**An Analysis of the Pet Food and Pet Treats Industry**

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INTRODUCTION

Pets are very important to the American people. Table 1 below illustrates the extent of companion animal ownership in the U.S. As indicated by the table, there is a huge business opportunity to provide goods and services to domestic pet owners, so they can please their pets. Agricultural producers and firms that market products made from agricultural commodities to pet owners can capitalize on this opportunity.

Table 1: Extent of Pet Ownership in the U.S. (Source: American Veterinary Medical Association, 2012)

|  |
| --- |
|  Dogs Cats Birds Horses |
| Percent of households owning: 36.5% 30.4% 3.1% 1.5% |
| Number of households owning: 43,346,000 36,117,000 3,671,000 1,780,000 |
| Average number owned per household: 1.6 2.1 2.3 2.7 |
| Total number in United States: 69,926,000 74,059,000 8,300,000 4,856,000 |

This paper will focus on the pet food industry. This industry produces and markets products that pet owners can give to their pets, both for their day to day meals as well as supplemental treats. The pet food industry has been occasionally addressed by researchers (for example, De Silva and Turchini, Michel et al., Zicker). This research has tended to focus on biophysical issues, however, rather than economic or strategic issues that this paper will focus on. Furthermore, to our knowledge, the distinction between the pet treats industry and the general pet food industry has not been examined to date. This paper will address these gaps.

The research will examine the pet food industry, with special attention to the production and marketing of pet treats. Regarding scope, it will focus on pet food production in the U.S., with occasional reference to overseas production of pet food for the U.S. market. Further, we will limit our consideration to dog and cat food. In our research, we found references to dry dog and cat food, wet dog and cat food, as well as pet treats. We determined the best way to analyze the industry was to consider these three products to be one overall industry, called either the pet food industry or the pet food and pet treats industry.

The research team has collected, compiled, and analyzed secondary data. Data sources include scholarly journals, trade publications and various government documents. The research team has also conducted in-depth interviews (Hair, et al.) with key industry informants. Porter’s (1980) Five Forces will be used to analyze the industry and aid in development of firm strategy.

This research will hopefully benefit any business wanting to learn how to improve their strategic position in this particular industry. In addition, the industry analysis will provide useful strategic information to firms considering entering the pet food and pet treats industry.

The pet food industry is growing, making entry by new firms easier and more likely to happen. This industry specializes in the production, distribution, and sale of both dry and canned pet food and treats such as biscuits and jerkies. By applying Porter’s (1980) Five Forces model, pet food firms will be able to consider the best way to enter the market and apply optimal marketing techniques to compete and thrive in the industry. This analysis will provide pet food firms some of the best information available on how to become strong competitors in the pet food industry.

METHODS

Our research on the pet food and pet treat industry was done in several ways. We performed a literature review related to this industry, including reviews of industry reports and statistics from sources such as IBISWorld. Research was also conducted through in-depth interviews with key industry informants from the pet food and pet treat industry. Interview scripts were prepared by members of the research team and made available to the entire team for comments and suggestions, prior to conducting interviews. The questions on the scripts were customized to address specific information needs of the research (e.g., each of Porter’s (1980) Five Forces). A total of 18 key industry informant interviews were conducted by different members of the research team. Transcripts of the interviews were also made available to all members of the research team. Utilization of these varied sources made this industry research thorough as well as up to date. In the following sections, we will address each of Porter’s (1980) Five Forces as applied to the pet food industry.

THREAT OF NEW ENTRANTS

The threat of new entrants is one of Porter’s (1980) Five Forces that helps managers to analyze an industry and supports firms within the industry as they develop business strategies. This specific force entails the likelihood of potential new competitors to join an industry. If the threat from potential entrants is lower, then it is more likely the existing firms will have higher and more stable profits.

The profitability of the pet food and treat industry has been favorable and as a result, new firms want to reap the benefits of the industry. Companies within the industry are expected to grow by 2.8% from now until 2019 (Yang, 2014). The pet food industry has become saturated over the years and is expected continue to be in that condition over the next five years. (Refer to Exhibit 1.) The pet food industry’s total revenue is also expected to grow from $23.4 billion for 2014 to $25.6 billion for 2019. Threat of new entrants is affected by both barriers to entry as well as the reactions from existing competitors to the new entrants.

Exhibit 1 below shows the market share of the leading incumbents in the pet food industry. Note that the four largest competitors in the industry control 46.3% of the market share.

Due to the high market saturation, there will be several barriers to entry for potential new firms. Economies of scale are a major barrier to entry within this industry. The largest players in the industry are capable of obtaining economies of scale and can operate at an efficient level where pet food and treats are produced on a mass scale with minimal use of inputs. This makes it difficult for new firms to enter and succeed. In most cases, new firms must rely on building their businesses around niche markets where there is limited competition and economies of scale are not as critical. It usually takes several years for an organization to develop from a niche oriented firm to a major market share incumbent, if it is possible at all. Another significant barrier to entry for the pet food industry is the capital required. Pet food and pet treat production requires significant capital costs to operate successfully and efficiently. To operate at a large scale like top competitors within the industry, new entrants need to acquire industrial grade food processing equipment as well as food processing facilities. In addition to that, new firms must also hire workers with knowledge of pet nutrition in order to comply with federal laws and FDA regulations regarding pet health, nutrition and proper labeling (Association of American Feed Control Officials, n.d.). Obtaining the necessary capital can be quite costly and it has been difficult for new entrants to obtain sufficient financing. Another notable barrier to entry in a saturated market like the pet food industry is product differentiation. New entrants must be able to set themselves apart from existing firms who have already established themselves within the industry and gained customer loyalty for their brands and products. They must also compete with the numerous other pet food brands and formulas already on the market and available to consumers.

Overall, the pet food industry is highly saturated. Larger companies who hold the highest market share are not seriously threatened by new entrants. These firms have large economies of scale and a consistent consumer following. On the other hand, the smaller firms that have found their niche markets are more at risk from new entrants who are also trying to penetrate these same niche markets.

RIVALRY AMONG EXISTING FIRMS

 Rivalry among firms exists when organizations produce and market similar products and services aimed at the same consumer group. In a competitive industry, companies must compete intensively over market share. Rivalry among firms is said to be high when there are several competitors, substantial exit barriers are in place, the industry is growing slowly, products are not differentiated and can easily be substituted, competitors are of similar size, and there are high fixed costs.

 The top four competitors in the pet food industry are Mars Inc. (Brand Names: Cesar, Greenies, Pedigree, Whiskas, and Sheba), Nestle SA (Purina ONE, Fancy Feast, Chef Michael's, Purina Cat/Dog Chow, and Friskies), Big Heart Pet Brands (Meow Mix, Milk-Bone and Kibbles 'n Bits), and Colgate-Palmolive Company (Hill's Science Diet, Hill's Prescription Diet, and Hill's Science Plan). As indicated in Exhibit 1 above, Mars Inc.’s market share is 22.2%. Nestle SA has 9.8%, with 7.8% for Big Heart Pet Brands, and 6.5% for Colgate-Palmolive Company. The remaining 53.7% is split between other, smaller companies (Yang, 2014).

 The pet food production industry is moderately concentrated, as indicated in the previous section. The top four companies are expected to account for nearly 50.0% of total industry revenue. Market share concentration in this industry has increased over the past five years, even though new entrants face only moderate barriers to entry. These top companies have been able to diversify product offerings through acquisitions, which contributed to rising market share concentration (Yang, 2014).

 Market leaders in this industry have specialized and expanded their respective product offerings through acquisitions in existing markets. Mars participates in the pet food production industry through its Mars Petcare product line and has expanded its portfolio through acquisitions. Nestle engages in the industry through its Nestle Purina label. Nestle has steadily expanded its pet food offerings by acquiring brand names such as Waggin' Train dog snacks. Big Heart Pet Brands competes in this industry through its Pet Products business segment and has expanded its pet food market share through various acquisitions such as Meow Mix Holdings and Milk-Bone. Colgate-Palmolive Company participates in this industry through its subsidiary Hill's Pet Nutrition which has several lines and formulas of pet food and treats. Colgate has focused on solidifying its market share for the pet nutrition product segment instead of doing acquisitions (Yang, 2014).

 Firms in this industrytry to distinguish themselves from competitors (Food Product Design, 2013). The majority produce pet food for dogs and cats, including dry food, wet food, treats, as well as specialized varieties of pet foods including natural, grain-free and organic products. Others try to stand out by offering food that is composed of vegetarian, allergen free, gluten free or weight management formulas. The natural pet food industry has been experiencing tremendous growth.

 The pet food industry faces moderate barriers to entry (Yang, 2014). This implies that if the exit barriers are high, it can lead to overcapacity and price cutting. If there are low exit barriers, borderline competitors are more likely to exit the market, which will increase returns for the firms that are still competing. In the pet food industry, the size of exit barriers differs, depending on the segment of the industry. For the largest firms, exit barriers are significant. This is due to the substantial capital costs to operate at a large scale in this industry, as explained above. There is also a different tier of smaller competitors, however. These firms operate at a smaller scale and target niche markets. The niches targeted by smaller firms include special ingredients, natural pet food, and the like. For the smaller competitors, the exit barriers are not as high. These firms do not have nearly the amount of capital investment as the large competitors do. So, for the pet food industry as a whole, exit barriers are relatively low. If warranted by industry conditions, the smaller firms can exit the industry, which would have the effect of reducing industry capacity. It is like the smaller firms provide slack so the larger firms are protected from having to exit the industry. This negates the effect of the relatively high exit barriers that apply to the large competitors.

THREAT OF SUBSTITUTES

Pet food was originally created in 1860 by James Spratt (Pet Food Institute, 2011). Since then, it has become a staple for animals in households across the world, and an item people rarely think to replace. Pet food has evolved from the first creation with now many different types of pet food: wet food, dry food, and several varieties of pet treats. Pet owners have relied on commercially available pet food to feed animals for over 150 years. The substitutes that can be used for pet food are not very well known due to consumer reliance on what has already been created.

 One of the most basic substitutes that can be used instead of commercially available pet food is human food. There are a number of websites with facts about dogs and what to feed them. An example of these is the site created by Cesar Millan, the T.V. personality known as “The Dog Whisperer.” One of the articles on this site contains a list of human foods that are ‘dog-approved,’ i.e., they are safe for dogs’ stomachs (Pajer, 2014). This list includes foods such as peanut butter, which is a good source of proteins and healthy fats along with different vitamins. Another food is cooked chicken; dogs can eat cooked chicken that is unseasoned which can also add protein to the dogs’ diets. Some other interesting human foods that dogs are able to eat are: pumpkin, apple slices, oatmeal, yogurt, and green beans. All of these foods have been approved by Millan, to give a dog nutrients and vitamins they don’t get every day from their commercial dog food.

 While looking at a comparison between human food and normal, dry dog food it is important to think about different components that could affect the decision to feed the dog human food rather than commercially available dog food. The first component to recognize is the set of health benefits for the dog. The list above states just a few foods and their benefits towards the dog and compared to a normal, everyday dog food, the benefits are much higher. The digestibility of foods such as meats is 92% while wheat and corn are 63% and 52%, respectively (Dunn, 2013). Providing a dog with real meat is much more beneficial for their health because they are able to break it down faster and get more from it compared to the wheat, corn, and soy in dry dog food. On the downside, preparing a dish like this for a dog costs more than an average 50 lb. dog food bag. Along with that, to prepare the foods just right takes more time than it does to pour food into a bowl. Dog owners like the convenience of commercial dog food and the reliability (if their dogs like it, and their digestive systems can handle it).

 Foden (2013) addresses alternative diets and foods for dogs other than normal, everyday wet or dry pet food. One of the diets Foden proposed is called the BARF diet which stands for the ‘biologically appropriate raw food’ diet. This diet means to give a dog food similar to what they would have hunted in the wild, for which their digestive system was optimized. In this diet, the dog is fed raw meat, bones, and vegetables. This method may not seem very original, but it allows the dogs to eat the foods they were historically adapted to eat, and to get the most out of the food that they do eat. This method of feeding dogs is messier than normal dry dog food, but is considered by some more beneficial and healthy.

 Watching online testimonials (i.e., YouTube videos) for the BARF diet was extremely beneficial and gave some insight about the benefits the owner finds. In one such testimonial, the owner was an advocate for the BARF diet, and fed his dog meat, with wet dog food supplements every day. The owner said the cost for his small dog was about $20.00 every two weeks, which is the cost of one bag of dog food that lasts a month. Based on these figures, the cost of the BARF diet is slightly more than double that of the commercially available dry pet food. The owner bought the food in bulk to cut down cost, and did not mind the time it took to prepare the meals for his dog. The testimonial video showed the dog eating the food, and the dog ate it quickly and seemed to enjoy it more than the average dog with dry dog food. The dog was given raw: ground beef, ground turkey, and a chicken wing. The dog was able to eat a raw chicken wing and its bone, but once it is cooked, the dog would be unable to because the bone cannot break down and the dog has a high likelihood of choking.

 The alternative diets and foods available for dogs are not commonly used today. Pet food has become an object of simplification for pet owners, but substitutes for pet food, like those described above, are actually more beneficial for dogs to eat in terms of health. After comparing the cost, time, and benefit to the dog, the vast majority of owners in America choose the simple and cheap route. Substitutes may not be the first option when it comes to feeding pets, but they are still considered advantageous options that are beneficial for pets.

POWER OF BUYERS

The power of buyers in Porter’s (1980) Five Forces refers to the leverage customers have to get firms in the industry to provide better goods, improved customer service, and lower prices. To examine buyer power, the analyst could take two different approaches. One approach would be to consider the power of the buyers of products from the pet food manufacturers, that is, the retailers. Another approach would be to look at the power of final consumers, as exercised against the pet food retailers. We will take both approaches, starting with the power of the retailers who buy products from the pet food manufacturers.

 The power of buyers displayed in firm to firm transactions reveals how much leverage a retailer has on a manufacturer to drive down its costs to acquire a specific pet food or treat product line. One determining factor is the ratio of buyer (i.e., retailer) concentration to firm (i.e., manufacturer) concentration which is considered medium within this industry. Another is the price bargaining leverage on the part of retailers. It should be noted that price is the most important basis of competition and pet food producers possess the ability to undercut competitors and attract the most downstream demand from retailers (Yang, 2014). Other factors include buyer information availability which is considered high as there is a growing market demand for premium and nutritious pet foods as well as the availability of substitutes which is varied and numerous within this industry. An additional factor is differential advantages of these pet food and treat products. Top firms produce everything from premium and specialized wet and dry formulas that are grain-free, organic, vegetarian, promote oral health, promote skin and coat health, along with numerous others. Buyers also purchase in high volumes, especially within large retailers such as PetSmart and Petco. These factors lead to the determination that buyer bargaining power is considered strong between producing firms and retailer firms.

 From the perspective of firm to consumer for the pet food and pet treat industry, the power of buyers is seen strongly in large chain stores such as Petco and PetSmart. These retailers are where a large portion of consumers purchase pet products, especially dog and cat food. Here consumers seek out certain brands of foods and treats at reasonable prices. Consumers also seek exceptional, knowledgeable, and friendly customer service. These retailers even allow customers to bring in their pets with them shopping in order to provide a unique shopping experience.

 There are several determining factors concerning the buyer bargaining power for the pet food and pet treat consumer. Buyer power can be considered strong because of four factors. These are: consumers are price sensitive, consumers are well-educated about pet food products, they purchase in high volumes, and the fact that there are many pet food alternatives available to the typical buyer.

 Blue Buffalo Co. Ltd. is a privately owned manufacturer of premium dog food and cat food, based in Wilton, Conn. According to an interview with Blue Buffalo representative Andre Soesman, there are consumers out there who have to be price sensitive when it comes to pet food. But a majority of pet retail shoppers are price sensitive when it comes to purchasing pet treats. He explains that some customers will buy premium dog or cat food but then will purchase more bargain-priced treats. High-end pet food can be considered a luxury and a large portion of consumers are price sensitive with pet food and pet treats because they have minimal disposable incomes.

 Pet food and treat buyers are becoming more educated about pet food products, which increases buyer bargaining power. People demand transparency for their own food, as well as for pet food (Baginski, 2013). This reveals that more and more consumers are becoming informed about pet food and pet treat ingredients as well as the nutritional benefits their pet will receive. Consumers are also seeking USA-made treats with USA-sourced ingredients because of the recent scare caused by pet deaths associated with Chinese-made or sourced pet treats (Yang, 2014).

 Consumers within the pet food and pet treat industry have many alternatives available to them. This increases the power of the buyer, as there are dozens of major brands within one retail location, each with several lines of food and treats available for purchase. And, as indicated in the previous section, there are substitutes for commercially available pet food in general.

 Based on Porter’s (1980) Five Forces and these causal factors, the bargaining power of buyers can be considered high within the pet food and pet treat industry.

POWER OF SUPPLIERS

The pet food industry is one that has been able to perform relatively well despite the economic downturn that began in 2008. It seems that American consumers continued to purchase products for their pets even when they experienced a decrease in their disposable income. Meanwhile, manufacturers have introduced higher-priced and value-added premium products that contain specialized ingredients. There has also been an increase in pet owners who treat their cats and dogs like members of the family, and they are more eager to purchase natural and high-quality treats. As industry revenue continues to steadily grow over the years, the profitability of the industry, however, has dropped as a result of the increasing costs of inputs. Since the price of corn and chicken meat—two main inputs—has risen in recent years, companies’ profit margins have been driven down (Yang, 2014). The following exhibit shows the price fluctuations of these inputs over the years.

Exhibit 2. Prices of corn and poultry meat. Both a recent history as well as near term projections of prices are presented.



In addition, since the manufacturing equipment and main ingredients in pet food such as meat by-products, grains, and other carbohydrates are generally inputs used in human food production, pet food processors establish themselves near other food and meat manufacturing facilities. For example, the majority of businesses that supply corn, soybeans, wheat, and beef by-products are located in the Plains region of the U.S. where there are numerous grain processing facilities and cattle farms (Yang, 2014). In terms of pet food composition, Exhibit 3 below shows the good and bad ingredients found in dry dog food. For instance, Blue Buffalo’s product is considered to be good dog food since it does not contain grains, but is rather made up of various meats and vegetables. Not surprisingly, the ingredients Duclos (2014) considers bad are the cheaper ingredients.

Exhibit 3. Selected brands of dry dog food and their ingredients. Source: Duclos (2014)



(Note 1: the ingredient key, according to Duclos (2014), is as follows: bold red = top 10 worst dog food ingredients, red = among the worst and should be avoided, orange = neutral, black = acceptable or good. Note 2: Several other brands of dog food were also listed, as part of a category called ‘the Ugly.’ These were omitted due to space limitations.)

Porter’s (1980) Five Forces indicate which aspects of an industry possess power. This tool is used to determine if a new business to provide a good or service will be profitable in a specific industry. The force addressed here is the power of suppliers, which considers how firms that offer a wide range of supplies can drive up costs for businesses, thus limiting industry profits. Basically, the prices of inputs are driven by the number and size of supplier firms, the uniqueness of their good/service, a business’ ability to use substitutes, and the cost of switching from one input to another (Mind Tools, 2014). In relation to the pet food industry, ingredients derived from animals or plants are sources of protein and carbohydrates for the typical dry or wet pet food (Yang, 2014). However, since pet owners are now seeking natural and organic kibbles or biscuit and jerky treats, manufacturers of such goods must look into switching to high-quality inputs. For example, specialized meats like wild boar, venison, turkey, and duck are being used along with quinoa, beans, and peas (Food Product Design, 2013). Thus, the increasing demand for premium ingredients influences pet food firms to switch to inputs that are possibly more costly for them and more difficult to obtain. Exhibit 4 below shows how the overall dog and cat food market is segmented among the various products that comprise it. For example, natural and organic pet foods comprise 12.4% of the overall market. In short, the power of suppliers is demonstrated if they increase input prices or make it difficult for companies to have access to differentiated inputs.

Exhibit 4: Breakdown of percentages of the dog and cat food market made up by various categories of products.



There are two other factors that make suppliers either powerful or weak. The first is the threat of forward integration, which occurs when a supplier decides to join the business and become a competitor in the pet food industry. In contrast, backward integration takes place when a pet food firm—a buyer—decides to produce some of its supplies within the company rather than acquiring them from independent suppliers. Overall, such factors determine how powerful supplier firms are in an industry. In our research, we did not identify any firms that engaged in forward integration into the pet food industry. Further, backward integration into supplier industries is unlikely because suppliers of corn and poultry meat sell to both human food and pet food production firms. In order for a pet food manufacturer to integrate backward, therefore, it would have to enter into a completely new industry, to a certain degree.

 CONCLUSION

 Table 2 below summarizes the information from the preceding industry analysis based on Porter’s (1980) Five Forces.

Table 2: Summary of Porter’s (1980) Five Forces Model, as applied to the pet food industry.

|  |  |  |
| --- | --- | --- |
| Force | Strength of Force (high, moderate, or low) | Comments |
| 1. Threat of new entrants | High-Moderate | The market is highly saturated, making the threat of new entrants moderate to high in strength depending on the size of the manufacturer. Large companies are not as greatly affected as smaller companies are.  |
| 2. Degree of rivalry among existing firms | High | The high level of market saturation makes the degree of rivalry among existing firms high. Smaller firms must compete for market share against big name companies with large market shares, or else target niche markets. |
| 3. Threat of substitutes | Moderate | While there are substitutes for pet food, most pet owners rely on ready-made, store-bought pet food. |
| 4. Power of buyers | High-Moderate | Buyer power is moderate to high because of buyer sensitivity to price and buyer knowledge. The saturated market also gives buyers more options and more buyer power. |
| 5. Power of suppliers | High-Moderate | The price of inputs used by pet food producers has increased over the years. Additionally, pet owners are looking for higher quality ingredients in pet food and this has also increased input costs.  |

 The analysis of Porter’s (1980) Five Forces as applied to the pet food industry has shown that each force is moderate to high in strength. In terms of threat of new entrants, the first of the forces, it is moderate to high in strength. This is due to the highly saturated market. It should be noted, however, that the pet food market is expected to grow significantly by 2019. The threat of new entrants is higher in strength for smaller companies because it is easier for smaller scale firms to compete in the niche markets they are currently in. Larger companies are not greatly threatened due to having large economies of scale and larger market shares. Since the market is highly saturated, the second force in Porter’s (1980) Five Forces, the degree of rivalry among existing firms, is high. Smaller firms must compete for market share among other small firms as well as go up against big name companies with large market shares. At the same time, successful smaller firms that exhibit steady growth may be acquired by larger firms, providing ample financial gains by the owners of the smaller manufacturers.

The third force, the threat of substitutes, is moderate in strength. This is mainly due to there not being many good substitutes for pet food. Substitutes do exist, but most pet owners choose to purchase ready-made pet food sold at pet stores and grocery stores. The fourth force, the power of buyers, is moderate to high in strength due to buyer price sensitivity as well as buyer knowledge of products. The high market saturation also plays a role in this due to there being many options on the market for buyers to choose from. The final force of Porter’s (1980) Five Forces is the power of suppliers. This force is also moderate to high in strength mostly due to an increase in price for inputs used to produce pet food. The growing trend in higher quality ingredients in pet food has also increased costs of inputs. These factors contribute to the strength of this force.

Overall, the pet food industry can be considered a stable but very competitive industry.

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