

According to Oxford word power Dictionary¹, pet refers to an animal which is kept at home for pleasure and companionship rather than for food or working purpose. Pets could be adopted from animal protection organizations or could be sold at pet shops, breeders as well as farms. The popular species of pets are dogs, cats, fishes that are kept indoor aquaria, birds, rabbits, hamsters and guinea pigs.² Those are common domestic pets that households keeping globally. Besides, some people would choose exotic pets, such as snakes, reptiles, Invertebrates, etc. In details, there is a list of usual pets which covers both common and exotic pets. In this thesis, it would mainly discuss on pets in three categories, they are Dogs, Cats and Other Pets due to the limits of secondary data which collected by Euromonitor.³ It cannot analyze in different species of pets diversely. However, the general presentation of an overview of pet care industry could be completed precisely still.

Food is a nutritious substance that eaten by human or animal for maintains growth and life through absorption. It is the basic requirement for every pet to have pet food, the food that designed or chosen for each of them, in order to support every pet's life. Hence, the growth of pet ownership is affecting the demand for pet food positively. In the category of food, it is not just multiplex in humans' world but also in pets' food. There are different kinds of pet food, for examples, dry food, wet food, canned food, treats, fresh vegetable or meat, etc. According to the statistics⁴, dry food are more popular for dogs' feed, on the other hand, wet food has more

demand for cats' feed. For snacks, dog treats and mixers are the most demanding in the world market. For other pet food, small mammal or reptile food have the highest demand and then the fish food and the bird food in descending way. In addition, not all of the pet owners purchase pet food, some of them may feed pets with table scraps or home-made pet food.

Traditionally, pet care companies dominate the pet food market by establishing

various brands for targeting different pet owners' favorite and also needs of the pet. Nonetheless, an increasing number of pet food consumers seek premium pet food and part of the consumers are finding 'raw', 'human grade', 'hypoallergenic', 'grain free' pet food for their pets due to the humanization trend of pet.⁴

Some of the new pet food retailers are holding a successful business for holistic, high quality and natural pet food purveyor. An example from the U.S., Memphis, Tennessee, the Hollywood Feed, is a chain of pet superstores in Southeast, expanding with selling natural pet food for consumers.⁴ Additionally, the leading pet care companies are manufacturing 'on-diet' pet food for targeting the needs of obese pets, while providing more premium and organic, raw pet food for maintaining the market leads.

Furthermore, more private labels of pet food and artisanal pet treats are entering the pet food market recently.

Pet products are referring the equipment for a pet, pet cleaning

products, pet toys, pet accessories, pet dietary supplements and pet medical care products. Bed, bedding, cage, food bowl and water bowl are the essential equipment for a pet to sleep, eat and drink for maintaining the living. And for the carrier, collar and identity tag, these are the products that used on cats and dogs usually. The carrier could be used for visiting the veterinary clinic or taking transportation. Collar and identity tag are having for identification and leash is a tool for controlling dog during walk. Pet toys and accessories are designed for pet's entertainment and increasing the interactions between pet owners and pets. Pet owners can gain satisfaction through playing with their pets and by dressing them. Although toys and accessories are not essential pet products, the demand for these products keeps increasing caused by the humanization of pets.

Due to Urbanization, more pets having longer time staying at indoors or at home because of the owners' working routine. And more and more pet owners spoil their pets, for example, feeding them treats with exceeding amount. Hence, pet obesity becomes a highlight of pet care and many related goods and services are provided in the market. Pet diet supplements are prevalent as more pet owners concern their pets' health problems or issues. Similarly, pet gadgets such as the fitness trackers are invented for health-oriented pet owners or monitoring the health and wellbeing of their porky pets. Some other technological pet gadgets are designed to

fulfill the needs of pet owners. An interactive camera that can allow pet owners to monitor their pets at home and pets could see or listen to their owners through the camera. Some advanced pet interactive cameras have more functions for interaction, for example, to give treats by pressing a button. Moreover, the other hit product in pet care industry is pet insurance due to the rising awareness of expensive veterinary health care.

For pet service, veterinary service is the core pet service among years; while pet grooming and training are wanted by the pet owners who are willing to spend more money on their pets in recent years.

Veterinary plays an important role in pet healthcare. Pets are brought to veterinary clinics for medical checking or treatment, get pets vaccinated and microchipped, surgery, etc. Every responsible pet owner should offer their pets the right of having veterinary treatment when they are sick or needed for medical help. For pet grooming service, apart from hair brushing and coat grooming, there is a list of grooming treatment services are provided, such as pet nails care, spa treatment, styling service, bathing, cleaning ears, etc. Pet owners may want to take pet grooming services for related professions if they do not know how to groom or to take care of their pets in grooming.

Training pets require skills and time, same as the grooming service, pet owners may want professionals to help them to train their pets.

Pet training consists of several types: behavioral training, obeying orders, fitting training, etc. The pet training that is mentioned are usually referring dogs and not for working training, simply a decision of pet owners to have or not to have this service. Moreover, due to the trend of pet humanization, pet sitting is a trendy pet care service that is provided by the market. Many pet owners have long working hours and they may not be able to take their pet for walking for looking after their pets when they are busy. Therefore, some of the pet owners would send their pets to pet sitting, in order to keep their pets in good care during the separation between the pets and pet owners. Pet adoption is encouraged to every pet owner or potential pet owner. However, some pet owners are having their ideas of owning a pedigreed pet or non-pedigreed pet and in particular species because of personal interest. Thus, these pet owners might need to find a legal breeder to purchase their desired pets. Additionally, in some developed countries, such as the United Kingdom, there are few pet supreme shows organized by breeders. These showing events are opportunities for breeders to reach their consumers and also a chance for pet owners to get to know more about the breeders and different species of pets.

Furthermore, the well-developed worldwide transportation network helps to create pet services, for instance, the pet traveling services. Increasing number of wealthy pet owners want to bring their pets to travel along or immigrate with them as the pets are a part of the family. Because of this, many transportations are allowing pet owners

to bring along pets for the journey, such as certain public transportations, airlines, cruises, etc. More accommodations, restaurants, and malls are pet-friendly by permitting pets to stay or enter, some of them may provide facilities and equipment specifically for the pets. However not all transportations, accommodations, restaurants and malls welcome pets; alternatively, for those which are pet - friendly, would have a greater opportunity for pet owners to use their service while their pets are being along with. Besides, there is another pet service that becomes more popular in a few years caused by the humanization of pet, that is the pet bereavement support or service. Pets in poor health condition would visit veterinary for treatment and vet and pet owners have to make a decision about euthanasia; on the other side, the old pets would pass way naturally. To memorialize the past way pets, pet owners may want to arrange a funeral for their pets and to set a grave for them. Even some professional bereavement service could offer services, such as making a memorable memento which contains the pet's DNA (deoxyribonucleic acid) for pet owners to keep. Uprising numbers of humanized pet services are provided in pet care industry at present. And different countries have their pet services framework and distinct environment for pet services. Therefore, the pet services that mentioned above are some general and recently pet services that might not be the same case in every country.

In such a huge and growing market worldwide, many stakeholders are involving in this dynamic industry. The stakeholders who take part in the pet care industry can be divided into seven groups, they are suppliers, manufacturers, companies, government, distributors, retailers, service providers, others which refer to animals' right protection organizations and non-governmental organizations related to pets, consumers or pet owners as well as pets. The relationships between each participant in pet care industry could be presented in a supply chain model. Suppliers are the business partners that supplying raw materials, assemblies or components to other business entities, for example, raw food, fuels, ingredients, metals, etc. And then, manufacturers are companies that producing final goods through manufacturing processes which involved labors, raw materials, equipment, machinery, etc. A company could be a supplier, manufacturer, distributor or retailer at the same time. There are different ways of operation and supply chain management in the pet care industry. Companies are business organizations that sell goods and services by marketing, branding, research and developing, operating management, etc. The finished goods need to be distributed by distributors, and then distributors would disperse goods to different sales channels, such as retailer or intermediaries between companies and consumers.

After the distribution of products, retailers would sell products to

customers or pet owners and may offer pre and post customer services for purchases. For service providers, they are offering pet care services that applying specialized competences for benefits from other. In another word, service providers provide professional pet caring services or efforts in exchange for money or income. Besides, government is the legal body which has functions of monitoring, regulating, safety controlling, taxing, etc. Government involves in multiple parts and processes of the pet care supply chain and has an inseparable relationship with every participant in pet care industry. For instance, the government set up law and regulations to restricting enterprises and retailers to follow the standards of manufacturing procedures, quality of finished goods and the safety regulations, etc. Besides, government charges taxes from companies, retailers, and consumers, the level of taxation would affect the business of pet care and the growth of the industry. Moreover, for pet owners who are the consumers purchase pet care goods and services for their pets. In addition, pet owners would project their wants or desires on their pets while buying goods and services. However, pets are the initiative stakeholders as they might have their own needs such as food, water, clean living space, etc. and sometimes pet owners buy pet care products that are relevant to the pets' health situation or other conditions.

The trend of pet humanization continues to grow deeply in the pet care industry and there is no sign of abating according to Euromonitor International.⁴ Pet owners are treating their pets like members or a

part of their family increasingly, whereby pets could provide companionship for their owners, especially dogs and cats. It is because the companionship of pets gives a fundamental psychological need for many people under a more atomized and urbanized living environment.⁴ Also, referring to the report of Euromonitor International, later marriage, elevated divorce rates, the smaller size of family and the social atomization are the sociological factors that causing the pet humanization trend. The pet care industry commercializes this humanization trend into extensive sales of humanized pet products and services.

Therefore, many human characteristics pet products in sale caused by the high demand from pet owners, as pet owners want to buy similar products that human use for their 'children' pets.⁴ Pet humanization is the main original cause that arouses other pet trends in pet care industry, as the pet humanized attitude of pet owners is affecting the supply of pet care market. The following examples are related to pet humanized: veterinary therapies like magnetic resonance imaging scan (MRI), chemotherapy for cancer, joints replacements; luxury grooming services such as spa, massage, hair styling; human-grade supplements for pets; and pet- friendly traveling services, etc.

Due to pet humanization, pet premiumization trend appears in pet care industry. Pet premiumization means upgrading the pet products to premium level in order to fulfill the demand of higher quality pet products from pet owners. In addition to, in the emerging markets, consumers demand premium pet food and products are middle class

and urban pet owners. In 2007, there had a menu pet food recall involving a wide range of cat and dog food brands in North America. The pet food recall is one of the reasons that many consumers prefer niche premium brands for purchasing premium level, human-grade, organic, hypoallergenic and holistic pet food for their pets, said by Euromonitor International. Another reason of leading the pet premiumization trend is urbanization. In the Euromonitor's report, it said that pet owners that live in the urban area are more likely to spoil their pets by comparing with the pet owners live in rural counterparts.⁴ As the rural pet owners think that pets are having functional usages like cats catch vermin and dogs are for security. The world population of living in the urban area is increasing meanwhile decreasing in rural area population. Therefore, the trend of premiumization in pet care would keep deepening as urbanites like to pamper their pets.

An annual obesity prevalence survey 2015 was conducted by the Association for Pet Obesity Prevention (APOP) in United State conducted. The survey found that about 20 percent of dogs and 28 percent of cats were obese, while approximately 34 percent of dogs and 28 percent of cats were overweight in the US. Put it in another way, over a half of the dogs and cats in the US have weight problems. Pets that are overweight or obese have primary risks of health

problem, for instance, high blood pressure, heart, and respiratory disease, kidney disease, osteoarthritis, many forms Due to pet humanization, pet premiumization trend appears in pet care industry. Pet premiumization means upgrading the pet products to premium level in order to fulfill the demand of higher quality pet products from pet owners. In addition to, in the emerging markets, consumers demand premium pet food and products are middle class and urban pet owners. In 2007, there had a menu pet food recall involving a wide range of cat and dog food brands in North America. The pet food recall is one of the reasons that many consumers prefer niche premium brands for purchasing premium level, human-grade, organic, hypoallergenic and holistic pet food for their pets, said by Euromonitor International. Another reason of leading the pet premiumization trend is urbanization. In the Euromonitor's report, it said that pet owners that live in the urban area are more likely to spoil their pets by comparing with the pet owners live in rural counterparts.⁴ As the rural pet owners think that pets are having functional usages like cats catch vermin and dogs are for security. The world population of living in the urban area is increasing meanwhile decreasing in rural area population. Therefore, the trend of premiumization in pet care would keep deepening as urbanites like to pamper their pets.

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Meanwhile, mobile pet care is another spotlight of pet m-commerce. With the installment of the mobile application software (apps) in the smartphone, consumers could shop for their pets in a quick and convenient way via the apps. For most of the leading pet care companies or retailers, they would provide online purchase service and mobile applications software for online purchase, for examples, Amazon.com, Taobao.com, Petco, etc. E-commerce offers online subscription services for consumers, in other words, consumers could

sign up for the service of regular pet food deliveries. The online subscription services are prevalent for bustling consumers that attach importance of convenience.⁶ Indeed, internet retailing in pet care is growing resolutely in the global market in particular of pet food. And Asia- Pacific region and North America region are the leading regions in the internet or mobile pet care according to the article of Euromonitor.⁶

To reveal the situation of the current and historical of pet care industry, analyses would be made by using the data which are collected by the Euromonitor International.^{3,7} The purpose of organizing these data is to ascertain the demands and supplies of the global pet care market, also to provide the overview of pet care industry with the support of data. The analyses consist of four aspects of pet care industry; they are as follow pet ownership, market size and expenditure per pet, distribution channel and the numbers of veterinary clinics and veterinarians.

Statistics are received as secondary data and they cover seven regions and fifty-four countries in total. The time periods of data are divided into two groups, which contain historical periods solely as well as both historical and forecast periods. Most of the historical data sets are starting from 2002 and then end with the latest the year 2016. For those data contain the forecast statistics, they may have the prediction till 2021 mostly. All of the data are interpreted by the perspectives of regions, a ranking of countries, and other particular metrics. All statistical data that presented in this work are retrieved from

Euromonitor database.

The ownership of a pet is referring to the population of animals that owning by owners as pets. In the pet ownership data set, it contains two sections: the aggregate of pet ownership, dog population, cat population and other pet population. According to the data contributed by Euromonitor International³, it shows that China has the highest average number of pet ownership between 2002 and 2016 worldwide, 273,474,190 pets in total. In contrast, the United Arab Emirates has the lowest average of pet ownership, 428,910 pets, from 2002 to 2016. The highest and lowest historical average of pet ownership countries are from Asia Pacific as well as the Middle East and Africa respectively. In 2016, Asia-Pacific region was the leading region of pet ownership, which had 33 percent of the global pet population. By comparison to the smallest pet population region, Middle East and Africa region which had 3 percent of pet ownership over the world, Asia Pacific had 18.8 times of the number of the Middle East and Africa region's pet ownership. The distribution of pet ownership of 2016 is shown in Figure 2 by percentage.

The current number of the global dog population in 2016 is 380,804,100, which is 25% of the overall pet population in the world. For cat population, it has 280,540,600 cats are living on the planet, cat population accounts 18% of the total world pet population. Another pet population is the largest sector in the pet population in worldwide; it has 57%, which means over a half of the pets are small mammals,

birds, reptiles, horses, and other exotic animals. Although China has the largest pet population in the world, USA is the country that has the highest numbers in both of the dog and cat population. It shows that the main factor of China having the apical pet population is because of the support of the numerous other pet populations.

Besides of the USA and China, Brazil is also having a massive pet population in the world. In dog and cat population, Brazil has the second highest number of dog and cat population; meanwhile, it ranks the third in highest other pet population over the world. More than 48% of household in Brazil owning a dog and the total pet population in Brazil accounts 9% of the world's pet population in 2016. With the fourth largest pet population, Russia also has the fifth highest dog population, 16,603,000 number of the dog; and ranks in the third of overall cat population with 23,000,000 cats. In addition, the cat population is higher than the dog population in Russia, while the number of households owning a cat in Russia is 18,867,700 more than 14,775,900 households that owning a dog.

Starting from 2002, the global pet population was increasing gradually till 2008. Then, the pet population in the world has a steady and slower growth by comparing with the time period before 2008. Therefore, there were only a slight and stabilized increment in the pet population between 2009 and 2012. Nevertheless, the world's pet population had a more gradual growth from 2013 to 2016. In addition, the

Euromonitor predicts that there would have a sharper and steeper incremental growth in the next five years begin with 2017. The positive pet population forecast in 2021 would be up to 1,648,865,700, which includes 419,756,100 dogs, 312,321,800 cats and 916,787,800 other pets.

In Figure 6, it shows the top 10 countries with highest market size are USA, United Kingdom, Germany, Japan, Brazil, France, Italy, Australia, Canada, and Mexico in descending order.³ The USA has the largest pet care market size, which had

\$44,657.3 million US dollar retail value in 2016. There is a huge difference in the market size of the USA and United Kingdom, although the United Kingdom is the second largest pet care market in retail value. The total market size of United Kingdom is \$6,903.1 million US dollar, which only accounts approximate 15.5% of the USA's pet care market size. Hence, North America is the region with the highest market size in the world eventually. Western Europe ranks the second in highest market size region, as the strong supports of the United Kingdom, Germany, France, and Italy; while Latin America and Asia Pacific rank the third and fourth positions respectively. Eastern Europe and Australasia lag behind in regional market size as well as the Middle East and Africa is the region that has the smallest market size in pet care industry. Moreover, the top 10 pet care growth markets between 2016 and 2021 would be as follow: USA, Brazil, Mexico, China, United Kingdom, Russia, Thailand, Canada, Argentina, and Japan, according to Euromonitor's report.⁸ USA would keep in the

leading position of the growth and with an absolute value growth of more than \$4,800 million US dollar from 2016 to 2021. In addition to, Thailand has the highest percentage of compound annual growth rate (CAGR) among the top 10 pet care growth markets.

For the expenditure per pet, the world average expenditure used on a pet is \$74.5 US dollar in 2016 which is lower than the regional average expenditure per pet of North America, Western Europe, Australasia as well as the Middle East and Africa. In another word, the average expenditure per pet in Asia Pacific, Latin America and Eastern Europe are less than \$74.5 US dollar. North America is the region that has the highest expenditure on the pet, \$149.25 US dollar is used per pet in 2016; meanwhile, the lowest expenditure per pet of \$ 44.96 US dollar is used on a pet in Eastern Europe. In fact, the expenditure per pet keeps growing gradually. The world average expenditure per pet in 2002 is \$39.62 US dollar and then changed to \$69.9 US dollar in 2010. It is forecasted that the average global expenditure per pet would rise to \$90.59 US dollar in 2020.

Store-based retailing is the major distribution channel of pet care business; it accounts 87.4% of the distribution of total pet care retail business worldwide, see Figure 8. According to the statistical data from Euromonitor³, supermarket is the grocery retailer sector that has the highest distribution of pet care; it has 18.6% of the total pet care distribution, is the popular distribution retailing points for pet care products and consumption of pet food. Pet superstore, hypermarket, and pet shop are the popular store-based retailing

channels for pet care businesses.

Especially for pet superstore, it is the non-grocery specialist channel that has 17.4% of total pet care distribution; a 33.85% of percentage change between 2002 and 2016 is made in the amount of distribution in the channel of pet superstore over 14 years. For the non-retail channel, veterinary clinics are the important intermediaries of the pet care product distribution, particularly on the medical products and the pet food with veterinary formulas. Moreover, in 2016, Internet retailing channel is a boosting distribution channel for pet care business while the development of logistic and e-commerce. 5.6% of the overall global pet care distribution is accounted by the internet retailing nowadays.

As China has the largest pet population, it is reasonable that China also has the highest number of veterinarians and vet clinics over the world, in order to offer suitable medical care for pets in China. As a result, 205,000 veterinarians are registered and 49,000 vet clinics are in service in China in 2016. At the same time, Brazil has the second highest number of veterinarians and vet clinics in 2016. The ratio of pets to a veterinarian in Spain is the third smallest ratio in the world, a veterinarian has to take care of 657.6 pets in Spain with the ratio of 1:657.6. The average ratio of pets per veterinarian is 1: 5345 globally; and the average ratio of pets per vet clinic is 1: 11375 in globe. Additionally, there is 2.74 veterinarians work in a vet clinic averagely in world. For the lowest number of veterinarians and vet clinics, the United Arab Emirates has the least number of veterinarian work in

the country, only 83 vet clinics on service and she has 1:2997 ratio of pets per veterinarian, which 1.78 times small that the world's average ratio. Similarly, in Saudi Arabia, it has the smallest number of vet clinics serve for pet and has a ratio of 6.3 veterinarians work in a vet clinic in average.

As the structure of pet care industry is divided into three major sectors, which are pet food, pet product and per service. Therefore, three common business paradigms in sectors are summarized by the primary research of relevant pet care companies and brands that are in a prevalent and leading position in the international market. The extraction of business ideas and operation concepts from popular companies intends to demonstrate the general common overview of the main goods and services for pets on the current market. First, for the most profitable business in pet care, pet food is manufactured in types of formulas and a variety of ingredients.

Thus, the common business paradigm of pet food would be a focus on the food itself, the design and selling points of pet food. Second, the business paradigm of pet product would concentrate on the product category and functions, in order to disclose the popular types of pet product on global pet care market. Third, pet services that provided nowadays are diverse and created under the effects of pet humanization. The outline of the various pet services would be discussed and summarized into the typical service offers and the content of services consumed.

The common business paradigm of pet food is constructed by the pet

food brands that are selling on more than three regions on the global pet food market. The brands are: Hill's Prescription Diet, Hill's Science Diet from Colgate-Palmolive Co.; Hartz from Hartz Mountain Crop; Pedigree, Whiskas, IAMS, Royal Canin and Royal Canin Veterinary Diet from Mars Inc.; Tetra from Spectrum Brand Ltd.; Dog Chow, Friskies, ONE, Pro Plan and Pro Plan Veterinary Diets from Nestle SA. This group of brands contains pet food that targets different species of pet, but many of them are solely targeting dog and cat food as the population of dog and cat are dominating the demand of pet food. There are three types of food from on the market, dry food, wet food, and treats. Different formats of pet food are manufactured through various food procedures and packaging. Dry pet food is usually packed in plastic or paper bags with a range of weight. Cans, pouches and foil trays are the ordinary packages for wet pet food. For pet treats, their packages are similar to dry food; in addition, some of the treat packages would have a zip on the opening for keeping the treats in good condition or crunchy crispy.

Dogs, cats, small animals, birds, fish, and reptiles are the typical pet species targeted by pet food manufacturers. Indeed, every pet species has its own preference and needs of feeds. Thus, pet food brands would divide their pet food products into specific classifications in order to fit the pets' needs. First of all, life-stage is a basic division for dogs, cats, and small animals. Most of the dog and cat food are

classified for newborn to one-year-old puppy and kitten, and then for one to seven years old adult, as well as senior cats and dogs that are older than seven years old. Some pet food brands also manufacture pet food for pets which are eleven years old as the demand for senior pet food is increasing due to a complete development of pet medicine and healthcare. The life-age division method is mainly applied on canines and felines, for small animals in some cases. Besides of life-stage, Breeds of pet are also essential to the choice of pet food. For an instant, Royal Canin is one of the pet food brands which offers specific-breed oriented pet food for most of the common and popular dog breeds. Nevertheless, a number of dog and cat food brands are also supply a variety of breeds pet food offers, such as extra small or toy size, small, medium, large and giant breeds of dogs; short-hair, semi-long and long-hair breeds of cats; rabbit, guinea pig and hamsters of small mammals, etc.

The key to pet food is the ingredients and formulas. According to the UK pet food manufacturers' association, the usual ingredients that used in dog and cat food are derivatives from animal, eggs and dairy products, fish, grains, vegetables, fats from plants and animals, mineral and vitamin supplements, additives like preservatives additional sodium chloride and sugar as the ingredients that enhancing flavors.⁹ There are numerous ingredient combinations of pet food formulas for diverse needs of pets in particular. By the

observation of the fourteen international popular pet food brands from five multi-national enterprises, the current pet food formulas for cats and dogs are created to target the following special needs for pets: aging care for longer life care of pets, oral or dental care for dealing with the common dental diseases of cats and dogs, skin and coat care for all of the furry pets, weight management formula for solving the pet obesity problem, growth care for young life-stage pets, grain free, high protein diet, picky pet eater, health and specific functional care like urinary care, kidney care, metabolic care, joint or mobility care, liver care, urgent care, stress and anxiety support, gastro-enteric care and glucose management or diabetes support.

In addition, there are some different special cares for canine and feline. For instance, dogs have the common problem of heart and cognitive health, so that pet food manufacturers formulate the heart care pet food and invent dog food for improving cognitive health dog food formulas. On the other hand, pet food producers also recognize there are particular needs of feline pets. The designate needs of cats are thyroid care, hairball management, indoor lifestyle care as well as spayed or neutered care. The special needs mentioned above are the comprehensive overview of current supplying food formulas that fulfill the common specialized needs of cats and dogs. Furthermore, the orientations of pet food selling point are vital in the marketing of pet food beyond the fulfillment of special health care needs. The general

selling points of pet food products are natural, premium, nutritional, veterinary formula, in savors, designed for enhancing concentration, made for sporty pets, brighten mind function formula, grain free, division of pet's lifestyle. The various oriented pet food options could help pet food manufacturers to target particular consumer groups in many ways.

Apart from the pet food for canine and feline, there is a portion of market demand of pet food for small animals, birds, fish and reptiles.

The common pet food for small animals and birds are the mixes for rodents, dry pellets, seed-base treat sticks and vitamins supplements and mineral blocks. Manufacturers have a different recipe for diverse breeds of small animals and birds like for cats and dogs. For fish food, the typical types of food are fish flakes, pellets, tablets, food granules and dry shrimp or dried bloodworm treats. Similarly to fish food, common types of reptile food are pellets and some floating stick food for aquatic reptiles. Similar to most of the pet food, the pet food for fish and reptiles are also manufactured with various formulas to satisfy the specific needs of breeds.

Pet product business has a smaller market size in pet care industry by comparing with pet food. Nevertheless, pet product is an extensive business that caters the pet owners' demand of pet commodity. In order to accomplish divergent needs of pet product, pet product suppliers and retailers subdivide categories of product for different species of pet. The common business paradigm of pet product is

referring to the companies which sell pet products over three regions or have outstanding positions in the global pet product business sector. The referring brands and companies are as follow: Advantage from Bayer AG, Beaphar from Beaphar BV, Hartz from Hartz Mountain Crop, Frontline under Merial Ltd. and Sanofi, Tetra from Spectrum Brand Ltd. and Trixie from Trixie Heimtierbedarf GmbH & Co. KG. In addition, the pet commodity retailer leaders, PetSmart, Inc., PetCo., and Pets At Home are on the reference list of the common pet product business paradigm. It is because the pet product retailers would assist to conclude a comprehensive pet product business paradigm. Similar to the common pet food business paradigm, the aim of the construction of the general pet product business paradigm is to identify the typical pet products that are supplying on the worldwide market and to investigate the essential factors that supporting the development huge pet product business.

In pet product business, different brands and companies are having a familiar categorization and subdivision. Typically, the two major classifications of pet product are product category and pet species. For common product category, approximate nine categories are created; and for those nine categories, most of the products' needs are included. Here are the categories of pet product: medicine for preventive medical care; health and wellness; grooming and hygiene; toys for entertainment; cleaning and maintenance; at home and on

the go; accessories; litter and waste disposal; and equipment. The common targeted pet species for pet product are dogs, cats, small animals, birds, fish, and reptiles. For the benefit of pets in different life- stage and breeds, pet products have a subdivision of newborn pet, adult, and senior; a precise division for sizes and breeds of diverse species. Dog products are in the separation of breeds by sizes. Cat products are simply classified in life-stage. The common breed divisions of small animals are a rabbit, guinea pig or rodent, hamster, ferret, rat, chinchilla, gerbil, chipmunk, and mouse. For birds, products are made in favor of popular pet bird breeds, which are finch, parrot, parakeet, canary, cockatoos and a tropical bird. Goldfish, tropical fish, pond fish, marine fish, chichlid, betta, shrimp, and crayfish are the usual pet fish breeds that pet product manufacturers would focus on. The typical product classifications of reptile breed are aquatic reptile and turtles.

Under every pet product category that mentioned above, clear subdivisions are defined and giving an evident concept of what kinds of products are supplying in the market. Firstly, medicine for pets is the vital product sector that works as preventive health care. Parasitic medicine is one of the main segments in pet preventive care; in details, flea and tick control, all worms, heartworm for dogs, anti-fungal, anti-ringworm, anti-mange and fungus and bacteria control are the prevalent pet medicine to be sold on the market. There are different

forms of pet medicine. They are including spot on which a medicine drop, powder form, spray, tablet and collar with medicine. Besides, the health and wellness category is a group of products that concern specific body and health care as well as particular needs. In the health and wellness pet product division, various products are designed for complete health condition care, for instance, dental care, eyes care, ears care, skin care, wound care, digestive care, urinary care, hairball control for feline, allergy care, first aid for urgent care, milk replacer for special conditions like pregnant and convalescing animals, calming for stress and anxiety of pets as well as supplement of vitamins and minerals for pets. The health and wellness products could help pet owners to take care of their pets' health in an all ground way.

To keep a pet in healthy condition, apart from the medical preventive care and supplements for health and wellness, hygiene of pets is one of the keys for health pets. Therefore, pet product companies are selling cleaning and grooming products for pet owners to maintain their pets in satisfying condition. The typical grooming products are in the subdivision of the following: grooming equipment, shampoos and conditioners, nail care, tear stain remover, oral cleaning and odor elimination products for the smelly smell. Moreover, toys for a pet are crucial products in pet product business as toys can provide entertainment and chances of interaction between owners and pets.

Basically, toys are designed in functions for chewing, fetching, scratching, chasing, exercising and some pet toys are in forms of plush toys, tunnel, and tube. Also, toys are usually made of materials such as fabric, flush, plastic, silicon.

For pet owners, they have the responsibility of offering a clean, comfortable living environment for their pet at home while keeping the streets and outdoor area tidy by cleaning the waste disposal produced by their pets. Thus, pet product manufacturers produce equipment, tools, and goods, in order to assist pet owners. In the cleaning and maintenance category, products have cleaning effects and maintaining functions for keeping equipment in good quality. Cleaning and maintenance products are provided as cleaner and wipes, waste disposal, cage cleaner formulated for no harm to animals, odor remover in spray or cleaner.

Furthermore, for the litter and waste disposal section, the products under this section align on the ways of pet waste management. Litter for waste from pets, disposal bags for walking, bag dispensers for holding disposal bags and litter box for cats and dogs are the common waste management products for pets that sell on the market.

In addition, pets deserve to live better in the eye of pet owners; and pet product companies know what pet owners are having in mind.

Hence, many pet products are produced and sold for the creation of exceptional pets' living environment. For the category of at home and on the go, products are divided into small divisions as follow: bed and bedding, water bowls and feeders, crates and kennels, gates and doors for setting pets' activity area, repellents for outdoor activity, hideaways, swings, and play stands for birds, aquariums, vehicle accessories like carriers and strollers, travel crates for transporting pets as well as ramps and steps. In addition to, there are products in the equipment category are mainly used at home or indoor. Divisions in the category of equipment are home monitoring, aquarium maintenance, filter and pumps for the operation of aquarium tanks, lighting, heater and chiller for climate conditioner's function for fish. The last pet product category is accessories. Pet accessories are commonly divided into groups of the collar, leash, and harness, clothing, background and decorations for aquariums. Products of pet accessory are targeting the interest of pet owners, the preference of how to dress up their pets or decorate the surroundings of pets; at the same time, accessories can also have functional usages, for examples, controlling pets and keeping pets warm, etc.

Due to the pet humanization trend, it inspires many humanized services in pet care industry, for instance, grooming service, pet boarding service, pet sitting and walking, pet insurance, pet memorial service and pet travel service, etc. It is difficult to summarize a common business paradigm that would cover all the service domains that are

prevalent in the industry. Therefore, it could have a common business paradigm for each of the service field which is expanding and popular to pet owners. After a primary research on pet services market, nine essential pet services are selected to analyze each of the commonplaces of the services provided by various companies or service providers in different regions and countries. The elemental services on the pet care market are as follow veterinary service, pet training, grooming service, pet boarding service, pet sitting and walking, pet insurance, breeders, and pet travel service. Information on pet services in various fields is collected from related official websites of service companies in different countries.

Alike to the human medical system, veterinary services provide an integrated medical care and hospitalization for ailing pets and animals. The typical structure of veterinary service is formed by animal hospitals, veterinary clinics, and mobile veterinary service. There are distinct medical services offered by different veterinary service bodies. Veterinary clinics should be the most popular choice for pet owners to have medical treatment for their sick pet or to have preventive care and health examination. Most of the ordinary veterinary clinics would provide the comprehensive preventive care, for example, vaccinations, parasite control treatment, dental care, nutritional and behavioral counseling services as well as body examination. In addition to, microchipping and euthanasia are provided by all regular veterinary clinics. Besides of preventive care and examination, vet clinics would also offer emergency treatment service and surgery service depend on

the condition of the pet. For surgery service, the common surgeries that offered by vet clinics are spay or neuter operation, soft tissue surgery, orthopedic surgery, etc.

With various medical facilities and medical staffs, usually vet clinics would help many of the cases; yet, pets that require specific medical treatments, such as cardiology, oncologic surgery, and minimally invasive procedures, etc. Thus, veterinary specialty hospitals and animal hospitals are the backup support for veterinary clinics. It is because veterinary hospitals have complete professionals and equipment usually, in order to offer diverse medical treatments for every type of diseases and illnesses. The current pet training courses are available for dogs solely. Nevertheless, it does not mean that other animals cannot be trained. Pets except dogs are usually kept at home all time and they may not need the regular outdoor exercise like dogs need. Therefore, there are books for a variety of pets' training guidance, to teach pet owners to train their pets at home by using proper methods. Although dog owners could train their dogs by themselves, not every dog owner has enough time and skills for the dog training. In such cases, dog owners would like to bring their dogs to the professional trainers for behavioral or obedience training. The basic aims of dog training are helping dogs to have appropriate manner while they are at home or outdoor area while teaching dogs to socialize with other dogs, animals, and people.

Moreover, some dog owners may want their dogs to learn advanced tricks and behaviors. There are also offers of advanced level of obedience training services for dogs. After the complement of training lessons, dogs may have better manner, obey owners' commands, walk without a leash, to complete a command with distractions, etc. For pet owners, owners can choose either to have the training lessons with their dogs or do not attend during the lesson. The training would vary by the breeds of dog and the duration of the training program. Additionally, pet owners should select the qualified professional trainer that with related certificates and licenses.

For most of the pets, they are furry and requiring a regular cleaning and grooming routine, in order to keep them staying in suitable hygienic condition. Grooming is crucial for a pet not just making them feel comfortable and clean, but also a key factor in maintaining a healthy daily life. A full service of grooming for pets could be time-consuming and complicated as groomers have to take care of different parts of the pet's body while they have to make sure of the pet is under control. Hence, some pet owners would like to take their pets to professional groomers and let their pets to enjoy the grooming services. The typical grooming services are in a package of bathing, hair cutting, brushing, nail trimming, ear cleaning, tear stain cleaning, shaving and scissor-cutting pad and feet, sanitary trimming and anal gland cleaning. Likewise, the grooming service can be provided

individually, it is not must for having a full-service package all the time. Pet owners would decide which services their pets are needed with the advice of groomers.

Furthermore, other special requirements are available in pet grooming service, for examples, teeth brushing, fresher breath, parasite control application, massage and spa treatment, etc. Besides, pet owners can discuss with the groomers in order to personalize the unique style for the pets. In common, pet grooming services are provided in stores or mobile service. Usually, pet owners need to have an appointment for a grooming package or mobile service; however, some grooming service providers would accept walk-in customer for single or simple grooming service. Similar to other pet services, pet owners should choose the pet groomer with qualification and licensed service company or provider.

Pet boarding service is mainly targeting the pets whose owners are traveling aboard or could not look after their pets within a period of time with any reason. Pet owners may send their pet to the boarding service that specialized for pets so that owners could make sure their beloved pets are in good caring and under supervision, while they are busy or far away from home. In fact, most of the pet boarding service companies are not only providing overnight boarding service, but also day care

service for different pet owners' needs. Basic amenities such as clean water, meal, daily play time, bedding and bed are elemental items that

provide to pets in boarding service. Pets are under the supervision of staffs, they would have time to enjoy the indoor and outdoor activities during the boarding usually. Furthermore, pet owners can require additional pet activities for their pets in the duration of boarding. Owners could purchase for extra treats, personal toy, extra play time for dogs, upgraded menu, photo shooting, aging or senior special care service, etc.

Grooming service is also available at most of the pet boarding companies, some of them may offer holistic or alternative treatment, therapeutic massage and consultant service for pets.

The pet boarding service providers know that pet owner concern the situation of their pets whereas pets are staying at boarding center.

Thus, many boarding companies are having the online monitoring webcam for their customers, pet owners, to monitor their pets anytime, anywhere. If pet owners want more details of the pet's condition, there are pet status update services for the pet owner. By receiving the reports, photos via email, message or phone call, pet owners could have the comprehensive information of their pets.

Training class, pick-up, and delivery service, as well as more service options, may be provided by the boarding service center for the favor of pet owners. In emergency cases, an on-call veterinary service is needed during the boarding or day care. More importantly, every pet boarding service center has its own regulation and rules for the

boarding pets, specific breeds may not be welcomed to take the service. Also, Pet owners are Pet Sitting is a service of taking care of the pet by a pet sitter. And for pet walking, it means to hire a walker for the replacement of the dog owners to walk their dogs.

The dog is the most ordinary pet species which demands regular walks and exercise in the daily life routine. There are options of dog walking service online platforms, by using the GPS function to search the available and nearest dog walkers, who can help pet owners to walk with the dogs. Not only for dog walking services, many of the pet sitting services are setting up online platforms, to match the ideal and suitable pet sitter for pets. Pet owners could book the sitting or walking service via the websites or mobile applications. In addition to, there is pet care store which also provides pet sitting service in stores. However, there would have the difference between the in-store sitting service and the sitter service that found via online platforms.

Pet sitters could offer various formats of sitting for pets, for instance, daily sitting, overnight sitting, pick-up and drop-off service, the sitting location which means pet owner can choose to send the pet to sitter's home or let the sitter take care of the pet at the owner's home. For dog walking service, dog owners would receive a post- activity report as a summary of the walk so that owners could live track the walk with GPS. The responsible pet sitters and walkers should exchange the contacts with the pet owners. Many of the pet sitting and walking

services are insured and bonded while offering customer service for any customer inquiries. Lastly, it is suggested pet owners may arrange a pre-meeting before the pet sitting or walking as the pet may not come along with the sitter or walker, also look at the profile of the sitter and the reviews given by the previous customers before choosing a sitter.

With the reasons of pet humanization and the expensive veterinary care costs, it is common that pet owners purchase pet insurance for their pets. In pet insurance market, insurance companies would provide plans with different coverage level or personalize insurance plan for each pet. The major coverage of pet insurance is the medical treatment; while the coverage level is varied by the price of the insurance. Usually, the larger amount of money invested in the insurance plan, the higher level of insurance coverage the pet and pet owner could get; however, it may not happen in every case as it depends on the insurance company. There are insurance plans for dogs, cats, small animals, birds, reptiles, horses and exotic pets. Nonetheless, some of the pet insurance companies solely offer insurance for dogs and cats. From preventive care to cancer treatment and emergency care, there are numerous options of insurance plans target distinct coverage for pets. Besides of the medical coverage under the insurance, some insurance may cover the situations that would happen on pets, for examples, pet is lost, pet passed away, holiday cancellation of the pet owner due to the decisive surgery of pets, etc. Aside from the insurance coverage, the price of insurance

differs due to the breeds, gender, age, health condition and the cost of veterinary service that close to the residential area of the owner, etc.

Moreover, there are other pet insurances in pet care which are breeder support insurance and pet business insurance. They are insurance services designed for insuring breeders and ensure the staffs and third parties in pet businesses.

Pet memorial service is to help pet owners to coordinate the arrangement for the pets' remains. Regarding the pet humanization, pet owners treat pets as a part of their family. Therefore, many pet owners would like to have an appropriate funeral for saying goodbye to their perished pets. Thus, pet memorial services are offered to help the pet owners and pets go through the last stage of pets' live. Once the pets passed away, pet owners could contact the pet memorial service company immediately. The company would send staffs to pick up the remains and sent it to freeze and sterilize. Pet memorial service companies would have grief support or counseling for pet owners; as well as arrange burial or cremation service by following the pet owners' want. Several companies offer funeral service, burial service, individual or group cremation service, columbarium and exhumation service, etc.

As there are different forms of memorial procedure in diverse culture or religious backgrounds, certain pet memorial service companies provide customized form of the funeral for pet owners. Moreover,

there are memorial products which help pet owners to keep the ashes or record of their pets in a proper way, such as urns, wooden boxes and framed photos with paw prints. Special keepsakes that made with the DNA or ashes of the pet would also be ordered to make, as a memorial item to preserve the bonding between pet and pet owner. In addition, online memorial service is available on the market, it is an online platform to let pet owners mourn and miss their pets. Besides, if pet owners want to plan the pet memorial service ahead, pre-arrangement before the sudden may be a better option for pet owners.

Pet breeder is the person that raises pets for particular breeds and sells them to customers. In pet breeding service, there is regulations and law to restrict the prohibited and illegal breeding. Breeders and kennels should register for the license of qualified pet breeder.

Adequate breeders should also provide complete veterinary care for the pets, facilities with shelter while making sure that the in healthy and reasonable condition without any violent treatment and abuse. Relevant government authorities are in responsible to monitor and regulate the pet breeders on market. However, pet owners who are looking for purchasing pets need to be aware of the validity of the breeder service and the transparency of information given by the breeders or suppliers.

There are a variety of pet species and breeds supplying on the pet market, such as dogs, cats, small animals, birds, fish, reptiles, horses, exotic animals, insects, and invertebrates, etc. The price of pet varies

because of the breed and the age of pet. Pets sold by breeders should have the vaccination and microchip. Pre and post- customer service from a breeder is important to pet owners for any inquiries of the pets that buy from the breeder. Pet owners should select the breed which is suitable or matching with their living style. In addition, breeders may provide exporting pet service which helps pet owners to complete the documents and requirements of the exporting procedures. Customers could purchase pets online or from pet stores or directly from breeders. Alternatively, adoption would be one of the options to get a pet.

Pet travel becomes more popular in recent years, pet owners are able to bring their pet to travel along or immigrate with them easier with the helping hand of pet travel services. The common pet travel services are the preparation of the application documents required by the departure and destination countries or cities; to get the approval of veterinary examination, health certification, records of vaccination and microchipped; to book flight service for pets; transporting pets to the airport; importing and exporting pets, etc. Although the pet travel service agents help pet owners to travel with a pet in a simpler way, pet owners should understand the limitation and regulations of import or export animals in the related countries.

Particular species and breeds are not allowed to visit or import.

Different countries have specific laws and regulation on pet travel. Pet travel service providers should explain the risks and procedures of the pet traveling process; while pet owners should understand and accept

the regulation and requirement of the pet travel in the home and visiting countries.

Currently, the global pet care industry is relying on North America heavily, as the USA has the largest pet care market in the size of the retail value. The world's pet population has a steady growth with no sign of declining form 2002 till now. All of the top 10 pet care markets in 2016 are from North America, Western Europe, Asia- Pacific and Lain America. They are the USA, United Kingdom, Germany, Japan, Brazil, France, Italy, Australia, Canada, and Mexico. Indeed, these countries also have significant pet populations and higher amount of expenditure for spending on pets. Most of the top 10 countries in market size are developed countries; hence, the consumers from those countries would have more purchasing power in comparison to developing countries, such as China and South Africa.

For the distribution channels, supermarkets still own the largest portion of pet care distribution over the past 14 years. The stored-based retailers are the main distribution channels in pet care; yet, the internet retailing channel under the category of non-store retailing accounts more pet care distribution with the percentage change of 833% from 2002 to 2016. Also, pet superstores, pet shops, and hypermarkets are the essential retailers in grocery and non-grocery specialists in the present; whereas, the veterinary clinics are the core distribution channel on the non-retailing area in pet care. Moreover,

the huge number of pet per veterinarian as well as the vet clinic reveals the tension between supply and demand of veterinary service; more qualified veterinarians and licensed vet clinics are needed to provide enough medical service and related facilities for better service for pets.

For the common pet care business paradigms, the pet care companies develop a comprehensive range of commodities and services in pet food, pet care products as well as pet services. In pet food segment, the business paradigm keeps changing as the markets' demands change. Therefore, the global pet food businesses cover a lot of orientations, ingredients, manufacturing formulas, pet species, and specific needs. It should not be difficult to find out the most suitable pet food for pets. As the pet humanization trend is spreading all over the world, rising numbers of consumers require the natural, premium-graded pet food for their pets. Therefore, a part of the consumers is purchasing premium pet food instead of the mid-priced pet food. At the same time, the consumers in emerging market are having demand on the economy and mid-priced pet food, as those pet owners change the table scraps feed to packaged pet food for their pets, affected by the trend of pet humanization.

Pet care product business segment has a relatively smaller market in the whole pet care industry, but it also has a far-ranging of product offers in different pet care division and functions. The pet care products on market could fulfill all the needs for pets and pet owners. For examples, preventive care medicines for pets, cage cleaners for pet owners, consumable goods such as litter and shampoos for pets, etc. In addition, Pet owners could use pet care products to create a personalized style for their pets and to have more interaction while playing toys with pets.

Furthermore, there has a diverse and distinctive pet service paradigm in the current pet care industry. In the view of common pet services on the recent market, it is mainly separated into two sections: the services for pets; and services for pets and pet owners. Veterinary service is the core and typical pet service for pets;

other than that, rest of the common pet care services are designed for pets and pet owners basically. For those pets and pet owners' services, they are targeting the needs of busy, working pet owners as they do not have sufficient time for taking care of their pets; or addressing on the wants and desires of pet owners toward their pets, for instances, pet training and pet traveling service. In addition to, the common marketing strategy of pet care business is digital marketing.

Pet care companies are using social media and advertisements to promoting brands and selling their products and services.

With the gradual growth in world's pet population in next five years, it is believed that the pet care market would expand into a larger scale

in the three core business segments: pet food, pet products, and pet services, as the demand for pet care, is correlated to pet population positively. The USA, Brazil, Mexico, China, United Kingdom, Russia, Thailand, Canada, Argentina, and Japan are the top ten markets would have the highest pet care growth between 2016 and 2021. The pet care companies should pay attention to those growing markets, in order to tackle more pet care business opportunities in the future. The trend of aging pet would keep on due to the extensive and complete veterinary care services are provided in the market. Thus, the demand of pet care good and services for senior pets would rise steeply. Also, the increment on the expenditure per pet would be one of the market expansion factors in the coming years. It is predicted that further pet care distribution would be completed via internet retailing due to the convenience and the fast-growing development of e-commerce and m-commerce. Moreover, the concept of data-focus strategy would be implemented in present to future, as more tools or pet products are inventing or invented for monitoring pets and tracking pets' activity. Whistle tracking collar from Mars Inc. is one of the representative examples of data collection.⁸ Abundant of pet related data would be collected for more precise and informative presence, further, development could benefit from that.

The trend of pet humanisation and premiumisation will keep affecting

the business environment of pet care in global presence, particularly in the emerging markets. The emerging markets of pet care have enclosed growth and potentials in expansion, especially in the pet food segments and natural, premium pet food products. Moreover, the leading orientation of pet food will remain on nutritional, natural, health and wellness focus in the future. For pet products, according to the obesity prevalence survey conducted by the Association for Pet Obesity Prevention (APOP) in 2015, it reported that over half of the cats and dogs were overweight or had an obese problem in the USA.⁵ Therefore, the rising demand for pet dietary supplements may happen due to the prevalent and subsequent phenomenon of obese and overweight pets. Furthermore, more innovative, technologic, advanced pet care products would be introduced in the future, as the improvement of technology in the world. Lastly, for pet services, the pet sitting and walking service would keep the coordination with internet network and mobile applications in foreseeable future; while the operation of pet boarding services would be affected by the competitor, pet sitting services. It is because the business model of pet sitting service offers more flexible, wider option range for consumers. Furthermore, pet insurance would become more common and popular in the emerging markets, as the rising of pet humanization and the awareness of pets' health.

With 150 years and experience in food and beverage, Nestlé is the largest company in the food processing business in the world. Nestlé was founded by Henri Nestlé in 1866, started with the foundation of the Anglo-Swiss Condensed Milk Company in Switzerland.¹¹ There are over 2,000 brands owned by Nestlé, in distributions to 191 countries worldwide. This corporation has nine product divisions; they are related to food and beverage, nutrition, health, and wellness: Nestlé health science; Nestlé skin health; Nestlé Nutrition; milk products and ice cream; powdered and liquid beverages; prepared dishes and cooking aids; and pet care. Nestlé is headquartered in Vevey, Switzerland and approximate 328 thousands of employees are working for Nestlé globally and currently.⁸ In 2016, Nestlé had 92,143 million of US dollar annual sales and 231,434 million US dollar of market capitalization.¹² For the pet care business segment of Nestlé, it

accounted 12.1 billion CHF in the sale with 21% of trading operating profit margin in 2016.¹² The trading operation profit margin of Nestlé pet care is 5.7% higher than the overall trading operation profit margin of Nestlé, 15.3% in 2016 annual performance.¹² In addition, the pet care segment of Nestlé held 13.5% of total sale while pet care is the second business that has the highest profit margin lagged behind the Nestlé Nutrition by 1.7% of profit margin.

The corporation structure of Nestlé is constituted in the hierarchy. Chief Executive Officer is directly under the Chairman of the Board of Directors as well as the executive board. Nestlé health science and Nestlé skin health are the sectors that in the parallel level with CEO as individual business departments. There are four constitutional management divisions direct under the supervision of CEO.¹³ In general, they are corporate governance, communications and human resources division; departments of operation; Nestlé Waters, nutrition and professional management; and three regional zones divisions. Thus, the pet care products are manufactured by Nestlé professionals in nutritional and innovative ways. Moreover, a comprehensive range of pet care brand portfolio is a key to Nestlé to underpin the second largest pet care business in the world market. Nestlé pet care produces dog food; cat food; dog treats and mixers; cat treats and mixers; bird food; fish food;

Nestlé pet care had 56% of pet care sales were contributed by North America and over 20% of pet care sales were accounted in Western Europe in 2016, according to Euromonitor.¹⁴ At the same time, Nestlé is in the leading position in North America, it is because Nestlé has a coherent nutritional and health-focus positioning in the market. As the US pet market is looking for natural pet food and pet food in premium quality under the pet humanization, Nestlé has been repositioning their brands into natural formulas and made acquisitions of the organic and natural pet food brands, for example, Merrick Pet Care in 2015.

Although Nestlé has a strong and leading pet care performance in North America, the shares in emerging pet care markets or regions are relatively weak when comparing with Mars, the main competitor. Nevertheless, Nestlé has been working on the emerging markets in recent years; it had a marginal increase of market shares in Australasia, Eastern Europe, and Western Europe shown in Figure 13. While Nestlé had no changes in the Asia-Pacific pet care market shares, the Middle East and Africa, as well as Latin America market shares, are declining gradually. Despite Nestlé is leading in pet care in North America, there are other natural and premium pet food brands expanding in the same market that occupy parts of the Nestlé's shares. In general, the world's pet care market share of Nestlé is increasing slightly, analyzed the data

provided by Euromonitor.¹⁴

In 2016, Nestlé introduced a new formula for its specialist pet food brand, Purina Pro Plan, targeting senior pets with the function of shaping a brighter mind and benefit on cognitive health of pets. With extra brain supporting nutrients in the food, it is claimed that pets would increase alertness and improvement on mental reaction after having the Purina Pro Plan Bright Mind products after 30 days, reported by Euromonitor.

The bright mind products are launched with the successful results of nutritional and health orientated research and the targeting the market demand of humanized health-focusing products under the pet humanization trend. Not only the health and nutritional pet care products are needed on the market, but also consumers are searching for the humanized products in pet care, for instances, the wider range of flavor options for pet food or pet food that are made with human-graded ingredients.

Therefore, Nestlé launched a selection of Savor Additions, for enhancing the meal satisfaction of pet food in 2014. In the same year, Nestlé created a new pet care brand,

Just Right by Purina, which is a personalized formulated pet food brand for dogs. Consumers need to provide the basic and necessary information about their dogs, such as the age, gender, breed, lifestyle, health condition, weight, etc. via the official website, JustRightPetFood.com for ordering.¹⁵ Moreover, the personalized dog food with the picture of the 'dog customer' would be delivered by Just Right by Purina directly to the delivery address. Another selling point of Just Right by Purina is the tailor made and design of nutrition plan are helping the dog to achieve particular goals, for example, improving on coat condition while losing weight.

Besides, the powerful research and development infrastructure and human resources of Nestlé strengthen the development of pet care innovation. Nestlé has 5,000 employees work in the R&D sector in Asia, Europe, and North America; and it owns more than 34 centers for product technology and R&D. The R&D infrastructures have a huge support on the pet care development, particular in the orientations of nutrition, health and wellness.

Most of the pet care brands from Nestlé are under one company, Nestlé Purina. Nestlé is using an umbrella branding strategy on their pet food portfolio¹⁴. The advantage of having a single brand is to help the company to reduce costs on diverse marketing operation, in order

to maximize the marketing investment, according to Euromonitor.¹⁴

Consumers are easier to recognize the pet care products that are manufactured by Nestlé.

However, the umbrella branding strategy increases the uncertainty of blurring the differences between each brand. Additionally, there has the risk of sharing the negative publicity of particular brand due to the lawsuit or recall cases. For instance, in 2015, Purina Beneful was sued for harmful to the health of pets. Under the lawsuit of Purina Beneful, it may lead consumers to worries of the pet food quality of the other Purina line products.

Indeed, Nestlé has a variety of pet care brands at different price levels and formulas. Purina Friskies is the top cat food brand that leads in the pet care sale in Nestlé; when Purina Fancy Feast/Gourmet is the second cat food brand with the highest sale in the Nestlé pet care brand portfolio. Nestlé provides food and products for cats and dogs with the varied brand portfolio in global pet care market as follow: Bakers, Go-Cat, Kibbles & Kaboodle, Kit 'N Kaboodle, Maxx, Merrick, Moist & Meaty, Mon

Petit, Purina Alpo, Purina Beggin', Purina Beneful, Purina Cat Chow, Purina Darling, Purina Dog Chow, Purina Fancy Feast/Gourmet, Purina Felix, Purina Fido, Purina Friskies, Purina Kanina, Purina Mighty Dog, Purina ONE, Purina Pro Plan, Purina Pro Care, Purina Puppy Chow, Purina Supercoat, Purina Tidy Cats, Purina Veterinary Diets, Waggin Train and Winalot.¹⁶ In addition, Nestlé Purina operates its own Purina Farms and 9-Square Ventures, which related to the investment of pet care brands in emerging markets.¹⁷

One of the essential strategies of Nestlé development is a local production. In purpose of maximizing the local recourses, cutting costs of distribution and optimizing the customer delivery. According to Euromonitor, it reported that Nestlé was aiming at using 90% of local raw materials in its Russia market.¹⁴ The locally orientated strategy is applying on pet food production gradually. The example of supreme dog food, Purina Revenue in Brazil, is the testimonial of Nestlé pet food with the local production and locally-focus approach by using local materials procured from Brazil.

On the other hand, Nestlé is improving the production of pet food. It opened a new factory in Silao, Guanajuato, Mexico for manufacturing pet food in December 2015.¹⁴ 130,000 tons of dry pet food would be produced from this newly-opened factory annually, and 40% of the factory output would be exported to the Caribbean and Central America. Also, Nestlé upgraded the facilities in other manufacturing

sites, such as the site in Blayney, New South Wales, Australia in 2014, Euromonitor stated in the report.¹⁴ With the rising demand for pet care products in Central Europe region, Nestlé built its pet care factory which located in Poland, at the southwest, in order to fulfill the growing demand from the market of Central Europe. At the same time, the reconstruction of the existing pet care factory in Bük, Hungary, is planned to re-open at the end of 2017. After the extension of the re-organized factory, it would become the biggest manufacturing center of pet food in Europe.

For the strength of Nestlé, it has a significant, strong focus on innovation of pet care product, which helps Nestlé to occupy the shares in nutrition, health, and wellbeing- focus pet market.¹⁴ Besides, the valuable human resources of Nestlé is one of the strengths in the pet care segment, the improvement of pet food formulas, innovation of pet care are the results done by the strong R&D tanks in Nestlé. As Nestlé is the world's largest corporation in food and beverage, it has a comprehensive distribution network in all retailing channel as well as the specialty retail intermediaries.¹⁴ The large distribution scale of Nestlé is the solid advantage of introducing new products and having the upper position during the negotiation of most retailers.

The imbalance of portion of pet care sale in regions would be one of the weaknesses of Nestlé. The 53% of total Nestlé pet care sale came

from North America in 2015. It led a consequence of over-reliance on the North America market.¹⁴ Nestlé has to take the risk of solely rely on specific market as huge impacts may occur when the North America market demand or economy declines. In addition, there was a lawsuit of Purina Beneful in 2015. Over 3,000 consumers complained and filed to court to against Purina Beneful with claims of Beneful dry kibble dog food are toxic to the dog and harmful to pet's health, even life.¹⁷ Consequently, the US Food and Drug Administration (FDA) issued a warning letter to Nestlé Purina for the violation of some manufacture and production regulations of the production of pet food in a related factory in Allentown, Pennsylvania, US.

Pet humanization is the opportunity for Nestlé, as the pet care market has an increasing level of concern on the nutrition, natural ingredients and health-oriented pet care products. Meanwhile, Nestlé has a strong research resources, it is capable to innovate more pet care products that targeting on the aging pets. According to the report from MarektLine, the expenditure on pets in the US market is increasing. It is also a great opportunity to Nestlé with the leading position in North America.¹⁷

Nestlé pet care has factories in 14 countries within America and Europe regions. The rising wages of labor in Europe and US would be a threat

to Nestlé, even though it has the local production strategy.¹⁴ As the operation costs increase, the profit and sale volume may be affected and then causing the underperformance in chances.

Besides, the local pet care players in emerging markets are the threat to Nestlé. PetSmart, Inc. is a US-based dominant pet specialty retailer in pet food, pet care products and pet services. It is established by the founder, Jim and Janice Dougherty in 1986.¹⁸ The company was taken by a group of private firms under the BC Partners' lead, with an \$8.7 billion US dollar transaction in March 2015, according to Forbes.¹⁹

PetSmart has a digital business portfolio which includes Pet360.com, petMD.com, OnlyNaturalPet .com, Pawculture.com, PetFoodDirect.com and PetSmart.com for customers and pet business partners to consume.

The major serving countries of PetSmart are United States, Canada, and Puerto Rico, with more than 1,500 pet stores and around 55,000 associates in the serving area. PetSmart had \$1,913.79 million US dollar revenue and \$132.1 million US dollar net income in the first quarter of 2015, shown in Figure 15.²⁰ It is the 48th America's Largest Private Companies ranked by Forbes.¹⁹ The headquarters of PetSmart is located in Phoenix, Arizona, USA. Approximately 53,000 employees are employed by PetSmart, reported by Forbes.¹⁹

Moreover, PetSmart has a vision of loving pets and believing that pets would make better people. With the clear vision of animal caring, PetSmart is passionate about promoting adoption services and aims at creating closer bonding between pets and pet owners. PetSmart Charities are non-profits business division of PetSmart, to collaborate with exceeding 3,000 animal organizations of welfare, to help adoptable pets to find their home with love and caring.¹⁸ On the other hand, PetSmart not only offers pet food, pet care products but also with pet grooming service, pet training, veterinary care in stores, pet boarding service and day care services for pets.

PetSmart is in brick-and-mortar and online retailing business models, as it sells pet merchandises and provides pet services that need to serve in brick-and-mortar stores.

According to the article taken from Retail Merchandiser, even though the major

target customer segment is the 'pet enthusiasts' but also have to strategic targeting for appealing other consumer segments, such as the accessible neighborhood segment and the customer segment which do not devote in pets very much.²¹ For the location strategy, the company focuses on setting store at the center of regional purchasing power; and has a requirement of 19,000 square feet for store size in average, yet smaller size for a store located in the urban area are considerable.

Furthermore, the placement of the goods in store is one of the operational strategies for PetSmart, reported by Retail Merchandiser.²¹ For instance, toys, aquarium equipment, and bird

feeders are some examples of hard goods that are placed in the front of the store where the entrance locates. Cat and Dog products are segregated distinctly with the individual area of placing all goods of one pet category.

There is over 12,000 assortments of pet care products are being sold at PetSmart, with a variety of national brands, premium brands, corporate brand and products with value-pricing.²¹ PetSmart corporates with brands that could be found in grocery retail stores as well as pet specialty store, aiming to provide most of the brands that are prevailing on the market. Furthermore, supplying non-traditional pet care items in broad selection is one of the characteristic highlights of PetSmart. For the pricing strategy of PetSmart, it claimed that its company had a price policy of setting the sale price offered by grocers as the regular price of the products sold at PetSmart, said by the CEO of PetSmart in the interview of Retail Merchandiser.²¹ Therefore, PetSmart would offer promotions in often and add extra gift or giveaway in the product package; for examples, additional cans or pounds in pet food, toy as a gift with goods, etc. With the pet services that are offered by PetSmart, the consumers may purchase or search for general pet solutions from PetSmart. The comprehensive pet business divisions are well-arranged and convenient for pet owners to solve a bunch of pets' problem in a place. In conclusion, the three core components of pet care industry are pet food, pet products, and pet

services. Pet food is the major business segment as it accounts the largest sales in the global pet care market; while pet product has smaller sales in total because of the fewer demand of pet care products over the world. However, it is difficult to differentiate between the sales of pet products and pet services, which segment has the higher sales and market size, as a number of world's sales of pet service is unavailable in statics or no announcement of the exact numbers. For the pet care industry's stakeholders, they are divided into seven groups by functions.

Suppliers, manufacturers, companies are the stakeholders with supplying, producing and inventing function. Distributors and retailers are the intermediaries between companies and consumers. The government is in a role of public governance, regulating and monitoring all the pet care business operations and legality of pet services. In the service sector, service providers are the key stakeholder of pet care service business. Pet owners and pets are the initiations of all pet care businesses and supplies. For other parties that are related to pet care industry, they are animal organizations, charities, pet business associations, etc., having the power of voice and monitoring function for all kinds of pet care relevant issues.

Moreover, there are four prevalent and Influential trends in the recent development of pet care industry, they are pet humanization, premiumization, aging and overweight pets as well as internet pet

care. Pet humanization is the key origin of the trend of premiumisation, aging and overweight pets. Rising number of pet owners treat their pets as a family member as kids of them. Those enthusiastic pet owners want to give the human-grade pet food, organic or natural pet food ingredients, comprehensive and premium pet care. Thus, the premiumization trend is popular in the pet care market, goods and services are in high, premium quality, for the purpose of satisfying the growing demand of premium-level of pet care. For the phenomenon of aging and overweight pets, more pets are having a longer life due to the improvement and complete resources of veterinary care; and the low- activity lifestyle and the habit of excessing diet of pet are the primary factors of the phenomenon. Furthermore, the trend of the internet and mobile pet care is referring the changing of consumers' lifestyle and the fast-growing development of internet and mobile application technology. Consumers could purchase pet commodities from local or oversea retailers and order or book pet care service via an internet website or mobile applications.

Pet care data collected by Euromonitor International reveal the historical, current and forecast on the essential facts in pet care industry. According to Euromonitor, the world's pet population is composed of 57% of other pets; 25% of dogs; and 18% of cats in 2016.³ It is predicted that the global pet

population would have a stable and gradual growth in the forecast. What is more, the USA has the largest market size in retail value and North America is the region that having the highest amount of expenditure per pet.

The numbers of veterinarians and vet clinics show the shortage of veterinary professional forces and facilities to handle and take care of the massive pet population. Alternatively, there are business opportunities in veterinary service as the growth of pet population and the power of pet humanization is rising. The major distribution channels remain in the store-based retailers, such as supermarkets of grocery channel and pet superstores as the representative of the specialty pet retailing channel; while internet retailing is the boosting pet care distribution channel of non-store retailing. Indeed, the business paradigms of common pet care business segments are constituted in divisions of product categories, breeds, functions, formation. Although the current common business paradigms are established comprehensively, the paradigms should have further changes under the trends of pet care. Significant changes in pet food business would be the shift to the focus of natural, premium pet food as well as pet food formulas which are targeting the needs of senior pets and overweight pets. On the other hand, the pet product's paradigm, more innovative and technological pet care products would be introduced in the future. Besides, the business paradigm of pet care service is divided into two types of consumers targeting: one is severed

for the interests of pets; the other one is targeting the needs of pet owners and pets. A typical pet service for the sake of pets is the veterinary service; pet grooming as well as pet sitting and walking are offered on markets mainly because of fulfilling the needs of busy pet owners and for pets that without the related care from owners.

Regarding the case study of three powerful pet care companies, there are commonplaces of the business models. Firstly, they are all international or multi-national enterprise. The two leading companies in pet care business have the major focus on pet food segment. Both of the dominating enterprises in pet care are having the background of food processing businesses and diverse business portfolio with food and beverage globally. They usually have comprehensive research and development infrastructures, a wide range of accessible distribution channels, multiplex brand portfolio in pet care, and commonly using the mergers and acquisitions strategy to expand their market sizes and brand portfolio. For the pet specialty chain, the business model focus on the consumer targeting strategy, formats of product placing, pricing strategy, the variety of pet care merchandises and services that are provided in one store at the same location and the company's image. For the situation of the pet specialty retailer in the case study, the retailer contributes a lot of effort in the pets' adoption and animals-related charity events, in order to build up the animal-caring image, to create stronger resonance and bonding with its consumers.

There are limitations of the thesis that have to be aware of. Firstly, lack of sufficient literature and academic information of pet care business is one of the main limitations of the thesis. Academic articles and books of pet care business are hard to find. Secondly, the other main limitation of the thesis is reliance on a particular source, the Euromonitor International. Most of the report data and statistics that used in the thesis are collected and reported by Euromonitor, as Euromonitor has been working the research on pet care industry since 2002. Therefore, complete and informative reports and figures of pet care are provided as the critical referencing resources for thesis's topic. For the secondary pet care data from Euromonitor has the restriction on the number of countries. In another word, Euromonitor could only provide the pet care data and statistical figures from 54 countries in 7 regions. The defectiveness of incomplete worldwide resources coverage causes the limitation.

Thirdly, the primary data of common pet care business paradigms are all collected from the related brands or companies' official websites solely. Fourthly, this thesis only presents the general overview of pet care business and opportunities in global perspective. The conclusions and business paradigms may not be applicable to the pet care business in every region or country.

For a discussion of the pet care business, it is suggested to carry out further academic research on the segments of pet care products and

pet services as the potential businesses. For instance, a detailed discussion on the relations of pet humanization and relevant businesses is recommended. It is because the pet humanization has been underpinned in the pet care market, the research would underline the business opportunities and further phenomenon. In addition, the brands and companies positioning in pet care industry would be a useful industry report which helps to understand the business environment of pet care, as well as the competition between major players in pet care market. Moreover, the potential analyses in the developing or emerging pet care markets are important, as that would provide more information on the emerging markets. Besides of the industrial research topics, the specific services in pet care are also having a high value of research, for example, the promotion and development of pet insurance in emerging pet care market. Last but not least, there are many potential research topics and further discussion in pet care business, as the pet care industry is still in a developing progress.

A **pet**, or **companion animal**, is an [animal](#) kept primarily for a person's company or entertainment rather than as a [working animal](#), [livestock](#), or a [laboratory animal](#). Popular pets are often considered to have attractive/cute appearances, [intelligence](#), and relatable personalities, but some pets may be taken in on an [altruistic](#) basis (such as a stray animal) and accepted by the owner regardless of these characteristics.

Two of the most popular pets are [dogs](#) and [cats](#). Other animals commonly kept include [rabbits](#); [ferrets](#); [pigs](#); [rodents](#) such as [gerbils](#), [hamsters](#), [chinchillas](#), [rats](#), [mice](#), and [guinea pigs](#); [birds](#) such as [parrots](#), [passerines](#), and [fowls](#); [reptiles](#) such as [turtles](#), [lizards](#), [snakes](#), and [iguanas](#); [aquatic pets](#) such as [fish](#), [freshwater snails](#), and [saltwater](#) snails; [amphibians](#) such as [frogs](#) and [salamanders](#);

and [arthropod](#) pets such as [tarantulas](#) and [hermit crabs](#). Smaller pets include [rodents](#), while the [equine](#) and [bovine](#) group include the largest companion animals.

Pets provide their owners, or guardians,^[1] both physical and emotional benefits. Walking a dog can provide both the human and the dog with exercise, fresh air, and [social interaction](#). Pets can give companionship to people who are living alone or elderly adults who do not have adequate social interaction with other people. There is a medically approved class of [therapy animals](#) that are brought to visit confined humans, such as [children in hospitals](#) or elders in [nursing homes](#). Pet therapy utilizes trained animals and handlers to achieve specific physical, social, cognitive, or emotional goals with patients.

People most commonly get pets for companionship, to protect a home or property, or because of the perceived beauty or attractiveness of the animals.^[2] A 1994 Canadian study found that the most common reasons for not owning a pet were lack of ability to care for the pet when traveling (34.6%), lack of time (28.6%), and lack of suitable housing (28.3%), with dislike of pets being less common (19.6%).^[2] Some [scholars](#), [ethicists](#), and [animal rights organizations](#) have raised concerns over keeping pets because of the lack of autonomy and the objectification of [non-human](#) animals.^[3]

In China, spending on domestic animals has grown from an estimated \$3.12 billion in 2010 to \$25 billion in 2018. The Chinese people own 51 million dogs and 41 million cats, with pet owners often preferring to source pet food internationally.^[4] There are a total of 755 million pets, increased from 389 million in 2013.^[5]

According to a survey promoted by Italian family associations in 2009, it is estimated that there are approximately 45 million pets in Italy. This includes 7 million dogs, 7.5 million cats, 16 million fish, 12 million birds, and 10 million snakes.^[6]

A 2007 survey by the [University of Bristol](#) found that 26% of UK households owned cats and 31% owned dogs, estimating total domestic populations of approximately 10.3 million cats and 10.5 million dogs in 2006.^[7] The survey also found that 47.2% of households with a cat had at least one person educated to degree level, compared with 38.4% of homes with dogs.^[8]

Sixty-eight percent of U.S. households, or about 85 million families, own a pet, according to the 2017-2018 National Pet Owners Survey conducted by the American Pet Products Association (APPA). This is up from 56 percent of U.S. households in 1988, the first year the survey was conducted.^[9] There are approximately 86.4 million pet cats and approximately 78.2 million pet dogs in the United States,^{[10][11]} and a United States 2007–2008 survey showed that dog-owning households outnumbered those owning cats, but that the total number of pet cats was higher than that of dogs. The same was true for 2011.^[12] In 2013, pets outnumbered [children](#) four to one in the United States.^[13]

It is widely believed among the public, and among many scientists, that pets probably bring mental and physical health benefits to their owners;^[24] a 1987 NIH statement cautiously argued that existing data was "suggestive" of a significant benefit.^[25] A recent dissent comes from a 2017 [RAND](#) study, which found that at least in the case of children, having a pet *per se* failed to improve physical or mental health by a statistically significant amount; instead, the study found children who were already prone to being healthy were more likely to get pets in the first place.^{[24][26][27]} Conducting long-term randomized trials to settle the issue would be costly or infeasible.^{[25][27]}

Pets might have the ability to stimulate their caregivers, in particular the elderly, giving people someone to take care of, someone to exercise with, and someone to help them heal from a physically or psychologically troubled past.^{[25][28][29]} Animal company can also help people to preserve acceptable levels of happiness despite the presence of mood symptoms like anxiety or depression.^[30] Having a pet may also help people achieve health goals, such as lowered blood pressure, or mental goals,

such as decreased stress.^{[31][32][33][34][35][36]} There is evidence that having a pet can help a person lead a longer, healthier life. In a 1986 study of 92 people hospitalized for coronary ailments, within a year, 11 of the 29 patients without pets had died, compared to only 3 of the 52 patients who had pets.^[29] Having pet(s) was shown to significantly reduce triglycerides, and thus heart disease risk, in the elderly.^[37] A study by the National Institute of Health found that people who owned dogs were less likely to die as a result of a heart attack than those who did not own one.^[38] There is some evidence that pets may have a therapeutic effect in dementia cases.^[39] Other studies have shown that for the elderly, good health may be a requirement for having a pet, and not a result.^[40] Dogs trained to be [guide dogs](#) can help people with vision impairment. Dogs trained in the field of [Animal-Assisted Therapy](#) (AAT) can also benefit people with other disabilities

People residing in a long-term care facility, such as a hospice or nursing home, may experience health benefits from pets. Pets help them to cope with the emotional issues related to their illness. They also offer physical contact with another living creature, something that is often missing in an elder's life.^{[10][42]} Pets for nursing homes are chosen based on the size of

the pet, the amount of care that the breed needs, and the population and size of the care institution.^[29] Appropriate pets go through a screening process and, if it is a dog, additional training programs to become a [therapy dog](#).^[43] There are three types of therapy dogs: facility therapy dogs, animal-assisted therapy dogs, and therapeutic visitation dogs. The most common therapy dogs are therapeutic visitation dogs. These dogs are household pets whose handlers take time to visit hospitals, nursing homes, detention facilities, and rehabilitation facilities.^[28] Different pets require varying amounts of attention and care; for example, cats may have lower maintenance requirements than dogs.^[44]

In addition to providing health benefits for their owners, pets also impact the social lives of their owners and their connection to their community. There is some evidence that pets can facilitate social interaction.^[45] Assistant Professor of Sociology at the University of Colorado at Boulder, Leslie Irvine has focused her attention on pets of the homeless population. Her studies of [pet ownership among the homeless](#) found that many modify their life activities for fear of losing their pets. Pet ownership prompts them to act responsibly, with many making a deliberate choice not to drink or use drugs, and to avoid contact with substance abusers or those involved in any criminal activity for fear of being separated from their pet. Additionally, many refuse to house in

shelters if their pet is not allowed to stay with them.

In January 2011, the Belgian [Federal Agency for the Safety of the Food Chain](#) stated that people are not allowed to kill random cats walking in their garden, but "nowhere in the law does it say that you can't eat your cat, dog, rabbit, fish or whatever. You just have to kill them in an animal-friendly way."^[60] Since 1 July 2014, it is illegal in the Netherlands for owners to kill their own cats and dogs kept as pets. Parakeets, guinea pigs, hamsters and other animals may still be killed by their owners, but nonetheless when owners mistreat their companion animals (for example, in the process of killing them), the owners can still be prosecuted under Dutch law.^[61]