

HOW TO FACE THE LACK OF SELL OUT DATA IN
SPECIALIZED CHANNEL IN PET FOOD INDUSTRY TO
IMPROVE INDUSTRY PERFORMANCE

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II. Abstract

This project aims to study the lack of sell out data in the specialized channel of Pet Food industry and develop a business model where this need could be minimized. Given the size of the market with a great number of different customers, a pilot test was conducted using the sell out data from a relevant customer in the market with more than 30 stores over the country.

An internal and external analysis were carried out, to better understand the pet food industry behavior and trends and to help to improve the action plan and business model proposal presented in the end. Considering the market threats and opportunities and also the company strengths and weaknesses, this business model intends to answer some of the companies' needs and goals. The pilot test analysis shows the advantages that sell out data can bring to companies' decision-making process, and how it would be relevant to efficient market proposals for both sides, companies' and customers' side, being this last one, the underlying beneficiary of this model, demonstrating in this case a win win situation.

The project ends with the actions plan proposal, monitoring and control actions and the contingency plan to face possible events.

Key words: Business model, Sell out data, Specialized channel, Pet food manufacturers

III. Resumo

Este projeto visa estudar a falta de dados de sell out do canal especializado, da indústria de Pet Food e desenvolver um modelo de negócio onde esta necessidade possa ser minimizada. Dado o tamanho do mercado com um grande número de diferentes clientes, foi realizado um teste piloto usando os dados de sell out de um cliente relevante no mercado com mais de 30 lojas ao longo do país.

Para perceber melhor o comportamento e as tendências da indústria de Pet Food e ajudar a melhorar as ações e o modelo de negócio proposto no final, foi realizada uma análise interna e externa. Considerando as ameaças e oportunidades do mercado e também os pontos fortes e fracos da empresa, o modelo de negócio tenciona dar resposta a algumas das necessidades e objetivos das empresas. A análise do teste piloto mostra as vantagens que os dados de sell out podem trazer ao processo de tomada de decisão das empresas e como seria relevante para propostas de mercado eficientes, quer para o lado das empresas, quer para o lado dos clientes, que vão ser o beneficiário subjacente deste modelo, representando assim uma situação de win win.

O projeto termina com uma proposta de um plano de ações, ações de monitorização e controle e um plano de contingência para fazer face a possíveis acontecimentos

Palavras Chave: Modelo de negócio, Dados de sell out, Canal especializado, Fornecedores de Pet Food

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VII. List of abbreviations

MIS – Management Information System

SKU – Stock Keeping Unit

EAN – European Article Numbering

YTD – Year To Data

JIT – Just In Time

B2B – Business to Business

B2C – Business to Consumer

KOL – Key Opinion Leader

GMO – Genetically Modified Organism

IMF – International Monetary Fund

IRS – Imposto sobre o rendimento

Chapter 1. Executive Summary

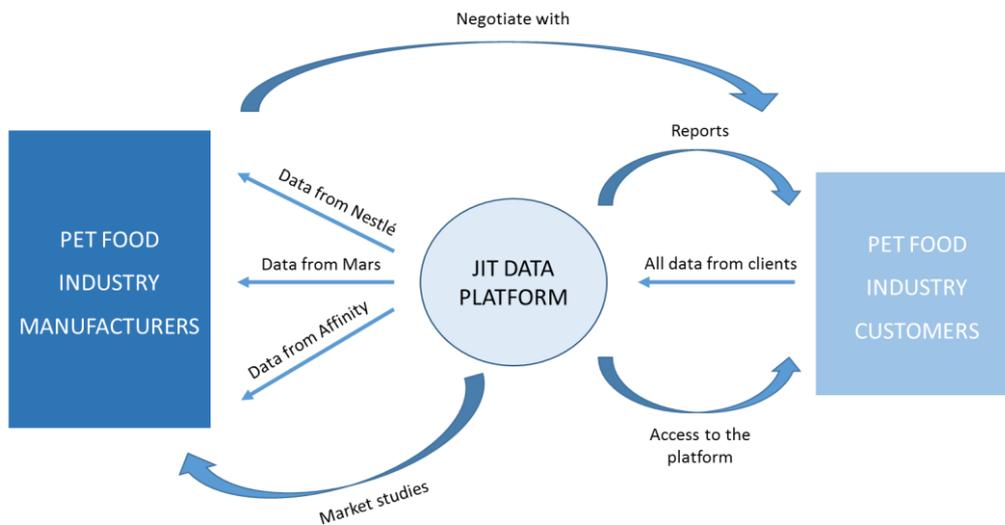


Figure 1: Business model scheme

This project aims to present a business model that responds to a perceived need of lack of sell out data in specialized channel of pet food industry. Although developed for a specific company, it can and should be expanded to the rest of the industry manufacturers that are in the same situation and that together can benefit of this co-opetition. The main goal is to gather the most relevant customers' sell out data, in exchange of commercial conditions, in order to implement an online digital platform for data aggregation and treatment and for posterior use of manufacturers.

The business model will have three parties involved, each with a specific and important role. The manufacturers get together in co-opetition and develop the negotiation terms and the platform main objectives and analysis; the customers will receive the proposal and discuss with manufacturers the trade of sell out data receiving extra conditions and business analysis that are relevant for them. The third party, the platform, is going to be the linking point of the whole system, being responsible for making available in a simpler, efficient and aggregate way all the information customers will send.

This way, manufacturers have access to all of their brands information as well as their competitors', which will improve their decision-making and the deepness of their analysis, being extremely relevant and a value added proposition for business development. Platform will receive the data from all customers in the project and aggregate that data to present all information to industry manufacturers. Customers will have the responsibility to send the sell

out data weekly or monthly, depending on the complexity, and in exchange receive extra conditions in their sales that will be in contract as well as business reports that can help them improve their performance.

This company project aims to give and test a solution to face this problem at the same time it uses a customer sell out data information analysis to prove that the information and the conclusion from that analysis are very important for industry manufacturers' decision-making process and management. As well as for customers' business development considering they would have access to efficient promotional campaigns, innovation proposals and category management offers.

The project will present the innumerable opportunities existent in this value proposition and more important than that, it will show how it can be benefic for the industry growth. Sell out data information will improve companies analysis and decision-making which would help to improve efficiency and better value proposals to customers which, in turn, with better value proposals would improve also their business offers, having more adequate answers to consumers' needs.

This business model is not about a product or service but regarding an industry analysis improvement, which means the investment will return in terms of sales improvement, better decision-making process, relevant market studies and satisfied customers, being some of them not directly associated with money return but for sure reasons why companies and customers will improve its financials.

Chapter 2. Literature Review

2.1 Data and its importance in decision-making process

According to the Cambridge dictionary, data is "*information, especially facts and numbers, collected to be examined and considered and used to help decision-making, or information in an electronic form that can be stored and used by a computer*" and decision making is by oxford dictionary "*the action or process of making important decisions*".

The information one collects, helps him to understand events, in order to develop good judgements to make decisions about those events (Thomas L. Saaty, 2008). Oxford dictionary describes decision as a conclusion or resolution reached after consideration, which implies an

ongoing process of options evaluation regarding a specific goal (Hussien Ahmad Al-Tarawneh, 2012). Data provides the information to choose between alternatives and opt for a particular course of action. Inside organizations, decision-making is a crucial part of the management and essential for companies' development.

According to Tohidi and Jabbari (2011), the decision making process includes six stages as shown in the figure below.

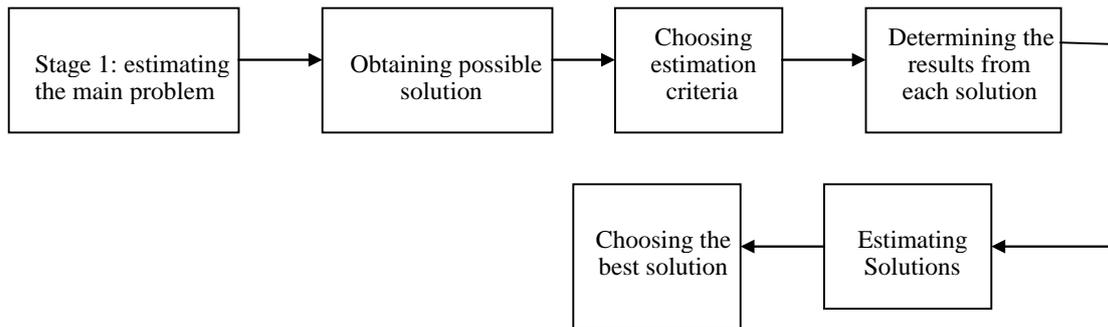


Figure 2: Different stages of decision-making process

Decision-making starts with a main problem or situation that requires some action. Based on the information available, one will have possible solutions that can be used to solve that problem found. From the various alternatives, a decision is needed using some criteria, which implies looking at the possibilities and define the possible results, estimating the solutions helps to estimate the results and consequently, helps choosing the best solution for the problem found.

According to Ajayi, I. A & Omirin, Fadekemi F (2007), an effective decision-making requires precise, timely, relevant and pertinent information.

2.2 Management Information Systems (MIS)

To better use the data and improve the decision making process, companies use management information systems (MIS). The main objective of MIS is to develop an efficient system that maximizes the effective use of data nowadays to better suit the management practices, it is also very important to assist managers to have timely and accurate information to use in decision-making process (Ajayi, I. A and Omirin, Fadekemi F, 2007).

According to the Ajayi, I. A and Omirin, Fadekemi F (2007), the MIS are concerned about the “*process of collecting, processing, storing and transmitting relevant information to support the management operations in any organization*”. Therefore, the decision-making success will depend in certain point, on the availability of information, which, if available will improve the managerial decisions.

MIS act has a mean for data transformation, transforming data in relevant information that can more easily be used by companies in their decision-making process.

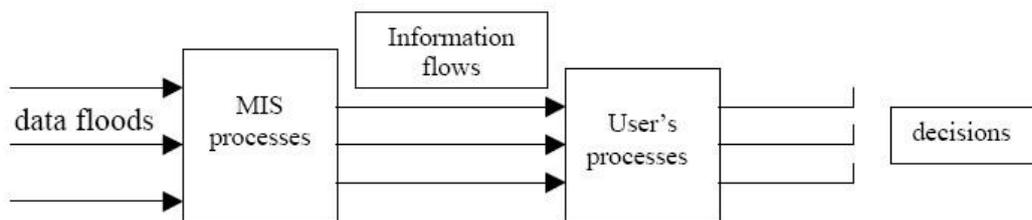


Figure 3: MIS and decision-making process

Source: Predrag Ranisavljevic, Tanja Spaisic, Ivana Mladenovic – Ranisavljevic, 2012

Information systems design is complex and a step-by-step process, requiring the definition of the company internal business processes and detail of the basic quantitative parameters of evaluation in which the company wants to focus (Novikova E. N., 2015).

2.3 Big Data and data driven thinking

According to TechAmerica Foundation’s Federal Big Data Commission (2012), big Data can be defined as “*a term that describes large volumes of high velocity, complex and variable data that require advanced techniques and technologies to enable the capture, storage, distribution, management, and analysis of the information*” (Gandomi & Haider, 2014).

In a world full of information, it is essential to understand which is the relevant information needed and how that information can be gather, process and use in daily basis routine. Big data for itself has no power, its potential is unlocked only when driving decision-making (Gandomi & Haider, 2014).

Companies need information to be assertive and reliable. With all the data available, it is impossible for companies to assess every single piece of information and then be able to make a decision in a short period. To shorten the time between the moment that information is

available until the decision-making is made, it is important to resort to management programs where these information can be stored and automatically transformed into tables and graphics of easy interpreting, enabling managers to justify their decisions based on facts and current information.

Organizations are becoming data driven, they no longer ask, “what do we think” but “what do we know” (McAfee & Brynjolfsson, 2012). According to Bjorkman & Fanco (2017), “*the ability to make sense of unstructured data through analysis enables organizations to incorporate valuable insights about their business into their everyday routines, processes and decision*”.

Nowadays retailers have huge amounts of information at their disposal, but the time needed to analyze this data is no longer enough to take relevant conclusions in real time. According to Grewal, D., Roggeveen, A. L. & Nordfalt, J. (2017), retailers in recent years are starting to “*take advantage of options for organizing these data better, improving access to computing power and the availability of proprietary or enterprise analytical systems.*”

Big data helps companies to understand consumers’ behavior, improving their service near consumers in B2C companies or near their customers, in case of B2B companies. Data access nowadays is fundamental but when aligned with digital data treatment platforms to take fully advantage in daily decision-making.

2.4 How important is Point of sale information in decision making?

Point of sale (POS) information such as sell out data, promotional data, and consumers buying behavior can play an important role in a business growth and sustenance, being very important for decision-making process. In order to support good decision-making, companies should equip themselves with infrastructures that will allow them to develop and manage customer databases, which can be helpful to define strategies for future implementations (Banerjee A. & Banerjee B., 2000).

POS data is data collected in point of sale; it can be the sales in value and volume, the price of the transaction, the promotional campaign results, such as quantity sold at which price and other relevant data for companies, that use it to important decision-making and to define a customers’ purchase characteristics pattern. According to Banerjee A. & Banerjee B. (2000),

in the last 12 years, companies are using consumer data to “*generate value added insights on consumer reaction to various marketing mix initiatives*”.

For retail store managers and brand managers, having a managerial tool capable of analyzing information from POS is very important for management decisions. Know what brands to promote and when, how long should the promotions last, what brands and promotions will drive profitability for companies and customers, what percentage discount have better results and the frequency that the campaigns should have, is extremely important in terms of business management and decision-making (Banerjee A. & Banerjee B., 2000).

Sell out data allows companies to have information on market share, market tendencies, products performance, product portfolio, promotions performance, consumer behavior and their overall performance in the market as a whole. This information help companies to conduct internal studies, improve their value proposals, perceive which are the most relevant innovations, and develop their business, improving their performance.

The sell out data is vast and has some challenges regarding its complexity (velocity, veracity and quality). The process of data capture, integration and transformation requires the right model for data analysis in order to take the conclusion at a fast and relevant way (Sivarajah U., Kamal M., Irani Z., Weerakkody V., 2016).

2.5 Cooperation between competitors

The term co-opetition comes from competition and collaboration and it is increasing in popularity looking at the fact that more than 50% of collaborative relations are between companies from the same industry, which implies being competitors (Gnyawali, D.R., Park, B. J., 2011).

Zineldin M. (2004) defines co-opetition as “*a business situation where independent parties co-operate with one another and co-ordinate their activities, thereby collaborating to accomplish mutual goals, but at the same time compete with each other*”

The need of working together in order to create value and the desire of being opportunistic to get a bigger share of the created value is the dilemma companies’ face in co-opetition in spite of being considered as a win-win strategy (Gnyawali, D.R., Park, B. J., 2011).

According to Bouncken R. B., Gast J., Kraus S. and Bogers M. (2015), “*While coopetition may combine the best of both worlds of cooperation and competition, there is still an inherent paradox, given the possible tension between value creation and capture*”.

In a co-opetitive relation, companies are partners and competitors at the same time, being extremely important to analyze the co-opetition in terms of engagement, achievements, conditions and resources. Each side will provide knowledge and resources that otherwise were not available, and combining their potential can help both companies to pursue innovation projects that can involve more risk and/or require more investment (Gnyawali, D.R., Park, B. J., 2011).

Co-opetition enables companies to pursue a common goal where both parties can contribute with different inputs and resources to achieve the same objective. Combine knowledge, resources and inputs can be advantageous for both sides, and working together sometimes is the only possibility of achieving those goals.

There are several reasons why companies should embrace co-opetition and lack of resources or common needs are some of them. “*Resources and its scarcity are in most of the cooperative relations a driving factor*” according to Oesterbeck S. (2015), that also defends that “*The resource-based-view is underlying that companies can achieve a competitive advantage through the best acquisition and exploitation of their available resources*”.

According to Hinttu, S. & Kock, (2003), “*Relationships based on cooperation indicate a share interest to work together towards a mutual goal*”. Those relationships can be formal or informal depending on its circumstances and alliance goals, and both are developed on a mutual interest where companies have access to external resources and knowledge that if not in cooperation both of them would not have (Hinttu, S. & Kock, 2003). The power of cooperation between companies is exactly the opportunity each one has to have access to others resources and it is considered a win win situation considering that the primary goal is to share each other knowledge and/ or resources.

There are four types of relationships among competitors, competition, coexistence, cooperation and co-opetition (Gnyawali, D. R. & Park, B. 2011 & Hinttu, S. & Kock, 2003). Co-opetition can be consider as the most demanding one because it uses two different relationships at the same time, the cooperation and the competition, two contradictory relationships with clearly different goals. While cooperation requires working side by side and share resources and know-

how, competition requires generating a competitive advantage over the competitor. These activities management can be very stressful for people inside each organization, who have to cooperate in some cases and in others compete with each other (Gnyawali, D. R. & Park, B. 2011 & Hinttu, S. & Kock, 2003).

2.6 Perform Pilot tests

Like the author Maryam Dikko (2016) says, “*One way to ensure that validity is achieved in any research is to conduct a pilot study of research instruments*”. A pilot test can be seen as a mini version or a trial, used to prepare a full-scale study in which the test was necessary to justify the full project development (Dikko, M. 2016 & Teijlingen, E. R. & Hundley, V. 2001).

Pilot tests are very helpful in detecting possible flaws previously to projects development. This helps companies optimizing their project to the fullest and avoid possible problems in the real project, providing the chance to adjust and revise the test before going large-scale.

Owen and Catriona Doody (2015) defend that “*pilot studies are conducted to allow researchers to practice and to assess the effectiveness of their planned data collection and analysis techniques*”. Pilot tests usually take a smaller part of the sample to give a real example, although in a minor scale.

There are several reasons why pilot tests should be conducted. They allow previous research instruments adequacy assessment, assess the project feasibility and viability, identify methods’ effectiveness, estimate outcomes, collect primary data, determine the resources needed to allocate to the planned project, assess the data analysis techniques to overcome potential problems (Teijlingen, E. R. & Hundley, V. 2001).

Pilot tests may be helpful in gaining experience, developing the researcher and understand the possible risks and costs of the real project development, being important to help deciding if the project should improve to large-scale or not (Doody, O. & Doody, C. M. 2015).

In the present study, the pilot test will be useful to understand in which way the data used is important for the decision-making inside organizations, what are the advantages and disadvantages of the method and understand how companies can work with this kind of information. The study will also be important to know what is the data needed to perform the

analysis, how that data should be organized in order to simplify the analysis and what are the possibilities of turning this in a large-scale project.

Chapter 3. Brief characterization of the organization

Nestlé is a multinational company, linked to the food business, founded 150 years ago by Henri Nestlé after he created a child meal that saved the life of a child. Since 1866, the company has this purpose to improve the quality of life of the people of the communities where it is. Its main ambitions are to provide science-based products that help children to have a healthier life, improve people's quality of life and achieve zero environmental impact of their operations.

It is considered as the world's largest food and beverage company, having more than 2000 brands, global and local, and being present in more than 191 countries.

In Portugal, Nestlé was born in 1923 when the first factory was created in Avanca of simple milk powder, being the starting point of what Nestlé is today in Portugal.

Nowadays it is a company that has several businesses in its portfolio depending on the products it offers. At a later stage, the pet food segment, Purina, became part of the business portfolio in 2001 when Nestlé acquired Ralston Purina and became Nestlé Purina Petcare, today the world leader in pet nutrition.

It is about this last business, Purina, that this project is going to address.

Purina believes that people and pets are better together, which is why its office is pet friendly, allowing employees to take their dogs with them to work. It is a company that believes in the research and in giving the best nutrition for each dog and cat, believing that no dog or cat is the same and that needs a food adapted to their necessities, this is the reason why Purina created a wide range of products adapted to all different types of dogs and cats.

3.1. Services

Nestlé is a company that provides products to retailers and wholesalers directly, not being the consumer its direct buyer, but being undoubtedly the target of its communication because it is for people that the company uses its efforts to guarantee the offer of the best food. It is thinking of people and in their quality of life that the company develops its products and elaborates its scientific studies to ensure that it has the best offer in the market for the different segments in

which it is present. It is an organization with a strong recognition and was elected the food and beverage company in which the Portuguese most trust. Meeting its purpose in improving the quality of life and contributing to a healthier future.

3.2. The brand

Purina is one of Nestlé's fastest-growing businesses and has well-known brands of the public, being cherished by its social responsibility side and the causes it supports.

Within the specialized channel, where this study will fall, we have the brands PRO PLAN, CAT CHOW and DOG CHOW, while in the grocery channel we have the brand PURINA ONE and ONE MINI and also the dual brands, present in both channels, GOURMET, FELIX, BEYOND, FRISKIES, DENTALIFE and the whole range of snacks.

3.3 Company values

Purina has five values, passion, continuous improvement, teamwork, confidence and excellence. It defends that people and animals are better together and practice this belief in its Pets at Work project allowing its employees to bring their dogs to work at the office with them.

Chapter 4. Pet Food market context and trends at international level

The times are changing and so it is pet food market. What happened some years ago is no longer a trend nowadays and pet food companies should focus in this market changes that will affect the industry as a whole. Unlike what used to happen, large breed dogs are decreasing in people's homes and small breed dogs are a growing tendency, being very popular. However, this happen because human populations are becoming more urban having less space for big dogs and because millennials pet owners choose smaller and more affordable mouths to feed. The same could be said about older pet owners where the problem is not the affordability itself but the idea of being easier to care for and handle.

Millennials generation is a generation that values freedom, change, well-being and are not concern about own resident, having children earlier and having a job for life. This is why the market is changing, because values and beliefs are changing as well. Humanization of pets is a trend, where pets are consider as part of the family. Along with this trend, owners are becoming more conscientious about health and their pet's wellbeing, which means, more willing to pay

more for better products and services. The **humanization** trend will remain a key driver of demand for higher quality pet care products in 2018 and 2019, while also continuing to support the shift towards greater segmentation by age, breed, size and health condition in dog and cat food. A Nielsen study revealed that 81% of the millennials are willing to pay more for food with higher health benefits.



BASE: POSSUEM CÃO: 2015 (523); 2016 (577); 2017 (562). | BASE: POSSUEM GATO: 2015 (278); 2016 (370); 2017 (359)

Source: GfK.Track.2PETS 2017

Figure 4: Which is the relation owner establish with their pets

According to Tim Wall, there are some tendencies raising in Pet Food Industry in the majority related to new generations and the increasingly concern about health and wellbeing, “Pet owners will increasingly demand the same qualities in pet food that they want in their own meals, such as familiar ingredients, sustainability and nutrition”. At this moment, it is very relevant for companies to know their consumers, their life stage and their needs.

Based on these facts, there are some trends gaining relevance. **No laboratory claims or cleaner labels** are an example of those changes. Be scientifically formulated can be considered as less human and having labels with lots of technical information or unfamiliar components can be misleading for some pet owners, which prefer simple and cleaner labels, with less ingredients or made with local or artisanal offers. This is a challenge for big companies, perceived by consumers as more industrial, less transparent and regional.

Limited ingredient diets (LID) are also a trend. Owners like to know which are the exact ingredients they are giving to their pets. They trust better if they see **transparency** in food formulation, with certified ingredients and simple communications about products composition

and sources, which is related as well to **less processed** food and increased demand for more natural products. **Superfoods** like chicory, beet, sweet potato, chia, carrots, spinach and honey started to become a success in food composition as it happen already in human food. All of these trends are based in human beliefs that shift their desire of a healthy eating to their pets as well, becoming now the big hit in pet food industry.

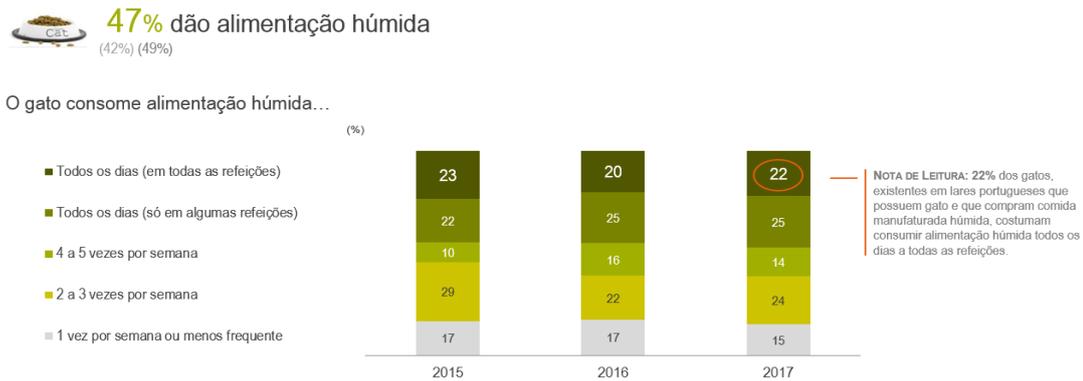
This greater concern about better products is leading to another growing trend, the **Natural and Ultra Natural products**, characterized by having higher protein levels, being grain free and/or gluten free, with natural ingredients, vitamin and mineral enriched, and with claims such as no added artificial colorants, flavors or preservatives and also, organically sourced and GMO-free. Raw diets in spite of being extreme are growing in popularity, believed as the food that better approaches pets' ancestral roots. These diets can be of two types, **BARF** (meaning Bones and Raw Food or Biologically Appropriate Raw Food, with fruits and vegetable) or **Prey** that uses only meat. Either way, is non-processed or cooked food.

Mix feeding is also a term that starts to appear in pet food communications, being a combination of dry and wet food in pets feeding. Wet food is a growing tendency in the market, both for dog and cat food. Although dry food continues to be the number one choice in the market, the wet food segment is gaining relevance over the years. Owners more over believe in a balanced nutrition and in single serve doses that are very common in wet food segment. Dry still the overall choice for everyday meals but wet begins to win serious relevance in small breed dogs and cats that value the palatability and food sauces.



Source: GfK.Track.2PETs 2017

Figure 5: How many people give their dogs wet Food?



Source: GfK.Track.2PETs 2017

Figure 6: How many people give their cats wet Food?

Chapter 5. External Analysis

5.1. Immediate environment

To better understand the environment in which the company and Purina in particular are, a PESTEL analysis was elaborated based on the Political, Economic, Social, Technological, Environmental and Legal areas.

Political

Portugal had a very complicated recession due to the 2008 crisis that caused the economy to suffer and the state to implement stricter policies with a heavy tax burden, which altered the consumption pattern of the Portuguese and increased the tension that there was with the government. These strong measures of reducing government costs and increasing the tax burden led to an overall discontent among the population, which started to have lower incomes and to rethink the management of the family budget in another way. With the exit of the IMF and recovery from the crisis, it was possible to gradually improve the rates to which the people were submitted to and the country's economy start to improve. Country is currently in an upward phase with improved rates and less recession.

Economic

The recession made the economy of the country very affected in times of crisis, with a drastic increase in the unemployment rate, inflation in products, an increase in the tax burden and of course, a reduction in consumption by the Portuguese who were forced to change its spending

pattern in light of the country's economic changes. But, although economy has suffered a lot, it is already in a phase of improvement, with the unemployment rate reaching its peak in 2013 with a percentage of 13.7% and having been down to 8,6% verified in 2017. There is now a greater propensity to consumption when compared to the last years.

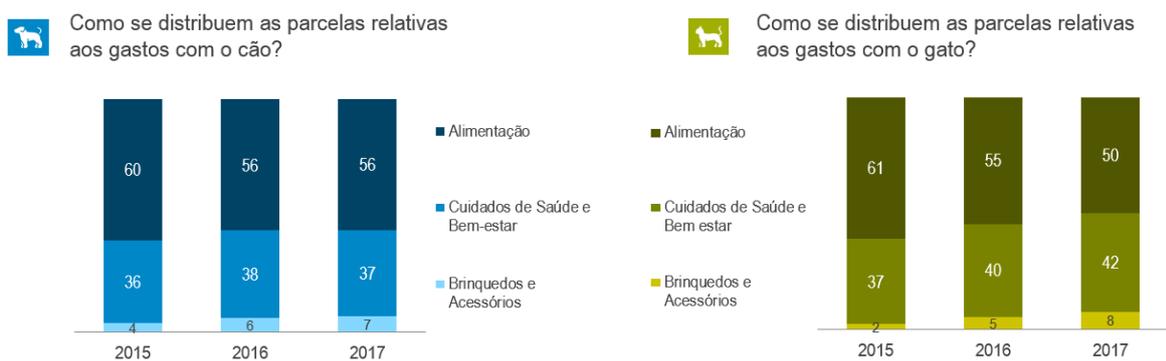
The Pet Food sector has registered very interesting values that demonstrate its growth in recent years. Having suffered with the crisis, it is a sector that grew 5.5% in 2016 and shows a clear evolution in the spending pattern of its consumers. According to the results of the 2017 GfK study, the percentage of family income allocated to pet spending has increased, representing an average of 17% in 2017. These indicators show a greater propensity to spend in this category associated with a higher concern about pets.



BASE: POSSUEM CÃO: 2015 (523); 2016 (577); 2017 (562). | BASE: POSSUEM GATO: 2015 (278); 2016 (370); 2017 (359)

Source: GfK.Track.2PETS 2017

Figure 7: Weight of expenses with Dogs and Cats in the familiar budget



BASE: POSSUEM CÃO: 2015 (523); 2016 (577); 2017 (562). | BASE: POSSUEM GATO: 2015 (278); 2016 (370); 2017 (359)

Source: GfK.Track.2PETS 2017

Figure 8: In what pet care expenses, the familiar budget is divided

The age structure of the population is another very important factor in the demographic environment, with an increase in the elderly population in Portugal in 2017 compared to 2016 with 5.9% of the population over 65. This demographic change is worrying but may be beneficial to the pet food business since many older consumers acquire pets so they do not feel so alone, which can mean an increase in the number of pets in Portugal and subsequently an increase in this industry consumption. In any case, it is important to emphasize that this is not a market with an age group, since age is not directly associated with those who have pets, because at all ages there is this valorization in having a companion animal that is part of the family. What is at stake in the older population is the propensity to acquire one, derived from their greater tendency to loneliness, which does not make this industry targeted to the older sector of the population.

Expenses with pets weigh heavily on family income, whether they are food or veterinarian. In 2017, a new tax rule defined that the expenses with vets would be deducted from the IRS, thus representing a plus for this industry and an advantage for those who have or want to have a pet.

Social

At the social level the conditions and lifestyle as well as the pattern and consumption behavior of the Portuguese are improving with the improvement of the economy, the unemployment rate and rates practiced by the banking and credit support units that are now starting to show some flexibility in lending, something that until recently was more difficult. Country is recovering and family consumption pattern is changing, people are spending more money and the increase in expenses with pets show that improvement in standard of living.

The attitude towards social issues and social responsibility have been developing over the last few years with the emergence of several associations of social nature where the objective is to help raise people's awareness for social behaviors and realities lived in the country. The growth of associations linked to the provision of consumer goods to needy families and associations to help abandoned pets has been very marked, either from a physical support perspective or from a virtual support perspective, on social networks. Facebook is frequently used as a means of raising awareness for pet related causes, such as abandoned pets, pets association needs and pet food advices.

In recent years many animal-related companies have also emerged, such as dog hotels, schools and parks that allow owners to safely and happily leave their pets when they go to work or go

on vacation. In day-to-day activities, improvements also start to be seen in the society that is increasingly creating laws that allow owners to be closer to their pets. Taking pets with them to shopping centers, such as the Alegro Alfragide, already pet friendly and also to restaurants, that became a reality in May 2017, among other initiatives that contribute to the well being of both pets and owners.

Technological

At the technological level, the great change in this sector is due to the fast growth of e-commerce, being now a platform widely used and with more competitive prices. It has been developing for the accessibility, convenience, ease and competitive prices that it offers, being nowadays a channel in the sector of pet food in Portugal with a very accentuated growth. This development can be seen as a plus, since sales volume tends to be higher by the above mentioned characteristics, but on the other hand forces companies to have different sales policies to avoid precisely that the price of their products be too affected and create a very large separation between physical stores and online stores.

When it comes to technology in product development, there are more and more tools to do more and better. State-of-the-art technologies that allow innovative product confections that allow companies to differentiate themselves not only by the type of products they offer, but also by the confection and technology used.

Legal

This sector is a food sector that although being for pets, is under food laws and rules having several restrictions in its confection and in the way it approaches the final consumer. Rules of labeling, packaging, communication, price, among others are extremely important and changes in those rules can lead to a company having high costs to keep up with what is legally requested.

5.2. Industry Attractiveness

This analysis is regarding specialized channel, the channel addressed in this project where the lack of sell out data information was found.

Threat of new entry

The threat of new competitors' entry is high because it is an industry where new brands are always appearing, with new value propositions to face market trends. In the specialized channel, the entry of new brands is easier when compared to grocery. In this channel, the importance of food, differentiation and quality is more valued and it is not a mass market, but rather to satisfy specific niches like the natural, the super-premium segment, among others. Another detail of the specialized channel is the fact that it is a channel of proximity, being more requested at times of convenience.

Characterizing factors of this force		Contribution for the force					Average 2,8
		1	2	3	4	5	
Economies of scale	High						Low
Product differentiation	High				X		Low
Cost of changing for customers	High			X			Low
Facility in accessing distribution channels	Low				X		High
Facility in accessing raw materials	High		X				Low
Experience effects	High		X				Low
Probability of competitors retaliation	High		X				Low

Table 1: Analysis of the Threat of new entry

Competitive rivalry

Rivalry among the companies in this industry is moderate not by the number of competing companies, but by the weight and strength each one has. The specialized channel market is divided into premium, super premium, natural and ultra-natural brands, and within each of these segments, there are not many competitors, with the exception of the natural and ultra-natural segment that has been growing in number of brands in the market. However, what happens in this channel is that although there are few brands competing in the same segment, they are very representative, the concentration of the market is very high and the degree of differentiation of the product is smaller, which does not help in the differentiation and positioning of leader in this industry.

Characterizing factors of this force		Contribution for the force					Average 3,1
		1	2	3	4	5	
Number of competing companies	Low				X		High

Market concentration level	High		X				High
Market growth	High		X				Low
Fixed costs	Low			X			High
Costs of stock possession	Low			X			High
Level of product differentiation	High				X		Low
Costs of changing for customers	High			X			Low
Competitors diversity grade	High			X			Low
Exit barriers (decomposed in:)							
- Assets specialization grade	Low				X		High
- Exit costs	Low			X			High
- Social and legal restrictions	Low			X			High

Table 2: Analysis of the competitive rivalry

Threat of substitute products

In the Pet Food market there is no great threat of substitute products, since the only threat that exists for suppliers and customers is the exchange of this feed for food made at home or leftovers which could mean a trade off between commercialized and home made food. But in recent years we have seen a significant decrease in the number of people who give their animals food remains, the number of caloric coverage is increasing and there are more and more people who identify pet food purchased as being of better quality for their pets. The exception concerns more areas in the interior or the countryside where this question is not yet clear and sometimes the food leftovers gain an advantage.

Characterizing factors of this force		Contribution for the force					Average 1
		1	2	3	4	5	
Substitute products availability	Low	X					High

Table 3: Analysis of the treat of substitute products

Power of suppliers

The power of suppliers can be considered moderate to high, depending on the position and importance that the brand occupies in the stores because that is what will make the power bigger or smaller. Considering a brand that sells fairly well and which has a fairly large market

weight, the power of suppliers is bigger, although it is customers who choose whether or not to buy, so it is always a situation that involves good negotiation on both sides. However, relevant brands in the market with a good share of sales on the customer have an advantage over it as they can cause problems if they are no longer sold. But, in this case the same applies to the brand because if it sells well in a particular customer, it does not want to stop selling because it implies losing sales, although it continues to have more customers to sell.

Characterizing factors of this force		Contribution for the force					Average 2,1
		1	2	3	4	5	
Number of industry supplies/manufacturers	High			X			Low
Size and degree of concentration of suppliers relative to industry	Low				X		High
Industry importance as client	High		X				Low
Average volume of purchases to suppliers	High		X				Low
Changing supplier costs	Low		X				High
Manufacturers profitability	Low				X		High
Weight of cost of products computed by industry in total cost	Low			X			High
Differentiation grade of industry bought products	Low		X				High
Substitute products availability	Low	X					High

Table 4: Analysis of Suppliers power

Customers' power

The customers' power depends on the weight they have on the suppliers' sales. If a customer has a high sales volume of a particular brand, of course the power of that customer, compared to the supplier who sells that brand, is greater than the power of a customer who sells the same brand at a residual value.

Characterizing factors of this force		Contribution for the force					Average 2,2
		1	2	3	4	5	
Number of customers in the industry	High	X					Low
Concentration grade of customers compared to the industry	Low		X				High
Average volume of customers purchases	Low			X			High
Cost (for customers) of supplier change	High		X				Low
Customers profitability	High		X				Low
Weight of costs of products sold by the industry in cost to customer	Low				X		High

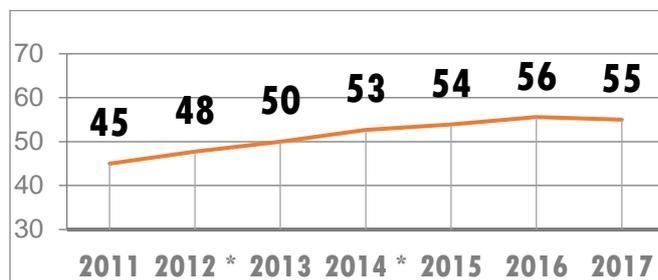
Importance to customers of the quality of products sold by industry	High		X				Low
Differentiation grade of the products provided by the industry	High			X			Low
Substitute products availability for customers	Low	X					High

Table 5: Analysis of customers' power

5.3. Market Dimension and Evolution

Pet food market in Portugal represents 204,8 million euros and grew this last year 2017 in value and volume. Cat food was the segment that registered the biggest growth with 7% in value (97,1 million €) and 6% in volume vs 2016 and dog food although in a lower percentage, also registered a growth of 2% (107,7 million €) in value and 1% in volume vs 2016.

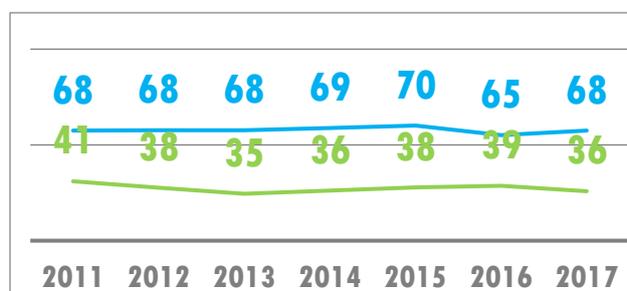
According to the GfK Track.2PETs 2017 study, Portugal has 5 million pets out of which, 37% are dogs and 20% are cats, which means that we have 2 million dogs and 1,1 million cats in Portugal. In terms of ranking of European countries with more pets, the same study positions Portugal in 12th place, after Russia, France, Italy, German and England. It also says that about 2 million Portuguese homes (55%) have at least a pet.



Fonte: Estudo Base. Total de Lares em Portugal Continental (3.869 milhões lares). Amostra: 1257

Source: GfK.Track.2PETs 2017

Figure 9: Percentage of Portuguese homes with pets

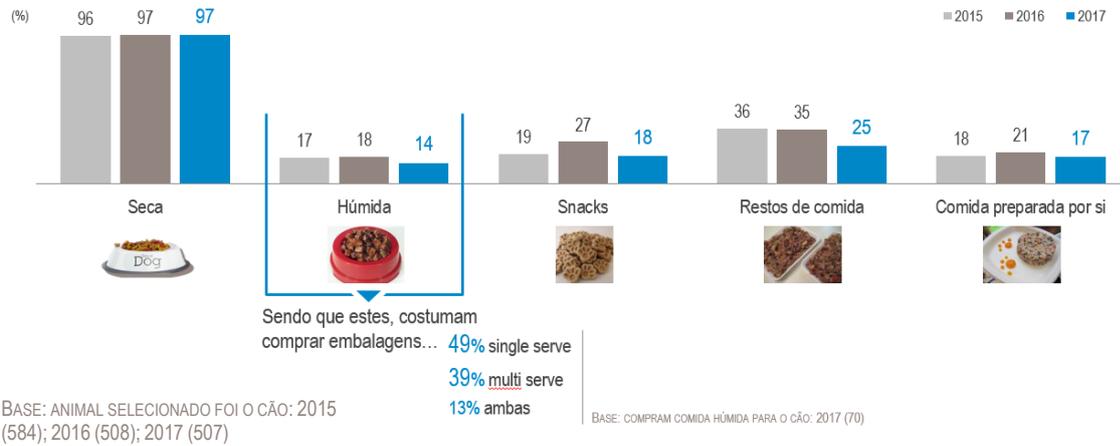


Fonte: Estudo Base. Total de Lares em Portugal Continental (3.869 milhões lares). Amostra: 1257

Source: GfK.Track.2PETs 2017

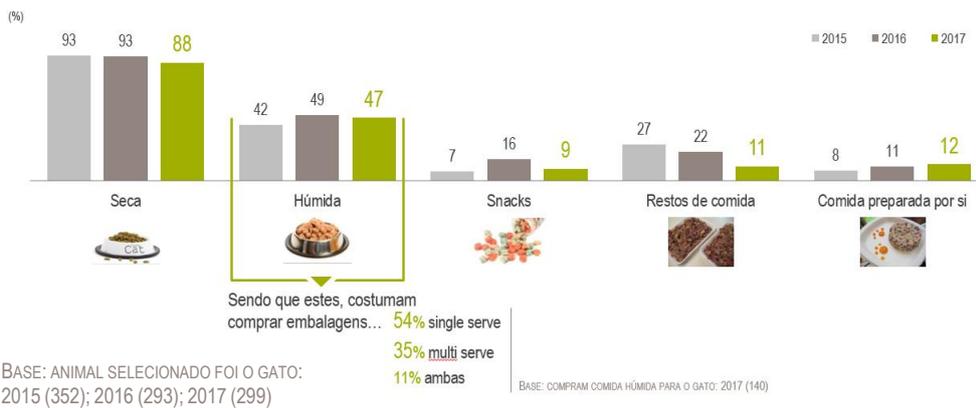
Figure 10: Percentage of homes with cat and dogs

According to the GfK.Track.2PETs 2017 study, 68% of Portuguese homes have a dog and 36% have a cat, representing a growth of 3% in dogs and a decrease of 3% in cats. This is interesting considering that the biggest growth in last year was in cat food, with 7% growth vs 2% in dog.



Source: GfK.Track.2PETs 2017

Figure 11: Dogs type of nutrition penetration



Source: GfK.Track.2PETs 2017

Figure 12: Cats type of nutrition penetration

Major Players

Purina's major players in specialized channel are Mars with Royal Canin and Affinity with Advance, both competing directly with PRO PLAN, all in the Super Premium segment in the science based nutrition. In premium segment, the competition is between Libra from Affinity and Cat and Dog CHOW from Purina, both with an Everyday Low Price Strategy considering premium as a price driven segment.

In Natural segment Purina just have one brand positioning in the entry natural segment, Beyond, being less relevant in this segment when compared to competitors that have better propositions. Beyond is a dual brand, present both in grocery and specialized channel, which hinders its positioning and interest in Specialized Market. Many new brands are appearing in this segment, positioning in natural and ultra-natural offers. Some examples in this segment are Acana, Orijen, Naturea, Happy One, Taste of the Wild and Schesir. It is a cluster market that is developing fast and with great offers. Affinity is from the major players in the market, the one that has propositions in all segment, Super Premium, Premium and Natural, this last one with the brand True Instinct, which is positioning both in Entry Natural and Natural sub segments.

Grocery vs Specialized retailers

There are two main channels in Portugal, the grocery and the specialized channel. Grocery includes groups of small and large supermarkets such as SONAE, Jerónimo Martins and LIDL where exists a pet food area; specialized channel are pet food exclusive shops or clinics where pets are the main concern. In this second channel are included Pet Shops, Veterinary Clinics, Garden Centers and pet food wholesalers and distributors. Each channel has its own brand proposals having products that are exclusive for grocery or specialized, but dual brands are a reality, being in that case, present in both channels.

In terms of business proportion, grocery still represent the biggest percentage with the mass market, while specialized have a lower but representative scale. The growth in specialized channel is more difficult to assess due to the great number of independent stores registered in Portugal. Grocery channel is more affordable and at the same time, consumers can buy both of their food and their pets', where price and convenience justify the mass market. Specialized as the name implies, has more specialized offers, with different brands from grocery and perceived as having better quality.

Product Categories

In Pet Food Market, there is a product segmentation in Dry and Wet food products, which can be Grain free or Non-grain free food and a market price segmentation, which can position brands in Economic, Premium or Super Premium segment. Natural and Ultra Natural

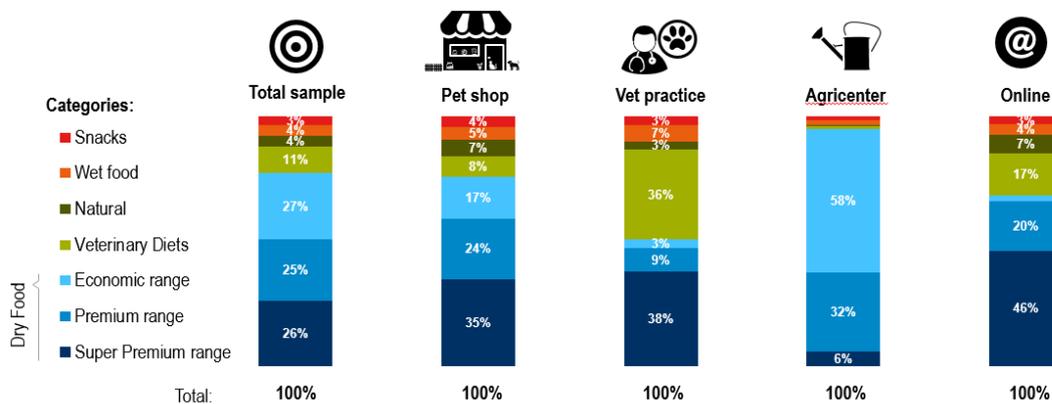
segmentation, visible in specialized retailer shops can vary depending on the products composition, as it will be show further.

Dry food in Portugal represents the biggest percentage of sales but the wet segment is a growing tendency and start to become relevant in the market, although not yet with a big slice of sales.

Economic brands are brands with lower price positioning and perceived as inferior quality in terms of product formulation. Economic segment is more popular in garden centers, both is dog and cat food.

Premium brands are position with an intermediate price, already with a considerable percentage of meat and possibly natural ingredients. In terms of quality is position as a good price quality product.

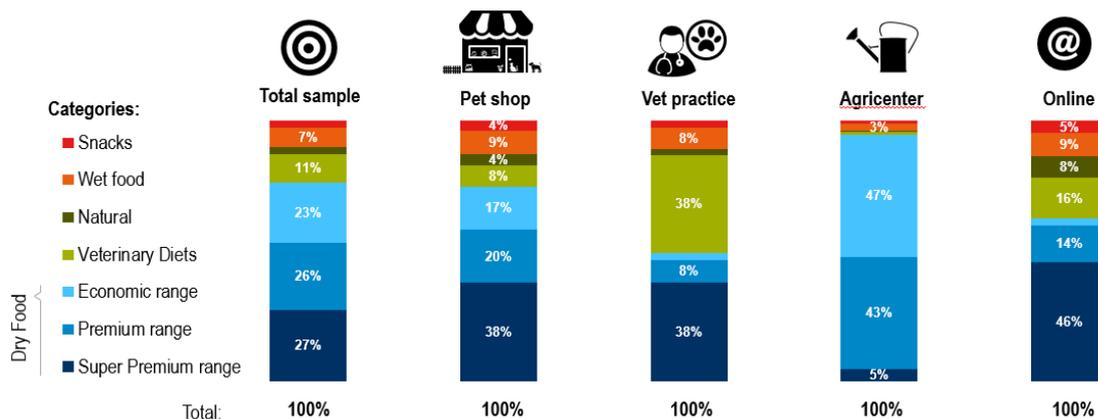
Super Premium brands have the best quality in the market having a higher price and a higher meat percentage. Are normally brands that have a background based on scientific research and that rely on this expertise. In this segment, there are already grain free option.



Base: W/UW: TOTAL Sample: (245/245); Pet shop: (138/105), Vet Practice (52/127); Agricenter: (80/29*); Online: (38/10*)

Source: Nestlé Purina Study with GFK

Figure 13: Characterization of dog food sales by categories



Source: Nestlé Purina Study with GFK

Figure 14: Characterization of cat food sales by categories

Base: W/UW: TOTAL Sample: (245/245); Pet shop: (138/105), Vet Practice (52/127); Agricenter: (80/29*); Online: (38/10*)

5.4. Clients

In specialized channel, there are several types of clients, Pet Shops, Veterinary Clinics, Garden Centers, wholesalers and distributors, which together represent the specialized market. Unlike the grocery channel that have 3 or 4 major players, each with hundreds of stores, specialized has hundreds, even thousands of unique stores, each with a different manager, way of working, commercial politics and rules, which makes this management much more difficult. The market is not as aggregated as it is in grocery and for that reason, having the sell out data and market studies of this channel is very difficult and sometimes less accurate.

Normally breeders and Vets recommend brands from this channel once they believe that is where the best offers are. The power of recommendation in this channel is very high. Pet owners take very seriously the opinion from Key opinion Leaders and when they recommend a brand, the likelihood of owners switching this brand is too small. The KOL recommendation is a great advantage for a brand and it is why specialized channel brands work with veterinary clinics in order to have this recommendation.

5.5. Consumers

In Petcare industry, there are different types of consumer, ones that humanize their pets and consider them as part of the family and ones that just consider them as a friend and a companion. Either way, the overall worry and care consumers demonstrate over their pets is growing.

It is possible to find several consumer profiles:

- Consumers that value more than anything the food, and want to give their pets the best nutrition available in the market. These consumers are super premium segment consumers, it is the segment where the best nutrition is and the prices are higher. Normally the brands in this segment are brands based on scientific research that offer the cutting-edge nutrition to pets and that perform several scientific test to prove their statements and why they are the best option. Here price is not the first concern of consumers, nutrition is. In this segment, the loyalty is bigger, consumers believe they are giving the best and changing brands because of the price is not a true reality.
- Consumers that want to give the best nutrition given their possibilities. These consumers are Premium segment consumers, who value the nutrition but with a more affordable price, a good price quality relation. Premium segment consumers are very price sensitive, which means loyalty is not very common in this segment given the high probability in switching brands depending on the price.
- Consumers that are price driven and do not care about which food they are buying unless the price they are paying. These consumers are clearly economic segment consumers, totally targeted for the price and not for the quality of what they are buying. These consumers are the ones that do not see their pets as part of the family, have less emotional bounds. Or, on the other hand, consumers that value their pets but do not have financial conditions to buy better food.
- Consumers driven by ways of living, such as the ones that value their pets' natural ancestors. Natural is a trend in human food and some pet owners believe their pets are having a better nutrition when consuming natural, raw or high protein nutrition. These consumers belong to Natural segment but even inside this segment there are different types of consumers based on their beliefs of what is the best, considering the natural side of their pets. Here are the Ultra Natural consumers, where meat percentage is number one focus and Natural consumers, where grain free concept is very popular.

In spite of existing several types of consumers, some variables affect all consumer profiles. Price, promotion, and key opinion leaders influence consumers' choice. Not all consumers are price driven, but being the market full of promotions it is expected that consumers tend to wait

or to buy where and when the product they want is with a reasonable price. This means that sometimes, a super-premium consumer can wait for the best nutrition at the best price and that a premium segment consumer can opt for a brand instead of other, if they are similar in quality, based on the price those brands have at the buying moment. Vets and Breeders are also two people consumers see as experts and when they recommend a brand, it is likely their opinion is taken seriously. Influencers also have great influence when it comes to social networks.

5.6. Competition

Characterization of the competitive intensity on the market

The competitive intensity is quite high considering the market is based in three or four large companies that owns the majority of pet food brands in Portugal. But in the specialized channel, there are smaller companies and brands when compared to grocery channel because the barriers to entry in the specialized channel are lower, which makes small players win some status on this channel. This is what happens with the natural brands that in recent years have emerged in force in this channel.

Direct Competitors

In pet food market, it only exists direct competition, competitors that also produce pet food products. There are no substitute products on sale in this business because substitute products would be people that just feed their pets with homemade food and that can't be defined as indirect competition because it is not something people can buy on stores, it is not for sale. There are companies selling pet food and people buying pet food or giving homemade food, which means there are no substitute products on the market for sale, just one choice that is commercialized and other that people can opt although they cannot buy.

The direct competition is intense in this industry, both in grocery and specialized channel, although in specialized with low entry barriers, key opinion leaders recommendation, high number of different offers for the same segments and grocery with lower price products, the competition may be consider higher.

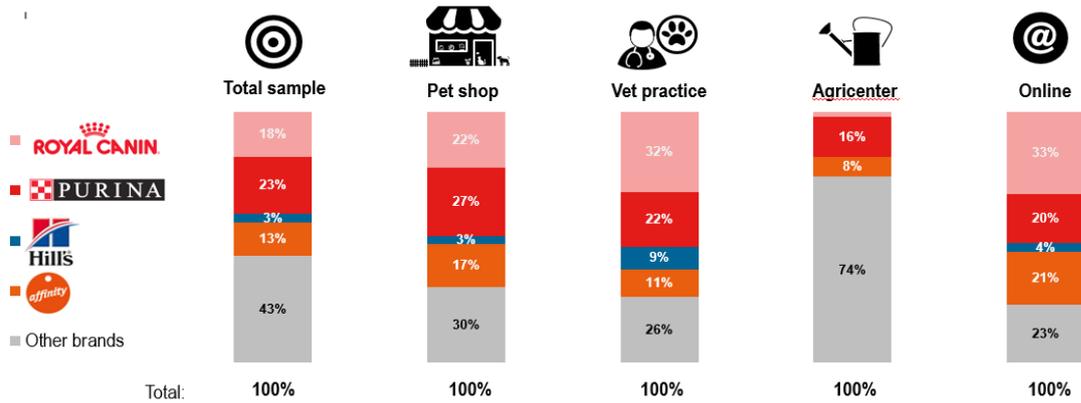
Major competitors

Mars is a company with a pet food segment, where Royal Canin is the brand from companies' portfolio with the most awareness in specialized channel. Royal Canin was founded in 1967 but only in 2002 was acquire by the Mars group. It is a brand with great awareness in specialized channel with a high price position and a high perception of quality due to the veterinarians' recommendation of the brand.

Mars Petcare portfolio beyond the Royal Canin, counts with brands like Pedigree, Whiskas, Sheba, César, Eukanuba, Iams, Frolic and Catisfaction. Like Purina, Mars has brands both from grocery channel and from specialized, although in specialized channel the most outstanding brand is Royal Canin. Royal Canin is very strong in online communication, having regular consumer communication that enhances the brand awareness and credibility.

Affinity is a petcare company with more than 50 years, committed to pets and owners well-being, reason why they created the Affinity's Foundation over 25 years ago with the purpose of promoting the role of pets and the benefits they have on people. Affinity counts with brands like Advance, Libra, Ultima and Brekkies in its portfolio and again, differentiate its offers in the two channels. In specialized channel, Advance and Libra have already a relevant market position, competing directly with PRO PLAN and CAT & DOG CHOW from Purina respectively. Affinity's strategy is a price strategy, focusing their communication in packaging price sticker and not in communication in point of sale.

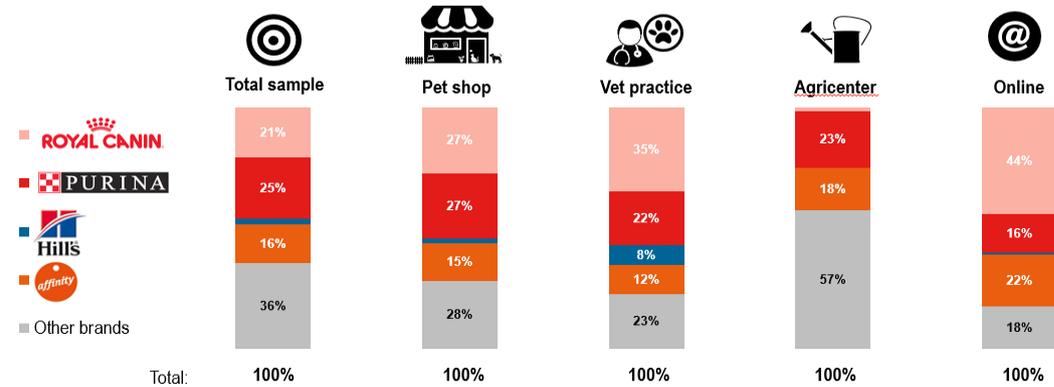
Purina is a well-known brand in the market with great awareness, both in point of sale and digital. Counts with relevant market brands and like its competitors has specific brands per channel. In its portfolio, the two brands exclusive from specialized channel are PRO PLAN and CAT & DOG CHOW. PRO PLAN competes directly with Royal Canin and Advance in the Super premium segment, while CAT & DOG CHOW compete with Libra in the premium segment. Purina is stronger in point of sale communication and, also in digital communication with the Purina umbrella.



Source: Nestlé Purina Study with GFK

Figure 15: Characterization of dog food sales by manufacturer

Base: W/UW: TOTAL Sample: (245/245); Pet shop: (138/105), Vet Practice (52/127); Agricenter: (80/29*); Online: (38/10*)



Source: Nestlé Purina Study with GFK

Figure 16: Characterization of cat food sales by manufacturer

Base: W/UW: TOTAL Sample: (245/245); Pet shop: (138/105), Vet Practice (52/127); Agricenter: (80/29*); Online: (38/10*)

Chapter 6. Opportunities and Threats

Opportunities:

- Country economic recovery
- Pet food industry growth
- Increased number of pet shops and clinics
- Increased caloric coverage (more pets eating pet food)
- Natural segment development

- Increase in pets monthly expenses
- E-commerce development

Threats:

- New brands lower entry barriers
- High number of brands entering the market
- Strong presence of competing brands
- Competing brands growth
- Small breeds growing tendency
- E-commerce lower prices
- Lack of sell out data
- Unaware of the situation of customers with our brands

Chapter 7. Internal analysis

7.1 Organizational structure

The Purina team consists of about 50 people.

The degree of specialization is high because all areas require specific knowledge, be it management and sales, marketing or finance. All functions have a management and analysis side as well as the core of the function, which can be marketing, sales or logistics. The model used is based on the discussion and participation of all parties, being very important the opinion of everyone and the conversation. All opinions are valid and dialogue is highly valued.

In the organizational structure, although there is a hierarchy there is no distance between the different hierarchies since the work is in team. There is a close relationship and autonomy between all levels of the organization and frequent and clear communication between bosses and subordinates.

7.2 Value chain

SUPPORT ACTIVITIES	1. Company Infrastructures Planning, Financing, Institutional relations					MARGIN
	2. Human Resources Management Recruitment, Training, Rewards					
	3. Technological Development Processes design					
	4. Logistics Stocks management					
1. Sales	2. Operations	3. Marketing	4. Category Management	5. Post-sale service		
Relationship with customers and sales team, field and office	Processes associated with services execution	Communication and relation with the consumer, work the brand	Point of sale and customers relation management	Customer and consumers' support		
MAIN ACTIVITIES						

Main activities

1. Sales

Purina has a sales force team responsible for customers' visits at their point of sale in order to guarantee a good follow up and build stronger relationships. In addition to the field team, there is also an office team responsible for the sales, that define the commercial conditions and that is the bridge between the company and customers.

2. Operations

Operations includes all people connected to the business operationalization, people responsible for the logistics and stocks, orders, payments and everything that seems to be outside the nuclear functions but that is necessary for the good functioning of the business.

3. Marketing

Marketing works the relationship with the consumer through point of sale and digital campaigns, online and offline. Websites, articles, every communication to the consumer comes from the marketing and digital area. It is very important in brand building and consumer perception. Also works the promotional brand activities with the sales area.

4. Category Management

This area works the Customer relationships through point of sale management. It can be associated with customers' events or stores decoration where the main goal is to improve consumers' experience. It is an important area that links the brand with the consumer through point of sale contact.

5. Post sale services

In post sale services there is the customer service support, the consumers support, all activities related to the post sale. Related with claims, orders and other activities that need follow-up.

Chapter 8. Strengths and Weaknesses

Strengths

- Wide range
- Relevant offer in Premium and Super Premium segments
- Purina awareness in the market
- Point of sale presence
- Point of sale promotional campaigns
- Sales field team proximity with customers
- Communication with consumers

Weaknesses

- Lack of offer in natural segment
- Customers commercial conditions
- Lower brands' awareness
- Lower consideration in purchase
- E-commerce presence
- Visits and prospection capability in country's interior

Chapter 9. SWOT Analysis

9.1. External factors degree of importance evaluation

In the following table are presented all the external factors identified in the analysis previously done, with an evaluation of each one's degree of importance in weak (W), medium (M) or Strong (S), having in consideration the impact they have in the business and the probability of happening in the future. This analysis is regarding Nestlé Purina SWOT analysis considering the project is about this company, although it is of major interest to expand to other companies in the industry.

	Business impact			Occurrence probability		
	W	M	S	W	M	S
Opportunities						
Country Economic recovery						
Sector growth						
Increased n° of pet shop and clinics appearing						
Increased level of caloric coverage						
Natural segment development						
Wet food consumption growth						
Increased monthly spending on pets						
E-commerce development						
Threats						
New brands low entry barriers						
High number of new brands appearing in the market						
Strong presence of competing brands						
Growing weight of competing brands						
High prices perception						
KOL low recommendation						
Small breeds growth						
E-commerce with lower prices						

Table 6: Evaluation of Threats and Opportunities

9.2. Internal factors degree of importance evaluation

Next, it will be analyzed the internal factors according to their degree of importance in the business and the probability of occurrence in a future phase.

	Business impact			Occurrence probability		
	W	M	S	W	M	S
Strengths						
Wide range						
Relevant offer in premium and super premium segments						
Strong awareness of umbrella Purina						
Point of sale campaigns						
Promotional campaigns						
Sales field team proximity						

Consumer communication						
Weaknesses	W	M	S	W	M	S
Reduced offer in natural segment						
Customers' commercial conditions						
Low brands awareness						
Low purchase consideration						
E-commerce presence						
Visits and prospection capacity in the country's interior						

Table 7: Evaluation of Strengths and Weaknesses

9.3. Dynamic SWOT Analysis

In this phase, there will be a match between the more relevant external factors with the internal factors that represent the biggest impact in the specialized channel business, in order to find action plans that improve the performance and help fight the most negative aspects.

	Strengths 1. Wide range 2. Relevant offer in Premium and Super premium segments 3. Promotional Campaigns 4. Consumer communication	Weaknesses 1. Customers commercial conditions 2. Low brands awareness 3. Low brands consideration to lead to buying
Opportunities 1. Sector/industry growth 2. E-commerce development	(1,1) Betting on innovation in growing segments (2,2) Guarantee the presence of premium and super premium brand in E-commerce (1,3) Improve promotional campaigns in E-commerce to boost trial	(1,3) Increase brands' digital visibility through more frequent presence in social media. (1,1) Develop a commercial plan with better commercial conditions (2,3) Improve brand Communications in E-commerce and customers' websites

<p>Threats</p> <ol style="list-style-type: none"> 1. New brands low entry barriers 2. Strong presence of competitors' brands 3. Low recommendation of KOL 	<p>(1,1) Guarantee shelf presence with a wider range and avoid loss of space for other new brands.</p> <p>(3,2) Focus on a wider and relevant range in the super premium segment more valued by KOL (Key Opinion leaders)</p>	<p>(2,2) Development of a business plan with better commercial conditions and counterparts to increase the Purina brand in the shelves.</p> <p>(3,2/3) Invest in the relationship with vets and bet on partnerships with important KOL in the Market.</p>
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Table 8: Dynamic SWOT analysis

Chapter 10. Goals

The business model proposed intends to respond to a Pet Food industry need in specialized channel, the lack of sell out data information, very relevant for business development. The idea is to achieve the following objectives in the next 3 years:

1. Get sell out data information in a regular basis from all relevant industry customers;
2. Implement a digital platform to sell out data treatment that could improve data analysis;
3. Invest in an efficient business model that brings value to companies and industry;
4. Restructure the industry and manufacturers' ways of working;
5. Improve sales performance with more accurate and current data;
6. Customer services improvement with more tactical and efficient promotional campaigns and products proposals.
7. Better decision making inside companies and in customers' businesses

Chapter 11. Marketing Strategy

11.1 Segmentation and Targeting

The market segments that will be considered in this study are customers from the specialized channel, who have relevant information for industry manufacturers and therefore can benefit from this interest. Customers would have better value proposals if manufacturers would have more accurate data, which can imply information exchange between parties to benefit both sides with relevant proposals.

The target customers are customers with clear relevance for the manufacturers industry. It is a channel with hundreds of customers, but just a few are relevant to obtain sell out data, the ones that represent the biggest manufacturers' sales percentages. The target customers are customers that together represent 50% to 60% of manufacturers' sales.

11.2 Positioning

In this study, although having possibly two different segments, the truth is that it can be all aggregated in one. Customers that together represent 50% to 60% of manufacturers' sales is the target. The value proposition for this group is giving extra commercial conditions (3%) for sell out data availability, periodical reports with own customers business data to improve their decision-making, and also better proposals from manufacturers that have clear perception now (with the sell out data) of what are the best promotional campaigns and products to offer.

11.3 Marketing Mix

Service – Offer better value proposals in terms of promotional campaigns, products and prices and give access to periodical reports and studies about pet food market category in Portugal, with market trends and behaviors.

Price – This business model is about information and conditions exchange, does not imply a payment or a price. Customers provide their sell out data in exchange of commercial conditions and several other services referred above.

Promotion – Negotiable if some criteria is implemented, as for example, giving access to some specific data. Monthly reports or specific analysis can be seen as an activity that communicates the merits of the product and persuade target customers to implement the platform. Specific data analysis access to increase customers' interest and satisfaction regarding this project. .

Place – The business model development do not imply a physical space and locations, it will be developed inside business organizations together with the online digital platform.

People – This business model include Customers and Manufacturers as project users and the digital platform staff as project developers. Both customers and manufacturers are parties involved in the business model development.

Process – The process will imply a teamwork between all parties involved, the customers, the manufacturers and the platform itself.

Chapter 12. Commercial Strategy

This business model is based on the Pet Food industry need in acquiring sell out data from the specialized channel. This channel is made up of several small companies that in their majority have only one commercial place but that can be representative for the manufacturers' sales in the pet food industry. What characterizes this channel is exactly the number of independent customers that exist, without any entity that owns groups of stores and that in the end there will only be five or six customers as it happens in the grocery channel with Continente and Pingo Doce, where each has hundreds of stores with the entire sell out information aggregated.

The main goal of this business model is to define, which are the priority and relevant industry customers where the sell out data acquisition is more important, how to acquire that information and what are the counterparts that industry manufacturers will have to give in exchange for this information.

The assumption of this information availability is a win win situation, once the idea is precisely to get data to manufacturers so they can offer better proposals, campaigns, products and conditions to their customers.

How to convince customers to give the data is the challenge. Industry manufacturers would have to present a proposal, with extra commercial conditions, access to data reports, possibility to have access to the platform and have data analyses management.

Explain the win win situation is fundamental for a successful business model and in this particular case when the service and sales proposals improve, the customers businesses improve as well, which is the major point here.

If customers see how they can improve with the manufacturers' service improvement it will be a plus for everyone meaning both sides has something to win in working together.

Chapter 13. Business Strategy

In order to better understand the business strategy we use the Business Model Canvas to easily and more logically present the business landscape. All industry manufacturers have lack of sell out information, representing a big step in the business if this situation was solved. The majority of customers are the same for each manufacturer and the relevance should be similar, although some differences may happen. This means that all companies have the same problem and all of them have the same customers, at its majority. These two common variables can justify a partnership between all companies in the industry. If all the manufacturers got together in a partnership and negotiate with the customers to provide the sell out data

13.1 Business Model Canvas

Table 9: Business model canvas proposed for the project

How to face the lack of sell out data in specialized channel to improve industry performance

7º KEY PARTNERS	5º KEY ACTIVITIES	2º VALUE PROPOSITION	3º CUSTOMER RELATIONSHIPS	1º CUSTOMER SEGMENTS
Industry manufacturers Software company (platform)	Commercial model development with customers Platform development adaptation to the Pet Food industry Customers sell out data gathering Platform daily management and maintenance Provision of services adapted to the various customers Development of daily, monthly and annual analysis Data implementation in the platform <hr/> 6º KEY RESOURCES Partner - digital online platform Partner – platform management and contact with customers Sell out data from customers Human Resources for project allocation Money for project development	Provide more efficient promotional campaigns and innovation, give access to monthly/semiannual reports about customers business, access to a platform of sales management improving quality of analysis and save time and category management services to improve overall customers' sale.	Personal assistance Personal dedicated assistance Self-service in platform usage Automated services for company and customers Co-creation - desenvolvimento em conjunto de análises <hr/> 4º CHANNELS Online through the platform (platform contact) Indirect via partner Email Direct through sales force team Direct through companies point of contact Phone contact Direct negotiation with customers Direct negotiation between industry competitors	Priority customers from specialized channel Relevant customers from specialized channel
COST STRUCTURE			REVENUES STREAMS	
Costs related to platform development and adaptation Platform management and Maintenance costs Human resources costs – people allocated to the project Project implementation costs Customer partnership costs from the extra commercial conditions			Increased sales Efficient promotional Campaigns results Efficient time spent in sales analysis	

13.2 Model operationalization

13.2.1 Customer segments and Value Proposition

In this point, we present our customer segments, answering questions like who are our most important customers, and for who are we creating value. Looking at this project, there is one big group of customers, customers from specialized channel who are representative for industry manufacturers in terms of sales. This big group has a similar value proposal, just some different points regarding its relevance that will be highlighted in the value proposition.

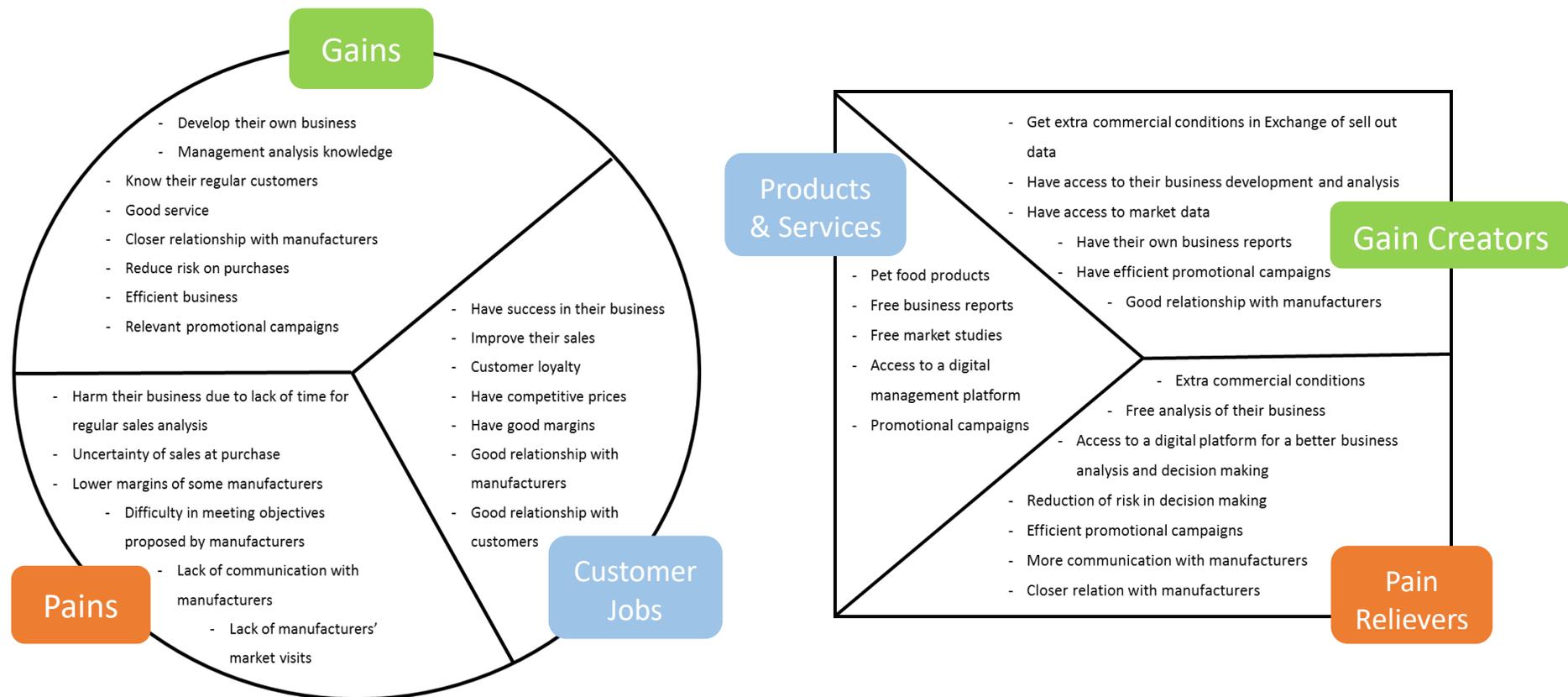
The customer segment is the priority customers' group, a narrower customer group that represent the biggest percentage of sales in manufacturers business and that can be selected according to their representativeness in sales and overall manufacturers business. This group includes the major customers who represent until 60% of manufacturers' sales, and that can have several shops in the same group. Inside this group there are customers with different grades of relevance and is in that differentiation that the value proposal is going to have some changes.

For this segment, the value proposal is the following:

- Deliver more efficient proposals in terms of innovation and promotional campaigns based on the sell out data analysis.
- Improve commercial conditions in exchange of sell out data.
- Give customers access to a digital platform where they can see their sales in a quicker and efficient way. With automatic dashboards and graphs that can improve their decision-making (just for the priority group of customers, non-available for less relevant customers).
- Provide free monthly reports or semiannual reports (for less relevant customers) on their sales with focus on what is going well and what is going wrong and possible reasons and solutions. A monthly analysis with a summary of the main points.

- Market analysis as Nielsen but developed by the digital platform who has all the data from all customers and all industry. This industry analysis can be provided to customers.

Segment: Customers from pet food market in specialized channel with great relevance in pet food industry manufacturers. Customers that represent 50%/60% of manufacturers' sales.



13.2.2 Channels

When talking about channels, it refers to how the customer segments want to be contacted and how the industry manufacturers are contacting them nowadays. It assesses which channels work best and how the current channels are integrated. How the company communicates and influences their customer segments to provide the value proposition.

Looking at this business model, the customers will be contacted directly, personally or by phone and through the digital platform which will be the contact point during the data transaction. Email will also be a contact channel in data exchange. Depending on the business model stage, the preferred channels can vary. Negotiation phase will privilege direct and personal contact while day-to-day contact will be phone and email.

In this business model, the information flow is critical and it represents the biggest asset. As well as the transparency and data confidentiality. In order to have a good interaction and improve customers' segments experience the contacts will be done in several ways.

13.2.3 Customer Relationships

Customer relationships evaluate the type of relationship each one of our customer segments expects industry manufacturers to maintain with them. And how they integrate with the rest of our business model.

There are several categories of customer relationships that can coexist between the industry manufacturers and the customer segments. In this business model we have personal assistance, the customer segments can communicate with the industry company representative to find help; elf-services and automated services.

13.2.4 Key Resources

Customers' sell out data is the key resource of this business model, being extremely important to guarantee first this information; it is the fuel of the whole business model. Digital platform has also an important role, being the central structure responsible for project implementation. Co-opetition is needed to give a better response to the industry in this type of situation that is common to all pet food companies. Money to be able to

adapt and implement the business model as idealized and finally the human resources that will have to be allocated to the project preparation, implementation and management.

13.2.5 Key Activities

To be able to answer customer segment needs and deliver the value proposition, it is very important to identify and define each key activity the company or companies need to develop. The key activities from this business model start with the design of the business model itself and definition on how the partnership between industry manufacturers will be done as well as the negotiation with industry customers for sell out data provision. As this business model is based on a sell out digital data analysis platform it is also necessary to find a company that will provide this service and adapt the platform to industry and manufacturers' needs, in terms of data analysis dashboards and also, extra adaptation to better suit the Pet Food industry reality in specialized channel.

After the project implementation, the daily follow up should be done between all parties involved in the business model, the industry manufacturers, customers and the platform company.

13.2.6 Key Partners

Companies from pet food industry who will join in co-opetition and together develop an efficient way of getting the sell out data information from customers, through negotiation of commercial conditions.

Digital platform that will be integrated in this business model and will be the central point of contact between companies and customers. It is the responsible for the information aggregation and treatment for companies. It will also be from platform responsibility, the development of market studies and customers reports that will improve the industry knowledge of what is happening in the industry in terms of buying behavior and market tendencies.

13.2.7 Costs Structure

The costs in this business model are related to the platform, in terms of information treatment, availability and usage, and the customers conditions that companies will offer in exchange of sell out data.

Platform adaptation to the pet food industry, data analysis developed to this specific business, customers' information integration, monthly reports, annual studies presentation are the costs related to the platform usability.

The negotiation with customers also represent costs for the industry companies. In order to have the sell out data information from customers, something has to be given in exchange and in this business model, the negotiation method predicted is the customers' commercial conditions, which will improve the willingness of customers in providing the data. These conditions will be a discount in percentage in monthly customers' purchases.

13.2.8 Revenue Streams

Sales improvement due to a more specific and careful analysis of sell out data, which previously was not possible regarding the lack of this type of information.

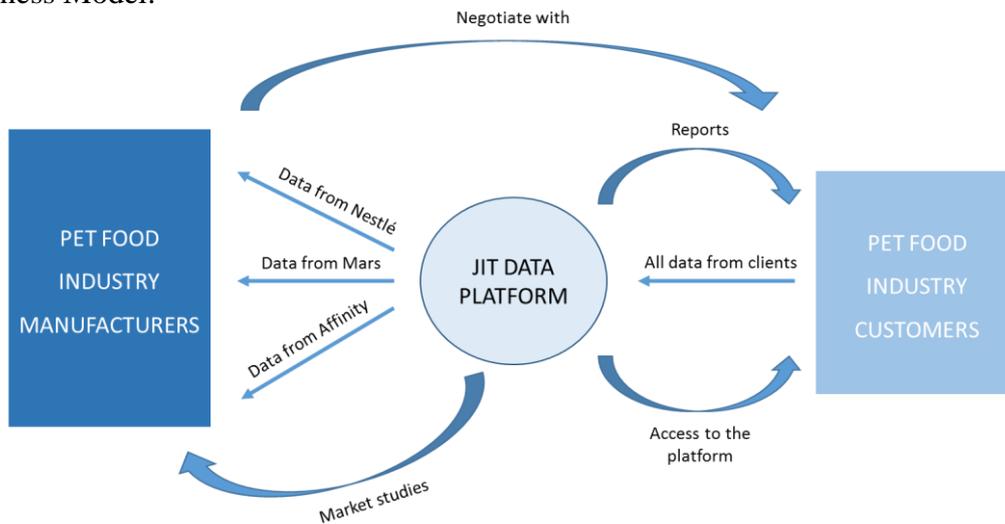
Efficient promotional campaigns, which can result in less campaigns but with better results representing savings to the companies.

Efficient management analysis with better preparation of meetings and decision-making process.

Overall improvement in companies' results in terms of sales, decision-making and efficient proposals as well as improvement in customers' businesses.

Chapter 14. Implementation Plan

Business Model:



In this business model, there are three parties involved, the industry manufacturers, the industry customers and the digital platform. The industry manufacturers are companies inside pet food industry such as Nestlé Purina, Mars and Affinity who sell pet food to industry customers, Pet Shops, Clinics, Garden Centers, Distributors, Wholesalers and E-commerce.

The manufacturers represent the B2B (Business to Business), selling products only to other customers that will resell them, having no relation with the final consumer. Industry customers are the ones that will buy products from industry manufacturers and will resell them to the final consumer or to other shops. This group have a relation with the final consumer.

The digital platform, in this business model, is the central element. It will be the link between industry manufacturers and customers in information exchange. Its main goal is to receive the data from customers and provide it to the industry manufacturers. The central position will allow the platform to assume an impartial side.

The information course starts in manufacturers' side, being their responsibility to partnership with each other and negotiate with the industry customers they find relevant for this business case to receive their sell out data. Then, the industry customers will provide the sell out data to the digital platform that will receive the information, treat that

data and provide it to manufacturers, having each manufacturer the sell out data of their own products and competitors’.

The digital platform will have access to all sell out data, from all industry manufacturers and from all customers that are on the project, being able to provide market studies about pet food trends and behavior, which would be relevant for both sides of the industry. The customers also have access to all manufacturers’ information, but in their case, only from their own sales, which could mean that they could also be interested in having access to a platform where they could see and do their sales management.

The interest in this business model is to provide access to all manufacturers with all sell out data from customers, which means each of them have access to their own sales but also their competitors and this will improve effectiveness in decision-making and represent a huge benefit for the industry manufacturers.

JIT DATA Platform (Just in Time data Platform)

Data dimension difficult the analysis in real time. The company goal is to transform raw data in useful and decisive information in a simple, easy and quick way to allow anticipated decisions that maximize the effectiveness and efficiency of the results, saving time and resources.

The platform provides analysis in several areas, category management, trade marketing, sales, key account management, customer service and entrepreneurship, having full autonomy to develop databases, integration, business analysis, software project management, and customized analysis and developments for specific subjects companies ask. This can be useful for all areas inside the company, marketing, trade marketing, sales, logistics and could be a tool for decision making and presentations, given the automatic reports and real time charts and tables it provides.

A solution to answer the needs of the market. Combines the power of information at a one-click distance with an easy and intuitive use. Allows an exploitation to the root of the problems in order to be able to act immediately. The tool helps anticipate impacts and make decisions based on numerical projections.

It provides analysis on point of sale management, team management, sales per channel and product (until de SKU (stock keeping unit) detail), assortment efficiency, shelf presence level and out of stocks and promotional effectiveness and efficiency. The software also gives alerts about non-sales, stocks and days of coverage as well as reports on these subjects. The process has four steps, data integration, data customization, treatment and presentation.

14.1 Actions

Action 1 – Develop a pilot test

Framework	It is proposed to develop a pilot project given the size of the market in this industry and in this channel (specialized channel of the Pet Food industry), in order to test this type of analysis and its replication to the rest of the market.
Objetives	<ul style="list-style-type: none">✓ Test this analysis of sell out data collection and processing✓ Test the integration of this data in a digital platform✓ Understand the advantages and disadvantages of this method✓ Understand this method limitations
Description	<ol style="list-style-type: none">1. Collect the sell out data from a relevant customer from the industry:<ol style="list-style-type: none">a. Understand how the customer treat this datab. See which are the data limitationsc. Interpret which data is necessary for project implementation2. Data implementation in the platform:<ol style="list-style-type: none">a. Work the data for project implementationb. Test the data implementation in the platformc. Understand which analysis are relevant in this industryd. See which are the limitations in this analysis and define a group of basic analysis relevant for the industry

Calendar Activities	2018				
		T1	T2	T3	T4
	Sell out data collection from a relevant industry customer				
	Sell out data analysis and possibility of platform implementation				
	Interpret the relevance of this kind of information for industry manufacturers				
Stakeholders	Customer “Petlândia”				
Implementation	Baixo				
Budget	0€				

In order to perform the pilot test we enter in contact with a relevant pet shop in the pet food industry, with more than 30 shops in the country, and ask for sell out data information. The main goal was to collect information from one important customer and use that data to understand the importance for both sides involved in this research. In one hand, we have customers who have the data from their stores but do not have information about the market and its tendencies, and in the other hand, there are manufacturers that just have access to sell in data. They know what they sell, but they do not have information about what their customers sell to the final consumers, both from their own brands and from the competition.

Pet Outlet (Petlândia) is a group with more than 30 stores over the country and helped this study by providing the company sell out data from 2016, 2017 and YTD (Year to date) April 2018. The data provided included all manufacturers’ products. The pilot test aims to analyze that information and take conclusion that would be relevant for the market and that will prove the necessity in having it available for pet food manufacturers. The main points of the pilot test are collect information, treat that information and see the variables needed for the conclusions, understand how a digital platform would be helpful and interesting in that sell out data analysis and conclude what are the main advantages for industry manufacturers in having this information in a regular basis.

This pilot test will help to analyze the data from this pet food customer, and take conclusions about the market trends and behavior, showing how this information would be useful for industry manufacturers.

In order to show the importance of the sell out data in the analysis and decision making, a pilot test was conducted with real sell out data of 2016, 2017 and 2018 (until April) from a relevant customer in the Portuguese pet food industry. We analyzed these 16 months of sales and taken into account several variables such as the share of sales mix, considering 60% in value and 40% in volume, the share of assortment and the fair share. All charts and tables that will be present are sourced from the pilot study develop for this business model.

Pet Food Macro analysis

Taking into consideration that there are only data from 2018 until April, a comparative analysis from this last 3 years was made considering and comparing the first 4 months of every year in the study.

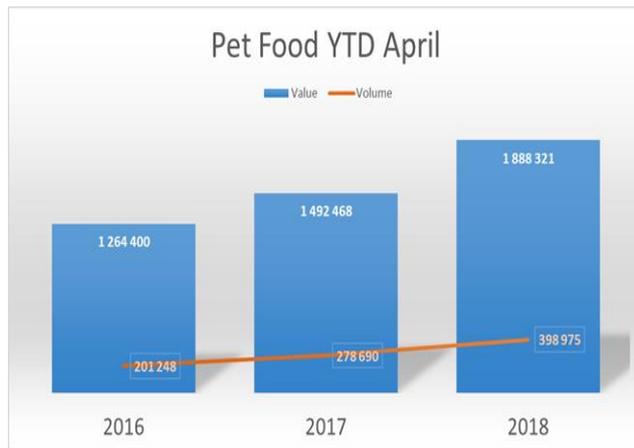


Figure 17: Pet Food Value and Volume YTD April

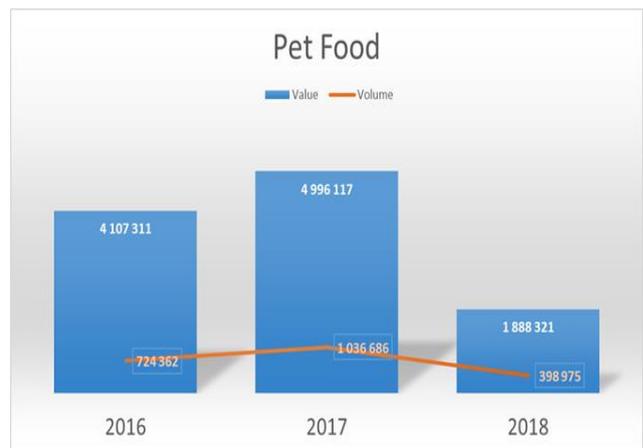


Figure 18: Pet Food Value and Volume

The Pet Food category in this customer comparing YTD analysis from the last 3 years show that the category is gaining relevance, registering a growth of 18% from 2016 to 2017 and 26,5% from 2017 to 2018 in value. Looking at the full year and estimating the end of 2018 we can consider, if the average growth of the first four months was the same, a value of 5 664 963€. According to the full year chart, the actual growth registered from 2016 to 2017 was 21,6% and would be 13,4% considering the estimated value for the end of 2018.

This comparison in value shows clear growth of the category, but it is important to compare the volume as well and conclude if the growing tendency also is true in this variable. In terms of volume there was an increase of 38,5% YTD April from 2016 to 2017 which in full year represented an increase of 43,1%. From 2017 to 2018 YTD April, the increase was 43,1% and estimating the end of 2018 with 1 196 925, the total year increase in volume will be 15,5%.

To conclude, it is clear that the pet food market continues to grow in 2018 both in value and volume, although not as fast as it grew in 2017, where the biggest growth percentages were registered.

To see the driver of this growth, the above analysis was divided in cat and dog segments as shown below.

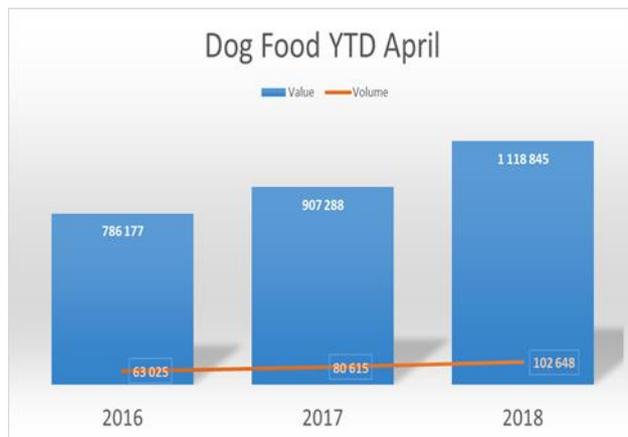


Figure 19: Dog food segment value and volume evolution YTD April

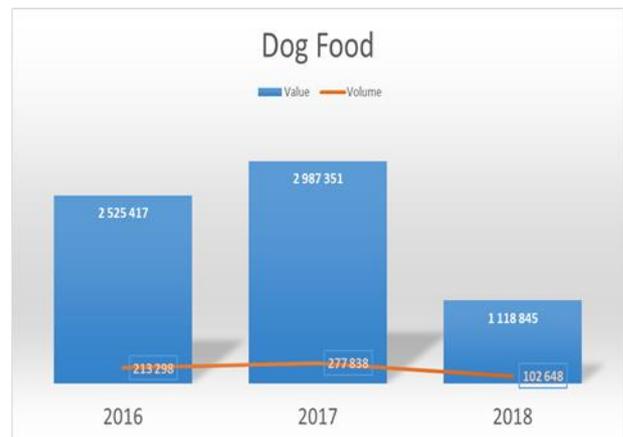


Figure 20: Dog food segment value and volume evolution

Comparing the YTD April results, dog food registered a growth of 15,4% from 2016 to 2017 and 23,3% from 2017 to 2018 in value, and when considering the full year, 2016 to 2017 registered a growth of 18,3% and from 2017 to 2018, estimating the end of 2018 with 3 356 535, registered a growth of 12,4%. The same analysis can be conducted with the volumes representing a growth of 27,9% YTD April 2017 versus 2016 and 30,3% in the full year. End of 2018 volume, if it keep the average growth, will be 307 944 which represent a growth of 10,8% full year and 27,3% YTD April.

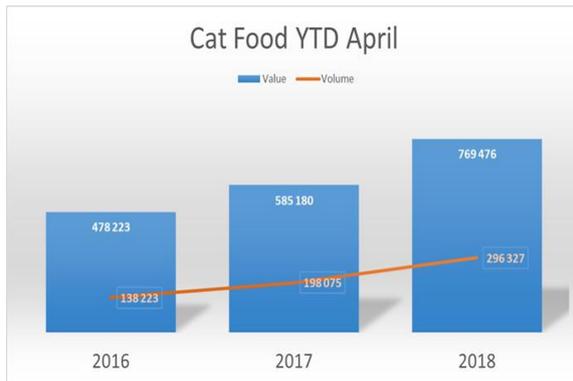


Figure 21: Cat food segment value and volume evolution YTD April

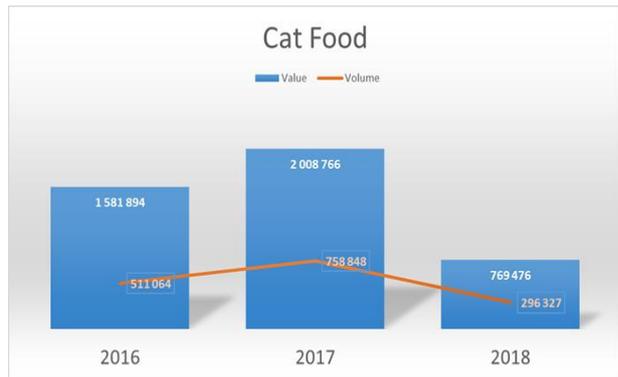


Figure 22: Cat food segment value and volume evolution

Looking now at cat segment, the growth tendency continues both in value and in volume. According to figure 21, the cat segment grew 27% in value and 48,5% in volumes from 2016 to 2017 and will grow 14,9% in value and 17,2% in volume from 2017 to 2018, if estimated the end of 2018 with 2 308 428€ and 888 981 in volume. These estimates imply that the average growth of the first four months continue for the rest of the year.

Clearly, the driver of market growth was the cat food with higher growth rates, boosting the growth of pet food category as a whole.

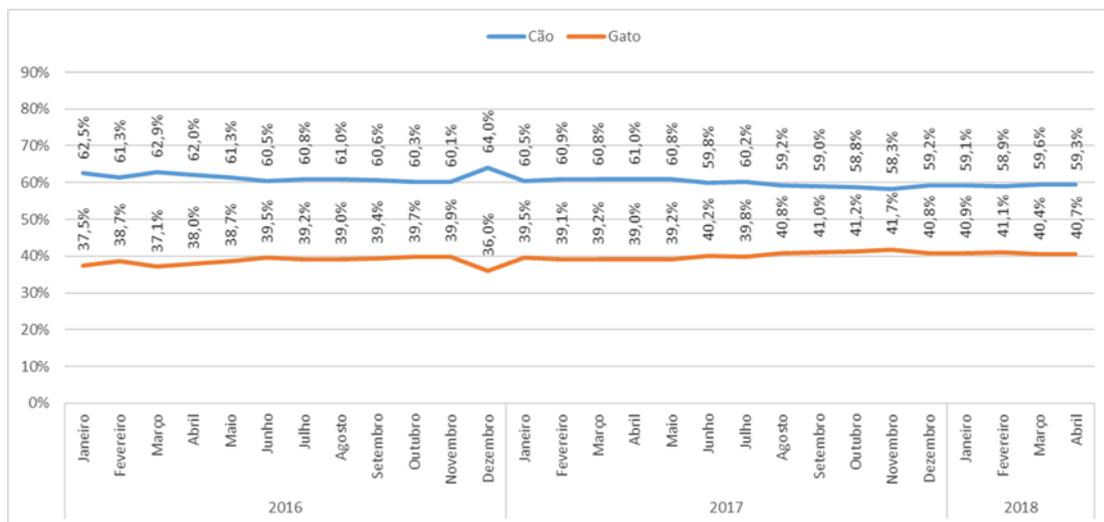


Figure 23: Pet Food value share evolution

This share value evolution graphic shows what was seen in the previous figures, that dog is losing share since 2016 and cat on the other hand is gaining relevance. According to this data, dog represented for two years more than 60% of the share and in 2018 this value started and continues lower than that, which implies the growth in cat share in this sixteen

months. Cat started from a share of 37,5% in January 2016 and in April 2018 the share is already 40,7%. Looking at the graphic behavior it is possible to conclude also that this evolution is not with ups and downs which can mean that dog is actually with a decreasing trend since 2016 and cat with an increasing trend over this years.

Dog registered a decrease of 5,1% and cat an increase of 8,5%.

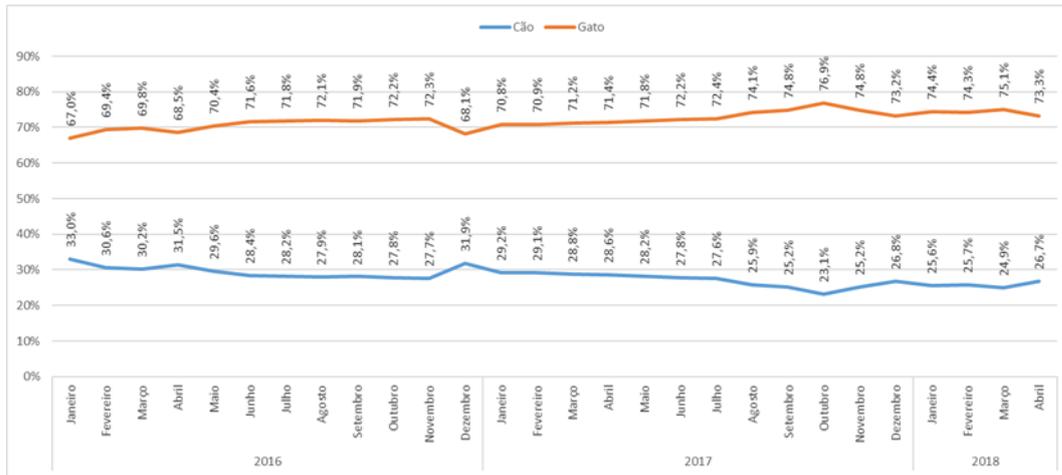


Figure 24: Pet Food volume share evolution

Assess the share in volume is also important to better understand what is going on in the market. Dog lost volume share from 33% in 2016 to 26,7% in 2018 YTD April which represent a decrease of 19% in sixteen months, and cat, increased its volume share from 67% to 63,3% in the same period, representing a growth of 9,4%.

To have a more realistic and fair market analysis, it were only considered the two full years available in the study, 2016 and 2017. With data from this two full years it was possible to calculate the weigh and growth each segment has in the category. The category register a growth of 21,64% from which 26,98% are from cat and 18,29% are from dog. This shows that although cat is the driver of growth, the weight it has in the total category still below dog, having 40,2% of weight compared to the 59,8% of dogs' as shown in figure 25.

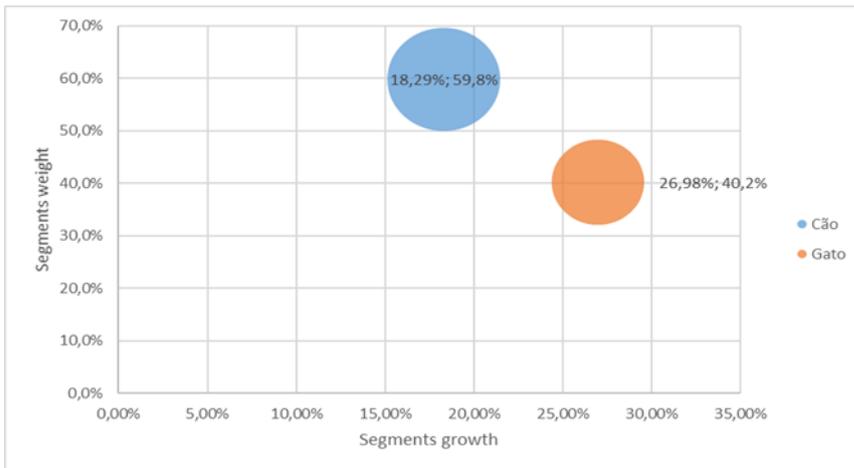


Figure 25: Weight and trends of Cat & Dog Segments in value – Bubble chart

This bubble chart intends to interpret the weight each segment has in the category, in value, and how is its behavior in terms of growth to evaluate its potential. Each bubble represent a segment, blue is dog and orange is cat and by looking at its size and position it is possible to assess that dog is the segment with more weight but in terms of growth it do not have the same potential as cat segment. In terms of tendencies, if cat continues growing at this speed, it is clear that Dog bubble will decrease size but maintain the growth and cat will increase both in size and growth, which could change the picture presented here.

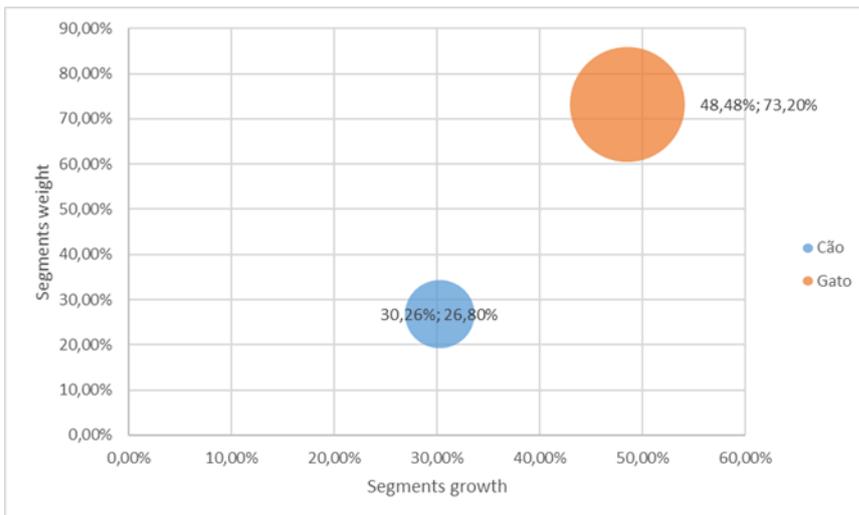


Figure 26: Weight and trends of Cat & Dog Segments in volume – Bubble chart

In terms of volume, the chart look different from the one in value, presenting Cat as the segment with higher weight and growth being clear that is the segment with the highest potential in the category. This do not mean dog should not be a focus because, it is losing

both weight and growth in volume but continues representing the biggest weight in value. These both charts allow to see how pet food industry is behaving inside dog and cat segments and it is clear that cat is the segment with higher potential with an increasing trend in value and already with a great performance in volume.

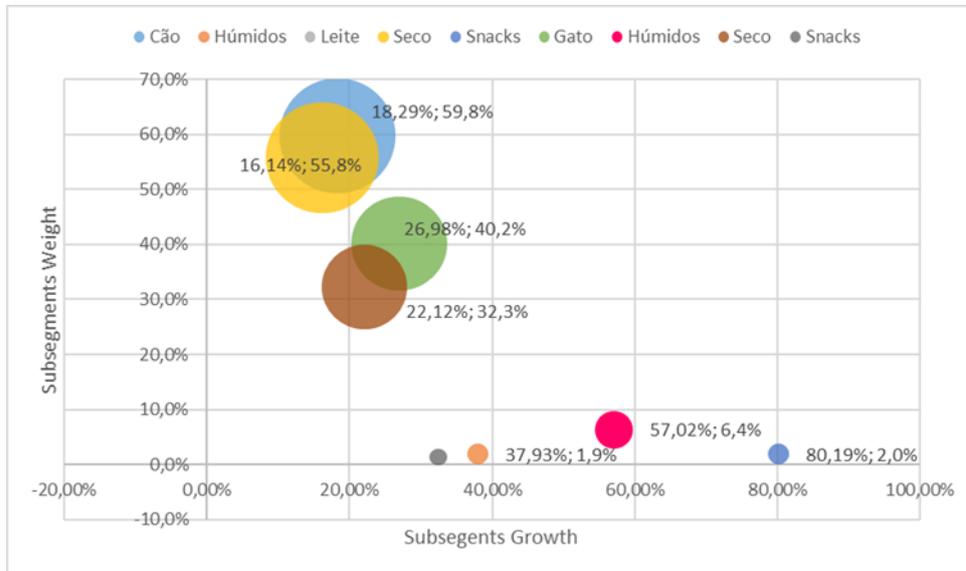


Figure 27: Weight and trends of Cat & Dog Sub segments in value – Bubble chart

The sub segment with the highest weight is the dry food, both in cat and dog with the biggest bubble sizes, although in terms of growth, the sub segments that stand out the most are the snacks in dog and wet food in cat with the highest growth percentages, 57% and 80,2% respectively. According to figure 27, dry food has the biggest weight in pet food products, but wet products in case of cats and snacks for dogs, start to gain some relevance in the category. It is important to consider that in dog food, dry food represent 55,8% from the total 59,8%, being the wet food and the snacks with just 1,9% and 2% and meaning that dry still the preferred owners food for their dogs. The same happens in cat with dry food representing 32,3% from the total 40,2% but with different reality when it comes to wet food that has a weight of 6,4% and the snacks a residual value. Cat owners prefer dry food products but they also complement the feeding with wet products. Looking at figure 28 it is possible to see that cat, both dry and wet are the ones with a better performance in volume, representing the highest percentages in weight and growth. It is clear that is the cat segment the one driving the business. Dog snacks continues representing the biggest growth in volume and value.

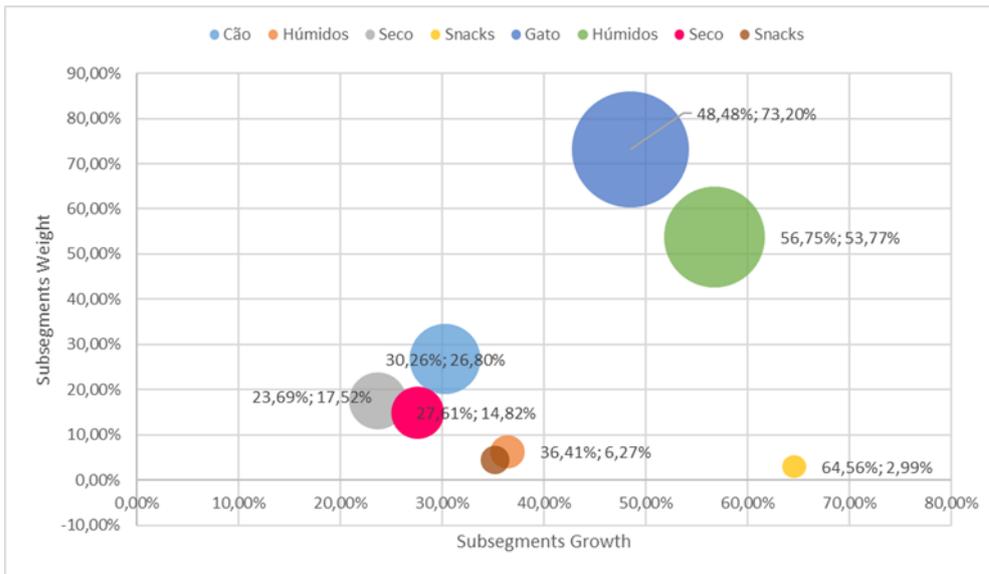


Figure 28: Weight and trends of Cat & Dog Sub segments in volume – Bubble chart

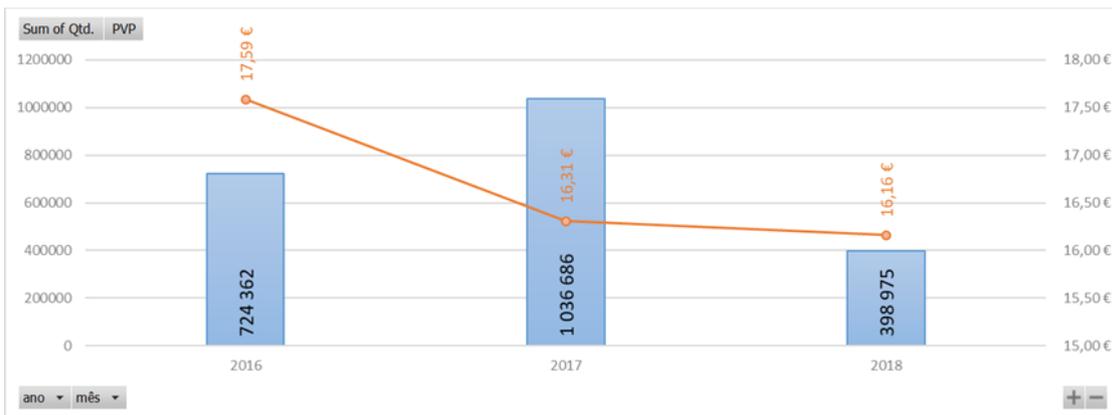


Figure 29: Pet Food industry annual price evolution from 2016 to 2018 YTD April.



Figure 30: Pet Food industry monthly price evolution from 2016 to 2018 YTD April.

These two figures about price evolution in pet food market show that 2016 registered the highest prices and the lowest volumes, while 2017 registered a price decrease of 7,3% and an increase in volume of 43,1% that can be related with the price changes. 2018 YTD April continues with a trend of falling prices, although not as significant as previous year and the volume if estimated for the end of the year would be 1 196 925€ which would significate a growth of 15,5%, considering that the average of growth per month would be similar to what happen between January and April 2018.

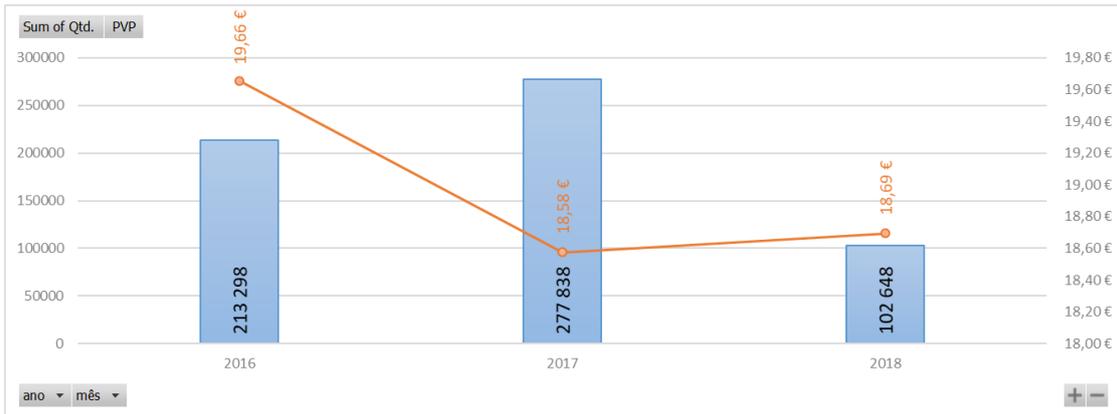


Figure 31: Dog food annual price evolution from 2016 to 2018 YTD April.

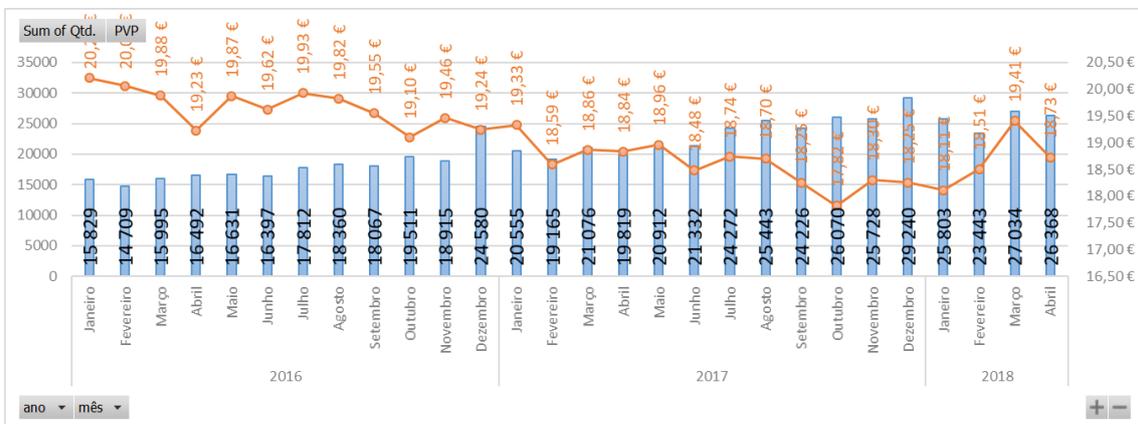


Figure 32: Dog food monthly price evolution from 2016 to 2018 YTD April

When looking deeper at dog's situation, there are some changes. From 2016 to 2017 the price shows a decrease of 5.5% while from 2017 to 2018 the price increases 0,6%. The volume in this respective periods present a growth of 30,3% and if estimating end of 2018 with 307 944 it would grow 10,8% (if average volume per months was the same as between January and April 2018).

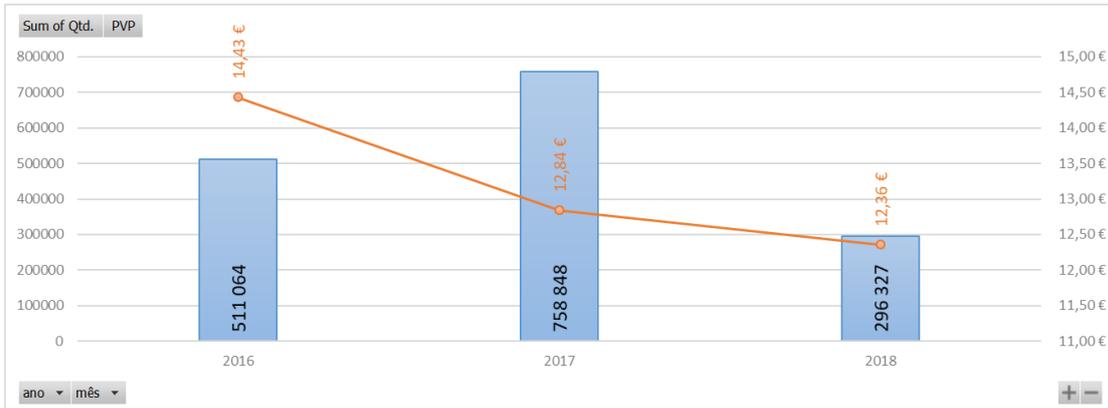


Figure 33: Cat food annual price evolution from 2016 to 2018 YTD April.

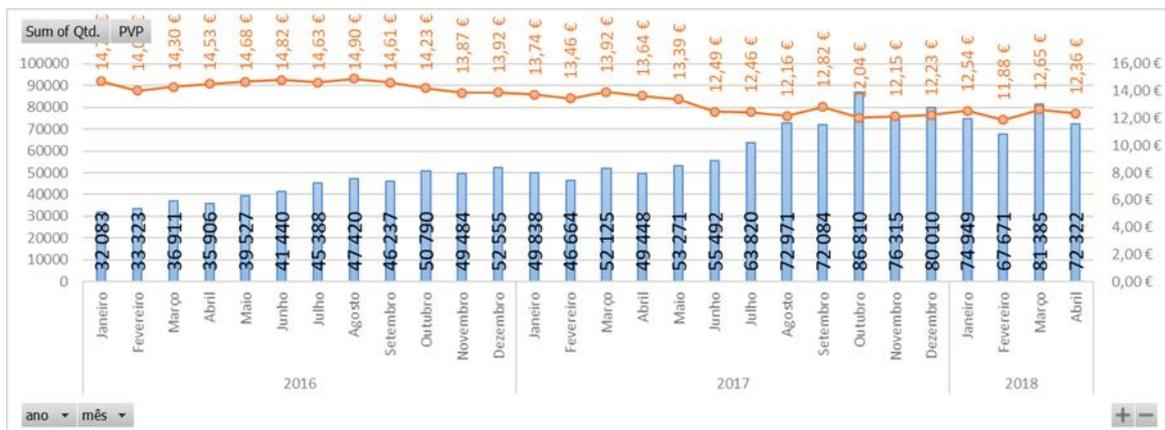


Figure 34: Cat food monthly price evolution from 2016 to 2018 YTD April.

Cat's situation is almost the same, although price continues decreasing until this year 2018. The total decrease in pet food market prices is driven by cat price decreases considering that dog prices increased this year. From 2016 to 2017 prices decrease 11% and from 2017 to 2018 YTD April, prices continue decreasing but this time 3,7%. In terms of volume, it showed a raise of 48,5% from 2016 to 2017 and 17,2% from 2017 to 2018 if estimated the end of 2018 with 888 981. It is clear the volume increase since

August 2017, which happen at the same time price started to register the lowest values since beginning of 2016. These two variable can be related.

A deeper analysis on sub segments and umbrella:

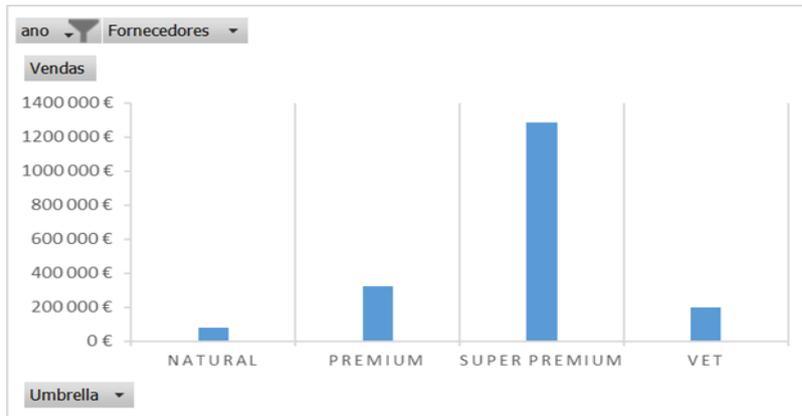


Figure 35: Pet food umbrella sales in values

In this pet Shop, the super premium umbrella is clearly the most developed, accounting for 69,8% of the total sales. The natural umbrella is the one with lowest sales but representing a growth of 15,4% from 2016 to 2017 and 32% from 2017 to 2018 if estimated the end of year 2018 with 244 683€. This figure 35 shows the total sales from the sixteen months of the study.

When looking at the super premium prices over the last years, it is also possible to see that in 2017 there was a decrease versus 2016, but YTD April 2018 the prices are going up again and higher than 2016.

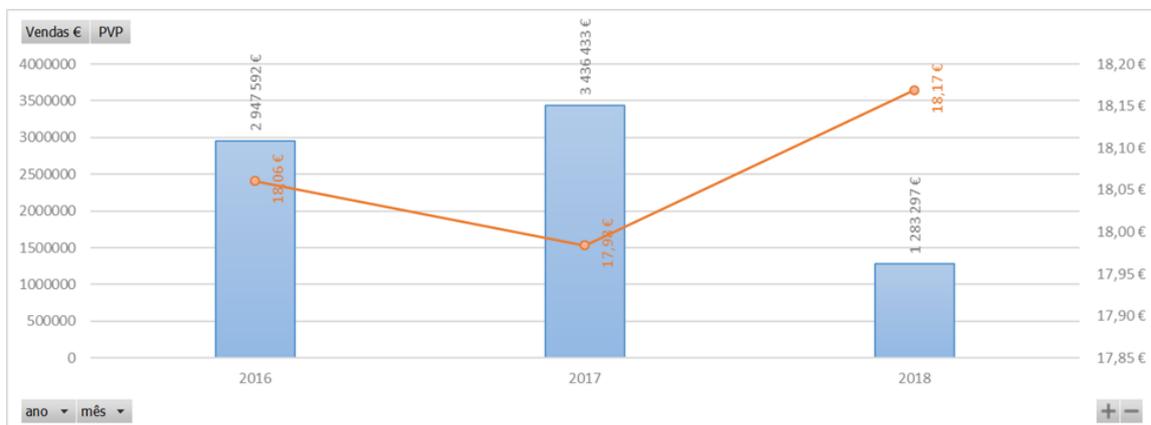


Figure 36: Annual price and sales evolution in Super Premium segment

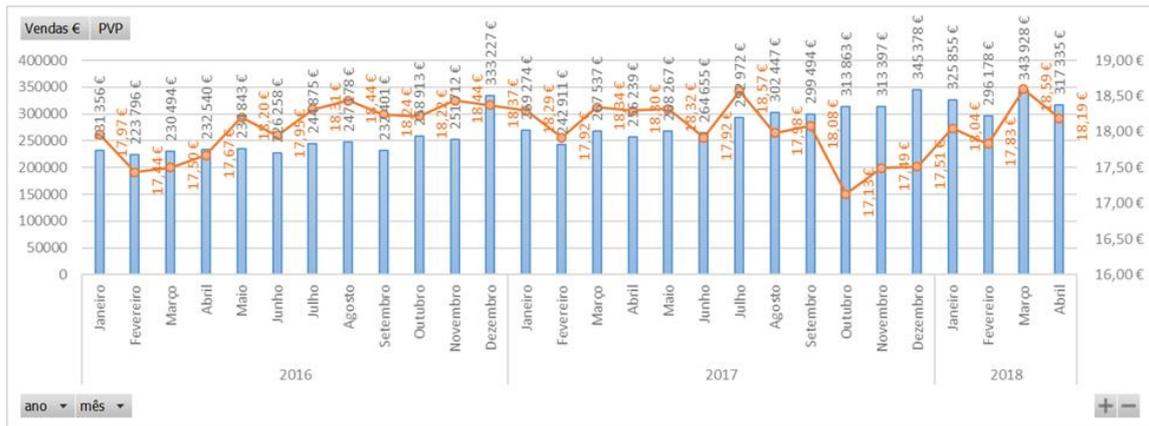


Figure 37: Monthly price and sales evolution in Super Premium segment

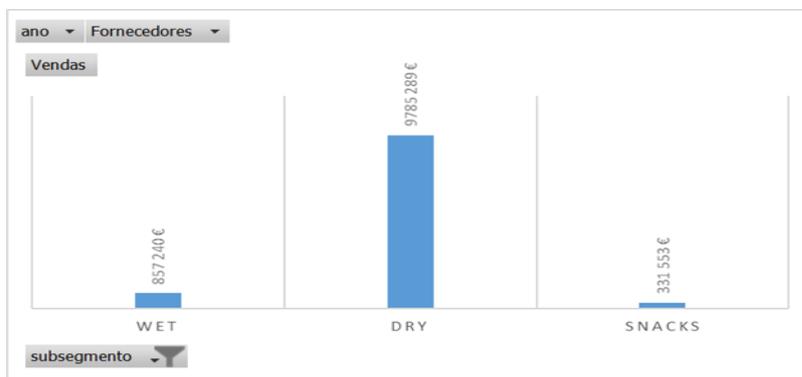


Figure 38: Sub segments value

According to the figure 38, the dry food is the segment with most of the sales, representing 89,2% of the total value. Milk and sand were removed from the figure given the lowest representativeness that both have. Looking deeper at dog and cat dry food and prices, figures 39 and 40, more detailed analysis can be conducted. In dry dog food, prices decreased in 2017 but are increasing in 2018 YTD, which did not happen in cat dry food where the prices increased in 2017 and continue with the same tendency in YTD 2018. If estimated the end of 2018 in both figures, dog dry would be 3 142 514€ and cat dry would be 1 834 470€ representing a growth of 12,7% and 13,6% respectively. In 2018 dry food keeps the increasing tendency registered in the pet food market.

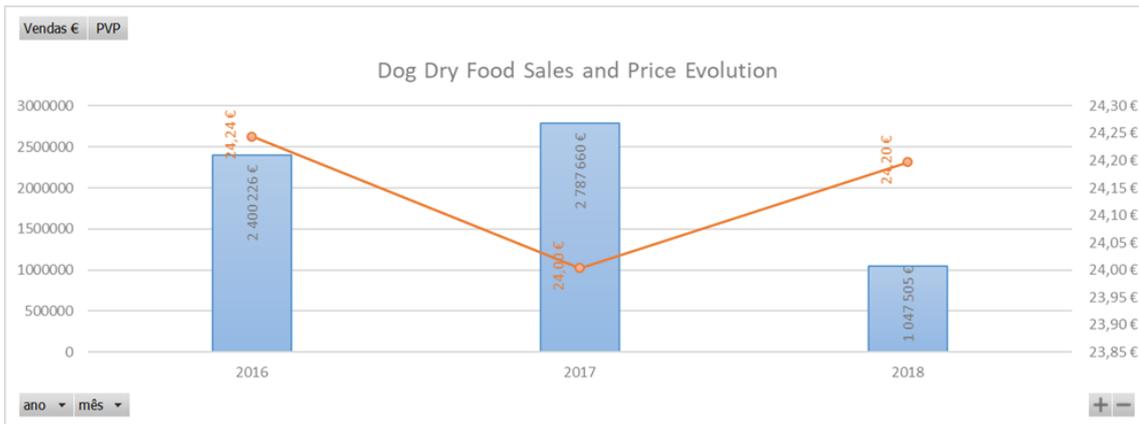


Figure 39: Annual Dry Dog food sales and price evolution

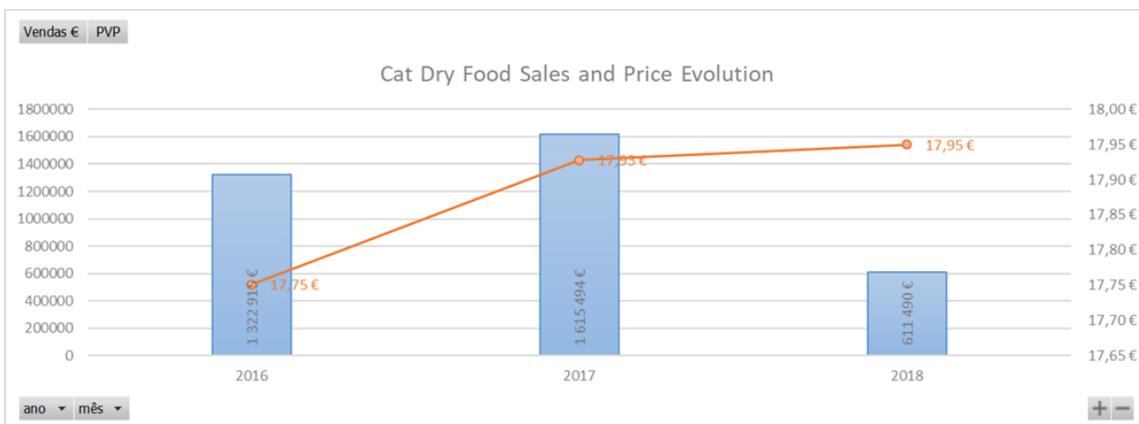


Figure 40: Annual Dry Cat Food sales and price evolution

Deeper on Manufacturers and Brands

In order to have the most current analysis possible, in the next figures, only YTD 2018 will be considered. According to the data, in April 2018 there were 1520 pet food products in the store, which were from the brands and manufacturers in the figure 41. Considering these data, 38% of the products belong to Mars, 22% to Nestlé and Hills and Affinity have 11%. The share of assortment represents the percentage of products from the total number of products sold in the shop. This means that the manufacturer with more products in this customer is clearly Mars with 38% of the total products, which represent 575 products from the 1520 registered.

But the share of assortment analysis is important for other conclusions, such as to see if, according to the sales, the assortment makes sense to the store. If the sales of Mars are

38% of the total sales, then, the assortment is correct, but, if the sales were for example 20%, the assortment is clearly above and the best decision was to reduce the number of products from Mars. Further, it will be possible to see which are the conclusions from this situation.

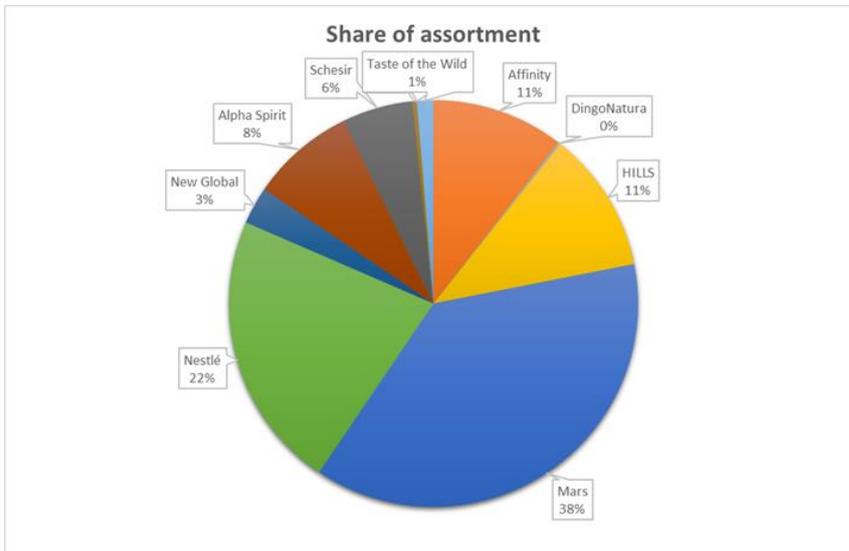


Figure 41: Pet shop share of assortment

To see if the number of products is adequate to the sales each brand and manufacturer has, it is necessary to calculate the share of sales and see if the percentages match and in case they do not, which are the conclusions to take.

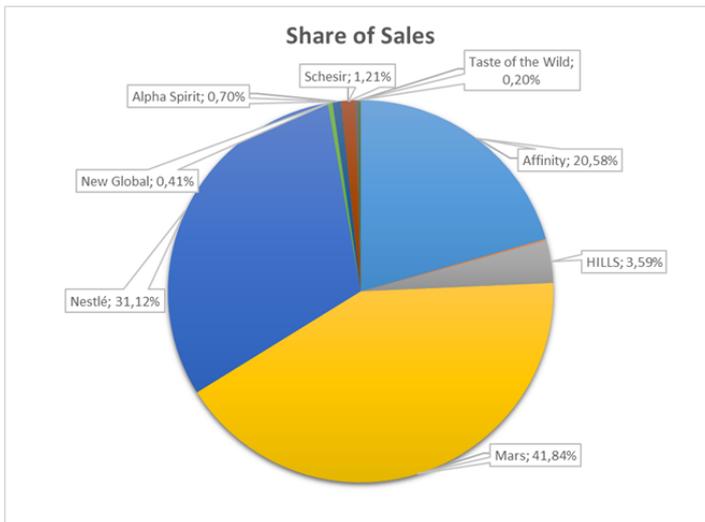


Figure 42: Pet Shop Share of sales

Looking at the figure 42 and comparing it with figure 41 there are several percentages that do not match. Mars with 41,8% of share of sales would justify a 42% also of share of assortment, but in this case the value are not far from the best option, considering that

the share of assortment is 38%. Those that stand out most for the discrepancy of values are Nestlé with 31,1% of share of sales and just 22% of share of assortment meaning the number of products should be more than there are at the moment. Same happen with Hills, but on the other way around, where the share of sales is 3,59% and the share of assortment 11% which represent too many products for the share of sales registered. Affinity also is in disadvantage with a share of assortment much smaller than the share of sales it has, here the number of products should be increased. The same reasoning may be used for the other brands and manufacturers considered.

From the 1520 products from the store, 901 are from dog and 619 from cat. Next it will be analyzed both dog and cat share of assortment and sale in order to see if each sub segment from these two groups is well optimized at stores.



Figure 43: Dog sub segments share of assortment

Figure 44: Dog sub segments share of sales

Looking at this both figures, 43 and 44, it is clear that dog wet and snacks segments have a number of SKUs higher than they should, considering the share of sales, each segment presents. But, in this case, there is another variable to take in consideration because each segment should always be representative and despite of having a low share of sales, it cannot mean the segment will not be represented in point of sale. This should be taken into account when comparing the share of assortment and sale.



Figure 45: Cat sub segments share of assortment

Figure 46: Cat sub segments share of sales

In cat sub segments the comparison between share of assortment and share of sales is perfectly optimized with very close percentages that show a good portfolio assortment and a good distribution between sub segments. Here is the example of a perfect optimization between store products and their sales, by sub segment.

Going deeper in the analysis, it would be interesting to see in more detail, the products and manufacturers that represent the most sales and also, which are the ones that represent the least.

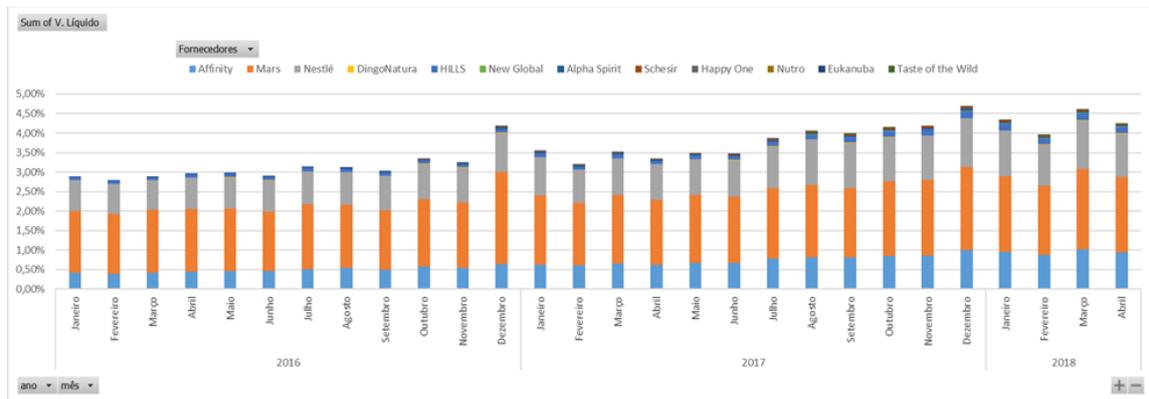


Figure 47: Monthly shares of sales by manufacturer and/or brand

The above figure show the three main industry manufacturers, clearly above all other manufactures from the industry. Those manufacturers are Mars with a share of sale of 20,01% in 2016, 21,63% in 2017 and 7,69% YTD April 2018. Nestlé with a share of sale of 10,10% in 2016, 12,46% in 2017 and 4,56% YTD April 2018 and Affinity with a share of sale of 5,95% in 2016, 8,99% in 2017 and 3,82% YTD April 2018 considering figure

47. According to the figure 48, it is also visible that Mars has been able to keep its share of sale more or less the same over the years, while Affinity and Nestlé are increasing its share of sale comparing the period from 2016 to 2018.

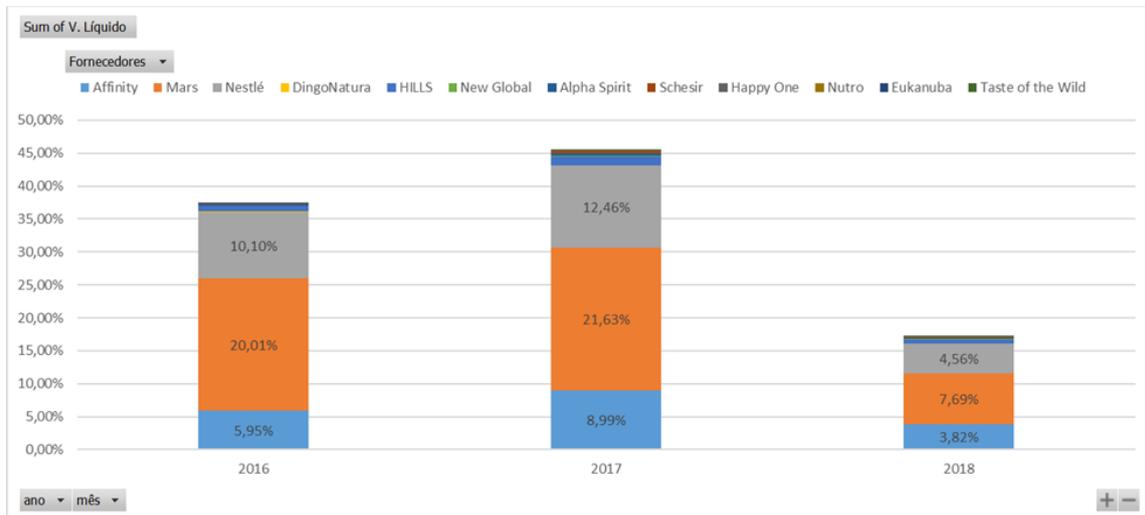


Figure 48: Annual share of sales by manufacturer and/or brand

In the next figure it is presented the top 10 brands in customer's sales showing a big difference between the first and the second with 1 304 831€ separating this two brands. These top 2 brands represent 54,1% of customer's sales and the top 10 represent 95,2%, which means the other 15 brands that make up the portfolio, all together represent 4,8% of the sales.

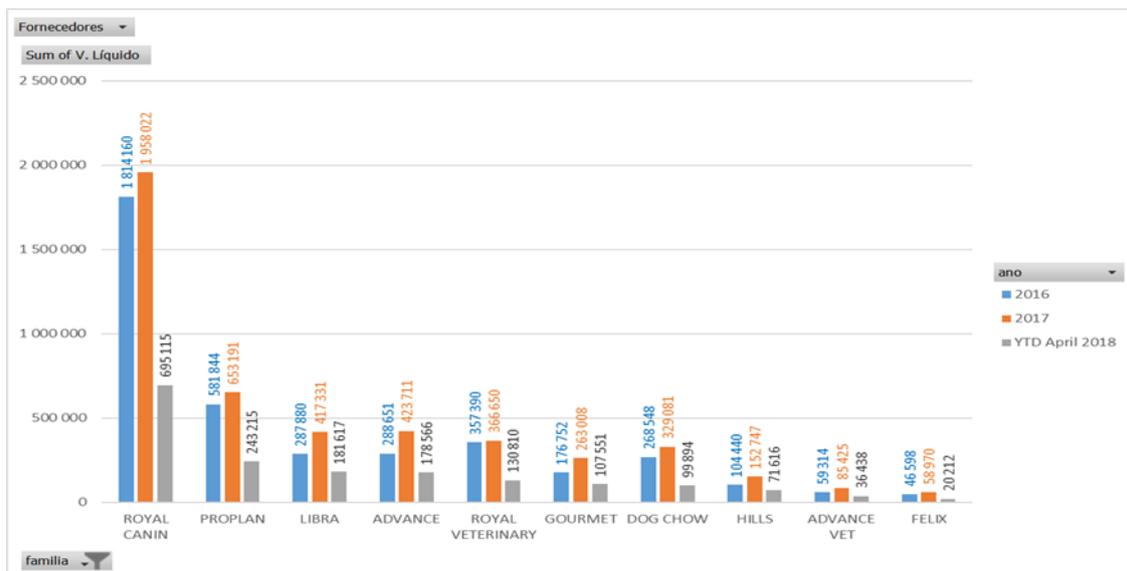


Figure 49: Top 10 brands in terms of sales

Figure 51: ABC curve - % of accumulated weigh 95%-100%

When looking at the bottom 5%, from 95% to 100% figure, the number of products in this range is 1014, which represent almost half of the products sold in this customer. According to this analysis, the bottom products should be the ones to cut in case there is need of space reduction or category improvement in terms of segments based in the share of assortment analysis. But, this cannot be a simple action, it should also consider in which segments these bottom products are because although representing very little, store should guarantee that all segments are represented which implies doing a match between this product list and the segments and sub segments to be able to do a responsible decision.

Conclusion

This analysis goal was to show how sell out data is important for decision-making process inside companies and for the customers itself, helping them to manage their sales and improve in terms of category management. This study intends to give proposals about an optimized and efficient range, help choosing the best products, understand if the customer has a fair share looking at the share of assortment and sales and improve customers profitability based on this studies' implementation.

These analyses are time consuming and require knowledge but companies have all the interest in doing them, as long as they have some tool that can help them aggregating the information and take the conclusions faster. On the other hand, customers may be another interested party with all the interest in having these analyses about their specific business. This business model is exactly to improve the business of all parties involved and with a platform that could help minimizing the time and that provides all the information dashboards that would be valued both from industry manufacturers and from customers. It will be a win win situation.

Action 2 – Define the business model

Framework	To better understand the strategy used to develop this project and for future implementation purposes, it is very important to define the business model where the project is based and explain the dynamic between all parties involved, clarifying the role of each one.																																			
Objetives	<ul style="list-style-type: none"> ✓ Explain the business model ✓ Show the parties involved in the business ✓ Explain the business model dynamic in terms of data flow 																																			
Description	<p>The business model has three parties involved, the industry manufacturers, the industry customers and the digital platform. The industry manufacturers are the ones that will start the process by establishing a partnership between each other and negotiating with the industry customers to obtain their sell out data. Are also the manufacturers that will hire the platform and negotiate with it to be part of this business model.</p> <p>After the negotiation phase, the idea is for customers to send their sell out data to the platform, which in turn will make them available to industry manufacturers. Each manufacturer will have access to all the information of their own and their competitors in case customers agree, which is going to be negotiated when presenting the project to customers and in the contracts signatures.</p>																																			
Calendar activities	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">2018/2019</th> <th colspan="5"></th> </tr> <tr> <th></th> <th>T1</th> <th>T2</th> <th>T3</th> <th>T4</th> <th>T1</th> </tr> </thead> <tbody> <tr> <td>Define the parties involved and each ones role in this business model</td> <td></td> <td></td> <td style="background-color: #d9e1f2;"></td> <td style="background-color: #d9e1f2;"></td> <td></td> </tr> <tr> <td>Design the business model and the information flow</td> <td></td> <td></td> <td style="background-color: #d9e1f2;"></td> <td style="background-color: #d9e1f2;"></td> <td></td> </tr> <tr> <td>To contract the role of each party in the business model development</td> <td></td> <td></td> <td></td> <td></td> <td style="background-color: #d9e1f2;"></td> </tr> </tbody> </table>						2018/2019							T1	T2	T3	T4	T1	Define the parties involved and each ones role in this business model						Design the business model and the information flow						To contract the role of each party in the business model development					
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To contract the role of each party in the business model development																																				
Stakeholders	Manufacturers, customers and digital platform																																			
Implementation	High																																			
Budget	No budget needed, probably just punctual needs																																			

Action 3 - Evaluate co-opetition between major competitors in Pet Food Industry

Framework	This lack of sell out data information in specialized channel is a reality for all industry manufacturers, which may justify the existence of a partnership between all or some of them to try to solve this common problem.
Objectives	<ul style="list-style-type: none">✓ Understand why a partnership could be a good strategy✓ See the balance between risk and profit✓ Partnership advantages and disadvantages
Description	<ol style="list-style-type: none">1. Why a partnership would be a good strategy?<ul style="list-style-type: none">- Lack of sell out data is a common need- The majority of customers are the same- Together manufacturers have more power over customers- Opportunity to adapt together the platform and guarantee that each of their needs are considered.- Less expensive for each party involved2. What are the risks and profits of joining in a partnership<ul style="list-style-type: none">- Closer relationships between competitors can increase the risk of sharing confidential information.- This partnership will imply having to adapt together the platform, which could benefit all parties with the individual ideas of each one.- On the other hand, this could be the way to get further in the industry data analysis, which would be benefic for all manufacturers.- Together the costs would be lower for each of the manufacturers but the benefits would be equal for all of them being a good strategy to join together.

Calendar activities	2018/2019					
		T1	T2	T3	T4	T1
	Contact the main pet food industry manufacturers					
	Discuss the possibility of a partnership in this business model and evaluate the role of each company					
	Define the advantages and disadvantages of co-opetition regarding this partnership between main manufacturers.					
Define the terms and conditions in this partnership contract						
Stakeholders	Industry manufacturers					
Implementation	High					
Budget	0€ - No budget needed, just industry negotiation					

Action 4 – Define the customers’ negotiation conditions

Framework	To provide sell out data, customers need to have some exchange conditions to be willing to provide that information. Better trade conditions, monthly reports about their business, better margins and more promotions can be used for data exchange.
Objetives	<ul style="list-style-type: none"> ✓ Find what customers value the most ✓ Understand the best option in terms of trade conditions for them to be willing to provide that data ✓ Investigate if all customers will be willing to provide that data with the same conditions or if the conditions should be different depending on the type of customer.
Description	<ol style="list-style-type: none"> 1. More relevant customers already have different conditions which means the trade conditions used to convince this type of customers will be different from the ones used to the relevant but less relevant. 2. Understand how many customers are in each type of customer. Have a perspective of how many would be useful to have in this project and how they will be segmented in terms of relevance.

	3. How many customers will be needed in the project to make sense to the company and industry to invest in the project?					
Calendar Activities	2018/2019					
		T1	T2	T3	T4	T1
	Perceive the conditions most valued by customers					
	Define a pack of conditions to be used in the negotiation by type of customer					
	Guarantee that commercial conditions are the same for all industry manufacturers.					
Stakeholders	Business manufacturers					
Implementation	High					
Budget	0€ - No budget needed to define, just needed to implement					

Action 5 – Define the role of the platform in this business model

Framework	According to this business model, the platform will be the link between industry manufacturers and industry customers, having a central role in this business development and in its dynamic. It is of major importance to understand its role and how it will be connected both with the manufacturers' side and customers' side.
Objectives	<ul style="list-style-type: none"> ✓ Understand the digital platform role in the business model ✓ Define which are the platform's main activities
Description	<p>1. Digital platform role in the business model:</p> <p>The digital platform will be the connection point between manufacturers and customers. It will be the party responsible for data collection, storage and availability. Customers will provide their entire sell out data to the platform, and the platform will be responsible for data treatment and making available that data for the manufacturers in the partnership, making sure each receives what was agreed in contract.</p> <p>2. The platform main activities are:</p> <ul style="list-style-type: none"> - Aggregate sell out data from the industry customers; - Work the data to present it easily to manufacturers;

	<ul style="list-style-type: none"> - Develop reports and analysis based on that data, which, depending on the strategy used in terms of negotiation conditions can be available for both manufacturers and customers. One of the trading conditions (in exchange for sell out data) could be to give customers a monthly report about their performance in the previous month; - Promotional campaigns performance evaluation; - Dashboards and analysis almost in real time; - Stocks supply; - Help category management decisions through product and stores analysis. 				
Calendar Activities	2019				
		T1	T2	T3	T4
	Define which the main platform goals are and how it should give an answer to that goals.				
	In partnership define a list of important analysis that platform should have and show				
Stakeholders	Manufacturers, customers and digital platform				
Implementation	High				
Budget	0€ - No budget needed, just plans designs to present, probably agency expenses but not mandatory				

Action 6 – Hire the services of a digital platform to be part of this business model

Framework	The third party involved in this business model and central to the process is the digital platform. The industry manufacturers need to negotiate with the platform's company to define the terms of this agreement and the role each party will have.				
Objectives	<ul style="list-style-type: none"> ✓ Find a digital platform that can respond to this business model ✓ Negotiate with the company the role and conditions of the contract ✓ Define the price for this business model approach 				
Description	<ol style="list-style-type: none"> 1. Search for this service suppliers 2. Present the business model and evaluate the platform capabilities of answering the companies needs 3. Negotiate the price for the business model development and implementation 4. Negotiate the annual price for this business model 				
Calendar Activities	2019				
		T1	T2	T3	T4
	Evaluate platforms in the market that offer this kind of service.				
	Negotiate with the chosen platform its role in the business model				
	Define the values according to the business model developed				
Hire the platform services					
Stakeholders	Manufacturers, customers and digital platform				
Implementation	High				
Budget	Depends on the number of manufacturers and customers in the project, it can vary between 20.000€ to 40.000€ annually. But business model should be evaluated first.				

Action 7 – Define the standard information needed for project implementation

Framework	<p>In order to have a standardization of data and easily implement the project with the selected customer segments it is important to define which are the mandatory variables that need to be in the sell out data information files and that will be used to draw conclusions about the business. It is of major importance to standardize the data to be easier and faster for data implementation in the platform, avoiding time spend in sell out data files treatment which would need more time and could represent not having the most current data available as wished.</p>
Objectives	<ul style="list-style-type: none"> ✓ Define a standard sell out file ✓ Ensure all variables are available
Description	<ol style="list-style-type: none"> 1. Variables needed for project implementation: <ul style="list-style-type: none"> - Sale date, store of purchase name, product code (EAN), Product description, segment, sub segment, product brand, sales in quantity, sales in Kg and sales in value. 2. What kind of analysis these variables allow: <ul style="list-style-type: none"> - Daily sales, best seller SKU, promotional campaigns results, price practice by customers with and without promotion, sales by store, sales by channel, sales by segment/ sub-segment and umbrella, stocks availability, out of stock. - It would also be important for deeper analysis such as shares calculation, segments performance in Cat and Dog, channels performance in terms of channels, Pet Shops and E-Commerce for example, which would be interesting to evaluate in omni channel customers to see which channel has more relevance and where the growth is more pronounced. Formats analysis to see in which SKUs makes sense to do a promotional campaign or the type of campaign that better suits the different formats.

Calendar activities	2019				
		T1	T2	T3	T4
	Do a list of the minimum necessary data together with the digital platform				
	Guarantee in the negotiation phase, that this information is given by customers				
	Develop a standard sell out excel file to be easier for customers to understand the minimum information needed and facilitate the data implementation in the platform				
	Ask customer segments to adapt their information to that standard file				
Stakeholders	Digital platform, Industry Manufacturers, Customer Segments				
Implementation	Moderate				
Budget	Low				

In the attachment 2, there are examples of platform dashboards and possible analysis relevant for pet food industry. Some of them require more variables that we could not have access with this study, but that if implemented make sense to consider as the pet shop where the sale was made and the daily of weekly sales.

Action 8 – Present the value proposition to customers segments

Framework	Industry customers are the other party involved in this business model and in fact, a very important one. Without customers' information, this business model would not be possible, being of great importance to negotiate with them and establish the conditions for sell out data exchange.
Objectives	<ul style="list-style-type: none"> ✓ Define the priority and relevant industry customers segments in this business model ✓ Identify the best strategy to approach each target segment ✓ Contact each customer and negotiate the availability of sell out data
Description	1. Present the business model to customers, explaining the conditions industry manufacturers are willing to give in exchange of sell out data. Customers will have access to

	<p>extra discounts in their purchases (+3%), will have access to their own business reports and this will be directly linked with a better sales performance, better knowledge of their business, better promotional campaigns offer. In the end, an improved performance due to the increased market knowledge that manufacturers will have.</p>				
Calendar Activities	2019				
		T1	T2	T3	T4
	Contact customers and present the value proposition				
	Negotiate the commercial conditions according to what was established between the partnership companies				
	Sign the agreements between the parties				
Stakeholders	Industry Manufacturers, Digital Platform				
Implementation	Moderate				
Budget	0€ - just the acceptance will imply expenses in commercial conditions				

Action 9 – Adapt the platform to Pet Food Industry

Framework	Each industry needs specific information and data analysis. The platform should give dashboards according to industry needs and based on industry inputs.
Objectives	<ul style="list-style-type: none"> ✓ Define the variables needed for this industry ✓ Develop extra dashboards specific for pet food industry – charts of segments, sub-segments, channels ✓ Integrate variables for specific conclusions ✓ Define which tabs to integrate related to pet food market and brands
Description	2. The platform base product should be analyzed and complemented with specific dashboards or new tabs that make sense for this industry data analysis. This means that the platform is ready for any sell out data, but industry inputs should be taken into consideration to improve the

	<p>analytical capabilities and data availability in order to be possible to take relevant conclusions for this market.</p> <p>3. Adapt the platform to a different business model dynamic. Until now the platform is used in retail business and companies use this platform to access the retail sell out data. Same platform has the data from all retail customers and the company have access to that info.</p> <ul style="list-style-type: none"> - In this business model the mechanic is different because the same platform has all data from customers but sometimes, only parts of it can be available for each manufacturer or customer, which means that the same platform with the same information will be divided in terms of information access by manufacturer or customer. - Customers will have access to all of their information - Manufacturers will have access to all customers information <p>4. Each manufacturer should have a unique access to the platform and that access should show all the data from all of customers.</p>																														
Calendar Activities	<table border="1"> <thead> <tr> <th colspan="5">2019</th> </tr> <tr> <th></th> <th>T1</th> <th>T2</th> <th>T3</th> <th>T4</th> </tr> </thead> <tbody> <tr> <td>Develop the necessary analysis for this industry</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Adapt the flow of information to this business model to guarantee data confidentiality and transparency</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Define which the necessary accesses to the platform are.</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Guarantee that the platform gives answer to all the business model necessities and goals</td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	2019						T1	T2	T3	T4	Develop the necessary analysis for this industry					Adapt the flow of information to this business model to guarantee data confidentiality and transparency					Define which the necessary accesses to the platform are.					Guarantee that the platform gives answer to all the business model necessities and goals				
2019																															
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Define which the necessary accesses to the platform are.																															
Guarantee that the platform gives answer to all the business model necessities and goals																															
Stakeholders	Industry Manufacturers, Digital Platform																														
Implementation	Moderate																														
Budget	Depend on the adaptation dimension and complexity - it can vary between 1.000€ to 15.000€ (estimated)																														

Action 10 – Restructure the industry manufacturers’ internal business analysis

Framework	<p>Nowadays companies’ managers from specialized channel made their decisions based on the information available, which is sell in data. Meetings presentations and decision making is made from correct information but not ideal and this project with sell out data availability will help companies to improve in terms of analysis and decision making and also to have real information about their brands, their actual performance near consumers and promotional campaigns results. This means companies will be able to make better decisions based on real data from Point of sale.</p>															
Objectives	<ul style="list-style-type: none"> ✓ Turn this platform a daily tool ✓ Improve overall business performance ✓ Improve analysis efficiency and results 															
Description	<ol style="list-style-type: none"> 1. Give access to the platform to brand managers, sales team and category managers to improve their business analysis, decision-making and value propositions to their brands. 2. Implement the usage of this platform in a daily basis routine to improve results and avoid spending time in less accurate analysis. 3. Use these platform dashboards, tables and graphs to prepare meetings and important presentation with real and current data. 															
Calendar Activities	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 70%;">2019/2020</th> <th style="width: 7.5%;">Q4</th> <th style="width: 7.5%;">Q1</th> <th style="width: 7.5%;">Q2</th> <th style="width: 7.5%;">Q3</th> </tr> </thead> <tbody> <tr> <td>Start using the platform in a daily basis</td> <td style="background-color: #d9e1f2;"></td> <td style="background-color: #d9e1f2;"></td> <td style="background-color: #d9e1f2;"></td> <td style="background-color: #d9e1f2;"></td> </tr> <tr> <td>Use the platform to present meetings and brand improvements</td> <td style="background-color: #d9e1f2;"></td> <td style="background-color: #d9e1f2;"></td> <td style="background-color: #d9e1f2;"></td> <td style="background-color: #d9e1f2;"></td> </tr> </tbody> </table>	2019/2020	Q4	Q1	Q2	Q3	Start using the platform in a daily basis					Use the platform to present meetings and brand improvements				
2019/2020	Q4	Q1	Q2	Q3												
Start using the platform in a daily basis																
Use the platform to present meetings and brand improvements																
Stakeholders	Industry manufacturers and their employees															
Implementation	Low															
Budget	0€															

14.2 Activities chronogram summary

Actions		Budget	2018				2019				2020				2021				2022			
			T1	T2	T3	T4																
1	Develop a pilot test	0€																				
2	Define the business model	500€																				
3	Evaluate co-opetition between major competitors in Pet Food Industry	0€																				
4	Define customers' commercial conditions	0€																				
5	Define the role of digital platform in this business model	500€																				
6	Hire the services of a digital platform to make part of this business model	15.000€ to 40.000€																				
7	Define the necessary information for project implementation	€																				
8	Present the value propositions to customers segments	0€																				
9	Adapt the platform to the pet food industry	1.000€ to 15.000€																				
10	Restructure the industry manufacturers' internal business analysis	0€																				
	TOTAL	€16500€ to 56000€																				
	TOTAL 1st year	€500																				

Attachment 3 – “Plan of activities proposed for the project development” in detail.

14.3 Monitoring and control

Table 10: Monitoring and control table

Perspective	Objectives	Indicators	Goal
Industry Manufacturers	Business model implementation	Partnership implementation	The 3 major industry manufacturers in co-opetition agreement or the possibility of implementing the business model just in one manufacturer. At least one manufacturer with this business model implementation.
		Customer portfolio	Have a relevant number of customers accepting the project
		Customers data	All customers sell out data (historical data from the past) implemented in the platform and start current implementation in a weekly basis.
		Digital platform contract	Digital platform already functioning
	Successful customers contracts and relationships	N° of customers in the project	Have 100% of the customers in the project (from the ones defined by the manufacturers)
		Delays in sending data	Have no delays in sell out data sending. Have 100% of the customers satisfied
Internal processes	Modernization of the business management model	How sales analysis are done? Using the platform?	Companies managers using the platform for decision-making, meetings information preparation and promotional campaigns results.
Financial	Growth of annual sales	Overall sales Sales by brand Profitability	Growth of 15% in sales in the first year of business model implementation for each manufacturer
	Promotional plan efficiency	Sales of promotional campaign	Improve promotional campaign results in 10%

Chapter 15. Contingency Plan

In table 11 are represented the possible project contingencies, which are the problems that may result from discrepancies in actions development, in case the action do not go as predicted and put the project in risk.

Table 11: Project contingency plan

Contingency	Consequences	Mitigation measures
Difficulty in establishing a partnership between competing companies in pet food industry	It would require a different business model strategy only based in one industry manufacturer, which would imply more costs for that unique player.	Develop the business model with just one manufacturer and get the other in a second phase which could be more appealing and interesting for the other manufacturers but would mean even higher costs for not being present since the beginning
Difficulty in negotiating with customers	If customers do not accept giving the sell out data, the project will make no sense or it would be necessary to negotiate different conditions that would cause a delay.	Depending on the number and relevance of customers that accept, it could go further but with less customers than expected which mean less sell out data analysis from the market. It would not be as appealing as the first proposal.
Delay in sending data by customers	Data sending delay would interfere with companies schedule and information availability	Measures should be taken if this happens as for example if the timings defined are not met, than manufacturer(s) could cut the conditions given that month. This would motivate parties to be compliant to the business model requirements.

Difficulties in standardizing the information for customers to send	This complexity would delay the project beginning but when fixe no problems will arise. It is customers' responsibility to standardize the data sent.	If customers have difficulties in standardizing the data, an option, but a more expensive one, would be the platform company itself working on that data and put it in the platform.
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Chapter 16. Project Budget

The goal of this project is to be able to have access to customers' sell out data and find a business model where this information flow could be organized in order to meet the industry needs in a simple and relevant way.

The main costs associated with this business model will be the negotiation conditions given to customers that is a percentage of the sales, 3% extra discount. And the digital platform contracting, adaptation and annual use. These values will depend on the scale of the business model and will only be hundred percent accurate if actually done, in this case it is just a prediction considering the business model ideas presented.

The cost will aggregate:

- Platform annual contract – 20.000 to 40 000€ (estimated)
- Platform adaptation (expense just in the first year) – 1.000 to 15 000€ (estimated) and depending on the adaptation complexity and dimension.
- Platform extra analysis (to be defined according to the complexity that those analysis require) – 10 000€ considered

The total cost estimated will be between 31.000€ and 65 000€ for all industry manufacturers which implies each manufacturer would have the cost of 10 333€ until 21 666€ in the first year because the next years would not include the adaptation if just the annual contract is considered.

Chapter 17. Project Limitations

This business model intends to find a solution for sell out data gathering and use, through a digital online platform, in order to allow companies to improve their information access and their decision-making and consequently improve customers' and industry's performance.

Although it presents a viable solution for the problem found in the industry, it also has some challenges that require work and thinking to overcome. Some limitations were identified.

Wide number of customers in the industry – in the specialized channel there are hundreds of customers, which brings complexity to the business model and in a first approach can be considered unfeasible. But, looking at the study presented, from those hundreds of customers, between 20 to 40 customers represent more than 50% of companies sales. This helps the viability of the project that would not have to consider the total population, it could focus their resources in this group that is more relevant and already allows having industry studies and market behavior.

Difficulties in working together as industry competitors – Develop partnership between industry manufacturers would be helpful for all, in the sense that it would facilitate the process and project implementation and at the same time improve the industry knowledge and information access as a whole, improving competition and having more information availability. But working together is not always easy and competitors need to understand the advantages and disadvantages of joining in co-opetition.

Chapter 18. Conclusion

Based on the business model presented and considering the results of the pilot test, it is possible to conclude that sell out data information is crucial for better decision-making and would be relevant for companies to have it, in spite of requiring commercial conditions for customers. The co-opetition will improve the value proposition and the industry development as a whole, going in line with the main goal of industry growth and customers' better performance, once the main manufacturers will use the sell out data conclusions to give better value proposals to customers and consequently improve customers' growth. It can be consider a win win situation.

This project answers the industry need of sell out data in specialized channel, providing information to the main manufacturers. It aggregates the most relevant customers from the industry that represent the largest share of sales. It provides market studies about segments performance, main trends and consumer behavior, which can be used by manufacturers and customers to better understand the pet food industry changes and have value proposals that fit these new realities.

To get the most out of this business model, it is of great importance to have a third party involved in this project, a digital platform that will aggregate and treat the sell out data to guarantee fast information access and efficient decision-making. This way, simple and relevant conclusions can be taken on a daily basis and allow quicker problems identification as well as identifying faster decisions to solve them.

Chapter 19. Attachments

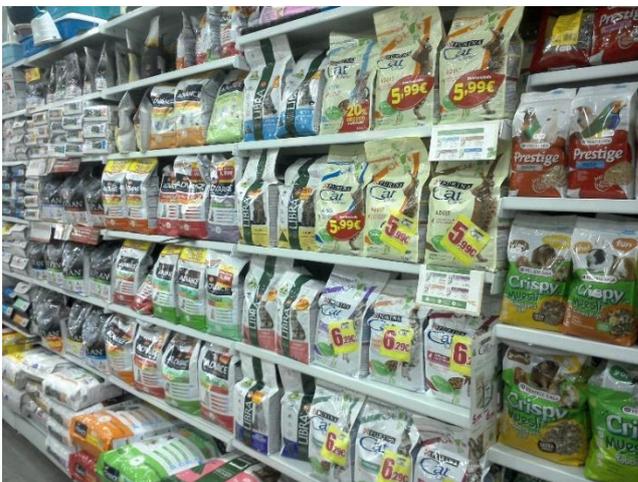
19.1 Attachment 1: Point of Sale Images from customers



Pet Shop extra space



Pet shop brand materials



Pet shop shelves presentation

19.2 Attachment 2: JIT Data Platform dashboards examples

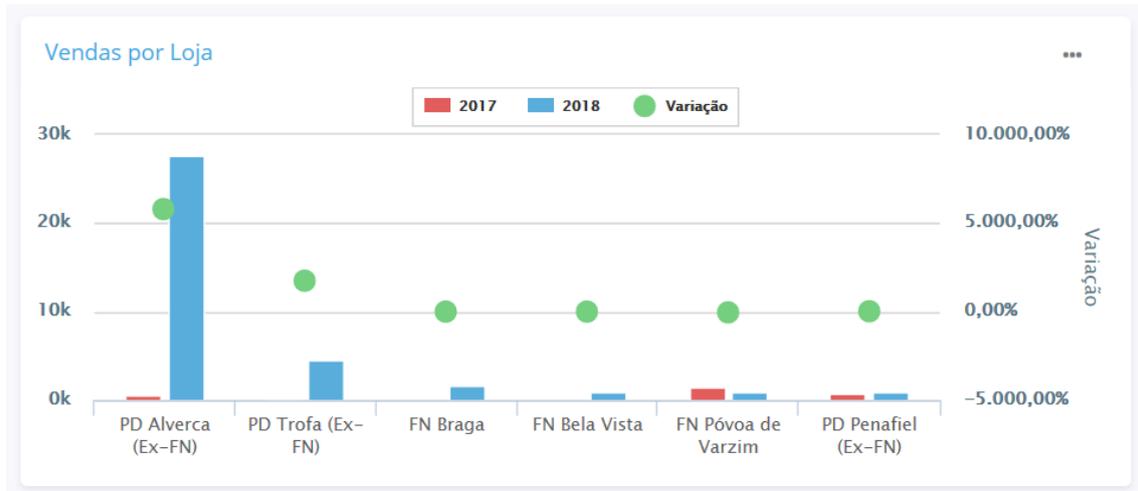


Figure 52: Sales by store

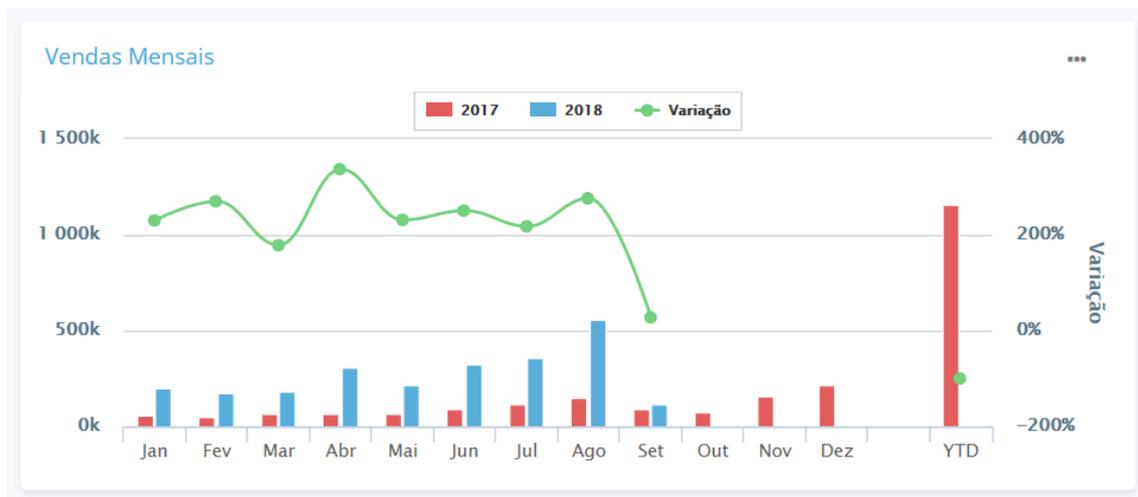


Figure 53: Sales per month

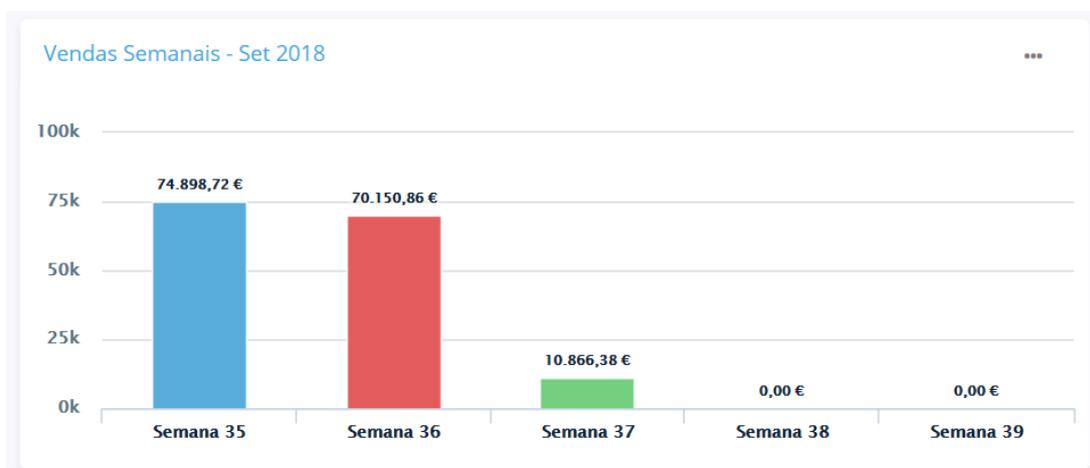


Figure 54: Sales per week

How to face the lack of sell out data in specialized channel to improve industry performance

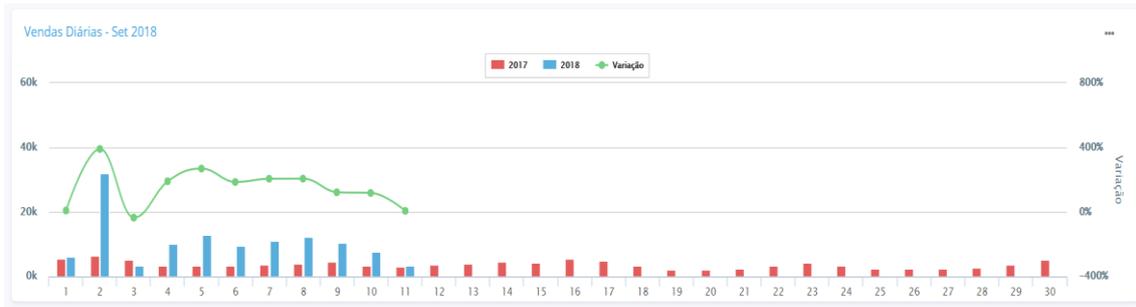


Figure 55: Sales per day

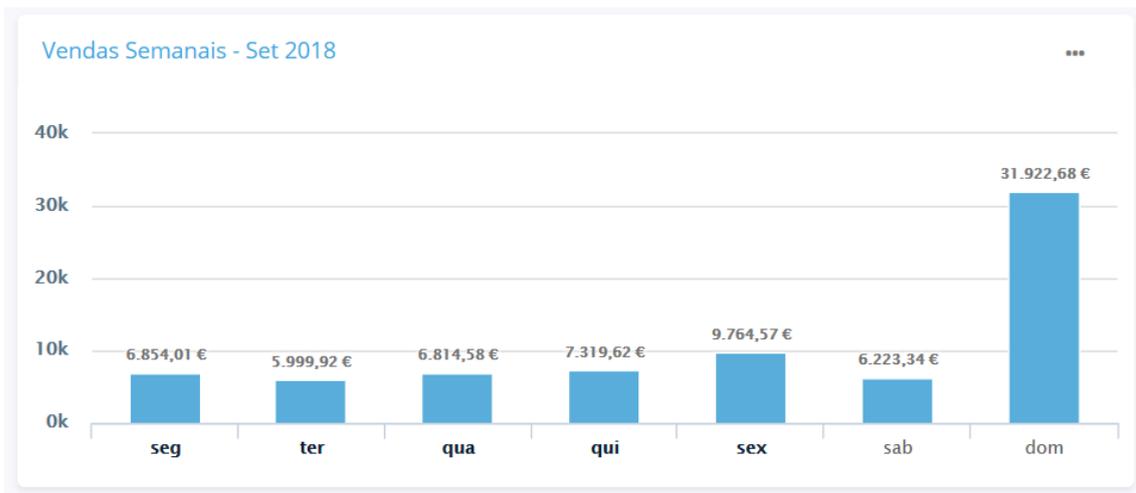


Figure 56: Sales per day in the chosen week



Figure 57: Sales weight by client



Figure 58: Sales weight by client YTD

4	Define customers' commercial conditions		0€																	
4.1	Perceive the conditions most valued by customers	IM																		
4.2	Define a pack of conditions to be used in the negotiation by type of client	IM																		
4.3	Guarantee that commercial conditions are the same for all industry manufacturers.	IM																		
5	Define the role of digital platform in this business model		500€																	
5.1	Define which the main platform goals are and how it should give an answer to that goals.	IM																		
5.2	In partnership define a list of important analysis that platform should have and show	IM																		
6	Hire the services of a digital platform to make part of this business model		15.000€ to 40.000€																	
6.1	Evaluate platforms in the market that offer this kind of service.	IM																		
6.2	Negotiate with the chosen platform its role in the business model	IM, DP																		
6.3	Define the values according to the business model developed	IM, DP																		
6.4	Hire the platform services	IM, DP																		
7	Define the necessary information for project implementation		€																	
7.1	Do a list of the minimum necessary data together with the digital platform	IM, DP																		
7.2	Guarantee in the negotiation phase, that this information is given by customers	IM, DP, IC																		
7.3	Develop a standard sell out excel file to be easier for customers to understand the minimum information needed and	IM, DP																		

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12. <https://www.veterinaria-atual.pt/na-clinica/portugal-tem-67-milhoes-de-animais-de-estimacao/>
13. <https://www.dinheirovivo.pt/empresas/mercado-da-comida-para-cao-em-portugal-vale-1077-me-e-para-gato-971-me-nielsen/>