

The 11th International, Invention, Innovation & Design 2022

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Ushering in the Age of Endemic

# THE 11TH INTERNATIONAL INNOVATION, INVENTION & DESIGN COMPETITION INDES 2022

# **EXTENDED ABSTRACTS BOOK**



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## The 11th International Innovation, Invention and Design Competition 2022

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#### PETXI: ONLINE PET CARE AND TRANSPORTATION SERVICE

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#### **ABSTRACT**

Given pet owners' busy schedules today, they sometimes struggle to provide for their pets' requirements independently. Finding the time to take their animals to the vet can be difficult, especially if someone is not available to help. These pet owners would benefit greatly from having a smartphone app specialising in pet services, so they do not have to worry about their pets not getting what they need. PetXi's goals are to make it easier for pet owners with busy schedules to take care of their pets' requirements and transport them safely to and from the neighbouring doctor and grooming appointments. This application employs comparative and observational research examining Malaysia's pet-care market.

**Keywords:** Pets; Pet-Care Services; Transportation; Safety

#### 1. INTRODUCTION

In this day and age, life is understandably hectic for many pet parents. With commitments at work, full-time attention to their pets is usually not a possibility. Most pet owners love their pets, but as time revolves and people get busier, some of their pets' needs are forgotten. PetXi is a contemporary and original idea proposed to fulfil this. This app is what pet owners are looking for so they can take care of their pets with a few taps from their phone. PetXi offers proper care for the animals, including door-to-door delivery services, with a secure and safe method of pet transportation. As the first mobile app idea that focuses exclusively on animal couriers, we would like to expand the business by raising demands and keeping pets in safe hands. Digitalism is now the main force behind human activity and is at the core of all academic fields, including the arts, science, and medicine (Bowen & Giannini, 2014). Digital applications enable brands to accomplish their overarching communication objectives, making them a potent tool for communication. They allow brands to interact with many internet users and advertise themselves online through digital marketing. Users can interact with brands through digital applications. They spread brand awareness, increase brand communication, and increase customer exposure to the brand. They also serve as platforms for lead generation, market research, and communication (Zatezalo, 2014).

According to the central tenet of product segmentation, a business can produce a single product with slight differences, market it to several consumer segments, and increase market share while incurring fewer expenses than if it were to create whole new products. Product



segmentation allows a business to spread the risk of selling an expensive product among various target customers. The company can sell sister product models to different market groups at different pricing rather than having one product with one market and supply-and-demand curve. One portion may respond poorly, whereas another may do better than predicted (Gillikin, 2017). This innovation's objectives are mainly to focus on customers and their pets. The first objective of the app is to provide convenience for pet owners with tight schedules to fulfil their pet's needs. This could help pet owners with little to no time keep their pets healthy. The next objective is safely transporting the pet to and from the nearby veterinarian and grooming appointments. Safety is vital for everything, including animal safety. Keeping their environment safe and comfortable can gain the pet owners' trust to keep using the service.

Pet owners would love for their pet to have the best because their pet is also a part of their family. Ensuring their health and needs can be challenging for some owners as they could be on a tight schedule and not have time for their pets. Not only that, but some pet owners are also young and could not have the transportation to get their pets the proper care. Now, numerous courier services that send various things such as everyday items exist. Pet care should not be an exception as pets are valuable and have been overlooked in their care. PetXi could help solve those problems. So, whether one has a tight schedule at work and no time to get their pet's essentials or to get their pet to the nearest vet, PetXi is here to safely transport owner's pet to and from any nearby veterinarian and grooming appointments. PetXi is dedicated to making pet care safe, simple, and accessible so their pet can get the best possible care.

#### 2. METHODOLOGY

The research was conducted using an observational study and a comparative study. According to Tegan (2022), an observational study relies only on what the researcher observes to provide an answer to a research topic. It helps in determining whether anything is missing or needs to be improved to better serve or provide for the customer, which subsequently helps strengthen the objectives of this study. Hence, for this study, researchers observed the industry primarily focusing on the pet care market in Malaysia. This is identified by analysing recent research studies, news articles, and social media updates. Furthermore, a comparative study was built by researchers from different approaches to provide further understanding of the subject discussed. A comparative study examines, contrasts, and compares two or more items or concepts to show how they are similar to, or distinct from one another (Bukhari, 2011). This method also helps researchers develop the design regarding the main argument.

#### 3. FINDINGS

The findings for this research are obtained from several previous research concerning mobile pet applications such as Petbacker, JoJoPets, and others. These existing applications help pet owners to locate and send their pets to vet appointments and groomers. In this way, these apps make it easier for pet owners to track their pet's appointments. However, none of the



applications can assist pet owners in ensuring the safety of their pets when in transport. Therefore, PetXi intends to create a unique application that is extremely useful and practical for pet owners (Shaheen et al., 2018) by adding several services that reduce pet owners' workloads. After comprehending the concept of PetXi as a platform for pet owners, the results indicate a few recommendations.

The retail environment of pet products and services have been significantly affected by the shift of customer buying habits and the rise of internet purchasing (Widmar et al., 2020). According to Akram, et al. (2021), the COVID-19 epidemic has altered how business is seen, leading to a surge in online commerce's transaction volume and consumer base. Therefore, this shows that online services are now the preferable way among consumers. First, PetXi suggested online purchasing pet supplies such as food, snacks, vitamins, medicines, etc. PetXi is also working with official veterinarians to check the pet's health condition and daily activities personally. This makes it easier for pet owners to purchase pet supplies online as recommended by their veterinarian of choice. Although it is generally known and often discussed that clinics are conducting less retail business for items and medications than in the past, it is not well recorded where and in what category this commerce presently takes place. A study by Widmar et al. (2020) proved this, stating that a large number of respondents purchased speciality food for cats, dogs, and other pets online rather than from a physical store.

In addition, the animal tracking system was proposed using a simple tracking page within the PetXi app itself with live and precise location of the drivers, and this is applied to monitoring pet animals in nearby cities, which can detect registered roaming pets in the city (Kumar & Singh, 2018). PetXi also supports Google Maps, which can show the right location and position of the appointed animals (So-In et al., 2012). Besides that, a tracking system was suggested to track not only vet appointments and groomers but also animal shelters or pet adoption centres. This encourages other soon-to-be owners to adopt pets instead of purchasing them.

#### 4. CONCLUSION

PetXi is a mobile app which focuses mainly on pet transportation services. It is the best solution for busy clients struggling to reduce physical contact due to the coronavirus pandemic. PetXi's service in transporting clients' pets from one to another is guaranteed to be safe and smooth. The researchers have conducted a study using an observational study where it is used to observe the industry, mainly focusing on the pet care market in Malaysia. The researchers used this method by analysing recent research studies, news articles and social media updates. The researcher also used a comparative study to help develop the design regarding the main argument. By using these methods, the researchers obtained information from several previous research concerning mobile pet apps such as Petbacker, JoJoPets, etc and none of these mobile apps can assist pet owners in ensuring the safety of their pets when in



transport. Therefore, PetXi intends to create a unique application that is useful and practical for pet owners.

PetXi is working with official veterinarians to check the pet's health condition and daily activities personally and will make it easier for pet owners to purchase pet supplies online from their veterinarian of choice. The app also recommends an animal tracking system with live and precise location of the drivers and track vet appointments and groomer, and animal shelters or pet adoption centres to encourage pet adoption rather than purchase. In conclusion, by introducing PetXi in Malaysia, it is believed that it will solve the problems faced by pet owners with tight schedules who want to reduce physical contact during the pandemic and safely transport their pets from one place to another smoothly.

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Saya yang menjalankan amanah,

Setuju.

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