrate proper husbandry practices; (3) improving how customers are informed about animal care and; (4) improving the overall animal sales process. Additional ideas were generated individually using the same templates as in the co-creation sessions, resulting in a broader and more diverse idea set.

Next, these ideas were re-clustered around more specific design intentions (see appendix D.2). This resulted in three refined categories: (1) facilitating learning about animal care and home habitat setup; (2) demonstrating appropriate care through in-store examples and product use; and (3) improving the sales process through additional services. Within each of these clusters, related ideas were combined and synthesised into twelve distinct concepts (see appendix D.3)

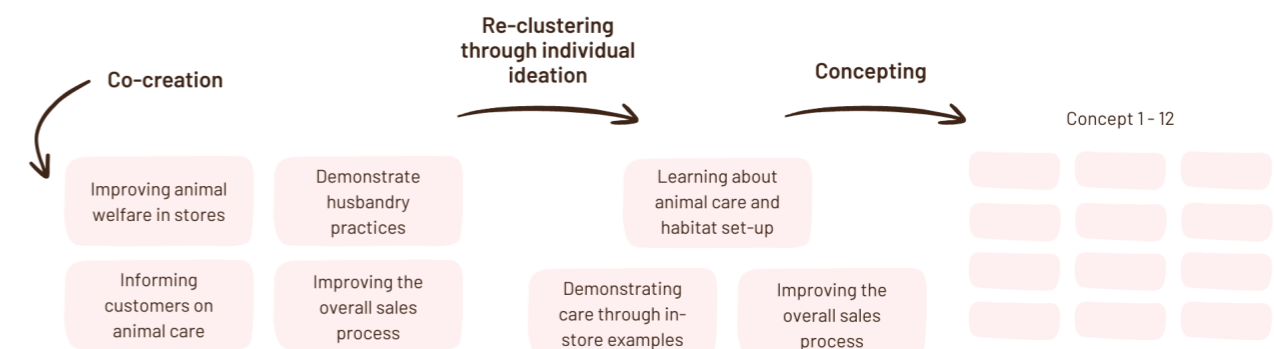


Figure 27: Individual brainstorming process

Evaluation criteria

To identify the most promising concepts, all concepts were evaluated using two comparison frameworks: desirability-feasibility and desirability-viability (see appendix E.1). Plotting the concepts along these axes enabled a structured assessment of their potential value and practicality. Based on this initial evaluation, four concepts were selected for further development. Clear definitions of desirability, feasibility, and viability were established to ensure consistency in this assessment (see figure 28).

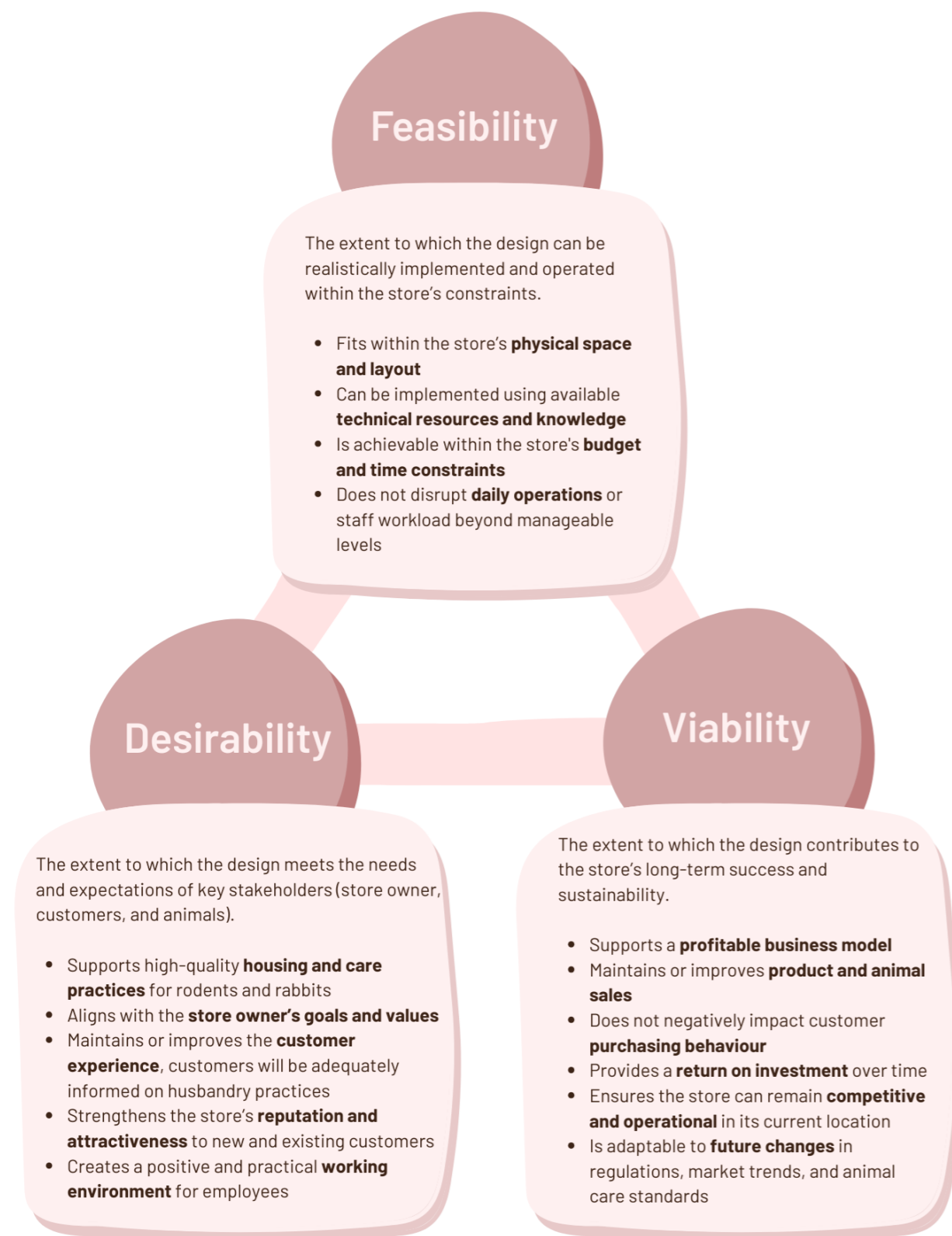


Figure 28: Feasibility, desirability and viability definitions

To determine the most suitable concept of the four selected concepts, a set of evaluation criteria was established. These criteria were developed by analysing the co-creation sessions and extracting the needs and values of pet stores, customers, and Dibevo. These needs were then combined with the refined project goal outlined in chapter 4, resulting in the final evaluation framework (see figure 29).

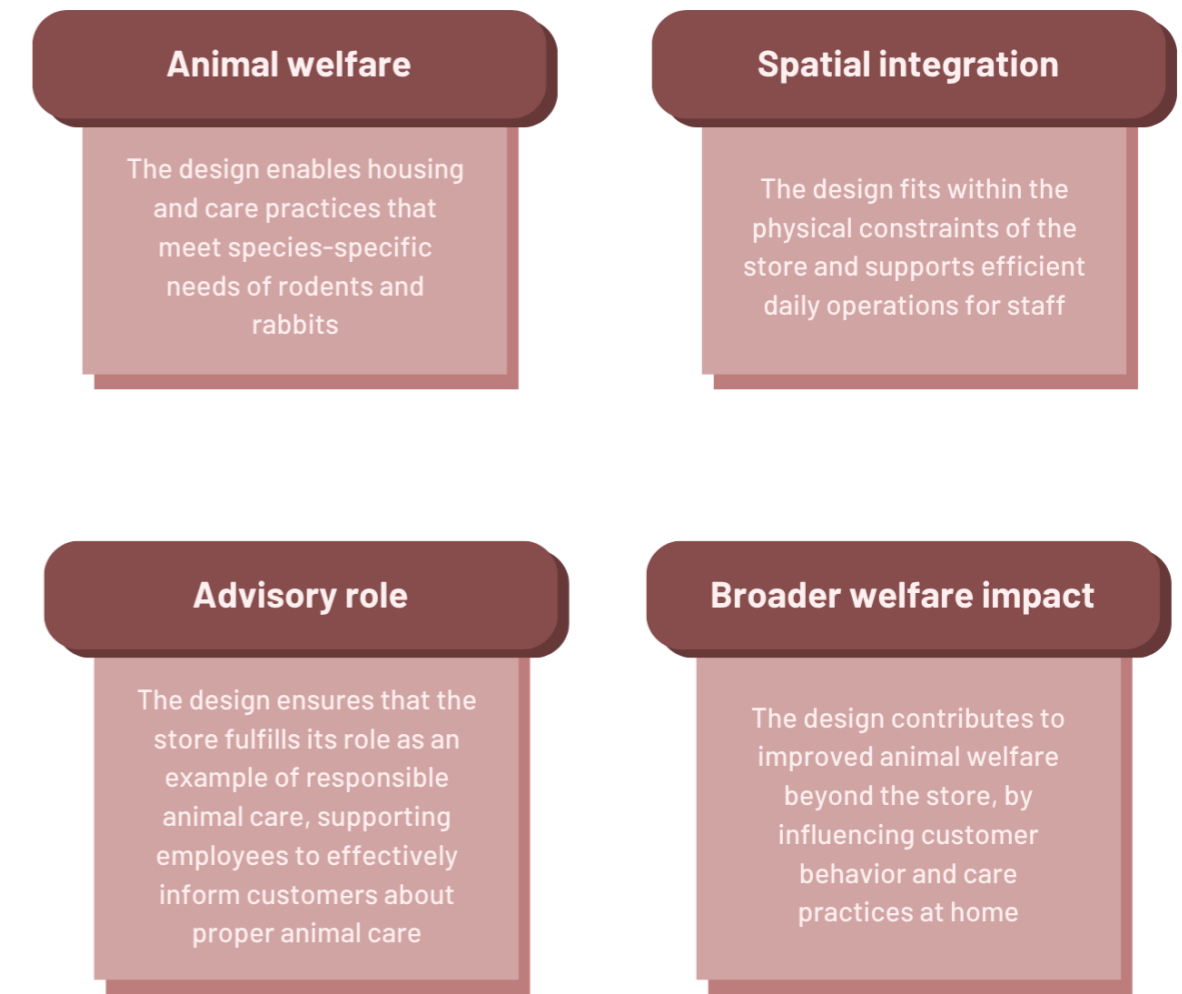


Figure 29: Evaluation criteria

5.2 The desired future

Four future directions

The four most promising concepts were structured into four distinct future directions, based on a two-axis framework (figure 30).

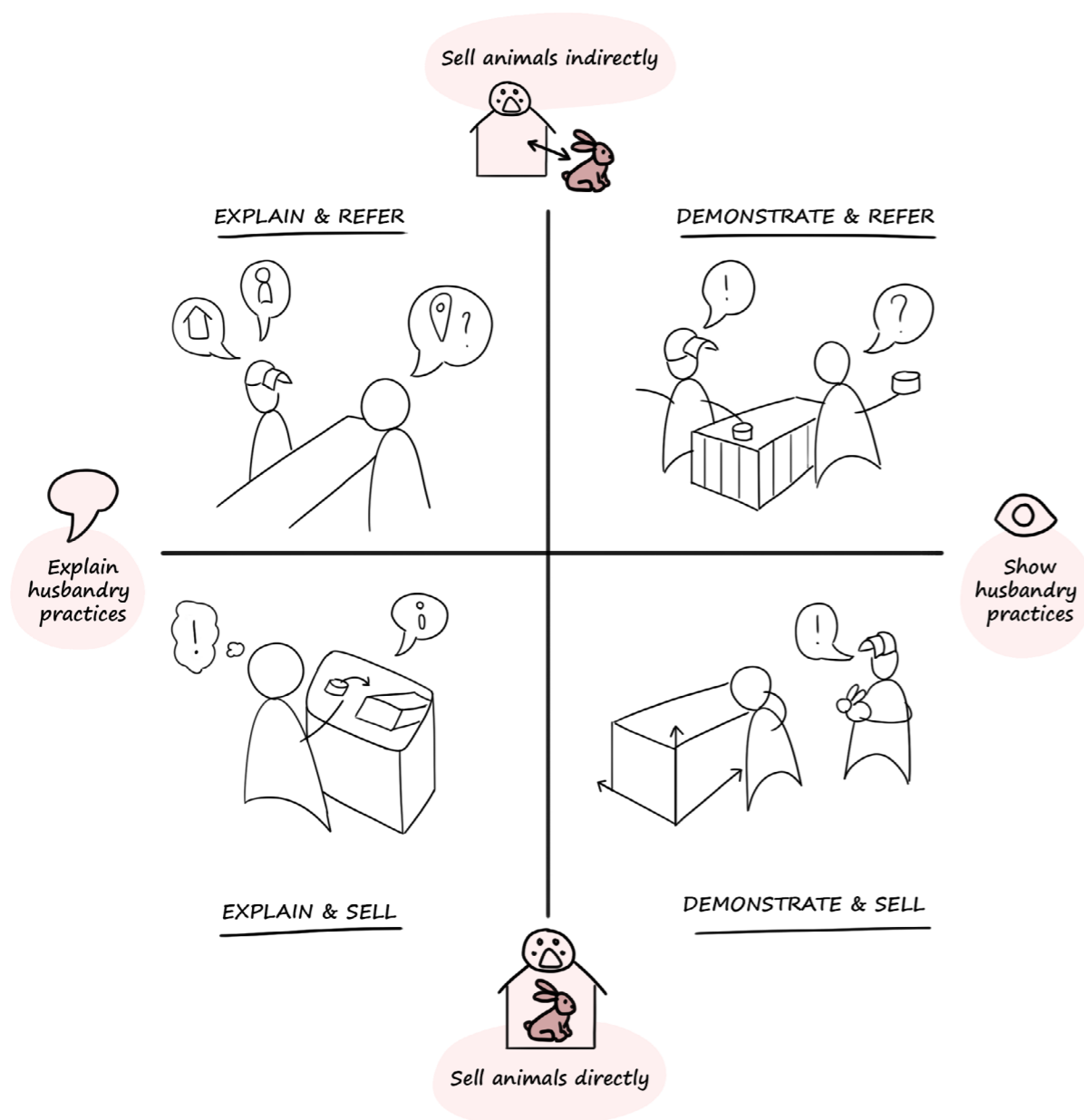


Figure 30: Four future directions

The horizontal axis represents how pet stores inform customers about husbandry practices: either through explanation (left), or by physically demonstrating these practices (right). The vertical axis represents how animals are sold: either directly in-store (bottom) or indirectly through referral to external sellers (top).

This framework results in four distinct future directions, each representing a different strategic approach to informing customers and organising animal sales. Each direction enables different types of concepts and requires different operational and spatial considerations. The selection of the desired future direction was based on the extent to which each direction contributes to the project goal: enabling pet stores to meet animal welfare requirements while effectively educating customers on proper husbandry practices.

A future of selling animals in-store

Explain & sell

The first future direction is located in the bottom-left quadrant of the framework (figure 31). In this scenario, animals continue to be sold in-store, while efforts are made to meet animal welfare requirements. However, achieving this requires significant compromises. For example, if the existing store layout remains unchanged, the number of species offered would need to be reduced to ensure adequate space and housing conditions.

Within this direction, the concept focuses on explaining husbandry practices rather than physically demonstrating them. A corresponding concept is a habitat setup tool, in which customers can digitally configure an enclosure and receive real-time feedback on appropriate products and configurations.

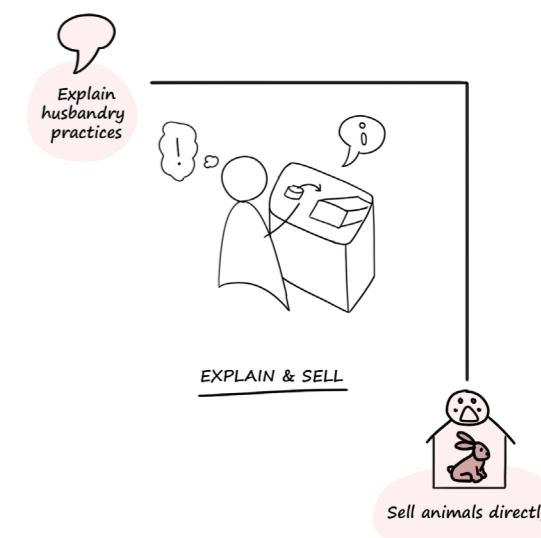


Figure 31: Explain & sell

Demonstrate & sell

The second future direction, in the bottom-right quadrant, (figure 32) combines in-store animal sales with physically demonstrating proper husbandry practices. In this scenario, pet stores would need to significantly redesign their layout to provide sufficient space for animal habitats that meet welfare standards. This introduces a trade-off: increasing space for animal habitats reduces the available space for product sales. However, it enables stores to provide clear, tangible examples of appropriate husbandry practices.

A corresponding concept within this direction is a showroom-style store layout, where customers can explore fully equipped habitat setups. Due to reduced retail space, this concept is complemented by a focus on customisable or do-it-yourself habitat solutions, allowing customers to assemble complete setups themselves.

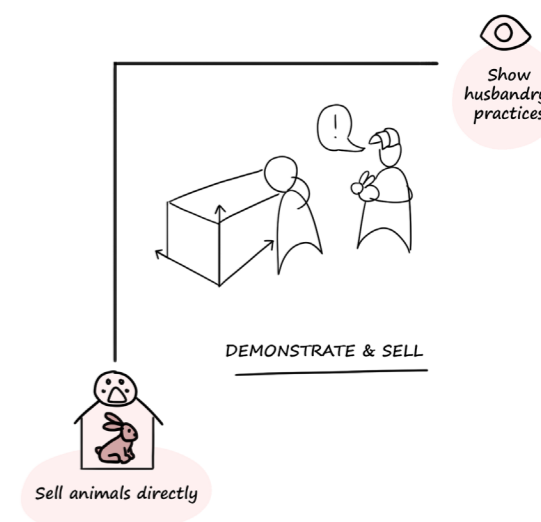


Figure 32: Demonstrate & sell

Reflection

Across both futures, a clear trade-off emerges: meeting animal welfare standards requires either reducing the number of species offered or sacrificing retail space for products. Both options have significant implications for the store's business model.

As a result, maintaining animal sales within the store while fully meeting welfare requirements is considered challenging from both a spatial and commercial perspective.

A future of indirect animal sales

An alternative future direction involves pet stores no longer selling animals directly, but instead referring customers to external breeders or specialised sellers.

Although interviews conducted during the research phase indicated that pet stores prefer to continue selling animals, the analysis of the four future directions demonstrates that doing so while meeting welfare standards would require substantial compromises. These compromises could negatively impact both store operations and profitability. This highlights a fundamental tension between commercial objectives and animal welfare requirements, which ultimately informed the final strategic decision.

The future direction of indirect animal sales was selected as the most viable approach. This direction allows pet stores to prioritise education and the demonstration of proper husbandry practices without the spatial and ethical constraints associated with selling animals in-store.

The selected concept

To determine the most suitable concept, a Harris Profile (see appendix E.2) was used to evaluate the concepts against the established criteria.

This evaluation indicated that the concept of workshop-based sessions, in which customers learn about husbandry practices through guided, hands-on experiences, scored highest (further explanation in chapter 6.2). This concept aligns with the future direction of indirect animal sales combined with physically demonstrating husbandry practices (figure 33). Based on this outcome, the workshop concept was selected for further development into the final design.

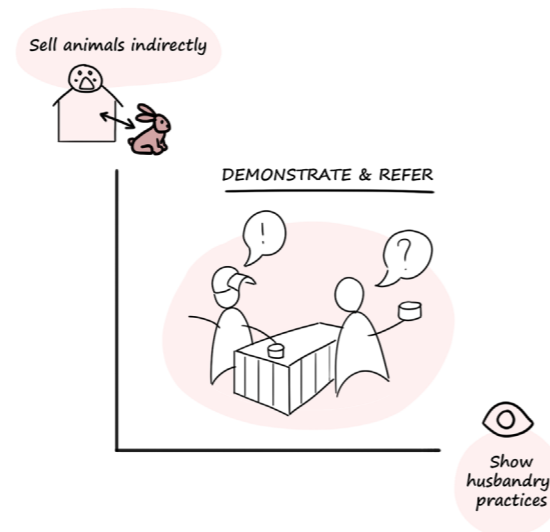


Figure 33: The selected future direction

Iteration on the design problem

The selection of the future direction in which pet stores no longer sell animals in-store leads to a refinement of the initial design problem. Whereas the original problem focused on improving animal welfare within the context of in-store animal sales, the revised problem shifts towards enabling pet stores to support responsible pet ownership without directly selling animals (figure 34).

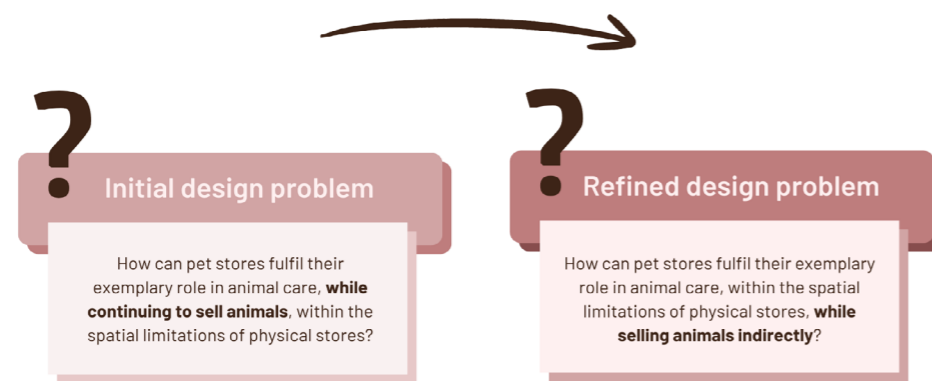


Figure 34: Refined design problem

Focus on specialty stores that sell animals

With the design direction and problem definition established, it is necessary to define the context in which the design will be applied. Pet stores vary in their operations, and not all stores sell animals (figure 35).

| | Owned by | Location | Size | Sell animals |
|-----------------|---------------------------|-----------------|----------------------|----------------------------|
| Specialty store | Independent entrepreneurs | City centres | Small (under 300 m2) | Most do not |
| | | Industrial zone | Big (above 300 m2) | Most do |
| Chain store | Parent corporation | City centres | Small (under 300 m2) | Most do not |
| | | Industrial zone | Big (above 300 m2) | Most do |
| Garden centre | Parent corporation | Industrial zone | Big (above 300 m2) | Most do (Welkoop does not) |

Figure 35: Types of pet stores

A shift can be observed in which smaller pet stores are discontinuing animal sales due to the high costs and limited profitability associated with them. Despite this trend, a group of specialty pet stores continues to sell animals and has expressed the intention to keep doing so. These stores therefore form the primary context for this design. Within this context, the design will aim to tackle the main tension these stores face: balancing the responsibility to demonstrate proper husbandry practices with the spatial limitations typical of smaller stores, making it difficult to provide adequate examples of animal care at the point of sale.

The design specifically targets specialty stores that currently sell animals and experience these spatial constraints. By addressing this challenge, the design aims to support more responsible animal sales practices within the existing realities of these stores. In contrast, larger stores (such as chain retailers) often have more space and resources to meet animal welfare requirements, making them less critical as a primary design focus.

Garden centres are excluded from the scope, as animal sales are not central to their business model.

Solution development

In the final phase, the selected concept was developed into a comprehensive design proposal. This included detailing the service, its implementation, the required strategy, and the underlying business model.

The concept was evaluated through interviews to assess its feasibility, desirability and viability and identify areas for improvement. The insights gained were translated into recommendations for future development. Finally, the limitations of the project and reflections on the design process were discussed.

Chapter 6

The final design

The final design consists of three interconnected components that together enable pet stores to promote animal welfare while effectively educating customers on responsible pet ownership. Together, these components reposition pet stores from points of sale to centres of education and guidance.

First, example habitats are implemented within the store environment. These habitats allow pet stores to physically demonstrate proper husbandry practices and provide customers with inspiration for setting up suitable living environments at home.

These example habitats will include animals and serve as the setting for in-store workshops. During these sessions, employees guide customers through the key aspects of animal care and habitat setup. As part of this experience, customers are offered the opportunity to purchase a starter package containing essential items for first-time pet owners at a discounted rate.

In addition, pet stores facilitate the indirect sale of animals through guided purchasing or adoption workshops. In these sessions, employees support customers in selecting a suitable animal from a breeder or shelter. They also provide transparent information on the financial costs, as well as the time and effort required for responsible pet ownership.

Finally, an online community platform is introduced, where members can connect with experts, access educational tips on animal care, gain inspiration for habitat setups, and receive product-related benefits such as discounts.

The final section of this chapter outlines how these services can be implemented, including the required collaborations and the underlying business model.

6.1 Example habitats

Store layout

To enable the proposed concept and meet the criteria of animal welfare and advisory support, example habitats are integrated into the store environment. Within the selected future direction, pet stores no longer sell animals directly. However, a limited number of animals remain present to allow for the physical demonstration of proper husbandry practices.

To assess the spatial feasibility of this approach, an adapted store layout is proposed (figure 36). For this example, a total product floor space of 120 m² is assumed, reflecting small specialty pet stores located in city centres.

In the current situation, as described by pet store owners during the co-creation sessions, approximately 80% of the floor space is allocated to product sales and 20% to the sale of animals. These animals typically include small mammals (e.g., rabbits, guinea pigs, and hamsters), although some stores also sell reptiles, fish, and birds. For the purpose of this concept, it is assumed that only rabbits, guinea pigs, and hamsters are present, as these are the most commonly kept pets.

In the proposed layout, approximately 20% of the floor space is now dedicated to example habitats (for rabbits, guinea pigs, and hamsters), as well as workshop activities, which form a key component of the proposed business model. On top of that, the number of animals kept in the store will be reduced, as they are no longer sold, allowing more space per animal.

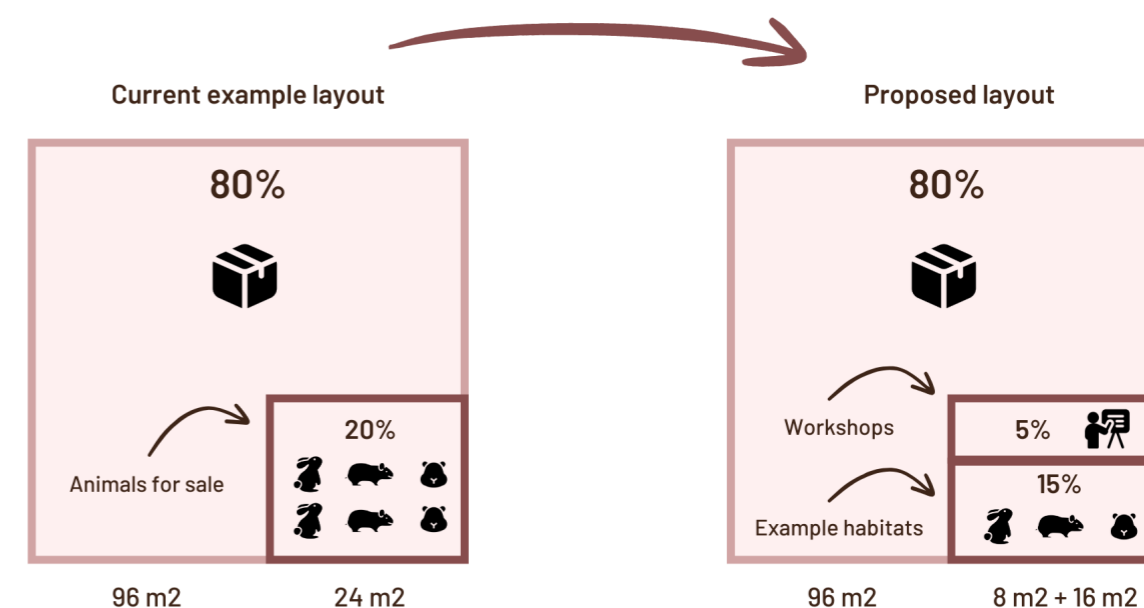


Figure 36: Store layout

Spatial requirements for example habitats

The minimum space requirements for the selected animal species are based on guidelines from the LICG (2026):

- Two (dwarf) rabbits: 1 m² cage and 4 m² run
- Two guinea pigs: 0.9 m² total
- One hamster: 0.5 m² total

However, as the store aims to demonstrate best practices, the example habitats are designed according to desired space requirements:

- Two (dwarf) rabbits: 2 m² cage and 7 m² run

For dwarf rabbits, LICG recommends 4–7 m² of floor space (LICG, 2026). Therefore, 7 m² is used as the desired standard for two rabbits.

- Two guinea pigs: 1.5 m² total
- Two hamsters: 2 m² total

For guinea pigs and hamsters, no explicit optimal space requirements are provided; therefore, twice the minimum required space is assumed.

This results in a total required area of approximately 12 m² for the example habitats. The remaining space within the designated 20% area allows for approximately 4 m² of circulation space and 8 m² for workshop activities. This workshop space can be flexibly arranged using tables, visual materials, and demonstration tools.

See figure 37 for a visual representation of the example habitats in the store.

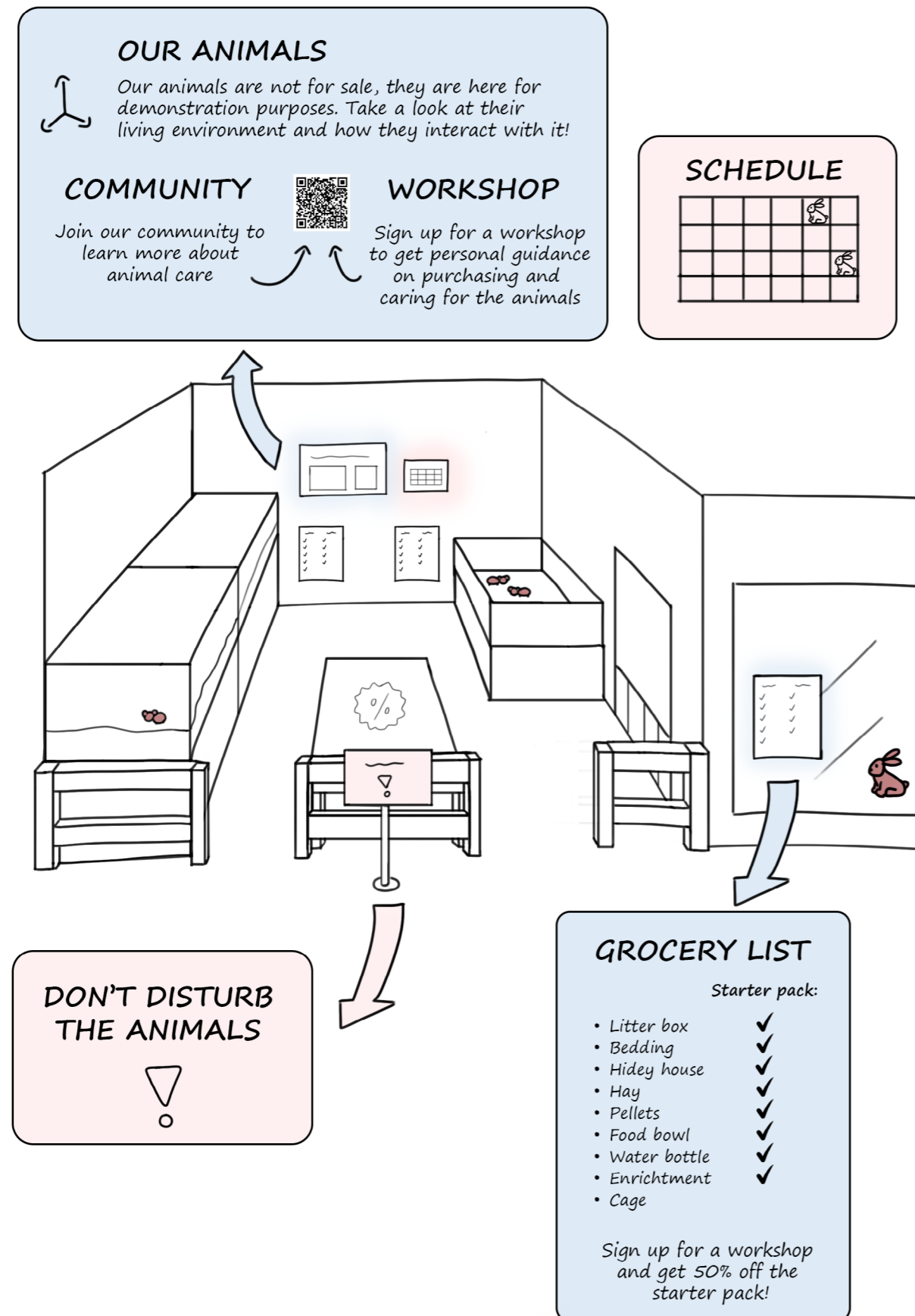


Figure 37: Example habitats

Animal welfare considerations

Why keep animals in the store

The decision to include live animals in the store environment is deliberate and closely tied to the store's advisory role. Although example habitats could be implemented without live animals, their physical presence enables employees to demonstrate practical aspects of animal care, such as handling, grooming (e.g., brushing and nail clipping), and interpreting behaviour. This supports more effective, experience-based learning for customers.

At the same time, it is acknowledged that retail environments are not ideal living conditions for animals. However, as pet store owners have indicated a desire to continue working with animals, these example habitats serve as a transitional approach. By maintaining a limited number of animals in-store as part of example habitats, store owners can gradually shift away from animal sales, while preserving the aspects of their work they find most meaningful, namely interacting with and caring for animals.

Maintaining animal welfare within the store environment

Insights from interviews and co-creation sessions indicate that animals in pet stores are often subject to frequent disturbance by customers, reinforcing the need for careful spatial and behavioural design. To mitigate this, the example habitats are positioned in a designated area at the rear of the store. This spatial separation encourages intentional visitation and reduces incidental disturbance. Additional measures, such as clear signage, further support appropriate customer behaviour.

The spatial arrangement of the habitats also reflects species-specific needs. For example, hamster and guinea pig enclosures are positioned along the wall, while rabbits are provided with a larger, enclosed area separated by partitions such as walls and glass. This ensures sufficient space for movement while limiting direct and continuous customer interaction.

Informing customers

To reinforce the advisory role of the store, informational posters are placed adjacent to the example habitats. These communicate that the animals are not for sale, but are present solely for demonstration purposes, emphasising the importance of adequate space and proper care.

In addition, species-specific posters provide an overview of required products and serve as a "shopping guide" for customers. These materials are complemented by QR codes linking to the online community platform and workshop registration. Customers are also informed about incentives, such as discounts on starter packages available through workshop participation.

A dedicated display table within the area can be used to showcase discounted products for community members, further integrating the physical and digital components of the concept.

The operation of workshops and the online community is further elaborated in the remainder of this chapter.

6.2 The service: Workshops and online community

The service concept

The final service concept consists of two main components: a series of in-store and external workshops, and a supporting online community platform. Together, these components enable pet stores to guide customers throughout the entire customer journey, from orientation and preparation to long-term animal care.

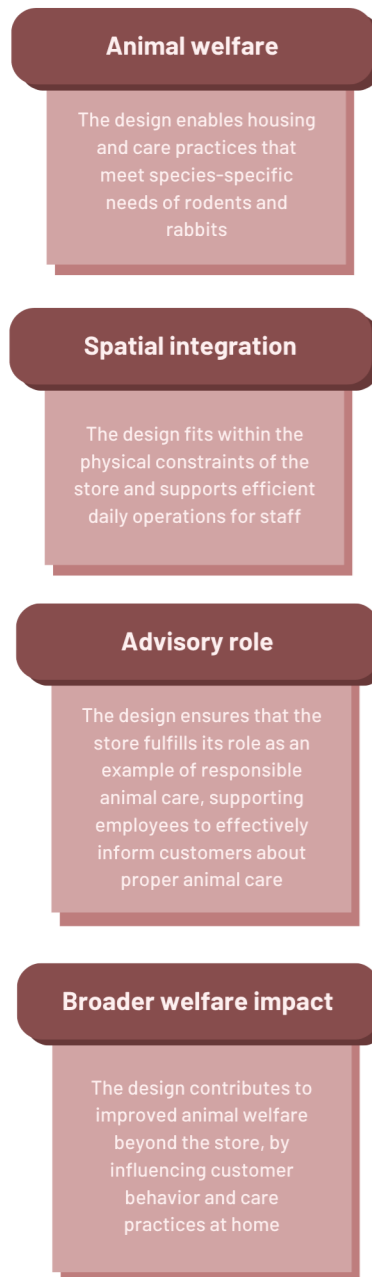
The workshops focus on actively educating customers on responsible pet ownership, including animal care, habitat setup, and the process of purchasing or adopting an animal.

The online community extends this support beyond the physical store, allowing customers to access information, connect with experts, and remain engaged after attending a workshop or acquiring an animal, strengthening long-term engagement with the store.

Together, these services reposition the pet store from a transactional retail environment to a continuous service provider focused on education, guidance, and long-term animal welfare.

Rationale for the service concept

Within the selected future direction “demonstrate & refer” (physically demonstrating husbandry practices combined with indirect animal sales), the workshop-based concept was identified as the most suitable solution. This concept performed best against the established evaluation criteria (figure 38).



By limiting the number of animals in-store and allocating sufficient space to example habitats, appropriate welfare standards can be maintained. In addition, workshops require relatively little additional space, making it feasible to prioritise animal welfare within existing store constraints.

Since example habitats are already present, workshops require minimal additional space. However, the concept does require staff training and time investment. These costs can be offset through workshop fees and the online community model (see chapter 6.4).

The presence of example habitats allows stores to continuously demonstrate proper care practices, while workshops provide structured opportunities for personalised advice tailored to customer needs.

Insights from interviews and co-creation sessions indicate that a combination of physical demonstration and verbal explanation is the most effective way to inform customers. Workshops enable employees to provide tailored advice through combining demonstration with explanation, increasing the likelihood that customers correctly implement husbandry practices.

Figure 38: Evaluation criteria

The workshops

The workshop offering consists of two complementary sessions (figure 39). Each workshop addresses a different stage in the decision-making and ownership process.

Separating the workshops is intentional. By introducing a temporal and procedural distinction between learning about animal care and acquiring an animal, impulse purchases are discouraged. While this approach may reduce short-term sales, it increases the likelihood that customers are well-prepared and committed. In the long term, this contributes to improved animal welfare and reduces the number of animals being rehomed or abandoned.

Customers are encouraged to attend both workshops, as each provides distinct but complementary information. The first workshop focuses on initial care and setup, while the second addresses long-term considerations, such as lifestyle compatibility and recurring costs.

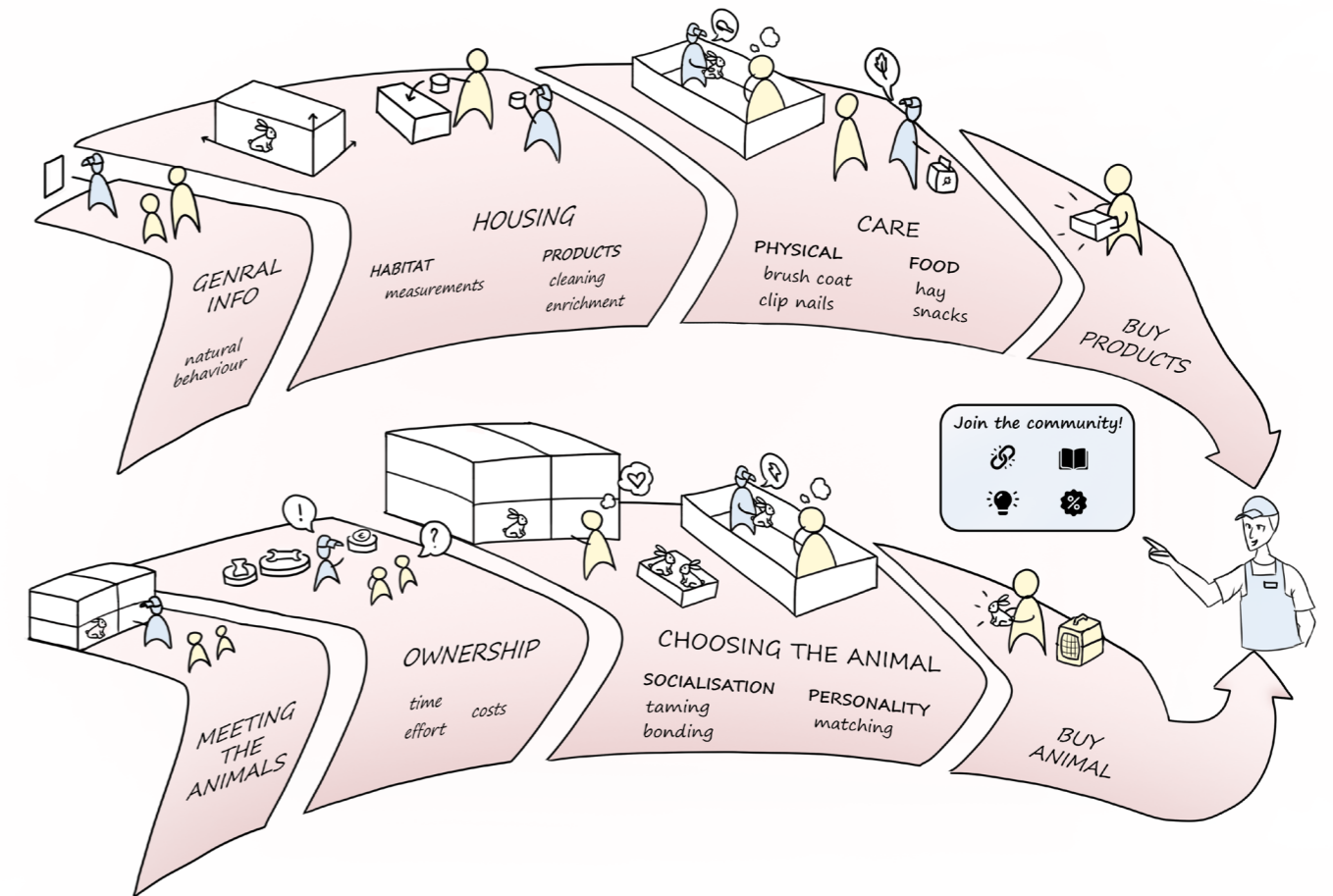


Figure 39: Two separate workshops

1. Husbandry and housing workshop

The first workshop takes place in the pet store and focuses on basic animal care and habitat setup. Sessions are organised per species to ensure that information is specific and relevant.

During the workshop, employees guide small groups of customers through the key aspects of responsible animal care, using the example habitats as a demonstration tool. This enables customers to better understand spatial requirements, appropriate products, and daily care routines. As a result, customers are better prepared to create a suitable living environment and meet the welfare needs of their animal.

2. Purchasing/Adopting workshop

This workshop takes place at an external animal provider, such as an animal shelter or breeder, in collaboration with the pet store. Depending on the setting, the session is facilitated by a pet store employee, shelter staff member, or breeder.

The workshop focuses on guiding customers through the process of selecting and acquiring an animal. This includes support in choosing an animal that matches the customer's lifestyle, as well as providing transparent information about the required time, effort, and financial commitment.

By supporting customers in making well-informed decisions, this workshop reduces the likelihood of mismatches between owner and animal, thereby decreasing the risk of abandonment.

Implementing the workshops

Figure 40 illustrates how pet stores could present the two workshops on their website. Here, it is important to clearly communicate that the first workshop takes place in-store, while the second is held at a shelter or breeder. Visual cues, such as images, can help reinforce this distinction.


Although this example of the promotional material depicts children, it is important to note that the workshops are not specifically targeted at them. The workshops are intended for people of all ages and demographics that want a rabbit, guinea pig or hamster, or already own one and want to learn about them.

To implement the workshops, employees must either already possess sufficient knowledge or receive appropriate training (see chapter 6.4 Business model). In addition, staffing levels must be carefully planned. If workshops are held during opening hours, sufficient staff must remain available to operate the store. Alternatively, workshops could be scheduled outside regular business hours, such as in the evening.

Husbandry & Housing

In these workshops, you will learn all about how to properly take care of your rabbit, guinea pig or hamster. Check our upcoming workshops to find out when there is one for your preferred species.

- Information about the species
 - Natural behaviour
- Housing
 - Inside or outside
 - Minimal + desired measurements
 - Different types of set-ups
 - Products
 - Enrichment
 - Cleaning
- Care
 - Food
 - Physical care
 - Health check
 - Brushing the coat
 - Clipping the nails




(Newcastle Family Life, 2018)

Purchasing/Adopting

In these workshops, you will learn all about how to purchase the right animal for you. It takes place at a shelter or breeder, so that you can meet the animals and buy/adopt them right away. Check our upcoming workshops to find out when there is one for your preferred species.

- Information about the species
 - Natural behaviour
- Introducing the animals
- How to choose
 - Different personalities
 - Socialisation
- Getting the animals
 - Solitary vs group animals
 - Bonding
- The reality of owning animals
 - Time and effort commitment
 - Vet costs



(San Diego House Rabbit Society, 2023)

Figure 40: Workshop page

Online community

The online community platform supports customers beyond the initial purchase and encourages continuous learning and engagement. It serves both to improve husbandry practices and to strengthen customer loyalty.

The platform consists of three main features: Connect, Feed, and Special Offers. While the Connect and Special Offers are tailored to stakeholders and offers local to the pet store, the Feed page is not location based.

1. Connect

The Connect page provides an overview of trusted experts, including specialised veterinarians, breeders, and animal shelters within the customer's region. Customers can only see the experts in their area, through being a member of their local pet store.


Insights from interviews and co-creation sessions indicate that pet owners often struggle to find reliable, specialised care, particularly for small animals such as rabbits and rodents. By offering a curated network of professionals, the platform increases accessibility to appropriate expertise and strengthens collaboration between stakeholders.

Figure 41 shows an example of what the Connect page could look like, with example texts and pictures

Connect with our staff

It can be difficult to find professional vets who specialise in exotic species such as rabbits, guinea pigs and hamsters. Our goal is therefore to connect pet owners to these vets and other experts in their area.

Below is a list of community members who are located in your area. You can read about them and find someone who suits your needs. Feel free to contact any of them whenever you need professional guidance!



(Freepik, n.d.)

Dr Bella Benson

Hi, I'm Bella!

After completing my veterinary studies, I specialised in treating rabbits. In recent years, I have gained a lot of experience in treating respiratory issues specifically.


Please don't hesitate to contact me with any questions or for further information.

Clinic
Dierenkliniek Delft-Centrum (Crommelinplein 3-5, 2627 BM, Delft)

Education
Veterinary Medicine, University of Utrecht
Training program for rabbit specialisation

Phone: 06 12345678

To encourage customers to connect with experts, each expert is given a brief introduction. In this introduction, they can highlight their area of specialisation, helping customers understand what kind of advice they can expect and why a particular expert is relevant to their needs.



(Freepik, n.d.)

Ingrid van Doorn

Ever since I rescued my first rabbit, I have dedicated my time to understanding their behaviour. This passion has driven me to turn my dream of becoming a behaviour specialist into a reality. I now own a rabbit rescue centre where we treat misunderstood rabbits, both physically and mentally.

Want to know more? Don't hesitate to reach out!

Shelter
Rabbit rescue Den Haag (Stieltjesstraat 850, 2521 TE Den Haag)

Education
HBO Animal Health and Management, Aeres Hogeschool

Phone: 06 12345678

In addition, including information such as location and educational background contributes to the perceived credibility and trustworthiness of the expert profiles. This increased transparency is expected to make customers more confident in the expertise offered, thereby increasing the likelihood of engagement.

Figure 41: Connect page

2. Feed

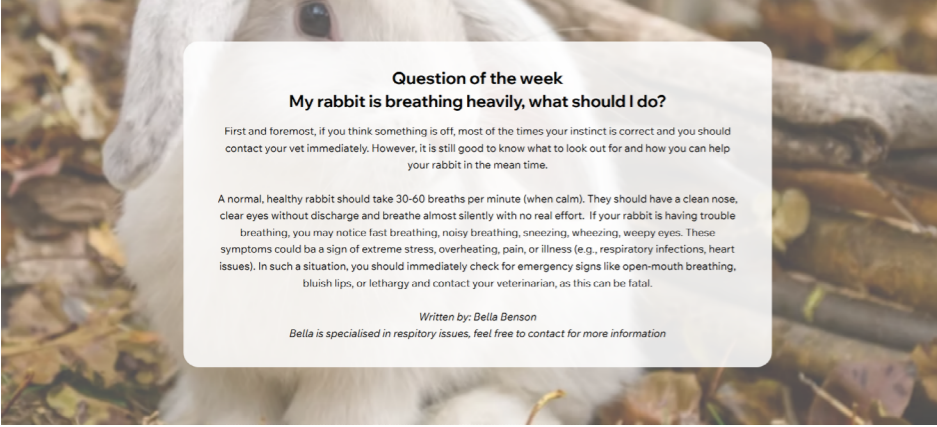
The Feed section supports ongoing learning and community engagement. It includes recurring elements such as a “question of the week,” a “tip of the week,” and a “habitat of the week.”

Customers can actively contribute by submitting questions and sharing their own habitat setups. These submissions are reviewed by experts (for example behavioural therapists), who provide feedback and suggestions for improvement. This creates a feedback loop in which customers learn from both professionals and peers.

Figure 42 shows an example of what the Feed page could look like, with example texts and pictures.

Weekly feed

This is where all the submitted questions, habitats and tips get shown, which are all updated every week. You can submit your own question or habitat [here](#). Tips are submitted by staff members.



Question of the week
My rabbit is breathing heavily, what should I do?


First and foremost, if you think something is off, most of the times your instinct is correct and you should contact your vet immediately. However, it is still good to know what to look out for and how you can help your rabbit in the mean time.

A normal, healthy rabbit should take 30-60 breaths per minute (when calm). They should have a clean nose, clear eyes without discharge and breathe almost silently with no real effort. If your rabbit is having trouble breathing, you may notice fast breathing, noisy breathing, sneezing, wheezing, weepy eyes. These symptoms could be a sign of extreme stress, overheating, pain, or illness (e.g., respiratory infections, heart issues). In such a situation, you should immediately check for emergency signs like open-mouth breathing, bluish lips, or lethargy and contact your veterinarian, as this can be fatal.

Written by: Bella Benson
Bella is specialised in respiratory issues, feel free to contact for more information

(iStock, n.d.)

Allowing community members to submit questions through the platform lowers the threshold for seeking advice. Customers can ask questions in an accessible and low-commitment manner, particularly in cases where concerns may not be perceived as urgent enough to warrant a visit to a pet store or veterinarian. This increases the likelihood that uncertainties are addressed at an earlier stage.



(Carrus, 2023)

Habitat of the week

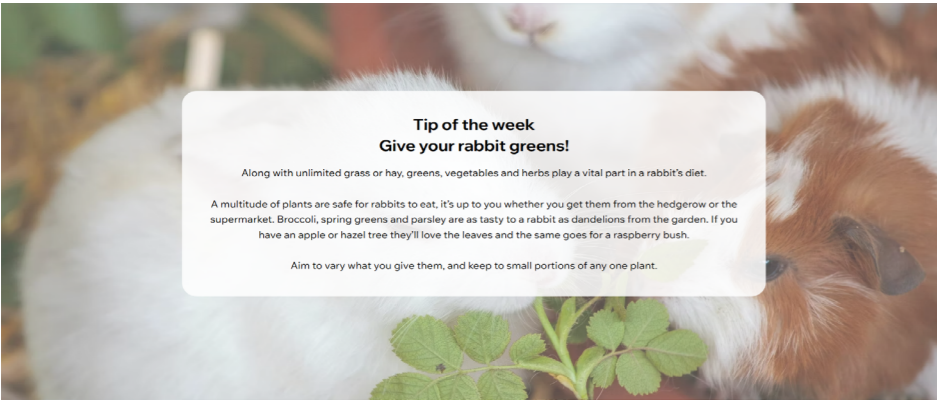
Habitat submitted by: Nina

This is my little pen for my two bunnies Freddy and Oreo. The set-up consists of C&C grids of 35 x 35 cm, so the total measurements are 210 cm x 70 cm x 70 cm. I still want to get more hidey houses and stuff for them but for now I have just a few simple enrichment items. They can free roam throughout the living room the whole day and at night they sleep in their pen.

Answer by: Ingrid

This is a great size for two bunnies, also given the fact that you give them so much free roam time! I see you already added some great enrichment items they can chew on, just make sure the materials are 100% natural and not harmful for the bunnies. For more enrichment you can add a digbox or scatter greens around (see tip of the week below). As for the water bottle, some bunnies might like a water bowl better, but it does tend to get messy, so you could try it out and see if it works for you.

Keep up the good work!



Tip of the week
Give your rabbit greens!

Along with unlimited grass or hay, greens, vegetables and herbs play a vital part in a rabbit's diet.

A multitude of plants are safe for rabbits to eat, it's up to you whether you get them from the hedgerow or the supermarket. Broccoli, spring greens and parsley are as tasty to a rabbit as dandelions from the garden. If you have an apple or hazel tree they'll love the leaves and the same goes for a raspberry bush.

Aim to vary what you give them, and keep to small portions of any one plant.

(Pexels, n.d.)

Enabling users to share their own habitat setups contributes to a stronger sense of community while simultaneously encouraging higher standards of care. The visibility of peer-generated examples motivates users to improve their own setups, while also exposing them to practical insights and details that may not be covered in workshops.

A similar function is served by the “tip of the week.” For users who are already familiar with basic care practices, these tips provide opportunities for further optimisation. By focusing on less commonly known insights, this feature supports continuous learning beyond foundational knowledge.


3. Special Offers

The Special Offers section provides members with access to exclusive discounts on products and events. These offers encourage repeat store visits and strengthen long-term customer relationships.

Figure 43 shows an example of what the Special Offers page could look like, with example texts and pictures.

Special offers

On this page, you can view the community's exclusive discounts and offers. A different product is discounted every week, so make sure to keep an eye out! In addition, we can offer you special event discounts, and thanks to our network, we can provide you with an overview of job vacancies and volunteering opportunities in your area.



~~€34,99~~ €19,99

Discounted product
House Ila 40 cm Rabbit house

The Trixie House Ila is very handy for larger rodents. The house is equipped with a hay rack on the side of the house. The roof is flat, making it ideal for sitting. The Trixie House Ila has an open bottom and an entrance at the front.

Dimensions: 40 x 29 x 25 cm | spacing bars: 2.5 cm


- ✓ Hay rack included: No more hassle with loose hay - the Trixie House Ila is equipped with a handy hay rack on the side of the house. This way your rodents can always enjoy fresh hay within reach!
- ✓ Flat Roof for Extra Comfort: The flat roof of the house provides an ideal seat for your rodent friends to relax and enjoy the view from their cozy home.
- ✓ Natural Bark Wood: Made from untreated bark wood, the Trixie House Ila offers a natural and soothing environment for your rodents to live and play.
- ✓ Animal-Friendly Design: With two entrances/exits and an open bottom, the Trixie House Ila provides a safe and comfortable environment for your rodents to explore and rest.

(DRD Knaagdierwinkel, n.d.)

Upcoming event
Exoknaag dayticket with a 20 % discount!

We've got a fantastic offer for our community members! As a member, you'll receive an exclusive 20% discount on a day ticket for Exoknaag! On the 7th of June, the Expo Centre in Houten will be all about rodents, rabbits, ferrets, rats, mice and much more. Will you be visiting? Order your tickets now with a 20% member discount!

Order with 20% discount



(VHM Events, n.d.)

Discounted products should be presented with the same level of detail as in a webshop, including a short description, dimensions, and key features. Providing complete and transparent information supports informed purchasing decisions and maintains consistency with standard online retail practices.

In addition to product discounts, the section may include offers for relevant events, such as Exoknaag or Animal Event. These offers require collaboration with event organisers, including agreements on participation and discount rates. Incorporating event-related discounts increases the perceived value of the platform while connecting customers to broader communities and learning opportunities.

Figure 43: Special Offers page

Figure 42: Feed page

6.3 Implementation strategy

Implementing the workshops and online community

A phased roadmap was developed to illustrate how pet stores can prepare for and implement the proposed workshops and online community (figure 44).

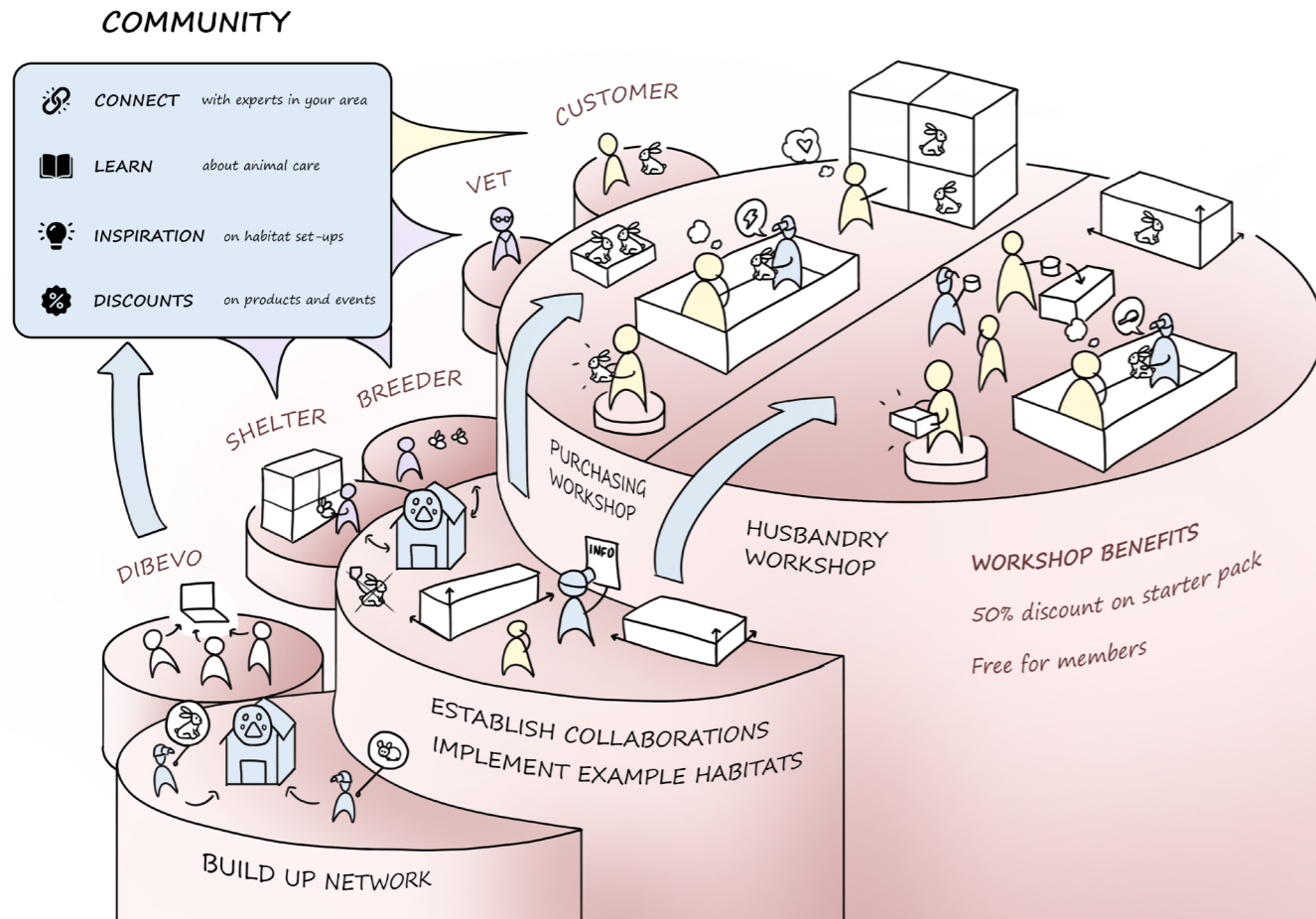


Figure 44: Roadmap

The first phase focuses on establishing a strong internal foundation. This involves building a knowledgeable team, either by hiring experienced employees or by providing targeted training. In parallel, the online community platform is developed and set up by Dibevo (see 6.4 Business model).

The second phase centres on preparing the physical and organisational infrastructure. Pet stores establish collaborations with pet sellers, including animal shelters and/or breeders. In addition, example habitats are implemented within the store. This requires discontinuing the direct sale of animals and reallocating this space to demonstration habitats. Stores must acquire the necessary animals and materials and, where required, adapt the store layout.

In the final phase, the workshops are introduced and the online community becomes accessible to customers. Members of the community can register for workshops free of charge. Workshop participants receive incentives such as discounts on starter packages for essential products.

Collaboration

The successful implementation of the concept depends on collaboration between multiple stakeholders, including pet stores, specialised veterinarians, and animal shelters and/or breeders. This collaboration is essential to ensure consistency in advice and to create a coherent customer journey.

Through collaboration with specialised veterinarians, customers gain easier access to expert care via the online community platform. This is particularly relevant for small animals, for which specialised knowledge is not always widely available.

Collaboration with animal shelters and/or breeders enables the organisation of purchasing or adoption workshops at external locations. Pet stores can choose which type of partner to collaborate with, depending on their values and strategic positioning.

Working with animal shelters allows customers to adopt animals, often giving older or previously rehomed animals a second opportunity. In contrast, collaboration with qualified small-scale breeders provides customers with access to young animals with known backgrounds and health histories.

Benefits of the collaboration

The collaboration creates value for all stakeholders involved (figure 45).

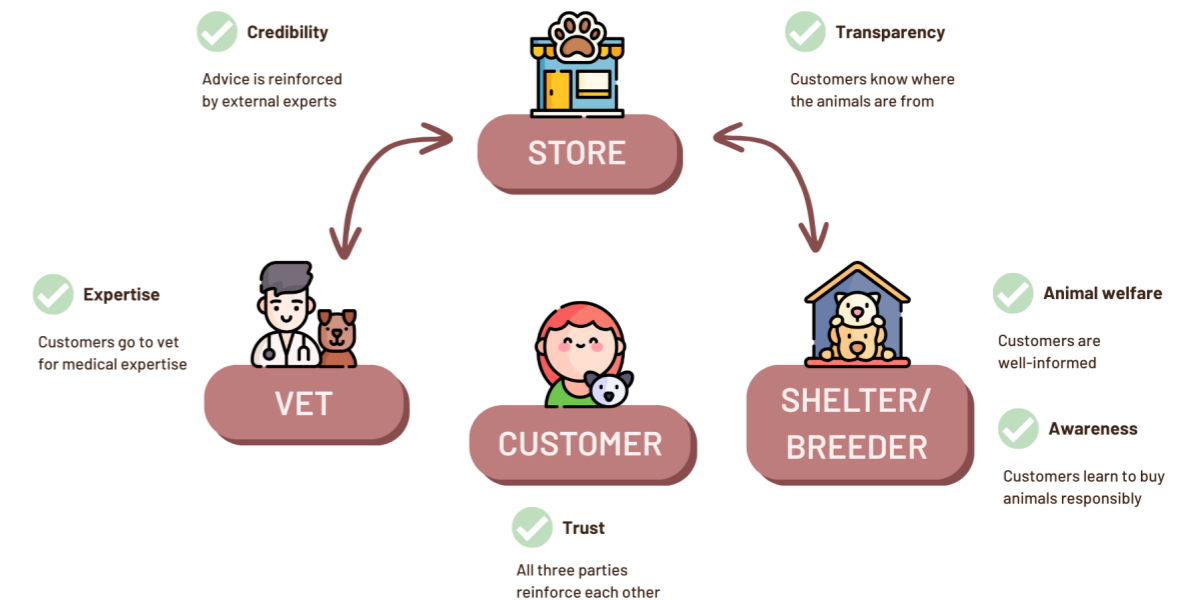


Figure 45: Benefits of the collaboration

For pet stores, collaboration with veterinarians increases credibility, as advice provided in-store is reinforced by external experts. Partnerships with shelters and breeders increase transparency regarding the origin of animals, strengthening customer trust.

For shelters and breeders, the collaboration ensures that customers are better informed before acquiring an animal. This reduces the likelihood of mismatches and improves long-term animal welfare outcomes. In addition, the collaboration increases awareness of responsible adoption and purchasing channels.

For all stakeholders, cross-referrals can increase customer traffic and strengthen relationships. Furthermore, collaboration enables knowledge exchange between parties, contributing to continuous improvement of animal care practices.

Customers also benefit from this ecosystem, as consistent and reinforced information from multiple sources increases trust and supports informed decision-making.

Conditions for successful collaboration

For the collaboration to function effectively, several conditions must be met (see figure 46).

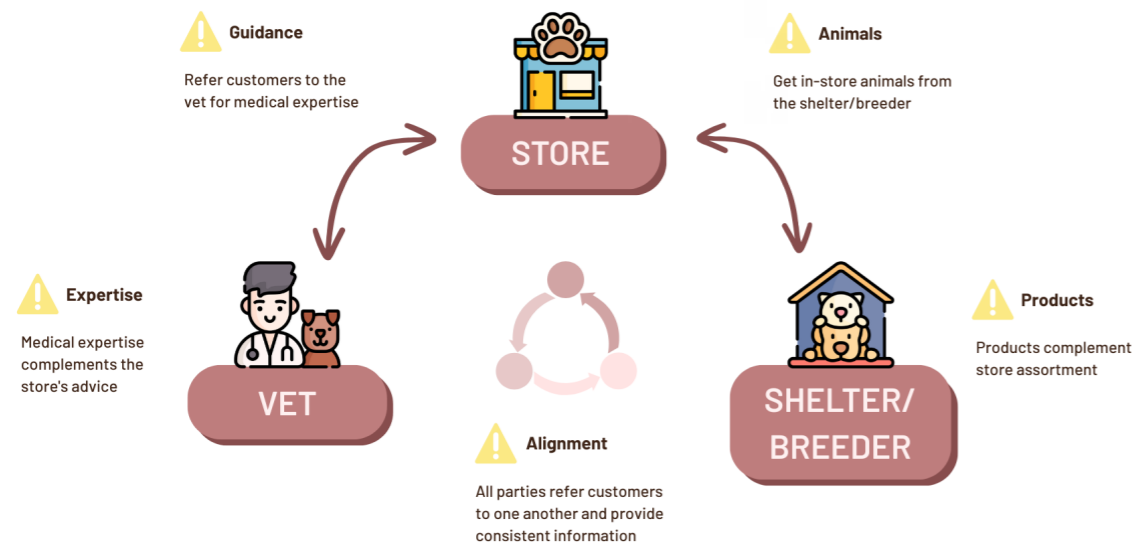


Figure 46: Benefits of the collaboration

A key requirement is alignment between stakeholders in terms of husbandry practices and advice. All parties must be willing to refer customers to one another and provide consistent information. Insights from interviews indicate that this may be challenging, as different stakeholders may hold varying perspectives on animal care. Achieving alignment may therefore require time and ongoing communication.

In addition, roles within the ecosystem should remain clearly defined. If veterinarians or breeders offer products, these should complement rather than compete with the pet store's assortment. This ensures that each stakeholder maintains a distinct role: pet stores focus on products and guidance, veterinarians on medical expertise, and shelters or breeders on animal provision.

Together, these conditions and collaborations form the foundation for a service ecosystem in which multiple stakeholders jointly contribute to improved animal welfare and informed pet ownership.

Forming a collaboration

Establishing effective collaboration will require time and deliberate effort. Insights from interviews show that perspectives among stakeholders are not always aligned. In particular, some shelters and breeders express concerns about pet stores selling animals, while several pet stores indicate openness to alternative models, such as sourcing animals through shelters.

For this reason, collaboration (especially with shelters and breeders) should be developed gradually, with a strong focus on building mutual trust. A shared emphasis on improving animal welfare can serve as common ground, helping stakeholders recognise their aligned long-term goals despite differing current practices.

Initial collaboration can take the form of low-threshold initiatives, such as pet stores supporting shelters through product donations or facilitating customer contributions via in-store donation points. These early interactions create opportunities for positive engagement and relationship-building.

Over time, such trust-building measures can evolve into more integrated forms of collaboration, including mutual referrals and joint implementation of workshops. In this future scenario, pet stores play a key role in educating customers, while shelters and breeders provide responsible sources for animal adoption or purchase, resulting in a more cohesive and welfare-oriented ecosystem.

6.4 Business model

A strategic business model has been developed to assess the viability of the workshops and online community (see figure 47).

The business model canvas summarises the key components of the service concept, including the value proposition, key partners, resources, and revenue streams. It provides an integrated overview of how the example habitats, workshops, and online community create and deliver value.

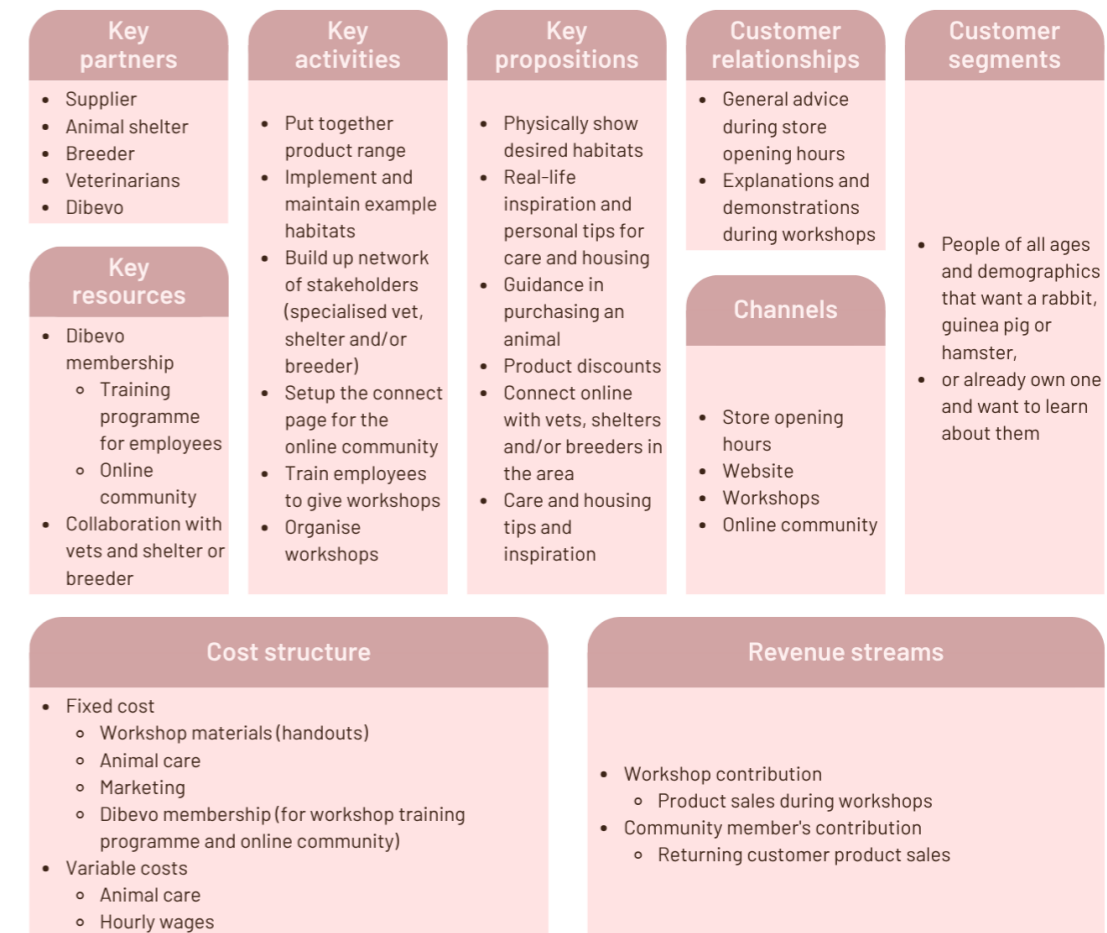


Figure 47: Business model canvas

The following sections elaborate on the underlying value, resource, revenue, and profit models in greater detail.

Revenue model

To substantiate the final concept, multiple revenue models were explored based on the future directions outlined in the previous chapter.

For explaining husbandry practices as well as indirectly selling animals (figure 48), a service-based model was considered. In which pet stores would act as intermediaries by connecting customers to external pet sellers and specialists. While this model supports the advisory role of the store, it was considered less suitable as a primary revenue stream. Elements of this approach were therefore integrated in a simplified form within the final concept, where customers can access a network of veterinarians, breeders, and shelters through a subscription-based online community.

For the future direction of “demonstrate & sell”, in which husbandry practices are physically demonstrated and animals are sold directly (figure 49), a purely transaction-based model was considered. This model centres on the sale of high-quality, customisable habitats, supported by in-store demonstrations of proper animal care.

While this approach aligns well with the intended in-store experience, it would require pet stores to significantly adjust their current product assortment. At present, the majority of revenue is generated from products for dogs and cats, with only a limited range of items available for small animals such as rodents and rabbits. These typically consist of standard, low-variation cages rather than the more advanced habitat solutions proposed in this concept. Transitioning to this model would therefore require pet stores to rely on a relatively untested product category as a primary revenue source. Given the lack of established market adoption within pet stores, demand for such habitats remains uncertain, increasing the financial risk. Although the sale of high-quality habitats represents a desirable long-term direction, the analysis suggests that it is unlikely to be a viable strategy for pet stores in the short term.

Based on these considerations, a hybrid model combining transaction-based revenue with a subscription model was selected. This model aligns with the proposed concept by supporting both physical retail and ongoing customer engagement through the online community. The subscription provides a stable, recurring revenue stream, while product sales remain a key source of income.

In addition, the model enables the use of targeted discounts and offers linked to workshops and community membership. These incentives can effectively influence customer behaviour, stimulate purchases, and increase transaction frequency. However, to avoid undermining long-term brand loyalty, pet stores should adopt a customer-centric approach, offering personalised and strategically timed promotions rather than frequent, broad discounts (Priyadharshini & Rajesh Kumar, 2025).

By combining recurring and transactional revenue streams, this model reduces financial risk and strengthens the long-term viability of the concept.

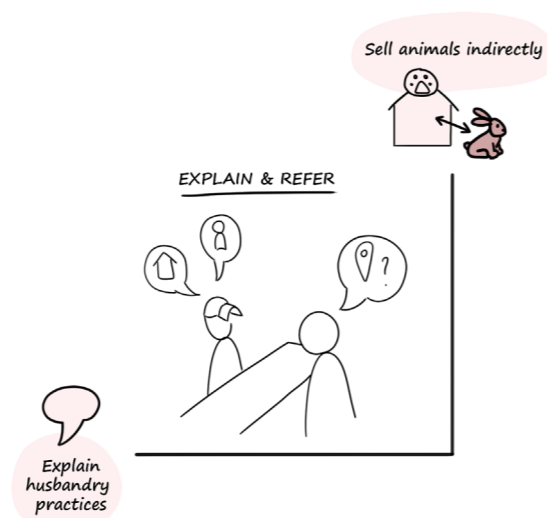


Figure 48: Explain & refer

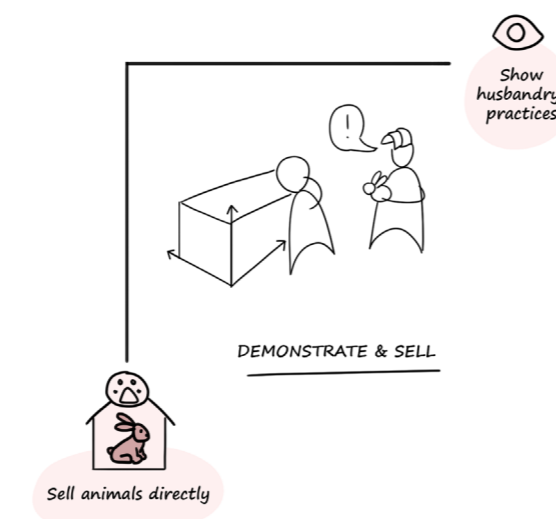


Figure 49: Demonstrate & sell

Value model

The value proposition focuses on supporting pet owners by providing high-quality, welfare-oriented care through a combination of physical retail experiences, expert guidance, and an accessible online community.

In-store, example habitats provide customers with tangible inspiration and a clear understanding of how to create suitable living environments for their animals. This reduces uncertainty and helps customers make more informed purchasing decisions.

Workshops further enhance this offering. The husbandry and housing workshop provides expert advice, practical demonstrations, and personalised guidance, enabling customers to confidently set up appropriate habitats at home. The purchasing/adoption workshop supports customers in selecting animals that match their lifestyle and preferences, increasing the likelihood of responsible ownership and improved animal welfare. Participation in workshops is additionally incentivised through product discounts.

The online community extends this support beyond the physical store. It enables customers to connect with specialised veterinarians, as well as local shelters and breeders, which are resources that are often difficult to access for pet owners. In addition, the platform provides ongoing educational content, such as care tips and habitat inspiration, helping customers continuously improve their knowledge.

A membership model further strengthens engagement by offering recurring product discounts that change monthly. This encourages repeat store visits, increases the likelihood of additional purchases, and supports long-term customer retention.

Resource model

To deliver workshops and maintain an online community, several key resources are required, including trained staff, technical infrastructure, and strategic partnerships.

Firstly, human resources are essential for delivering high-quality workshops. Employees must possess sufficient knowledge of animal care and the skills to guide and inform customers effectively. Training for these competencies can be provided through industry organisations such as Dibevo, which already offers knowledge days and training sessions for pet store professionals (Dibevo, 2026). These existing training structures form a critical resource, enabling staff to develop the expertise needed to run workshops.

Secondly, the online community requires dedicated technical infrastructure and ongoing content management. As most pet stores lack the capacity to develop and maintain such a platform independently, this function can be facilitated by an external partner. Dibevo is well positioned to possibly fulfil this role, as it already operates a digital platform providing pet care information and access to animal-related services (Huisdierenspecialist, 2026). By expanding these existing capabilities, Dibevo can provide both the technical foundation and content creation needed for the online community. This may be integrated into an extended membership model for pet stores, with costs offset through customer subscriptions.

Finally, the purchasing/adopting workshops rely on partnerships with animal shelters and breeders. These partners provide access to animals and support responsible matching between pets and owners. Establishing successful collaborations requires clear communication of mutual benefits, such as increased visibility and access to well-informed customers, which increases the likelihood of long-term cooperation.

Together, these human, technical, and relational resources enable the implementation and scaling of the proposed business model.

Profit model

To assess the short-term financial viability of the proposed concept, an estimate of both costs and revenues was developed. This analysis resulted in a projected cash flow and an indicative break-even point for the implementation of the workshops and the associated online community.

Figure 50 presents an overview of the projected cost structure and revenue streams related to the example habitats, workshops, and community, providing a basis for assessing the financial feasibility of the concept.

| | Variable | Fixed |
|----------------|------------------------------------|-------------------------------------|
| Costs | | |
| Employees | Employee training €300 | Hourly wages €100 |
| Materials | Workshop materials €20 | Workshop materials €100 |
| Animals | Animals + example habitats €920 | Animal care €275 |
| Marketing | | Marketing €50 |
| Community | | Extra fee Dibevo membership €10 |
| Revenue | | |
| Workshops | | Contribution + starter pack €565 |
| Community | | Contribution €88 |
| General | | Returning customer sales €200 |

Figure 50: Estimated costs and revenue

Costs

The cost structure consists of both variable and fixed components.

Variable costs associated with the workshops include employee training, ensuring that staff are adequately qualified to deliver the workshops. These training costs are estimated at €300 in total. In addition, materials are required to facilitate the workshops. A preliminary estimate includes €10 for printed materials (e.g., posters) and €10 for demonstration tools (e.g., brushes and nail clippers). Furthermore, initial investments are required for animals and their habitats. This includes the acquisition of small animals (two rabbits, two guinea pigs, and two hamsters) estimated at €500, as well as example habitats costing approximately €420 (LICG, 2026).

Fixed costs for animal care include consumables such as bedding and feed, estimated at €150 per month (LICG, 2026). In addition, veterinary care and habitat maintenance represent less predictable but essential expenses. Based on available estimates, an annual budget of €1,500 is allocated for these costs (Bunnybunch, 2024), corresponding to approximately €125 per month. Resulting in a total of €275 per month for animal care costs.

Fixed costs for workshop materials include printed booklets (€100 per workshop).

Labour costs are also considered fixed in this model. Based on an hourly wage of €17 for a senior sales assistant (Nationale Beroepengids, 2025), and assuming three hours of labour per workshop (including preparation and delivery), the total monthly labour cost for two workshops amounts to €100.

Marketing and customer acquisition activities are required to ensure sufficient awareness and participation. It is assumed that the store will implement a sign-up system via its website, supported by in-store promotion and social media communication. The associated costs are estimated at €50 per month.

For the online community, costs are limited to an additional membership fee associated with Dibevo, estimated at €10 per month (Dibevo, 2026). This assumes that the pet store already holds a base membership.

Revenue

Workshop pricing is based on a value-based pricing strategy. A price of €50 per participant for a two-hour workshop is proposed, informed by comparable offerings in the market (Chews & Nibbles, 2026). This price point is intended to balance accessibility with perceived value.

It is estimated that each workshop will attract five participants, with two workshops conducted per month. This results in a projected monthly revenue of €500 from workshop attendees.

In addition to direct workshop revenue, supplementary income is generated through product sales. During workshops, customers are offered a discounted starter pack containing essential products. The regular price of this package is estimated at €65; however, a 50% discount is applied for workshop participants. Assuming that two out of five attendees purchase the starter pack during each husbandry workshop (held once per month), this results in an additional monthly revenue of €65.

The online community is priced at €10 per year to ensure accessibility and encourage adoption. Based on market data indicating that approximately 7% of Dutch households own rabbits or rodents (Dibevo, 2020), and assuming a catchment area of 30.000 households per store, the potential target group is estimated at 2100 households. Assuming a 5% adoption rate, this results in approximately 105 members per store, generating €1050 annually, or €88 per month.

Furthermore, the online community and workshops are expected to reinforce each other, contributing to increased customer retention. Community members are offered monthly product discounts to encourage repeat store visits. Assuming that 10% of community members make an additional purchase of €20 per month, this results in an estimated €200 in monthly product revenue.

Cash flow analysis

Based on the estimated costs and revenues, a cash flow projection was developed (figure 51). The initial material costs in month 1 (€1020) include animals (€500), habitats (€420) and printed booklets (€100).

The cash flow analysis demonstrates that, despite a relatively high initial investment in the first month, the concept reaches its break-even point in the fourth month. From this point onward, a stable positive cash flow is generated. This suggests that the concept has the potential to become financially viable in the short term.

| | Month 1 | Month 2 | Month 3 | Month 4 | Month 5 | Month 6 |
|--------------------------------------|--------------|-------------|-------------|-------------|-------------|-------------|
| Workshop costs | | | | | | |
| Employee training | -300 | | | | | |
| Materials | -1020 | -100 | -100 | -100 | -100 | -100 |
| Animal care | -275 | -275 | -275 | -275 | -275 | -275 |
| Hourly wages | -100 | -102 | -102 | -102 | -102 | -102 |
| Marketing | -50 | -50 | -50 | -50 | -50 | -50 |
| Community costs | | | | | | |
| Extra fee Dibevo membership | -10 | -10 | -10 | -10 | -10 | -10 |
| Total | -1755 | -535 | -535 | -535 | -535 | -535 |
| Revenue | | | | | | |
| Workshop contribution + starter pack | 565 | 565 | 565 | 565 | 565 | 565 |
| Community contribution | 88 | 88 | 88 | 88 | 88 | 88 |
| Returning customer sales | 200 | 200 | 200 | 200 | 200 | 200 |
| Total | 853 | 853 | 853 | 853 | 853 | 853 |
| Cash flow | -902 | 318 | 318 | 318 | 318 | 318 |
| Cumulated cash flow | -902 | -584 | -266 | 52 | 370 | 688 |

Figure 51: Cash flow analysis

Sensitivity analysis

The financial projections presented in this model are based on several key assumptions regarding participation rates, customer adoption, and cost stability. The model assumes immediate and stable participation in workshops, consistent upselling of products, and the full adoption of the online community from the first month of implementation.

The base scenario assumes five participants per workshop and two workshops per month. However, if attendance decreases to three participants, monthly workshop revenue would decline by approximately 40%, significantly delaying the break-even point. Similarly, the assumed adoption rate of 5% for the online community is optimistic. In practice, membership is likely to grow gradually over time, while customer churn may reduce the total number of active members.

In addition, the model assumes stable costs, particularly with regard to labour and animal care. Increases in hourly wages, additional time required for organisation, or unforeseen veterinary expenses could lead to higher operational costs and reduced profitability.

The projections further assume consistent demand over time, without accounting for seasonal fluctuations or changes in customer interest. In reality, demand may vary due to external factors such as economic conditions, competitive offerings, or shifts in consumer preferences.

Moreover, the financial viability of the concept is strongly dependent on indirect revenue streams, particularly product sales generated through workshops and community engagement. This indicates that the success of the concept is not solely driven by workshop fees or membership income, but is largely contingent upon its ability to stimulate additional retail purchases.

Overall, these uncertainties introduce financial risk, particularly during the initial implementation phase. Nevertheless, the analysis suggests that under moderate variations in key assumptions, the concept retains the potential to reach break-even, although the time required to achieve this may increase.

6.5 Iteration

Based on initial evaluation sessions, the service concept was refined. Figure 52 illustrates how the different elements (store experience, workshops, and online community) are integrated into a continuous customer journey. Customers are guided from in-store orientation to workshop participation and, subsequently, to ongoing engagement through the online community, creating a feedback loop that encourages repeat store visits.

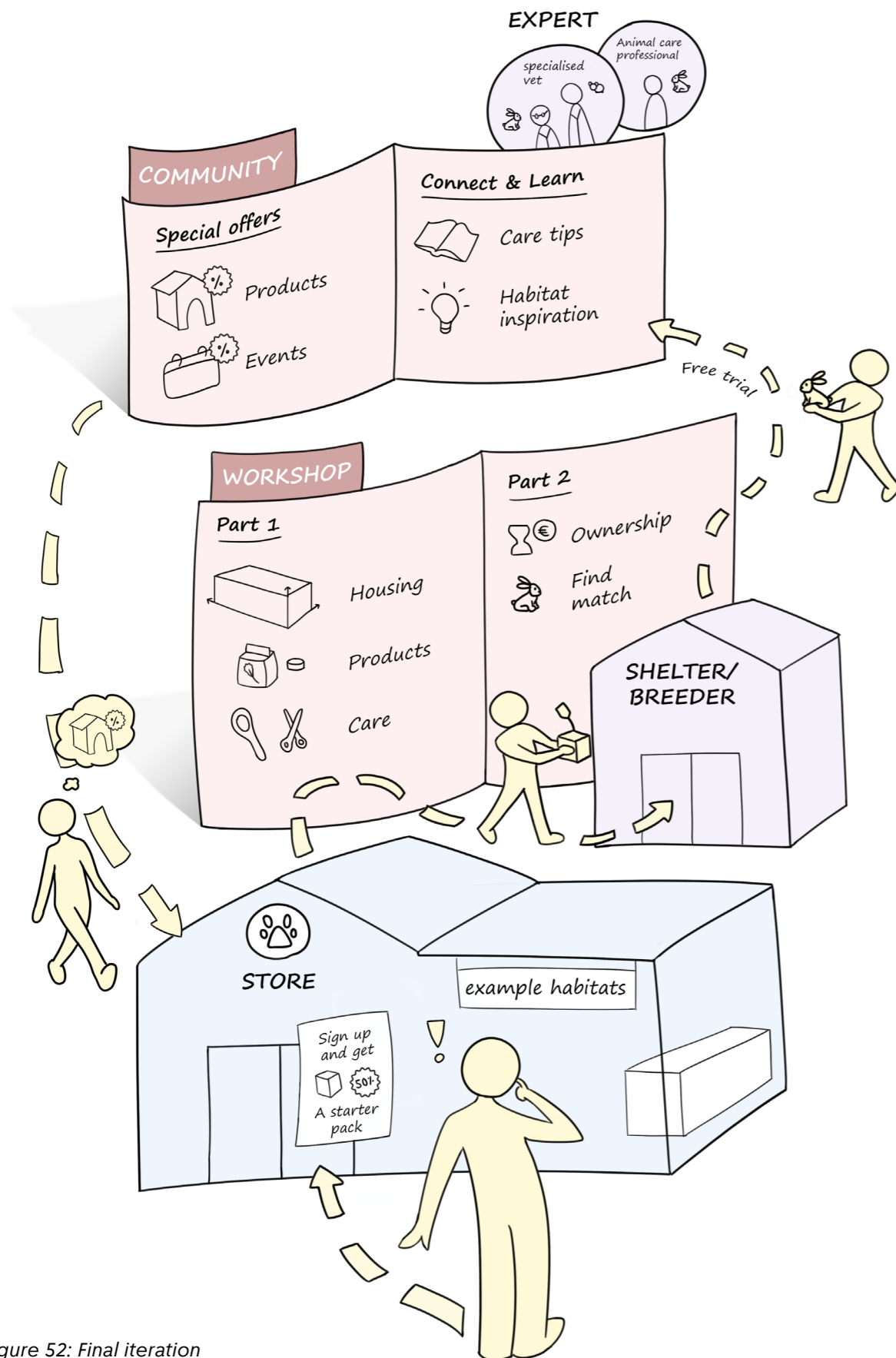


Figure 52: Final iteration

Service concept

The journey begins in-store, where customers can explore example habitats, consult employees, and register for a workshop. Workshops are positioned as an accessible entry point for first-time small animal owners, supported by an incentive such as a discounted starter pack.

The workshop consists of two consecutive parts. In the first part, customers are introduced to animal housing, required products, and basic care practices. This is followed by a transition to a shelter or breeder, where the second part focuses on the responsibilities of pet ownership, including long-term care, time, and financial commitment. Customers are then guided in selecting an animal that matches their lifestyle, in collaboration with the relevant stakeholder.

After completing the workshop, customers are offered a free trial of the online community. This lowers the barrier to entry and allows them to experience ongoing support, such as expert care tips, habitat inspiration, and special offers. Through continued engagement and personalised incentives, the community encourages repeat store visits and strengthens customer loyalty.

Collaboration

The concept relies on clearly defined roles within the stakeholder network. Pet stores focus on product provision and long-term customer guidance, while shelters and breeders are responsible for matching animals to suitable owners and managing the rehoming process. This division ensures that each stakeholder contributes their expertise while maintaining a coherent customer experience.

Workshop structure

A key iteration is the integration of two separate workshops into a single, two-part session. Initial evaluations indicated that participating in multiple sessions created a high threshold for customers. Combining them into one streamlined experience better aligns with customer preferences for convenience and will likely increase participation rates.

Key benefits and considerations

Figure 53 displays the key benefits and considerations for the main stakeholders involved in the concept.

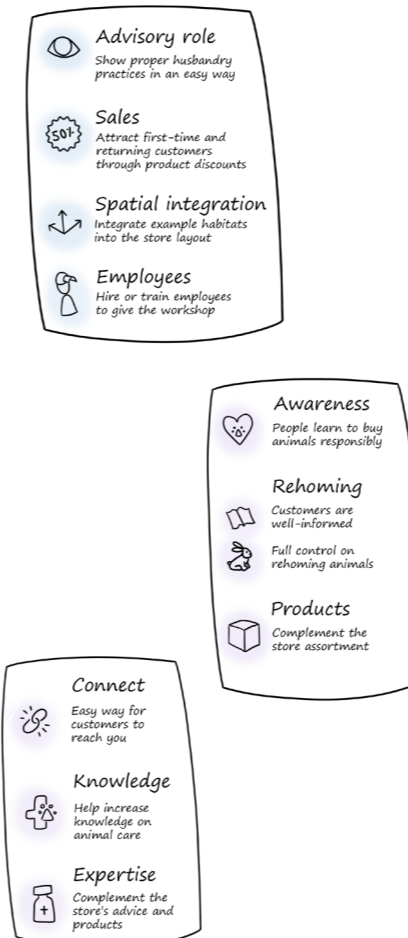


Figure 53: Benefits and considerations

Pet stores

The concept strengthens the advisory role of pet stores through physical demonstrations, workshops, and ongoing support via the online community. It also encourages repeat visits through targeted incentives like the starter pack discount and the special offers of the community. However, implementation requires spatial adjustments to accommodate example habitats, which may reduce directly revenue-generating floor space. In addition, stores may need to invest in staff training or expansion to deliver workshops effectively.

Animal shelters and breeders

For shelters and breeders, the concept increases awareness of responsible animal acquisition and ensures that customers are better informed prior to adoption or purchase. They retain control over the rehoming process, which aligns with their focus on animal welfare and appropriate owner matching.

At the same time, collaboration requires alignment with pet stores, particularly in ensuring that any product offerings remain complementary.

Experts

External experts, such as specialised veterinarians and animal care professionals, benefit from increased visibility and access to new customers through the online community. The platform also enables them to share knowledge and contribute to improved animal care practices.

A key consideration is the need for consistency in advice across stakeholders to maintain a clear and reliable customer experience.

Chapter 7

Evaluation

With the final service concept defined, this chapter evaluates its feasibility, desirability, and viability from a stakeholder perspective. The aim was to assess to what extent stakeholders are willing and able to implement the proposed components, and whether the concept can be sustained in practice over time.

The chapter first outlines the evaluation methodology, including the criteria used and the setup of the evaluation sessions with different stakeholder groups. This is followed by a presentation of the evaluation results, structured per component as well as including an overall assessment of the concept.

7.1 Methodology

To validate the proposed service concept, qualitative interviews were conducted to assess its desirability, feasibility, and viability from the perspectives of key stakeholders. This was done by grouping the previously defined criteria under the categories of desirability, feasibility, and viability. Additional criteria, derived from the established definitions of these dimensions, were incorporated to ensure a comprehensive assessment (figure 54). These criteria were translated into interview questions, resulting in six structured interview guides tailored to the specific roles and perspectives of each stakeholder group (see appendix F).

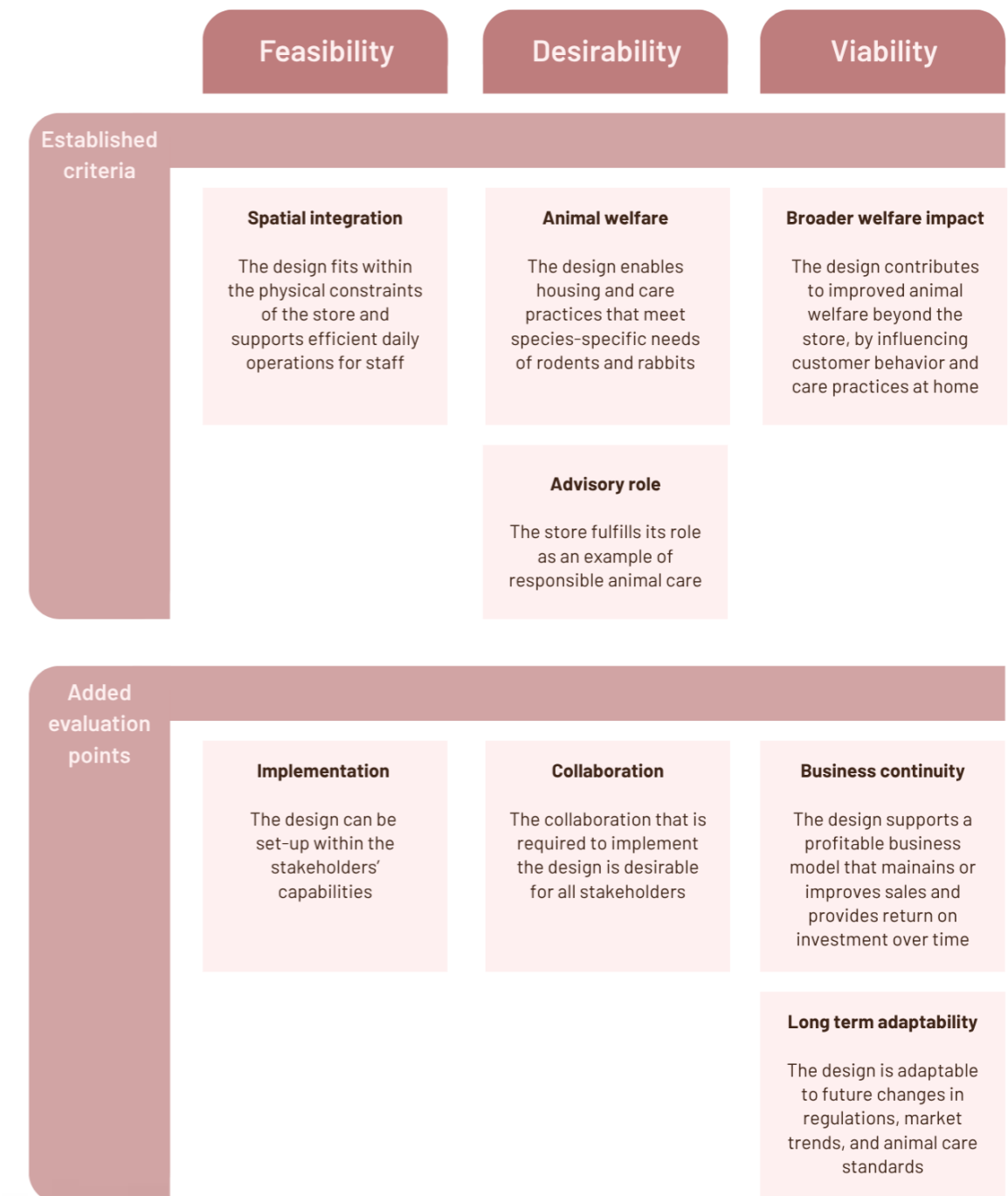


Figure 54: Evaluation criteria categorised

In total, interviews were held with four pet store owners, two potential customers, a rodent shelter representative, a hamster breeder, a rabbit workshop expert, and a representative of Dibevo. Figure 55 provides an overview of the participants, including their roles, background, and involvement in the project.






| | Evaluation session | Role | Background | Project involvement |
|--|--------------------|-----------------------------|--|---|
|  Pet stores | Pet store 1 | Pet store owner | Sells rodents and rabbits, among other animals | Involved during interview and brainstorming phase |
| | Pet store 2 | | | |
| | Pet store 3 | | Post-iteration | |
| | Pet store 4 | | | Only sells rodents and rabbits, no other animals |
|  Potential customer | Customer 1 | Wants rabbits in the future | Has had rabbits when they were younger | Not involved so far |
| | Customer 2 | | Post-iteration | |
|  Animal provider | Animal shelter | Shelter volunteer | Has volunteered in shelters for over 20 years | Not involved so far |
| | Breeder | Hobby breeder | Breeds hamsters at home | Involved during interview phase |
|  Workshop expert | Post-iteration | Rabbit workshop provider | Rabbit expert, behaviourist and nutritionist | Not involved so far |
|  Sector organisation | Post-iteration | Dibevo employee | | Involved during interview and brainstorming phase |

Figure 55: Overview of evaluation interviewees

Initial evaluation sessions took place before the final concept was iterated upon (as described in chapter 6.5). In Figure 55, these sessions are referred to as the pre-iteration evaluations, while the sessions conducted after the concept iteration are referred to as the post-iteration evaluations.

The pre-iteration evaluations were conducted with Pet store 1 and Customer 1. Based on the findings from these sessions, several minor adjustments were made to the concept. These included clarifying the roles of the different stakeholders, merging two separate workshops into a single session, and integrating the idea of offering a free trial of the online community after participation in the workshop.

Evaluation setup

Pet store evaluation

For pet store owners, the evaluation focused on the practical and strategic implications of the concept. This included assessing whether the concept could be realistically implemented within the store context, whether it would provide long-term business value, and whether it aligns with the advisory role of pet stores.

After presenting each component of the concept, participants were asked to reflect on its feasibility, considering spatial, operational, and organisational constraints. Desirability was explored by discussing expected customer adoption and the extent to which the concept supports their advisory responsibilities. To assess implementation potential, the roadmap visual was presented, allowing participants to evaluate the practicality of different implementation steps. Finally, the overall viability of the concept was discussed in terms of long-term business impact and alignment with store objectives.

Customer evaluation

For customers, the evaluation primarily focused on desirability. The central question was whether they would be willing to engage with the proposed workshops and online community, and whether these services would support them in gaining sufficient knowledge and confidence to care for their animals.

Customers were guided through a simulated process of purchasing an animal. During this process, the influence of example habitats on customer behaviour was assessed, as well as the impact of the proposed workshops on knowledge acquisition and trust in the store. Additionally, the online community was evaluated by exploring its potential influence on animal care practices and purchasing behaviour.

Animal provider evaluation

For the animal shelter and breeder, the evaluation focused on both desirability and feasibility of collaboration with pet stores. Participants were asked whether they would be willing to collaborate on organising workshops, and what conditions would be required to establish such partnerships. In addition, feasibility was explored by discussing their capacity to contribute to workshops, expected participation levels, and the potential impact on animal welfare.

Workshop expert evaluation

The workshop expert provided insights into the practical organisation and delivery of workshops. Questions focused on logistical requirements, participant engagement, and effective knowledge transfer strategies for diverse audiences. Particular attention was given to the role of live animals in workshops, examining whether their presence enhances learning outcomes. The expert was also asked about their willingness to contribute to the proposed online community.

Sector organisation evaluation

Dibevo was included due to its sector-wide perspective and involvement in improving animal welfare standards. The representative was asked to evaluate the desirability and feasibility of the concept across different types of pet stores, as well as the likelihood of adoption by both businesses and customers. Additionally, questions addressed how employees could be trained to deliver workshops and how the online community could be developed and maintained.

Conducting and analysing the interviews

It should be noted that one pet store owner, the hamster breeder, and the Dibevo representative had previously been involved in earlier phases of the project, including interviews and ideation sessions. Their prior involvement may introduce a degree of positive bias towards the concept. The remaining participants had no prior exposure to the project.

Customers were recruited through personal connections, while pet stores and the rodent shelter were contacted through direct outreach. The workshop expert was approached during an open day at an animal shelter, where rabbit workshops were being conducted.

Most interviews (customers, pet store owners, rodent shelter, and workshop expert) were conducted in person, providing contextual insights as they took place in relevant environments such as stores or workshop locations. The remaining interviews were conducted via phone. Each interview lasted between 20 and 40 minutes.

7.2 Evaluation results

Example habitats

Pet store owners were asked to what extent they would be willing to implement example habitats and whether this would be feasible within their spatial constraints. Figure 56 presents a summary of their responses.

| | Willingness of implementation | Spatial integration |
|-------------------|--|---|
| Pet stores | | |
| Pet store 1 | Would be willing to implement the example habitats if possible | Has future plans to incorporate it in the store |
| Pet store 2 | | Will never have enough space for it |
| Pet store 3 | | Already has some kind of example habitat in the store |
| Pet store 4 | | |

Figure 56: Evaluation results of the example habitats

Fulfilling the store's advisory role

All interviewed stores indicated that example habitats support their advisory role, which they consider a core responsibility. By demonstrating how animals should be kept in a home environment, example habitats improve customer understanding and enable employees to provide contextualized product advice. Additionally, customers respond positively: they are more engaged, better informed, and more inclined to purchase products when they see them applied in a realistic setting.

Example habitats also contribute to norm-setting behavior. By presenting a complete and enriched living environment, stores implicitly communicate a minimum standard for animal care. This encourages customers to replicate similar conditions at home, potentially improving overall animal welfare.

Commercial purposes

However, despite these benefits, economic and spatial constraints form a significant barrier to implementation. Retail space is expected to generate direct revenue, and example habitats do not immediately contribute to sales. One store indicated that it will never have sufficient space, while another is uncertain about future feasibility. Only larger stores currently implement such habitats, often placing them at the back of the store to control customer interaction and prevent impulse purchases.

This highlights a key tension: while example habitats enhance advisory quality and customer experience, they conflict with the commercial logic of retail, where every square meter must be financially justified. As a result, example habitats in their current form are not sufficiently viable as a standalone investment.

Regarding the inclusion of live animals, all stores emphasized that animal sales remain central to their business model. Animals attract customers and create long-term relationships, as buyers tend to return for related products. Stores also prefer to maintain control over the full sales process, positioning themselves as providers of a complete package (animal + products + advice). At the same time, using live animals in example habitats presents ethical limitations, as a retail environment can never fully meet optimal living conditions due to the constant possibility of disturbance.

Workshops

Pet store owners, the animal shelter, and the breeder were asked to evaluate the feasibility to implement workshops, within spatial and staffing constraints. In addition, participants were asked about their willingness to collaborate in facilitating these workshops. Figure 57 provides an overview of the responses.

| | Implementation | Collaboration |
|-------------------------|--|--|
| Pet stores | | |
| Pet store 1 | <ul style="list-style-type: none"> Not enough space Enough employees | Would want to collaborate with shelters |
| Pet store 2 | <ul style="list-style-type: none"> Not enough space Not enough employees | |
| Pet store 3 | <ul style="list-style-type: none"> Enough space Not enough employees | |
| Pet store 4 | <ul style="list-style-type: none"> Enough space Enough employees | |
| Animal providers | | |
| Animal shelter | <ul style="list-style-type: none"> Not enough space Not enough employees | Would want to collaborate with a pet store, under certain conditions |
| Breeder | <ul style="list-style-type: none"> Not enough space Could give workshop | |

Figure 57: Evaluation results of the workshops

The need for in-depth information

There is a demonstrated need for more in-depth and accessible information. Both stores and customers indicate that current advice is often insufficient, especially for first-time owners. Workshops could address this by providing structured, practical guidance, increasing customer confidence and potentially improving animal welfare. However, their effectiveness depends heavily on how information is delivered. Generic presentations are not sufficient; advice must be tailored, interactive, and adapted to different audiences. This requires a level of expertise and communication skill that most stores currently do not possess.

Implementation

As a result, implementation capacity is limited. Many stores lack the space, time, and qualified staff to organize workshops independently. While external experts could fill this gap, this introduces additional complexity and cost. Larger or chain-based stores are better positioned to implement workshops due to greater resources, existing networks, and ongoing shifts toward service-oriented models. Smaller specialty stores, in contrast, face structural constraints that make consistent implementation unlikely.

User engagement

In terms of willingness, both stores and customers show conditional interest. Workshops are attractive when they provide clear added value (such as personalised advice or hands-on experience) but are unlikely to appeal to all customer segments. In particular, customers who purchase animals impulsively are unlikely to participate, especially if time or financial investment is required. This suggests that workshops primarily serve a more motivated, welfare-oriented target group rather than the average customer.

Collaboration

Collaboration between pet stores and shelters or breeders is currently constrained by conflicting interests and control over animal rehoming. While stakeholders express openness in principle, differences in revenue models, sales processes, and responsibilities create substantial barriers, particularly as pet stores are commercially driven whereas shelters and breeders prioritise animal welfare outcomes. Trust and alignment are therefore not yet sufficient for deep integration, especially when live animals are involved. Although small-scale collaborations are emerging, which are often based on existing relationships or facilitated initiatives (such as those explored by Dibevo), these remain exceptions rather than the norm, and stakeholders generally consider widespread collaboration unrealistic in the near future. As a result, collaboration would need to be developed gradually, starting with lower-risk forms of support that do not involve animals.

Online community

Implementation

In terms of implementation, pet stores themselves are not equipped to develop or maintain an online platform. The responsibility would need to lie with an external organisation that has both the resources and a neutral position. An NGO focused on animal welfare is the most suitable candidate, as it can provide educational content and manage a centralized platform. Pet stores could contribute indirectly, for example through coordinated product discounts or loyalty-based incentives.

Providing information through the community

There is broad willingness to participate among stakeholders. Pet stores, experts, and customers recognise the benefit of having access to reliable, in-depth information in one place. In particular, the perceived credibility of expert-backed content is a strong motivator, especially in contrast to the large amount of misinformation available online. Additional features, such as anonymous question-asking and access to specialised veterinarians, further lower barriers to seeking advice.

However, maintaining consistency and trustworthiness of information remains a challenge. Differences in opinions between experts cannot be fully eliminated, and alignment between advice from veterinarians, specialists, and pet stores is essential to avoid confusion. This requires careful curation and coordination within the platform.

User engagement

A key limitation lies in user engagement. The primary customer group of pet stores are families with children, who are unlikely to actively use an online knowledge platform. Instead, the community is more suited to a niche audience of motivated owners, hobbyists, and enthusiasts who are already inclined to seek additional information.

Overall evaluation conclusion

Figure 58 presents an overview of the benefits and limitations for each component of the concept, based on the evaluation results.

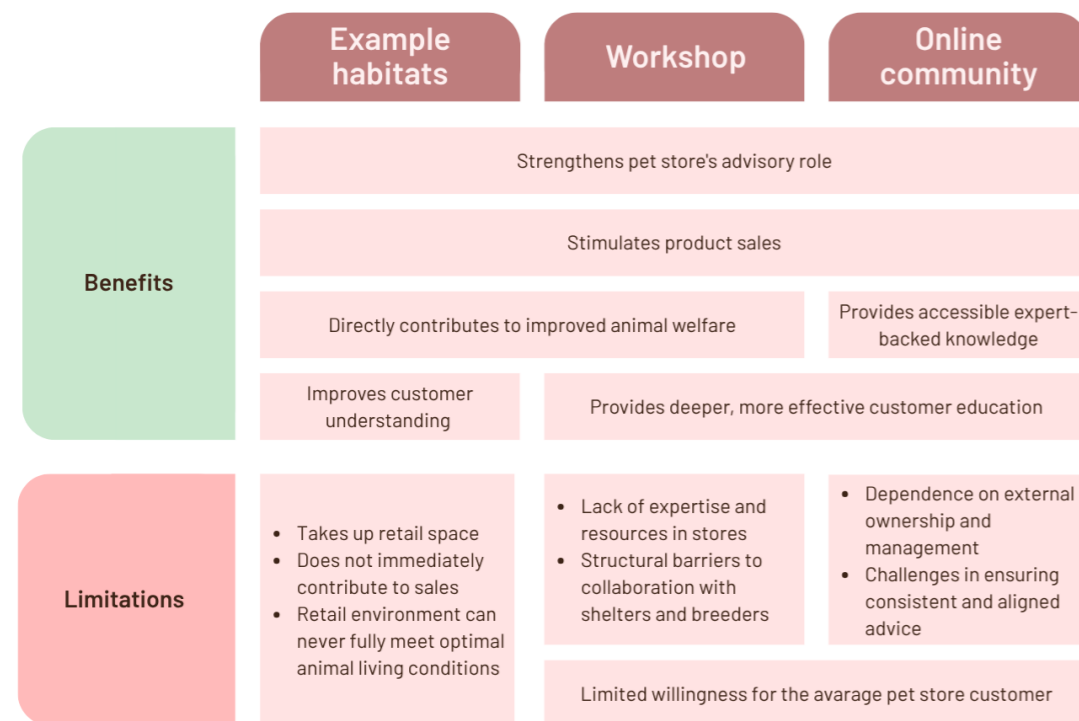


Figure 58: Overall evaluation results

Overall, the concept demonstrates strong desirability in terms of improving animal welfare and supporting the advisory role of pet stores, but it is not universally viable in its current, fully integrated form.

Strengthening customer loyalty

The combined concept of example habitats, workshops, and an online community has the potential to strengthen customer loyalty, but only when implemented selectively and in alignment with the realities of pet store operations.

Customer loyalty can be enhanced by creating a connected customer journey. Example habitats attract customers and provide immediate, practical inspiration for product purchases. Workshops deepen this engagement by offering structured and personalised advice, while the online community extends the relationship beyond the physical store through continued access to knowledge and support. When these elements are linked (through starter packs and community discounts), they create a reinforcing system in which customers are more likely to return, make informed purchases, and recommend the store to others.

Education and welfare in retail environments

The evaluation reveals a fundamental tension between the concept's educational and welfare-oriented value and the commercial and spatial constraints of retail environments. While example habitats, workshops, and an online community all contribute to better-informed customers, their implementation requires resources, space, and expertise that are not available to most stores. As a result, feasibility is highly dependent on store size, business model, and access to external partners.

This suggests that the concept should not be approached as a single, unified solution, but rather as a modular system, in which components are implemented selectively. Larger or more service-oriented stores may adopt multiple elements, while smaller stores are more likely to benefit from limited or externally supported interventions. Similarly, collaboration with external stakeholders and the development of an online community require gradual, trust-based approaches and cannot be assumed at scale in the short term. In this sense, the concept's success lies not in full implementation, but in its ability to be adapted to different contexts and stakeholder capabilities.

The following chapter therefore outlines targeted recommendations for each component, as well as strategic guidance for implementing the concept as a whole.

Chapter 8

Discussion

This chapter reflects on the findings of the project and discusses their implications. It begins by answering the initial research questions, based on the results obtained throughout the study. Subsequently, the research and design limitations are addressed to provide a critical perspective on the validity and applicability of the findings. Finally, recommendations are presented for the implementation of the individual components of the concept, as well as for broader improvements in animal welfare within the rodent and rabbit sector.

8.1 Answers to research questions

The initial research questions served as a starting point for the study. Based on the findings, they can now be answered as follows.

Question 1

Question 1

What do **pet stores** that sell rodents, rabbits and/or related products have to do to keep up with changing consumer trends and maintain business viability?

Pet stores need to adapt to a shift toward increased awareness of animal welfare and a growing demand for reliable information. Rather than fundamentally changing their core business model, their role is expected to evolve toward providing accessible advice alongside products.

The findings indicate that pet stores are not well-positioned to lead educational efforts independently due to limited expertise and resources. Instead, they can remain viable by collaborating with external experts and responding to increasing customer expectations. As customers become better informed, demand for higher-quality products and responsible animal care practices increases, requiring stores to adjust their product range and advisory role accordingly.

In this way, business viability is maintained not by initiating change, but by adapting to evolving standards in animal welfare and customer knowledge.

Question 2

Question 2

How are **customers** informed about animal welfare, how do they inform themselves, and what effect does it have on buying pets and taking care of them responsibly?

Customers obtain information about animal welfare from a variety of sources, including pet stores, online platforms, and external experts. However, the findings show that the quality and consistency of this information vary significantly, which can lead to confusion or incomplete understanding.

More structured and expert-driven forms of information, such as workshops and curated online content, are perceived as more reliable and effective. Customers who actively seek out such information tend to be more engaged and are more likely to make informed decisions regarding pet ownership and care.

This suggests that improved access to high-quality, expert-backed information can positively influence both purchasing behaviour and long-term animal care, although its impact is strongest among already motivated customer groups.

8.2 Limitations

Research limitations

Ethical considerations

The project is grounded in an inherent ethical tension: even when animals are kept according to established husbandry guidelines, optimal welfare cannot be guaranteed due to their dependence on human control. This raises fundamental questions about the appropriateness of keeping animals in retail environments. Although the proposed example habitats aim to improve conditions by following established guidelines (e.g. LICG), they do not fully resolve this ethical concern. As a result, the concept operates within a system that remains inherently limited in its ability to ensure animal welfare.

Methodological limitations

This research is primarily based on qualitative methods, including semi-structured interviews and co-creation sessions. While these methods provide rich, in-depth insights, they are inherently interpretive and limit the generalisability of the findings. The results should therefore be understood as indicative rather than representative of the broader animal retail sector.

Sample limitations

The study involved a relatively small and selective group of stakeholders. Pet owners were primarily recruited through guinea pig and rabbit-focused online communities, meaning they are likely more engaged and motivated to learn about animal care than the average pet owner. This introduces a bias toward more welfare-oriented perspectives.

Additionally, pet stores and animal shelters were geographically concentrated in urban areas. As attitudes toward animal ownership may differ between urban and rural contexts, this limits the applicability of the findings to other settings.

Design limitations

Context dependency

The concept is primarily designed for small specialty pet stores in urban environments. While some components may be transferable to larger stores or chains, the concept has not been fully developed or tested for these contexts. Its applicability is therefore context-dependent.

Limited novelty of individual components

The individual elements of the concept (example habitats, workshops, and online platforms) are not entirely new and have been implemented separately in existing initiatives. The added value of this concept lies in the integration of these components into a single system. However, this also means that its innovation depends on the effectiveness of this integration, which has not been tested in practice.

Limited evaluation of business viability

The long-term business viability of the concept has not been thoroughly assessed. While stakeholder perceptions of feasibility were explored, no detailed financial or operational analysis was conducted. As a result, it remains uncertain whether the concept can be sustainably implemented in practice.

8.3 Recommendations

Implementing the individual components

This section translates the evaluation results into targeted recommendations for each component. Given the differences in feasibility and impact, the components should not be implemented uniformly, but selectively based on store size, resources, and strategic focus.

Example habitats

Although example habitats improve customer understanding of animal welfare, their implementation is constrained by limited retail space and the inability to provide optimal living conditions in-store. A phased and selective approach is therefore recommended. Smaller specialty stores should start with a single, space-efficient habitat (e.g. for hamsters) as a pilot to assess commercial impact. Only if positive effects on customer behaviour and sales are observed should expansion be considered.

This approach allows stores to strengthen their advisory role without immediately compromising retail capacity, while gradually shifting toward a more education-driven value proposition.

Workshops

Workshops can provide deeper and more effective customer education, but require a level of expertise that most stores currently lack. Smaller specialty stores should therefore start with occasional, expert-led workshops, allowing them to offer high-quality education without placing additional pressure on staff. More accessible formats, such as online sessions, can be used as a first step to lower participation barriers and test customer interest.

Larger or chain-based stores are better positioned to implement workshops more structurally, for example by standardising formats and rolling them out across multiple locations.

Online community

The online community should be developed and managed by an independent and credible organisation with the necessary resources and authority to provide reliable, expert-backed information. Organisations with an established role in animal welfare education (such as De Dierenbescherming) illustrate the type of actor that could take on this role, given their existing platforms and experience in providing information to pet owners.

However, as such organisations are often more closely aligned with animal welfare perspectives, collaboration with pet stores may require time and careful alignment of interests, similar to the broader challenges identified in stakeholder collaboration.

To ensure trustworthiness, content should be curated by multiple experts. Given the diversity of opinions on animal care, the platform should not present a single “correct” approach, but rather offer well-substantiated perspectives, enabling users to make informed decisions.

Collaboration

Collaboration between pet stores and animal shelters or breeders should be developed incrementally. Due to fundamentally different priorities (commercial sales versus animal welfare) there is currently insufficient alignment for deep integration.

Initial collaboration should focus on low-threshold, non-animal-based initiatives, such as product donations or in-store fundraising. These interactions can help build trust and establish working relationships, which may, over time, enable more integrated forms of collaboration, such as referral systems.

Implementing the concept as a whole

A full implementation of the concept is not feasible for most pet stores in the short term. Spatial limitations, limited in-house expertise, and the commercial need to prioritize revenue-generating activities restrict what can realistically be adopted. In addition, the sector is subject to broader uncertainties, including changing regulations and a gradual decline in small specialty stores selling animals.

As a result, the concept should not be approached as a complete transformation led by pet stores, but as a gradual and externally supported transition.

Top-down approach

A key insight from the evaluation is that pet stores are unlikely to drive large-scale improvements in animal welfare due to structural and commercial constraints. Instead, meaningful change is more likely to emerge from a top-down dynamic, in which expert-driven information and educational initiatives shape customer expectations and behaviour (figure 59).



Figure 59: Top-down approach

Through channels such as workshops and online platforms, customers become better informed, which in turn increases demand for higher welfare standards. Pet stores are then required to respond to these changing expectations, rather than initiating the shift themselves.

Within this dynamic, the primary role of pet stores remains providing accessible advice and products. More complex educational responsibilities should be led by external experts, such as specialised veterinarians and animal behaviour specialists, who possess the required knowledge and authority. This division of roles allows for broader impact without placing unrealistic demands on retail environments.

Rather than fully redefining their business model, pet stores should position themselves as accessible, experience-based touchpoints within a broader ecosystem of animal care and education. This allows them to remain relevant in a changing market while contributing to improved animal welfare in a gradual and feasible way.

Recommended implementation approach

This top-down dynamic should be combined with a phased implementation strategy. As established in chapter 5, the concept was initially designed primarily for independently owned specialty stores. However, the evaluation demonstrated that chain stores possess greater financial, spatial, and organisational capacity to implement several components more extensively. Therefore, a differentiated implementation roadmap was developed for both store types (figure 60).

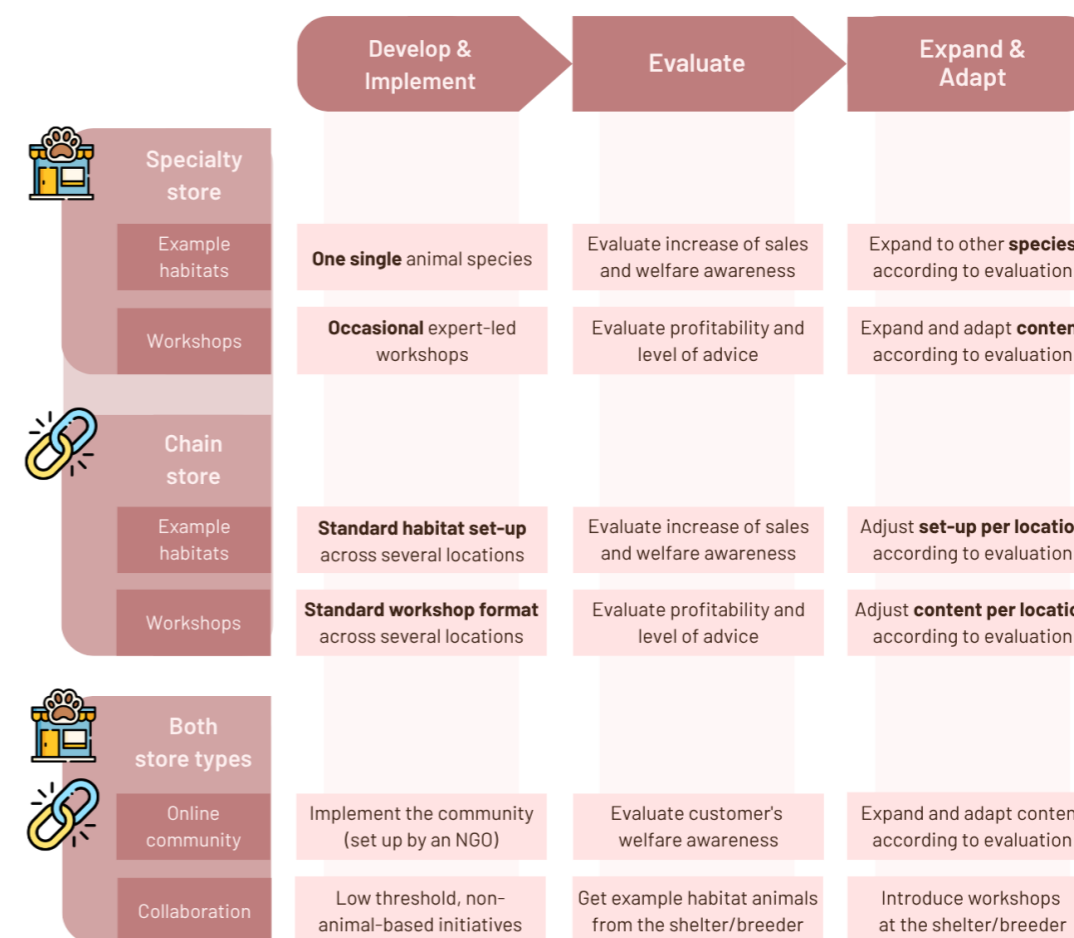


Figure 60: Recommended implementation approach

The implementation strategy is divided into three phases. In the first phase, the concept components are introduced in a low-threshold and exploratory manner. For specialty stores, this involves gradually implementing selected elements, such as introducing an example habitat for a single species and organising occasional expert-led workshops. At the same time, the collaborative network required for the broader concept can begin to develop. Through partnerships with NGOs for the online community and through small-scale, non-animal-based initiatives together with animal providers (animal shelters and breeders).

For chain stores, the first phase focuses primarily on standardisation and scalability. This includes developing consistent formats for example habitats and workshop content that can subsequently be implemented across multiple locations, enabling broader reach and more efficient execution.

The second phase focuses on evaluation. During this stage, stores assess whether the implemented components positively influence customer behaviour, animal welfare awareness, and long-term commercial performance. Collaboration with animal shelters and breeders can also gradually expand to include animals themselves, provided that sufficient trust and alignment have been established between stakeholders.

In the third phase, the concept can be further expanded and adapted in response to evolving welfare standards, customer expectations, and evaluation outcomes. Once stronger collaborative relationships have been established, stores may facilitate workshops hosted directly at animal shelters or breeders. This would allow customers to receive education and guidance within the pet store environment, while acquiring animals through external providers better equipped to support responsible ownership practices.

8.4 Personal reflection

Working on this project over the past months has been both challenging and valuable in terms of my personal development. From the outset, I wanted to choose a topic that genuinely interests me, which ended up being animal welfare, eventually leading to a focus on small animals. In particular, a focus on rodents and rabbits and the way in which the purchasing process could be improved. While I initially anticipated that this would be a complex topic, I was still eager to explore its possibilities, especially given its societal relevance.

One of the main challenges of this project was its individual nature. Unlike previous projects, I was now responsible for defining the scope, structuring the process, and initiating contact with supervisors and external stakeholders myself. This required a high level of independence and self-direction. Through this process, I became more aware of my own working style. While I am comfortable adapting to team dynamics in group settings, this project required me to take full ownership of decisions and to critically assess my own work without continuous external validation. This strengthened my ability to reflect and make informed design choices independently.

A key learning point was the importance of stakeholder engagement within the design process. Throughout the project, I actively involved a wide range of stakeholders, including pet store owners, animal shelters, breeders, and pet owners. These interactions ranged from informal field visits to in-depth interviews and co-creation sessions. Engaging with approximately 25 participants provided valuable insights into different perspectives and helped ground the project in real-world contexts. It also contributed to the development of my interviewing and facilitation skills, particularly in balancing different viewpoints. At the same time, this process highlighted the challenges of working with diverse stakeholders, such as managing conflicting interests and translating qualitative insights into concrete design directions.

Overall, this project has strengthened my ability to conduct independent research, engage with stakeholders, and critically reflect on both the design process and its broader implications. It has also increased my confidence in addressing complex, real-world problems, particularly those involving ethical considerations and multiple perspectives.

I am grateful for the willingness of participants to contribute to this project and for the interest shown in its topic. I hope that the outcomes of this work can contribute, even in a small way, to improvements within the rodent and rabbit sector.

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