



The use of pricing tools to leverage the business partners' profitability

Diogo Martins Machado

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INSTITUTO SUPERIOR DE CONTABILIDADE E ADMINISTRAÇÃO DO PORTO
INSTITUTO POLITÉCNICO DO PORTO



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**Presented to Instituto Superior de Contabilidade e Administração do Porto to
obtain Master degree in Corporate Finance, under supervision of Dr. Rui
Fernandes.**

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Dedication

I would like to dedicate the entire work to someone who shaped my entire life – Dr. Rui Saavedra – without his lessons at an early stage of my life I wouldn't achieve even half of what I achieve today. Thank you for being my life reference.

I want to thank Dr. Rui Fernandes for all the opportunities he gave me and for what he taught me. The internship was a huge success thanks to him, he spent a lot of time monitoring my work and discussing ideas, I will never forget that.

I also would like to thank to all the good teachers for their excellent work and for inspiring me.

Resumo:

O apuramento da rentabilidade por cliente numa dada organização implica diversos desafios, desde o cálculo do preço líquido até ao desenvolvimento de um sistema de alocação de custos dentro dos processos da empresa. Portanto, o trabalho desenvolvido pretende explorar o potencial de uma metodologia de avaliação de clientes, através da utilização de técnicas de precificação como ferramenta de suporte, onde a análise por segmentos será efetuada, de modo a identificar padrões de rentabilidade de acordo com as características da relação entre a empresa e o cliente, considerando na análise o posicionamento do cliente na cadeia de valor, a dimensão e o potencial do negócio em análise, os tipos de relação negocial estabelecidos, assim como, os efeitos das características de cada segmento na relação negocial. Depois de desenvolvida a metodologia será analisada a rentabilidade por cliente e serão propostas recomendações de melhoria, quantificando sempre os possíveis ganhos com cada contribuição, utilizando técnicas de nívelamento e análises de sensibilidade. Estas propostas podem contribuir para que outras empresas executem as suas políticas de preço, assim como, a alterar o foco de modo a atrair clientes dos segmentos mais rentáveis.

Palavras chave: Preço, Cliente, Rentabilidade, Margem de Contribuição

Abstract:

The profitability set per customer of a given organization implies several challenges, from the calculation of the net pricing to the development of a cost allocation system within the company's processes. Thus, the work proposed aims at exploring the potential of a customer evaluation methodology, using pricing techniques as a supporting tool, where the analysis of the customer clusters profitability will be done, in order to identify profitability patterns according to the characteristics of the relationship between the customer and the company, including the customer's supply chain role, the dimension and the potential of the business under study, the types of business relationships that are established, as well as the relative effects of each cluster own characteristics in the overall business relationship. After developing the methodology, the customer profitability will be analyzed and recommendations will be set, highlighting and quantifying the possible improvements in the contribution, under leveraging techniques by the average and sensitivity analysis simulations. These insights will support the companies in their pricing decisions also as shifting their focus towards attracting and retaining the customers from the more profitable clusters.

Key words: Pricing, Customer, Profitability, Contribution Margin

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Acronyms

ABC – Activity Based Cost

CLV – Customer Lifetime Value

CM – Contribution Margin

CPA – Customer Profitability Analysis

CRM – Customer Relationship Management

INTRODUCTION

Most of the companies are focused on assessing the profitability of their products, developing processes to achieve that, but most are far behind in assessing their customers' profitability (Epstein, Friedl, & Yuthas, 2008). Product or service quality, staff quality, corporate image, and price perception affect the customers choices. These variables are leading the organization resources with different intensities; as such, it is essential that the companies define the customers to whom more resource should be allocate (Albalaki, 2018; Noone & Griffin, 1998; Erjavec, Tanja & Povalej, 2016). Managers are often very surprised to find out that a small number of customers generate a large part of the profits, and the remaining customers are unprofitable or only contribute to a small part of the profits (Elias & Hill, 2010). Once the customer profitability analysis is done, the company will understand that the why certain customers are generate different levels of contribution. The more or less profitable, and those conclusions are appliable at the strategic level, guiding decisions from grow initiatives to marketplace segmentation and, at tactical level, with tactical and operational improvements in profitability (Johnson, Simonetto, Meehan, & Singh, 2009).

This work aims to analyze the customer portfolio of one subsidiary of a Portuguese multinational company, through a methodology that aims possible margin improvement opportunities, across different types of costs allocated at individual customers or clusters, in order to upgrade the profitability boundaries. Throughout this work it is intended to explore the proportion of each cost between clusters/individual customers and propose corrective actions. The analysis will begin with an overview of a waterfall profitability and then we'll look at the most relevant customers and explore the reasons for their individual level of profitability Finally, it is proposed to explore the different levels of discounts and the different intensity of customer service allocation between clusters and within clusters, in order to recommend the main actions to increase the overall profitability levels.

CHAPTER I – CUSTOMER PROFITABILITY MEASUREMENT

Most management accounting systems focus not on the customer but on products, departments, or geographic regions (Gupta, Foster & Sjoblom, 1996). A customer profitability model is centered on a profit basis, typically a dollar contribution, but other measures can be used, for example, if a customer is an opinion leader or a market maven, making constant contributions to product and company brand, can't be measured only on a profit basis (Mulhern, 1999). To Stubing (2019), the basic definition of customer's profitability is "the direct revenue from sales to the customer minus the direct expenses of providing the customer the product or service", so, calculation of customer profitability is pretty straightforward in Miller (2008) opinion, the revenues and costs are allocated to customers or customers segments and it is done. On the other hand, Mulhern (1999) refers that, although measuring customer profitability may looks a straightforward process, it is a quite complex task to do, and that it is because profitability depends not only on the unit cost of a product or service, but also on the range of the services required, including marketing, distribution, and customer service (Gupta, Foster & Sjoblom, 1996).

If the company wants to read and analyze an individual/cluster customer profitability it must implement a different accounting approach. Noone and Griffin (1998) distinguish between traditional accounting approach and customer profitability approach in Figure I, explaining that in the traditional way, the operating department costs, including overheads, are deducted from the department revenues to reach total organization profit. On the other side, customer profitability approach split operating department revenues by individual customer or customer groups and deduct costs by individual customer or customer group, achieving the profit by consumer group. In CPA the total profit is reached when non allocated costs are deducted to the profit by consumer group. At the Figure I the revenues and costs are split by individual customers or by customers groups. Because customers have different characteristics, it is important to distinguish them through segmentation. As Wu, J. and Zheng, L. (2005) refers, customer segmentation is "classifying customers by their value, demands, preference and other factors in the circumstances of clear organization strategies, business model and targeted market". The traditional customer segmentation models based on demographic, attitudinal, and psychographic attributes of a customer have low accuracy, so companies should use a customer segmentation model based on customer transaction and behavioral data (Lee, & Park, 2005). According to Mulhern (1999), firms often prefer a customer aggregation

instead of individual measurement. The same author argues that companies often aggregate customer's types (e.g., corporate versus consumer, retailers versus wholesalers), because it's more practical (e.g. when individual level marketing is not feasible or when individual purchase data are not available), especially when the amount of individual purchase is low.

Even with customer aggregation, companies need to attribute some indirect costs to the customers or customers group, in fact, if we observe Figure I, we noticed that costs distribution are based on activity-based cost (ABC) system. Several authors agree that ABC systems provide accurate information about the costs of activities and business processes, individual products, services and customers, therefore customer profitability measurement fits better in an activity-based cost logic than in traditional cost systems (Kaplan & Cooper, 1998; Raaij, Vernooij, & Triest, 2003; Lahutta & Wroński, 2014), that are more oriented to product costs and do not identify, for example, how a customer service affect the cost structures (Guerreiro, Bio, & Merschmann, 2008).

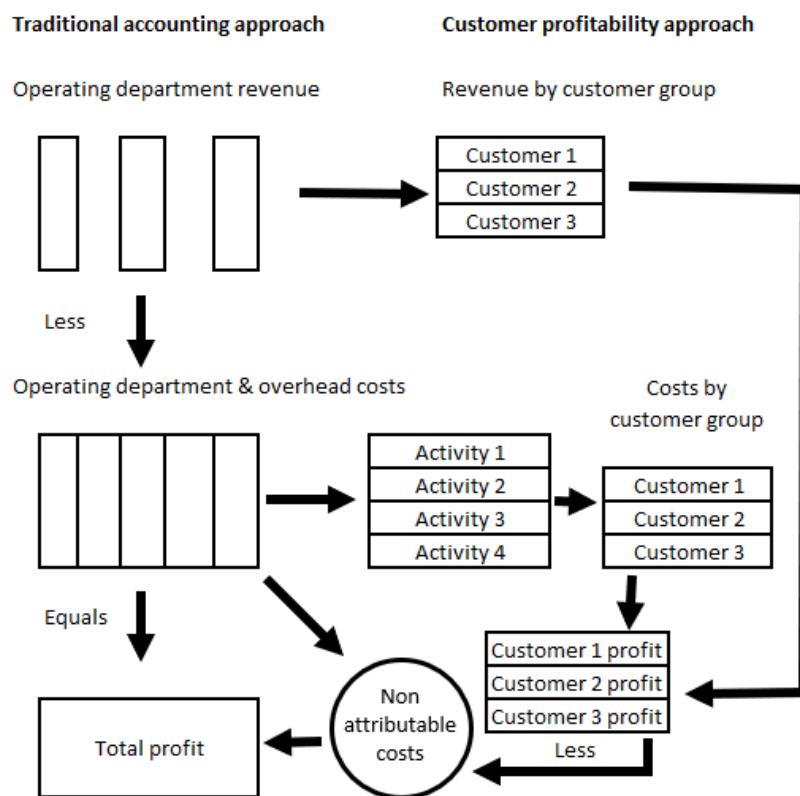


Figure I – Different accounting flows

Source: Noone and Griffin (1998)

Using ABC it is recognizing that not all costs can be attributed to customers, because customers aren't directly responsible for all the activities costs, for example: the cost of auditing accounts, so the cost should not be assigned to them, so the cost is non-attributable and therefore should not be included in the customer calculation (Noone & Griffin, 1998; Kaplan & Cooper, 1998). Noone and Griffin (1998) referred that ABC is a basic concept, the premise underlying ABC is that the cost objects, like customers, use activities in the organization that are based on resources that incur in cost. The basic difference between traditional costs systems and ABC, as explained by Cooper & Kaplan (1991) is that traditional cost systems “use bases like direct labor and machine hours to allocate to products the expenses of indirect and support activities”, while ABC “segregates the expenses of indirect and support resources by activities”.

According to Cooper & Kaplan (1991) it is impossible to management control expenses at the macro level, so managers need to understand patterns of costs at the micro level.

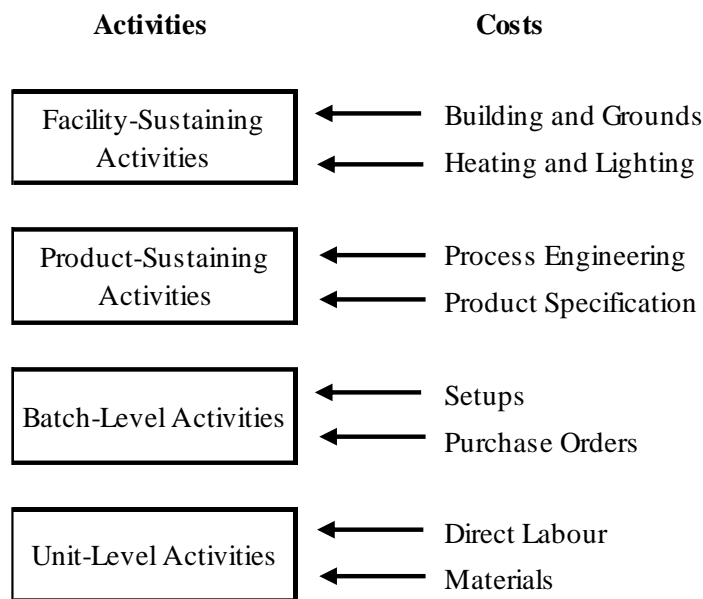


Figure II – ABC hierarchy

Source: Cooper & Kaplan (1991)

The allocation of expenses to individual units leads managers to misinterpret results. The mistaken impression is that costs vary according to produced units, but the resources consumed by batch and product sustaining activities do not vary at a unit level (Cooper & Kaplan, 1991).

CHAPTER II – VALUE PERCEPTION

When we shop, why do we aren't able to pay for a product or a service while another person could be able to pay more than the fixed price if necessary!? Well, that's related to our value perception of a certain product or service and, the expected value that customer receives (or not), will vary according on many factors (Ivanauskienė, Auruškevičienė, Škudienė, & Šarūnas, 2012).

To Zeithaml (1988) what constitutes value appears to be highly personal and idiosyncratic and suggested that perceived value can be regarded as an overall assessment of the utility of a product or service based on perceptions of what is received and what is given. To Sweeney and Soutar (2001) the most common definition of value is “the ratio or trade-off between quality and price”, also concluding that quality and price have different effects on perceived value. The same authors also distinguish perceived value and satisfaction, according to the authors value is perceived at various stages of the purchase process while satisfaction it is a post purchase evaluation.

Sheth, Newman and Gross (1991) presents their theory about consumption values with three fundamental propositions:

- Consumer choice is a function multiple consumption values;
- The consumption values make differential contributions in any given choice situation; and
- The consumption values are independent.

The consumption values that Sheth et al. (1991) refers are functional; conditional; social; emotional; and epistemic values.

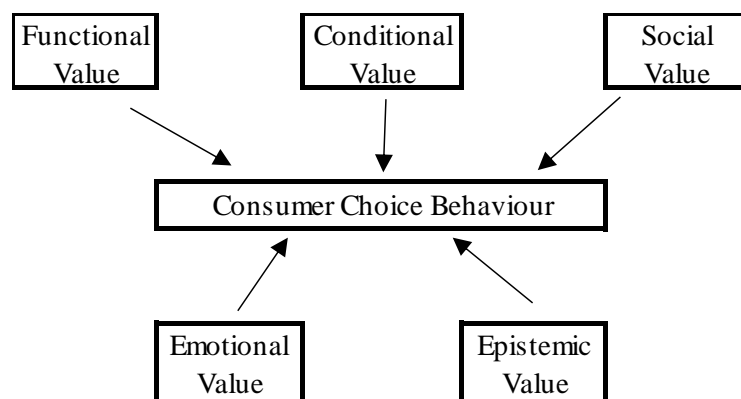


Figure III – Consumption values

Source: Sheth, Newman, and Gross (1991)

The same authors mentioned the multiplicity of disciplines which contributed to their theory, the list went from economy and marketing to sociology and psychology. They also describe the way of impact in of each value in the customer choice behavior, as followed:

- Functional value: It's presumed to be the prime driver of consumer choice and an alternative functional value may be derived from its attributes, as price, durability or reliability;
- Social value: Sheth et al., (1991) define social value as “the perceived utility acquired from an alternative association with one or more specific social groups”, a really good example of this is the car choice, the authors argue that automotive it's chosen mostly by social values than functional performance;
- Emotional value: It's basically how the product or service makes the customer feel, it's the noncognitive and unconscious state that drives the consumer choice, sometimes marketing and promotional mix could awake emotional responses in the customers;
- Epistemic value: This value reflects the human curiosity and desire of the “new”, it's the perceived utility of experiencing something new; and
- Conditional value: The perceived utility acquired in result of an alternative choice in a specific situation, for example, the seasonal products or punctual events (e.g. wedding).

In Sweeney and Soutar (2001) perspective, the proposition of independent values is false and argue that epistemic value and conditional value should not be included in customer value construct, for them functional value was seen to be the key influence on consumer choice. In fact, Sheth et al., (1991) admit that social, epistemic, and conditional value may have little influence in customer choice. Ivanauskienė, et al. (2012) concluded in their study that “many researchers agree on the three major dimensions of customer value, namely, functional, emotional, and social”. In a more practical way, Marn, Roegner, and Zawada (2004), perceive value as the “tradeoff between the benefits a customer receives from a product and the price paid for it—or, more accurately, the perceived benefits received and the perceived price paid”. Their approach considers price as a major variable

of the customer value perception, affirming that value can be expressed with a simple equation:

$$\text{Value} = \text{perceived benefits} - \text{perceived price}$$

A visual representation of how customers perceive the tradeoff value emerge with this approach with the help of Price-to-Benefits Map (Smith, 2010). In the map, products are located at the interception of perceived prices (vertical axis) with perceived benefits (horizontal axis).

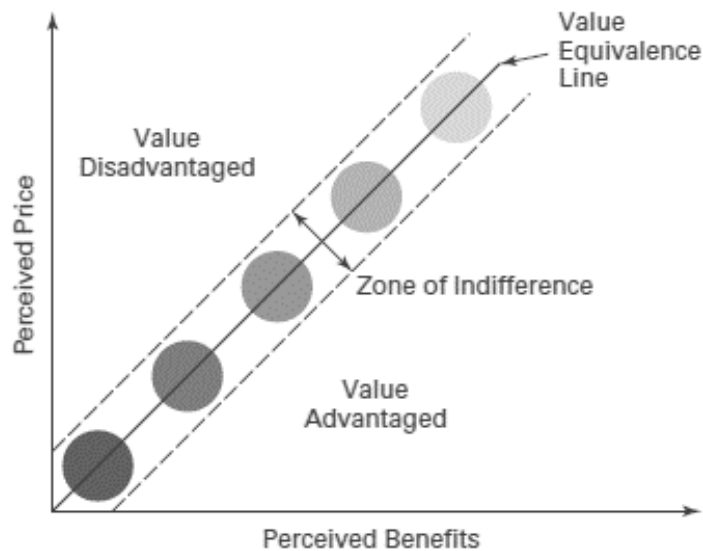


Figure IV – Perceived value Vs. Perceived benefits

Source: Smith (2010)

Was drawn a value equivalence line on the map, that represents the theoretical options of position along the row of competitors products or services, assuming a stable market and in the condition of perceived prices and benefits being accurately measured (Marn et al., 2004). The map also has drowned two lines which creates an indifference that reflects possible variations across customer perceived benefits and perceived price without severely affect sales Smith (2010). The zones under and above value equivalence line are advantages or disadvantages zones, if a company product is positioned under the value equivalence line, it means the product is gaining market share, because the benefits perceived are high and the perceived price is low, and the reverse is applied to the zone above the value equivalence line (Smith, 2010; Marn et al., 2004).

CHAPTER III – COST TO SERVE / DRIVERS

Guerreiro, Bio, and Merschmann. (2008) argue that ABC has traditionally been applied to measure costs of industrial activities, existing a limited number of empirical studies that have applied the system to consumer-service activities. To interconnect ABC with customer profitability it's presented the Cost-To-Serve (CTS), O'Byrne (2008) define CTS as “understanding the total cost of servicing our customers, at a customer and product level, so that the business can provide appropriate levels of service to its customers”, on the other hand, Lahutta and Wroński (2014) defined Cost-To-Serve as “the total pre-sale, order related, distribution and post-sale service cost required to maintain an ongoing exchange relationship with a customer firm”. Guerreiro, Bio, and Merschmann (2008) used in their work a Cost-To-Serve approach, which they consider that administrative, commercial, and logistic activities are related to customer-service delivery, with a simultaneous use of ABC to measure the cost of those activities. O'Byrne (2008) presents his own version of CTS with ABC connection which considers ABC a subprocess of CTS model as Figure V expose.

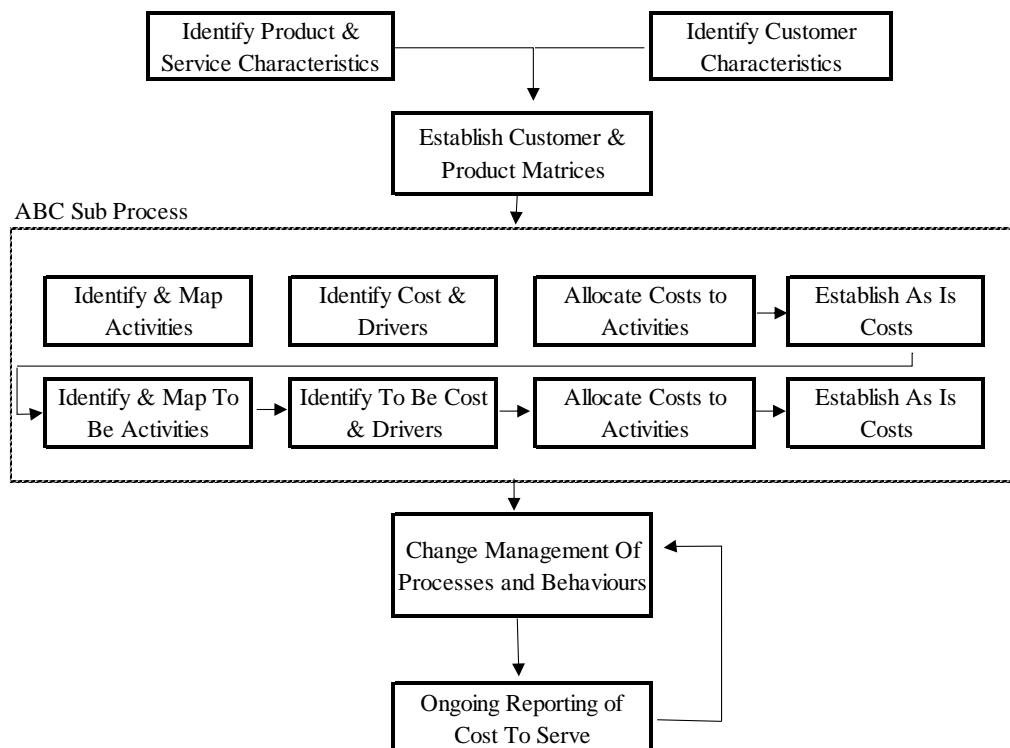


Figure V – Cost-To-Serve structure

Source: O'Byrne (2008)

As Lahutta and Wroński (2014) mentioned, CTS it's a "different and definitely less popular methodology of cost accounting method". In Braithwaite and Samakh (1998) work highlight the identification of drivers for change, as they identify:

- **Variety Cost:** This means that not all products contribute in an equal way to profit, and a straightforward gross margin calculation will not isolate the activities that are making the product more or less profitable;
- **Customer Channel Management:** Every business has large and small customers, comparing one type of customer to each other it's wrong, simply because the bargain power or their position in supply chain row, customers need to be grouped in a basis of homogeneous characteristics;
- **Customer Service Objectives:** Service level provided to customers reflects the position of the company in the supply chain strategy, different customers groups have different service level;
- **Supply Chain Routing and Network Structure:** The design of business network has implications in the cost of service, with this approach company will understand the true cost of doing business with some channels or order types and maybe rethink the business model design;
- **Commercial and pricing policy:** The adjustment of prices, discontinue products or customers, or cost reduction leads to possible margin improvements; and
- **Functional Cost Emphasis and Personal Rewards:** The changes proposed must be followed by rewards to the responsible managers to drive changes, otherwise they could not be effective.

The model proposed by Braithwaite and Samakh (1998) was structured into four master groups, that represent the data need to be accessed for Cost-To-Serve analysis:

- **Master Files:**
 - **Products:** Product groups, standard manufacturing and physical characteristics;
 - **Customers:** References, groups and geographical distribution;
 - **Suppliers and manufacturing:** Data geography and lead time;
 - **Hub:** Besides geography, includes the list of products docked in each of held hub;

- Sales data at transactional level: Like order number; product code, quantity; hub reference;
- Sales data aggregated by specific period of time: To understand seasonality and capacity requirements;
- Inbound data at transactional level: Order number, quantity, supplier manufacturer reference, hub reference; and
- Inventory data: Product code, units in stock, hub reference.
- Operating costs:
 - Fixed costs;
 - Financial costs; and
 - Variable costs.
- Distribution costs:
 - Fixed costs;
 - Financial costs; and
 - Variable costs;
- Outsourcing costs:
 - Warehouse rates;
 - Transportation rates; and
 - Capacity constraints.

With the data obtained, ABC system is enabled to be applied at the costs level, allocating them to activities through cost drivers. O’Byrne (2008) put an emphasis on supply chain cost drivers as cost of stock; storage cost; handling cost; order processing cost; repacking cost. In a practical explanation of cost driver, we revisit Noone and Griffin (1998) work, which they used drivers to impute activities’ cost as such a check in/out function in a hotel, if the receptionist spent 30% of the time with that activity, 30% of him/her salary must be allocated to check in/out activity, subsequently being imputed to customers in CTS view.

| Cost Pools | Cost Driver |
|---------------------|---------------------|
| Purchase orders | Number of orders |
| Shipping activities | Number of shipments |
| Invoices | Number of invoices |

Table I – Cost pools Vs. Cost drivers

Source: Gupta, Foster, and Sjoblom (1996)

Another comprehensive example of drivers is given in Gupta, Foster, and Sjoblom (1996) article, which is exhibit at Table I the cost driver application to some activities denominated as “cost pools”. The analysis of customer/product costs through the CTS cost drivers will unhide some “invisible” costs and create opportunities to minimize costs in the supply chain minimizing the impact of some activities in total costs, as example:

- Product handling;
- Stock levels; and
- Order processing.

CHAPTER IV – CUSTOMER PROFITABILITY ANALYSIS (CPA)

According to Mulhern (1999), customer profitability analysis is defined as “the evaluation of the how profitability varies across customers”. Customer profitability analysis is also defined as “the allocation of revenues and costs to customer segments or individual customers, such that the profitability of those segments and/or individual customers can be calculated” (Raaij, Vernooij, & Triest, 2003). We find differences between several authors about which department owns the accountability of customer profitability analysis. Cardoso and Cardoso (2014) assume that customer profitability analysis is considered as a marketing topic, despite being a management accounting innovation. On the other hand, Miller (2008) considers that, despite the marketing, sales and operations departments being the major users of CPA information, the finance department is in the best position to understand and calculate the customer’s profitability, referring that a company who wants to apply the best practices should divide CPA accountability by both departments.

Customer profitability analysis allows organizations to identify and understand its sources of revenues, expenses, and, in consequence, the source of profits and take actions based on customers profitability perspective, instead of a simple revenue analysis approach (Albalaki, 2018; Shapiro, Rangan, Mariarty, & Ross, 1987; Cokins, 2015). So, if each dollar of revenue does not contribute in the same intensity to the profits, the difference between customers comes from differences in revenues and costs, as Gupta, Foster, and Sjoblom (1996) explains.

Revenue differences:

- Differences in the prices charged per unit to different customers;
- Differences in the volume of sells across customers;
- Differences in the products or services provided to customers; and
- Differences in no charge items delivered to customers.

Differences in cost:

- Differences in the way resources are consumed by different customers;
- Price discounts and other forms of revenue offset;
- Differences in distribution channel; and
- Differences in customer service levels.

We now know that customers have different levels of profitability according to their characteristics, but levels of profitability will vary due to the use of different estimation methods (McManus & Guilding, 2008; Albalaki, 2018). Johnson et al., (2009) presents an CPA approach done in a “pocket margin” perspective, calculating the profitability of each transaction by subtracting all the costs related to a singular transaction. As they affirm, these costs can range from invoice discounts and promotions, to the less obviously ones, like freight costs, warehousing and other activities that may be classified as “overhead cost”. An illustrative example is given by the same authors, with a construction of a so called “price waterfall” chart that portrays the progression from list price to pocket margin, based on cost-to-serve data collected at transactional level.

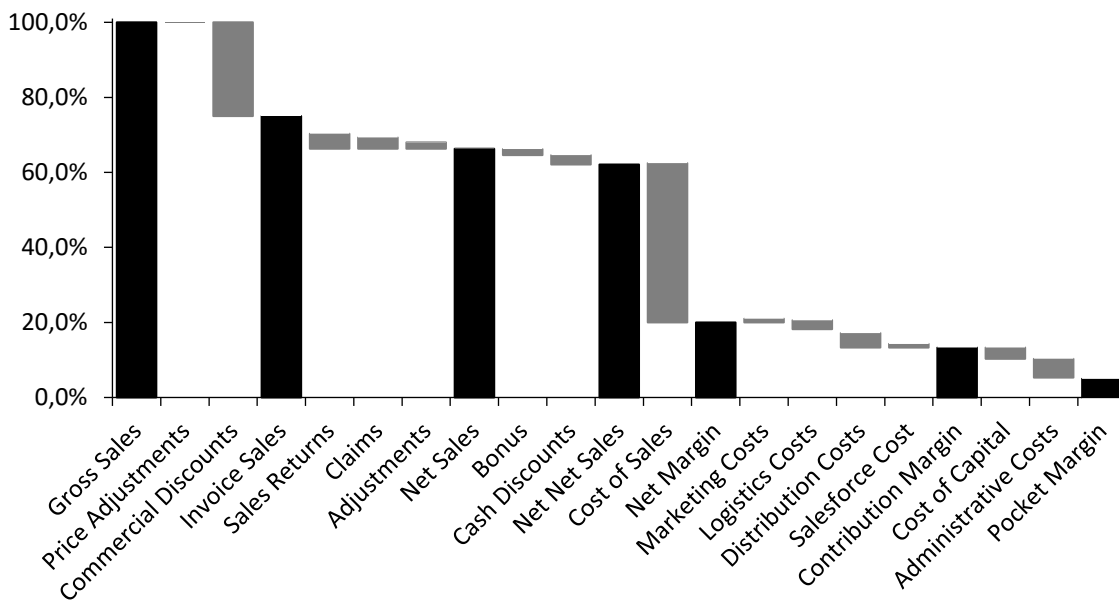


Figure VI – Profitability waterfall

Source: Johnson et al. (2009)

Once the profitability is measured for each customer or customer segment, Elias and Hill (2010) suggest to plot the results into a profit graph, popularly called “whale curve”, where the Y-axis of the graph shows cumulative customers or customer segment ranked and from high to low in terms of profitability from all customers and the X-axis shows cumulative customer or customer segment ranked from high to low in terms of profitability. Usually, the graph will show that a low number of customers are responsible for more than 100% of the profits and, the remain customers, are normally on breakeven or generating losses (Kaplan & Cooper, 1998).

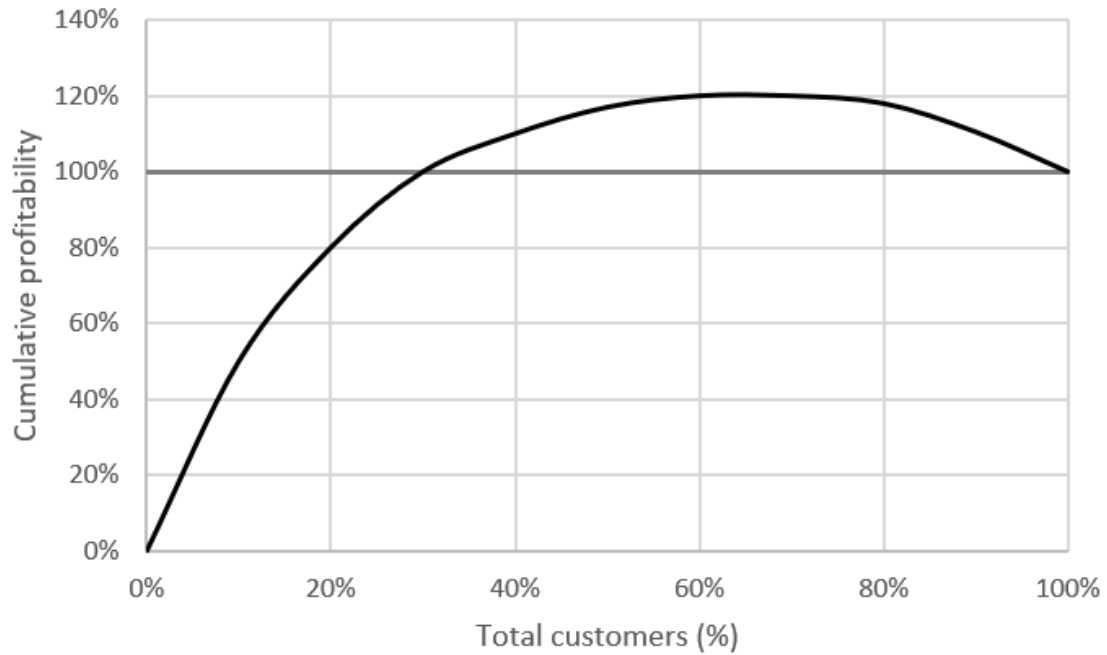


Figure VII – Profitability whale curve

Source: Elias and Hill (2010)

Brown (2010) proposes a “4 box” model to segment customers based on their profitability and their relevance for business strategy, suggesting actions to take in each segment.

| | Profitable | Loss maker |
|---------------|------------|------------|
| Strategic | Retain | Transform |
| Non-Strategic | Monitor | Replace |

Figure VIII – Four box model

Source: Brown (2010)

For strategic and profitable customers, the company should retain them and increase their business if possible. For strategic and loss makers the action to take is to transform these customers into profitable or, at worst, move them to breakeven. At non-strategic and

profitable customers, the orders and service levels should be regularly monitored to ensure nothing changes that causes them to become non-profitable customers. The non-strategic and loss makers customers sales volumes and contribution needs to be replaced, with increasing of selling prices and with no effort spent developing these customers, in order to move them to the “Monitor” box.

CHAPTER V – CUSTOMER RELATIONSHIP MANAGEMENT

The term customer relationship management (CRM) emerged in the information technology vendor community and practitioners community in the last decade of century XX (Payne & Frow, 2005). Anderson and Kerr (2002) define Customer Relationship Management as a “comprehensive approach for creating, maintaining and expanding customer relationships”. Buttle (2009) also define CRM as “the core business strategy that integrates internal processes and functions, and external networks, to create and deliver value to targeted customers at a profit”. To Buttle (2015), some people wrongly equate CRM with loyalty campaigns, whereas others think of CRM as an IT issue, he divided CRM into three main forms.

- Strategic: It’s focused on the development of a customer-centric culture dedicated to serve the customer with more value than competitors to maintain and attract customers;
- Operational: The automation of customer business process, usually with software applications help; and
- Analytical: The capture and analysis of customer data to enhance both customer and company value.

Exist a multiplicity of CRM models as IDIC model, CRM Value Chain and Gartner competency model as Buttle (2015) mentioned on his work. Payne and Frow (2005) identified five generic CRM process and developed a model around them as illustrated on Figure IX.

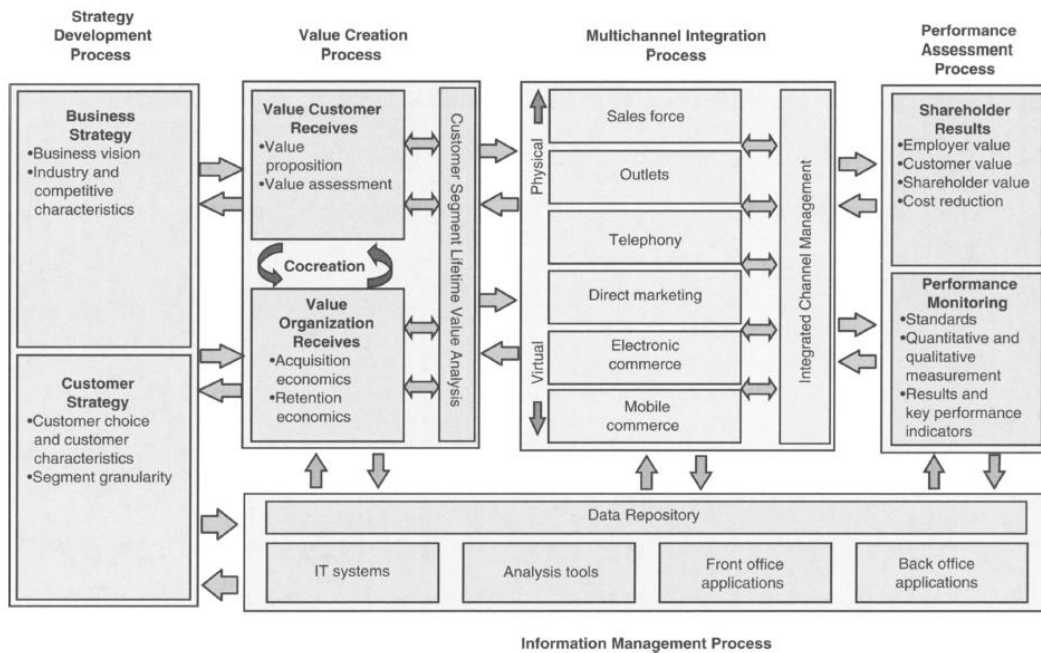


Figure IX – Payne and Frow's 5-process model

Source: Payne and Frow (2005)

To Buttle (2015) the three main forms (strategic; operational; and analytical) are linked to Payne and Frow model. The multi-channel integration process and the value creation process represent strategic CRM; the multi-channel integration process represents operational CRM; the analytical CRM is represented by information management process.

Strategy development is divided into two focus, customer strategy and business strategy, they both should be interrelated. Business strategy should cover the business vision with an integration in the evolving industry, on the other hand, customer strategy involves the examination of potential customers and identification of most appropriated segments (Payne and Frow, 2005). The model authors referred value creation process as the transformation of strategy development process extraction and deliver value, and it's divided into two elements:

- The value customer receives

Company should quantify the relative importance that customers place on all the attributes of a product, already aborded on value perception chapter.

- The value organization receives

To model authors there is two key elements. The first element is the determination of how customer profitability varies across segments as customer profitability analysis chapter suggests, and the second one is the economics of customer acquisition and retentions. At this level, Epstein, Friedl, and Yuthas (2008) presents a comprehensive approach for measuring and managing customer value.

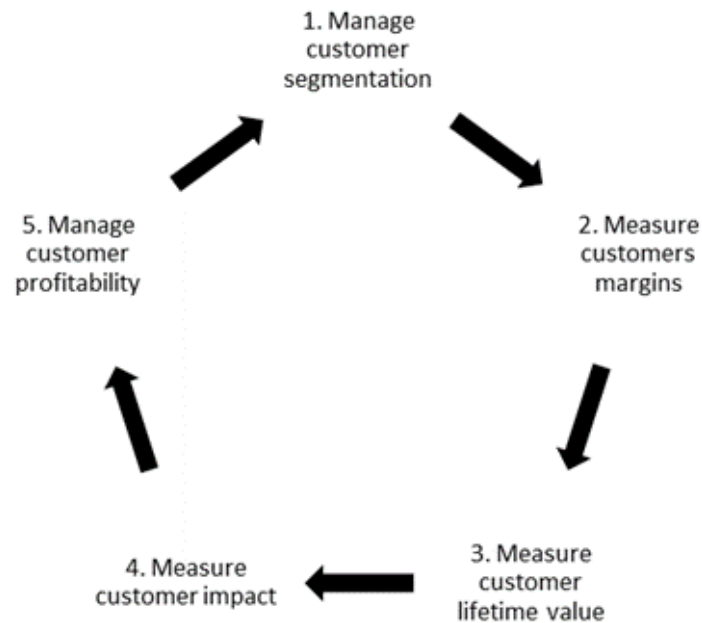


Figure X – Customer value management cycle

Source: Epstein, Friedl, and Yuthas (2008)

Step 1: The customers division process into groups for decision-making purposes;

Step 2: Assessing the customers profitability, as already mentioned in this work on profitability analysis chapter;

Step 3: The calculation of customer lifetime value (CLV), that reflects the expected or potential customer income-generation. In other words, CLV values customers based on their expected cash-flows;

Step 4: Activity-based cost and CLV made progress in understanding the expected customer profitability, but value can be destroyed or created in other ways that fall outside CLV. Epstein, Friedl, & Yuthas (2008) identify two critical sources of hidden customer value: the influence that a customer has on other customers and the customer knowledge gained by the company; and

Step 5: The information of customer value should be analyzed in order to improve uncovered areas where small changes could lead into big value improvements.

Backing to Payne and Frow’s 5-process model view, now with multichannel integration process, one of the most important processes in CRM. Multichannel integration process takes the outputs of value creation and business strategy process and transform them into value-adding activities with customers by exploring the multiplicity of channels which a company can interact with its customers. Information management process it is related to the information technology systems and the data collected and provided for these systems with relevant analytical tools that focus on tasks as campaign management, credit scoring and customer profiling.

At the last, but not the least process, it is the performance assessment. This process has two main components:

- Shareholder result: The ultimate goal of CRM it’s to increase shareholders results, here it’s important the development of models as service profit chain as illustrated bellow.

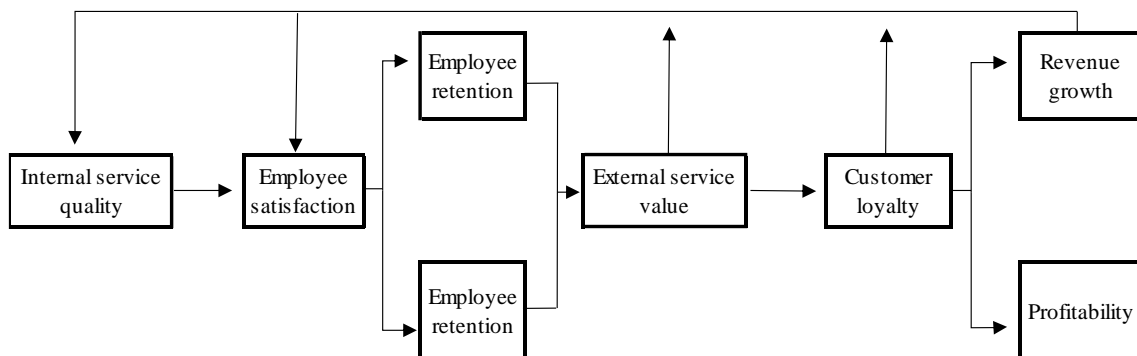


Figure XI – Service profit chain

Source: Heskett, Jones, Loveman, Sasser, and Schlesinger (1994)

- Performance monitoring: Key performance indicators that reflect the performance standards of each five processes must be adopted to ensure that CRM activities are planned and practiced and that a feedback loop exists to maximize performance.

CHAPTER VI – PRICING

Price of trade determined by an organization is usually reflex of its competitive position and corporate view of market opportunities (Braithwaite & Samakh, 1998). “That which is given in return for a product in a commercial exchange”, it’s the definition of price given by Schindler (2012). In the Marn et al. (2004) point of view, if a company sets the right price for its products, it will increase profits. He also presents a price management with three levels.

- Industry strategy:

Consider the overall industry price levels, the focus goes to demand, supply, regulation, costs, competition, and other related. The critical issue at this level is industrywide price levels, and if possible, influence them in a positive way, because price wars create downward pressure on industry prices (Marn et al., 2004; Ponikvar, Nina & Rant, Melita, 2007)

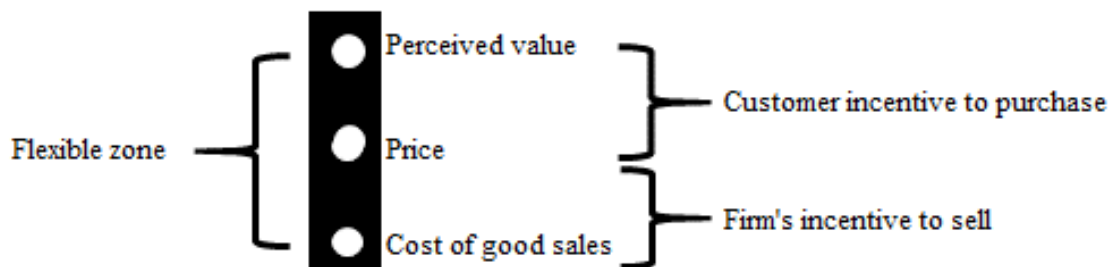


Figure XII – Price fixation corridor

Source: Dolan (2014) and Schindler (2012)

The figure above tells us that exist a zone where the price can be settled according to company’s strategy. The price could vary between the cost of good sales and customer perceived value. It also can be developed tactics for pricing across different segments because the timing of customers’ needs, the speed of their payments, and the level of service and support required, drives significant differences in the cost to serve (Nagle, Hogan, & Zale, 2011)

- Product/market strategy

It’s essentially the price position relative to competitors. At this level it’s important the definition of a price level with optimization of customer price/benefit tradeoff (Marn et al., 2004), this is related to value perception aborded on chapter II. Efforts to measure

customer perceived price and perceived benefits are necessary, the company should know where the competitor products or services are positioned at value equivalence line and take a position.

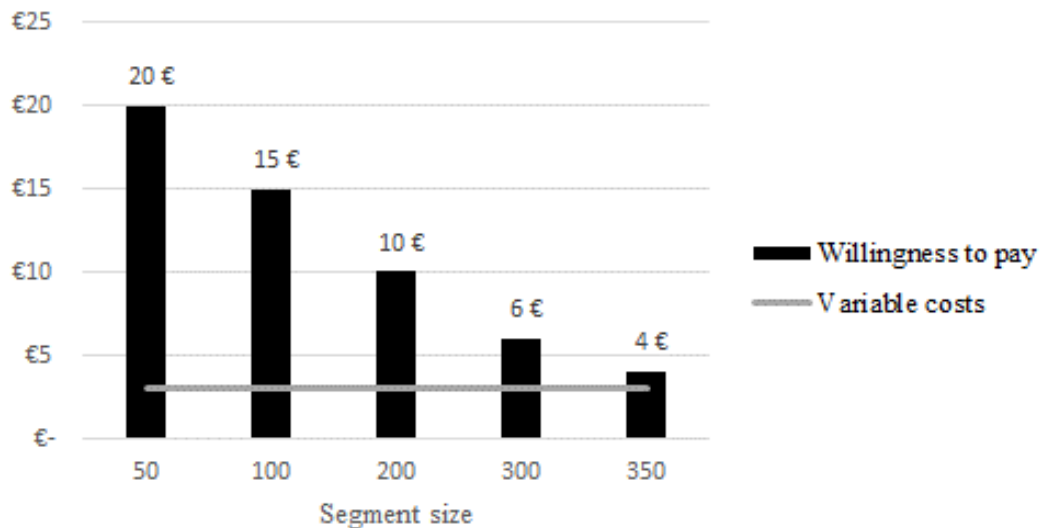


Figure XIII – Segments price level

Source: Nagle, et al. (2011)

When a company pretends to serve all customers with a single price, or a markup (as retailers and distributors), it's forced to make large tradeoffs between volume and margin, according to Nagle, et al. (2011). Let's imagine that the company sets a 10 € price to each product, in that case the company will earn a larger contribution margin (CM) from each customer, meanwhile, it will lose the volume of larger size segment, according to Figure XIII, will lose the segment responsible for 350 units and 300 unit. Nagle, et al. (2011) suggests to fixe different prices to each segment, in order to hit all the segments with revenue and profit maximization.

- Transaction

At the last level, the definition of the exact price for each customer transaction with the help of pricing tools as discounts, allowances, payment terms and volume bonuses. It's often at this price level, mostly known as price execution, that pricing projects breakdown (Bodea, & Ferguson, 2014). Efforts made on collecting information assiduously about

pricing execution is compensated with large and fast payback, usually 3 to 10 times the investment made (Davidson, & Simonetto, 2005).

Different customers generate different margin, because the price and the cost to serve can be different to each customer (Marn et al., 2004).

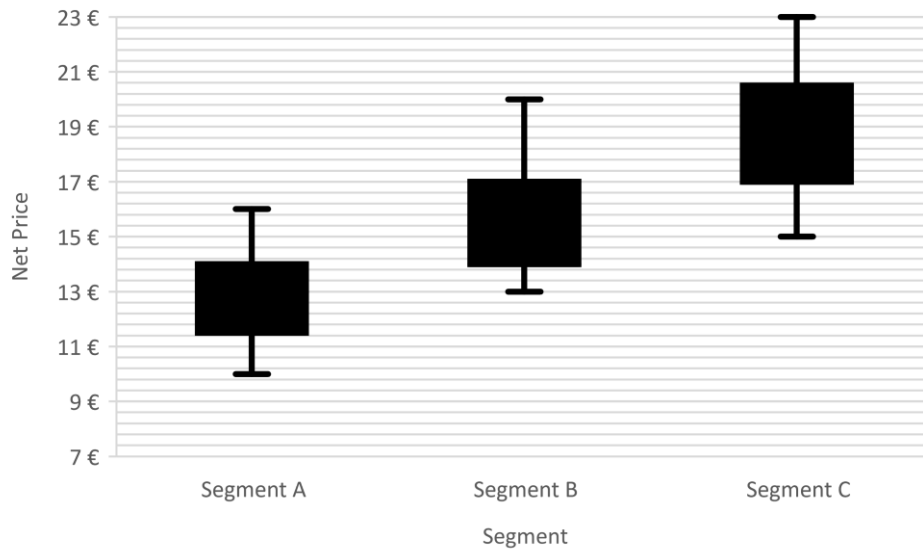


Figure XIV – Net price corridor dispersion

Source: Smith (2010)

As Marn and Rosiello (1992) affirm, the goal of transaction price management is to accomplish the best net price for each transaction. It's obvious the range of dispersion in Figure XIV into the same segment and between the segments, through Figure XIV executives can examine on a general view if the pricing execution it's being accomplished (Smith, 2010). Usually executives concentrate management energy on either the list price or the invoice price, failing the management of all the components that contribute to final transaction price, resulting in a widely range of executed price (Marn et al., 2004). To understand the variables that influence the final price, Davidson and Simonetto (2005) proposes a full visualization of revenue consumers through a price waterfall chart, as presented in Figure XV.

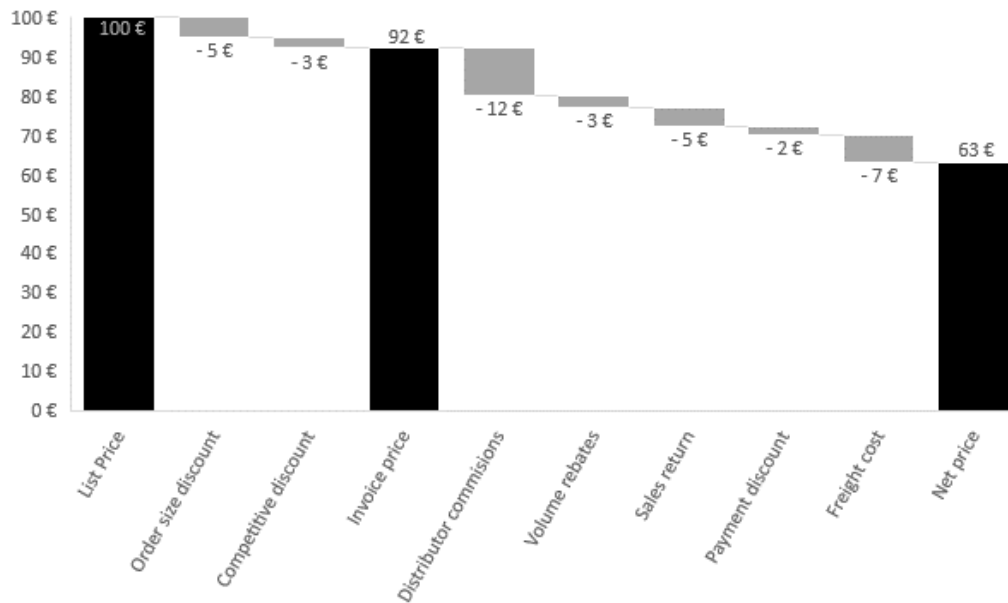


Figure XV – Price waterfall

Source: Davidson and Simonetto (2005); Marn and Rosiello (1992)

In most business, particularly those selling through trade intermediaries, invoice price does not reflect the true transaction amount, each “step” in the waterfall presented in Figure XV represent an opportunity to improve margins at the transaction level (Davidson & Simonetto, 2005; Marn & Rosiello, 1992). The price waterfall will expose the main reasons to dispersion across the same segment and between segments evidenced in Figure XIV. To Marn et al. (2004) a wide net price band almost always indicate significant pricing opportunity. Every price tool as discounts, bonus and others should be analyzed and adjusted to accomplish the business strategic purposes (Smith, 2010; Marn et al., 2004).

Marn and Rosiello (1992) presents the necessary steps to capture transaction prices opportunities:

- Manage the pocket price band: The entire pricing should be managed to the realization of net price (or pocket price) rather than invoice price or list price;
- Engineer the price waterfall: Executives shouldn’t be at all surprised if customers or customers segments value differently each set of price waterfall, the sales representative should be able to identify the sensibility of each customer to each set; and

- Get organizational involvement and incentives right: Managers who set specific goals for transaction price improvement and monitor those goals through a regular and concise transaction price performance report, are likely to improve transactions price.

CHAPTER VII – CASE STUDY

This case was conducted in a subsidiary of one of the largest Portuguese multinational company that operates in the industry of production and transformation of raw materials, being the world leader in its sector. We will change the original data to protect the company against the disclosure of sensitive business information.

i. Summary

After collect all the transactional data and all relevant costs, we start the study with a general analysis at the company. At the date of the study, the subsidiary analyzed was facing profitability problems as the general profitability waterfall shows.

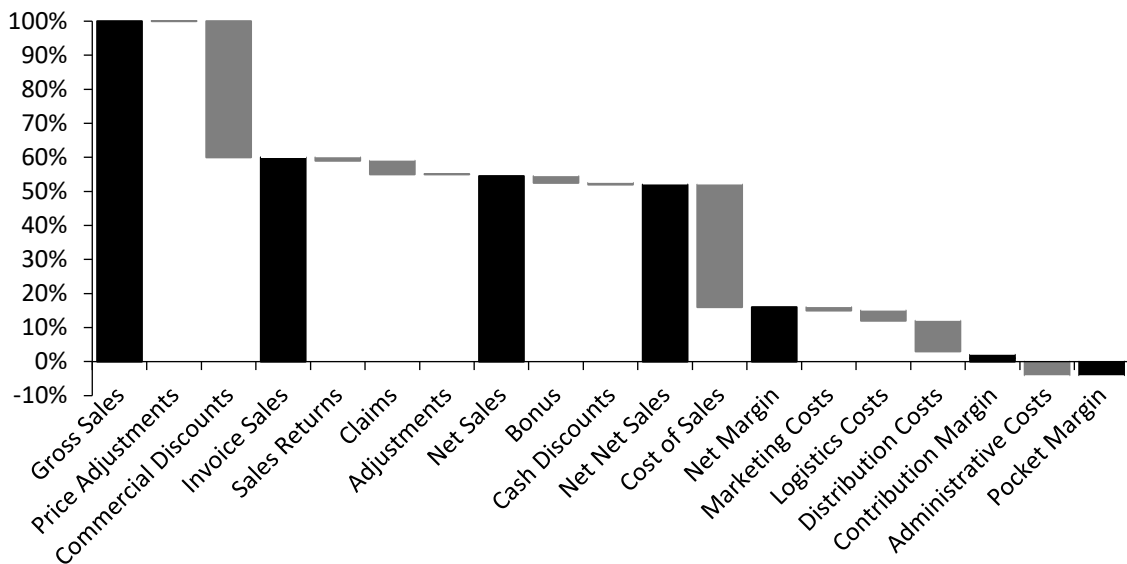


Figure XVI – Company general profitability waterfall

Source: Own elaboration

The total Gross Sales represents 100% of the potential income and, slice by slice, the gross sales are deducted by company's cost. As shown in Figure XVI, the most representative costs are commercial discounts and cost of sales, with a representation of 40% and 36% of the gross sales, respectively. The contribution margin is still positive by 1%, but administrative costs exceed this margin resulting in a total loss (pocket margin) of 4%. At the time, there were around 400 customers divided into three clusters (retailers, wholesalers, and others) and 700 different products. We distinguish between normal sales and sales out-of-mix. Sales that comprehend the company core products are named as "sales" and sales that does not fit on "sales" definition are named "sales out-of-mix".

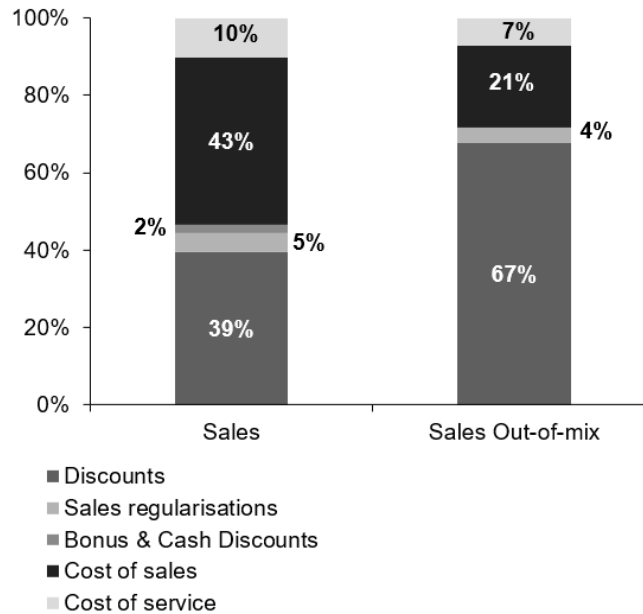


Figure XVII – Sales Vs. Sales Out-of-Mix cost structure

Source: Own elaboration

The company decided to sell out-of-mix products because of their low cost of sales, however the commercial discounts smash the cost of sales gains. At the normal sales, the discounts and cost of sales sum have less relative weight when compared to out-of-mix sales, nevertheless, normal sales customers demand more attention (reflected on the cost of sales relative weight), have more claims and receive more bonuses.

ii. Customer individual analysis

The customer analysis, as we already mentioned, was made in a transactional basis and, will stop on contribution margin, because no reliable method has been found to allocate the administrative costs.

As we show in Figure XVII, most of the customers have a positive contribution margin. The company’s customers profitability behavior seems to behave like the “whale curve” graph presented by Elias and Hill (2010), mentioned in this work.

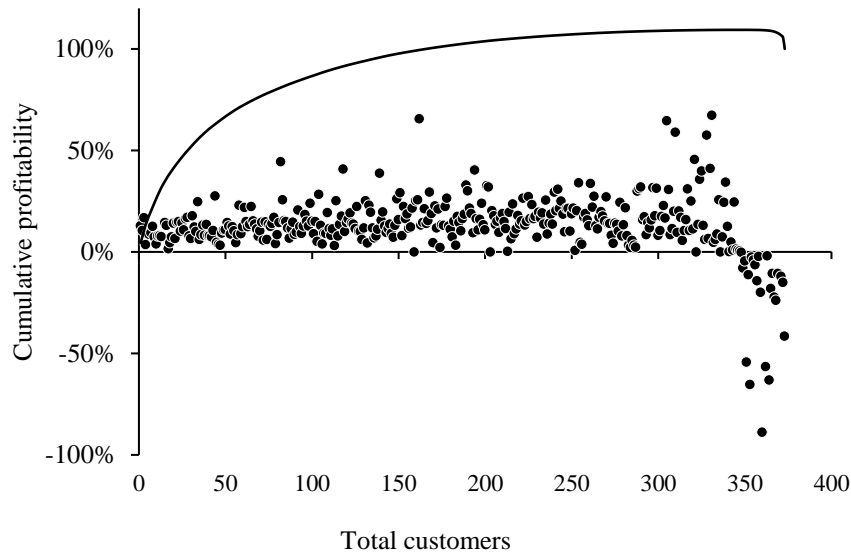


Figure XVIII – Contribution margin per customer

Source: Own elaboration

In the Figure XVIII, where each point represents a customer, we figure out that a minority of customers (around 6,5% of total customers) causes a loss of 9,1% of the maximum cumulative profitability. Without them the contribution margin would be around 10% higher. In other hand, around 80% of total profitability was concentrated in 80 customers, 20% of the total customers.

| Top/Bottom 3 customers | Gross Sales (% of total) | Contribution Margin (% of total) |
|------------------------|--------------------------|----------------------------------|
| Profit maker 1 | 2,70% | 4,50% |
| Profit maker 2 | 2,40% | 3,20% |
| Profit maker 3 | 1,50% | 3,15% |
| Loss maker 3 | 0,40% | -0,70% |
| Loss maker 2 | 0,50% | -0,90% |
| Loss maker 1 | 1,00% | -5,72% |

Table II – Top/Bottom 3 customers

Source: Own elaboration

We look at the top three profit/loss makers and conclude that one customer represents a 5,72% loss in contribution margin. In the side of the profits, one customer represents 4,5% of total contribution margin. After Loss makers transactional data analysis based on individual profitability waterfall, we find out that:

- The Loss maker 1 negative contribution margin was clearly due to three products claims (sales adjustment);
- The Loss maker 2 negative contribution margin was due to excessive commercial discounts and to one product claim (sales adjustment); and
- The Loss maker 3 negative contribution margin was due to high cost of service (marketing, logistic, transport costs) and two product claims (sales adjustment).

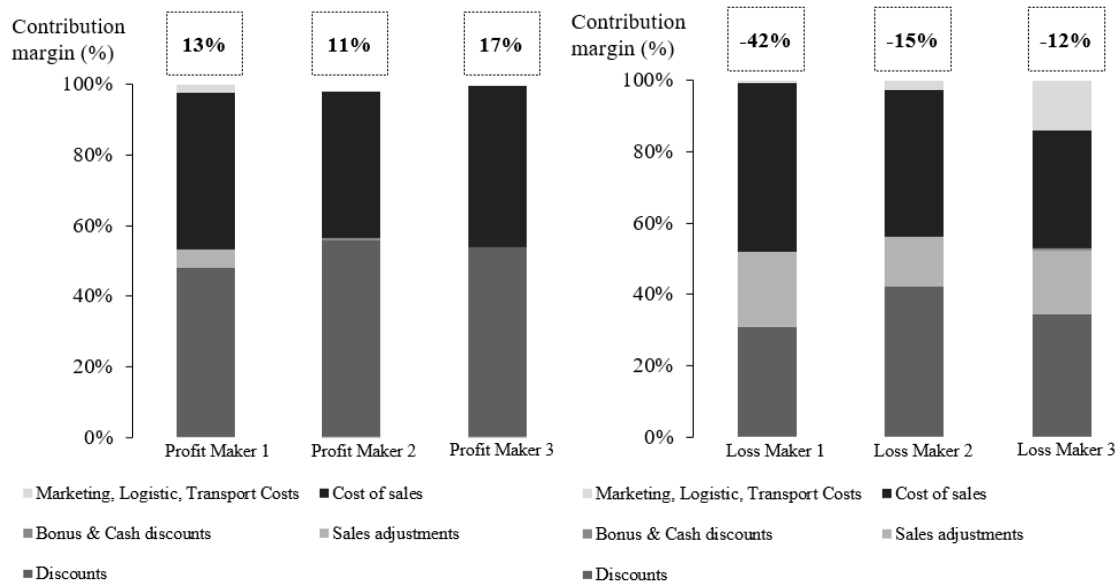


Figure XIX – Profit makers cost structure

Figure – XX: Loss makers cost structure

Source: Own elaboration

Source: Own elaboration

At Figure XIX and Figure XX, the vertical axis represents the distribution of costs by customer and above them is displayed the CM. At the profit makers transactions analysis, we conclude that the main cause of their superior contribution margin was result of purchase of products with above-average profitability and low cost of service. All the negative contributors have high “sales adjustments” costs, that occurs because some products do not undergo quality testing before shipping. The profit makers usually only have two main costs associated: cost of sales and discounts.

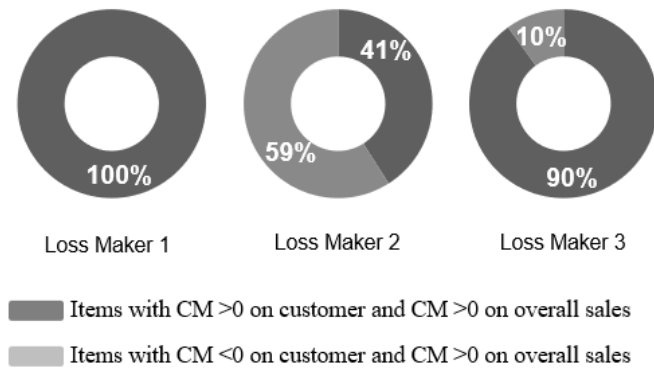


Figure XXI – Top three loss makers profitability on profitable items

Source: Own elaboration

After analyzing Figure XXI, we conclude that all the three top loss makers have bought items that are generally profitable, however, some of these items have negative CM when purchased by these customers. The loss maker 1 case is different, despite he is being a loss maker he was profitable in the items he bought during the analysis period, however, a sales return related to an item bought in the previous period brought him to the top loss makers. The top three profit makers did not buy any items with negative CM.

iii. Item's profitability

Although none of the top three profit/loss makers have not bought items with overall negative CM, these items exist and erode the business profitability.

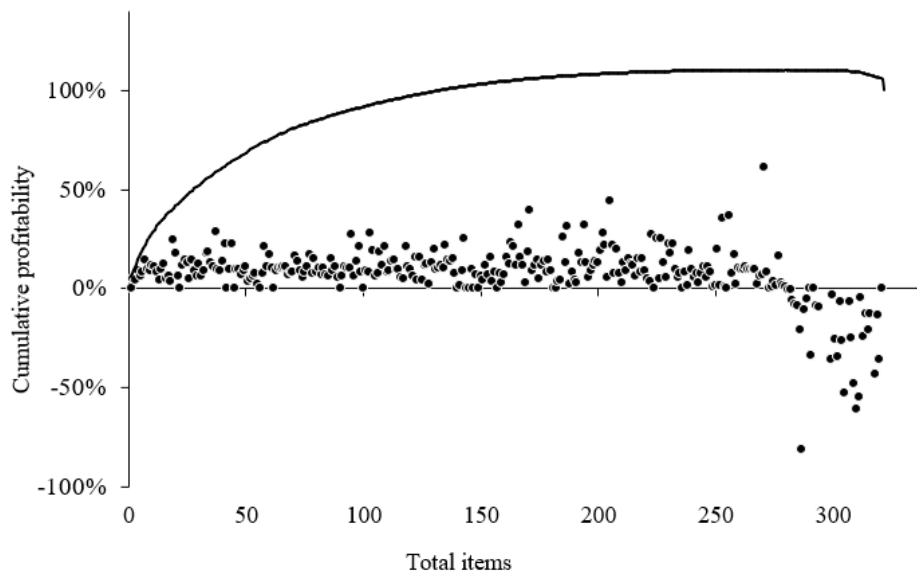


Figure XXII – Contribution margin per item

Source: Own elaboration

Around 11% of the items are unprofitable, on the other hand, 11% of the items represent 50% of the CM. The unprofitable items need a feasibility analysis in order to select and improve the profitability of items with higher sales potential and remove non-strategic items.

| Top/Bottom 3 Items | Gross Sales (% of total) | Contribution Margin (% of total) |
|--------------------|--------------------------|----------------------------------|
| Top Item 1 | 6,06% | 3,56% |
| Top Item 2 | 5,53% | 2,86% |
| Top Item 3 | 2,59% | 2,81% |
| Bottom Item 3 | 0,28% | -0,42% |
| Bottom Item 2 | 0,14% | -0,56% |
| Bottom Item 1 | 0,03% | -5,62% |

Table III – Top/Bottom 3 items

Source: Own elaboration

After looking to Table III we noticed that one item is responsible for a 5,62% CM loss, in fact, the number of defects reported by customers about that item largely surpasses the normal standard of defective items. The patterns of costs at the top three bottom items are high claims (sales adjustments) and excessive commercial discounts, on the other hand, the top profitable items usually only have two main costs associated: cost of sales and discounts; the same pattern as top three profitable customers.

iv. Segmentation

The segmentation was made in two different perspectives:

- Profit comparability; and
- Business strategy.

In profit comparability perspective the criteria adopted was the position of the customer in the supply chain row. As we have been already said, the company's traditional segments are:

- Retailers – The ones who sell at the final customer;
- Wholesalers – Distributors or intermediaries; and

- Others – All categories not applicable above.

At the strategic view, the customers were classified accordingly to their actual or expected sales representativeness.

- A classification – Clients with large present or expected representativeness of gross sales ($\geq 10\%$);
- B classification – Clients with solid present or expected representativeness of gross sales ($\geq 5\%$ & $< 10\%$);
- C classification – Clients with regular present or expected representativeness of gross sales ($\geq 2,5\%$ & $< 5\%$);
- D classification – Clients with residual present or expected representativeness of gross sales ($< 2,5\%$); and
- E classification – On time customers.

v. Traditional clusters analysis

As already mentioned in this work, only exist costs because exist customers or future customers (Albalaki, 2008; Noone & Griffin, 1998), so we'll analyze how customers influence total costs using profitability waterfall largest costs' items of each cluster.

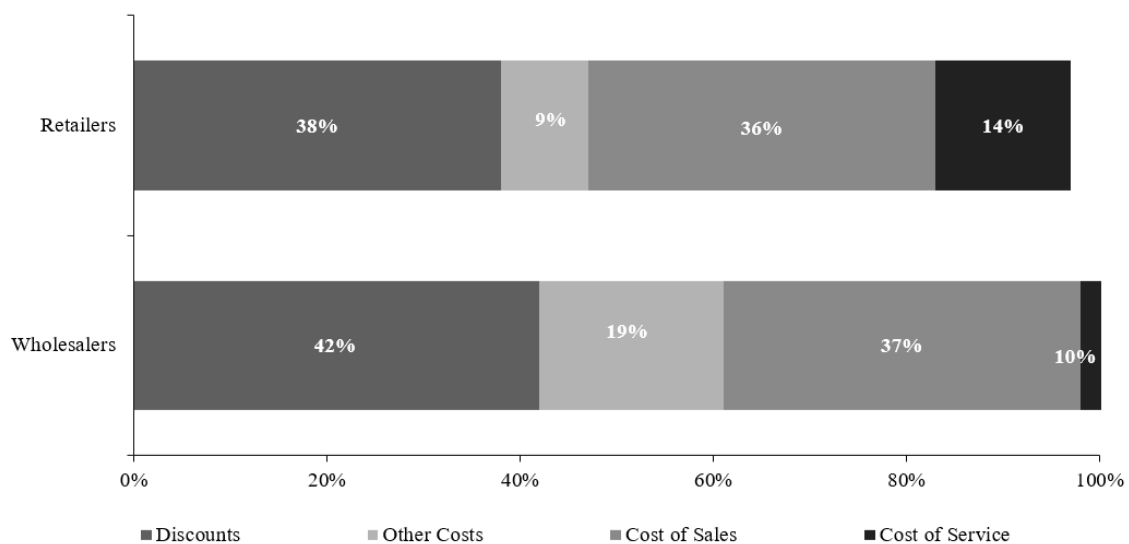


Figure XXIII – Major costs weight in gross sales of each cluster

Source: Own elaboration

As shown in Figure XXIII, the total costs sum of retailers is 97%, the rest is contribution margin, and the wholesalers' total costs sum 108%, it means the costs are above the gross

sales in 8%. The most relevant differences between both segments are Discounts, Cost of service, and Other costs.

Before went out to the costs' analysis, we will perceive what is the position of customers on gross sales that generates more or less profitable.

- Retailers

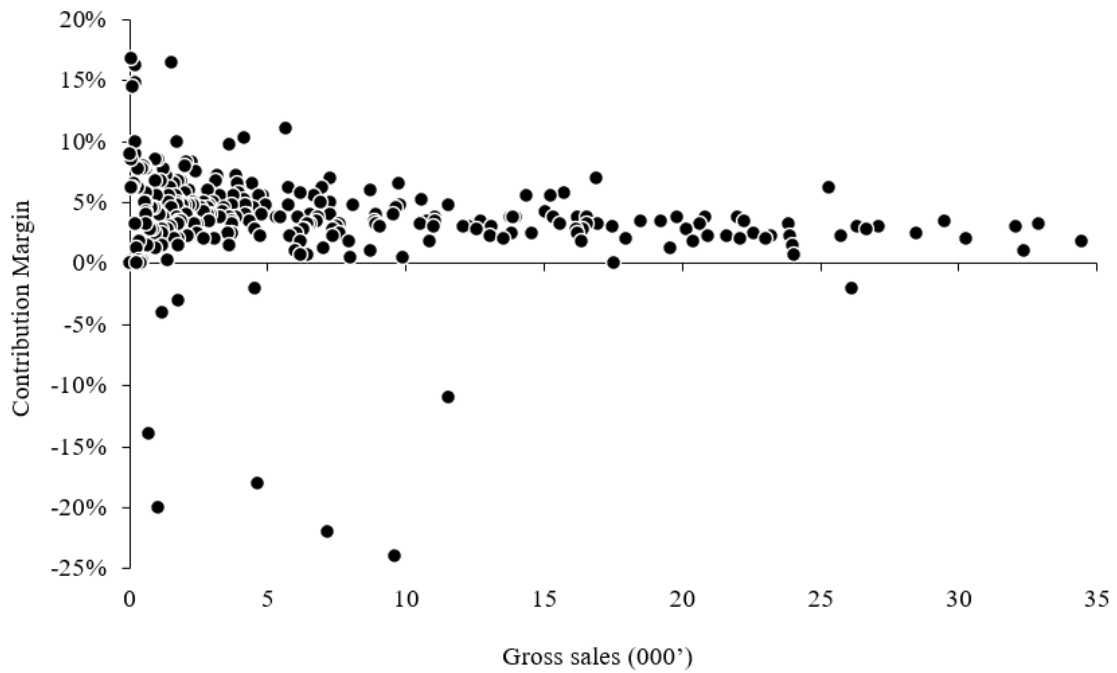


Figure XXIV – Retailers gross sales Vs. Contribution margin representation

Source: Own elaboration

Retailers have a weighted average contribution margin of 4%. There are a bunch of customers that have some influence on the average because of their sales representativeness, despite being all with gross sales under 30 000. Here, the customers, at the same volume of sales, theoretically, shouldn't be at different level of profitability because they're on the same position at supply chain row.

- Wholesalers

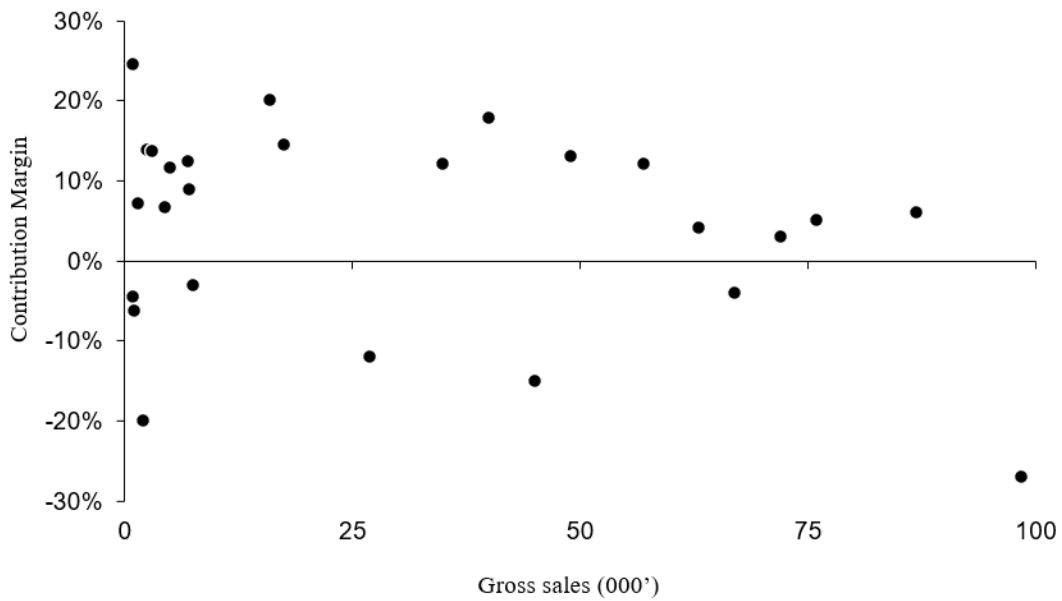


Figure XXV – Wholesalers gross sales Vs. Contribution margin representation

Source: Own elaboration

In the wholesalers' graph is obvious that one customer has a relatively high influence on the weighted average margin of -8%. The trend of margin looks to decrease as we increase gross sales. This segment has a big issue, the largest customer was incredibly unprofitable.

- Others

Because of the multiplicity of characteristics and low relevance at gross sales of this cluster, the analysis at others' customers will not be done.

vi. Commercial discounts

Commercial discount is the biggest cost slice of gross sales, the analysis will be done comparing each customer commercial discount with the supposed discount to that sales volume, for both segments.

- Retailers

The retailers have a lower commercial discount than wholesalers, mainly because they involve more cost to serve because of their characteristics.

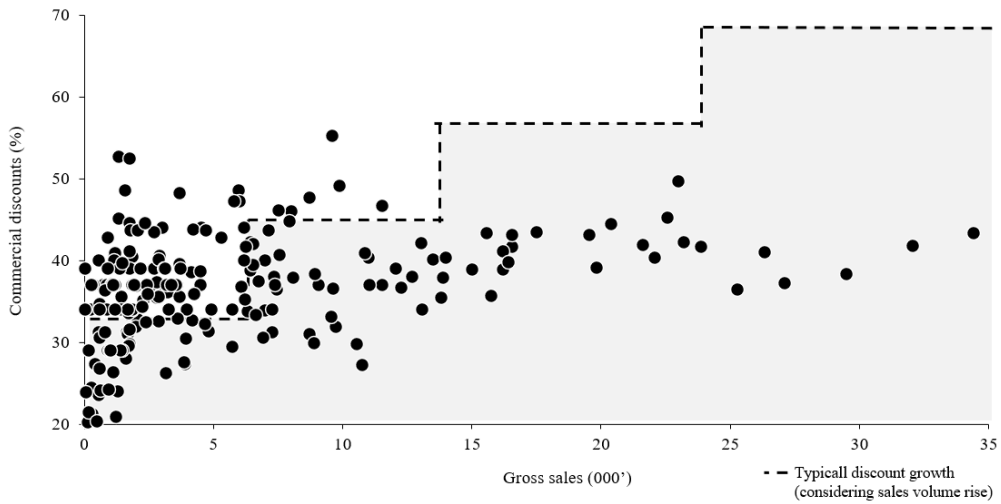


Figure XXVI – Retailers commercial discounts applied Vs. Potential incentives by sales volume

Source: Own elaboration

As we can figure out, there are a lot of customers out of the “stairs”, that means the commercial discounts policies aren’t being accomplished in the lower sales.

- Wholesalers

The wholesalers, because they are positioned more on the upstream of supply chain row need to get a bigger incentive. The average commercial discount in this cluster is 42%.

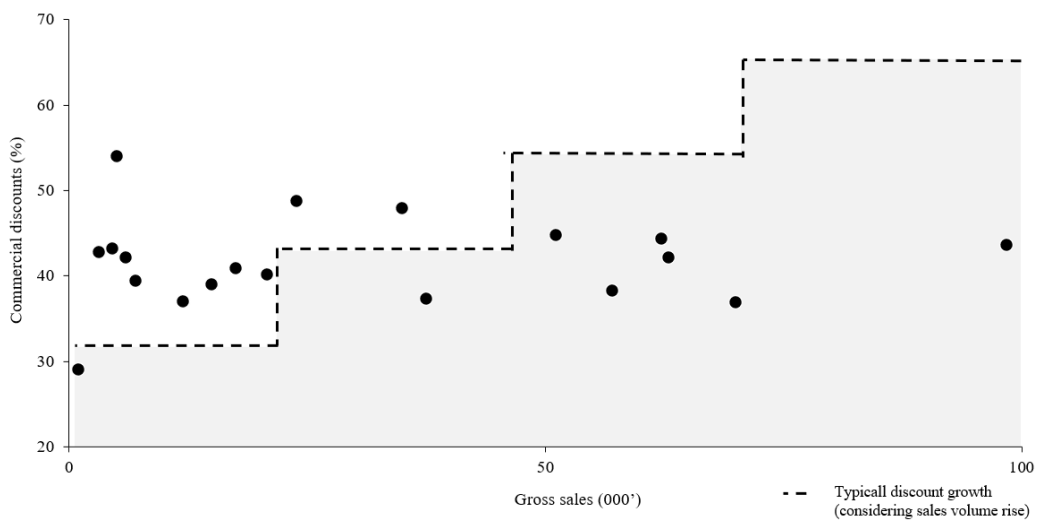


Figure XXVII – Wholesalers commercial discounts applied Vs. Potential incentives by sales volume

Source: Own elaboration

The commercial discounts policies in wholesalers are not being accomplished in at lower gross sales, as the retailers.

- General analysis

At this stage was purposed a simple methodology for controlling commercial discounts performance, as shown in Table IV.

| Gross Sales | Discount | Customers (%) | Quantity | Discount | Customers (%) |
|-------------|-----------|---------------|-----------|-----------|---------------|
| < average | > average | 16% | < average | > average | 22% |
| > average | > average | 10% | > average | > average | 4% |
| > average | < average | 10% | > average | < average | 2% |
| < average | < average | 64% | < average | < average | 72% |

Table IV – Commercial discount control panel

Source: Own elaboration

We achieved that a high percentage of customers with gross sales or quantity below-average had access to above-average commercial discounts. The company should assess these customers to ensure they are getting the proper commercial discount.

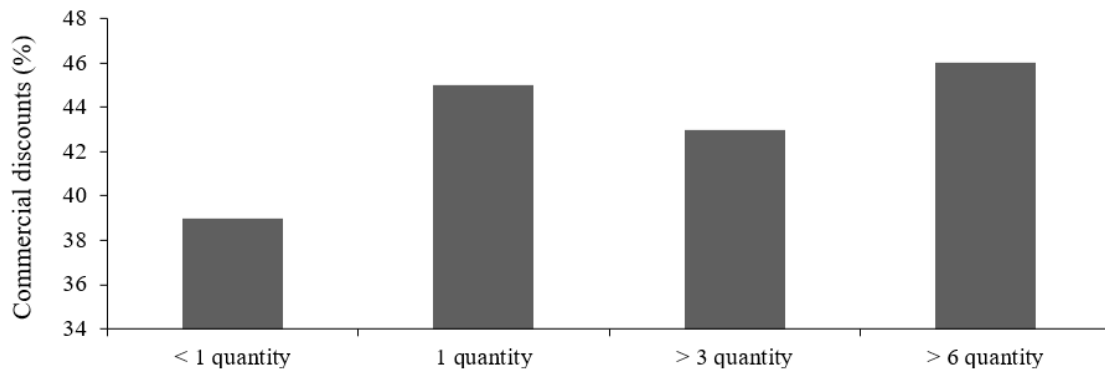


Figure XXVIII – Commercial discount per quantity purchased

Source: Own elaboration

When we analyze the minimum commercial discount applied by quantity purchased, we find out that orders superior to three quantities (excluded more than 6 quantities) have an inferior minimum discount than orders of one to three quantities. After meeting with commercial and marketing department, we find out that all discounts applied was due to

one experimental marketing campaign to decrease the number of customers that bought less than one quantity.

vii. Cost of service

The cost of service is composed by marketing costs, logistic costs, and distribution costs. The most relevant cost here is the distribution cost with 9% of gross sales consumption. Marketing and logistic costs are, in part, distributed with subjective criteria, so, to resume the analysis at the most direct and effective cost, marketing and logistic costs will be excluded of analysis.

- Retailers

Retailers have a distribution cost of 14% compared to gross sales, the analysis is made in a transaction basis, comparing the cost driver (quantity) of distribution costs. If we made this analysis in a gross sales volume perspective instead of quantity perspective, or in a customer global analysis instead transactional based, the cause of high distribution costs (frequency of interactions and units volume) would remain unknown.

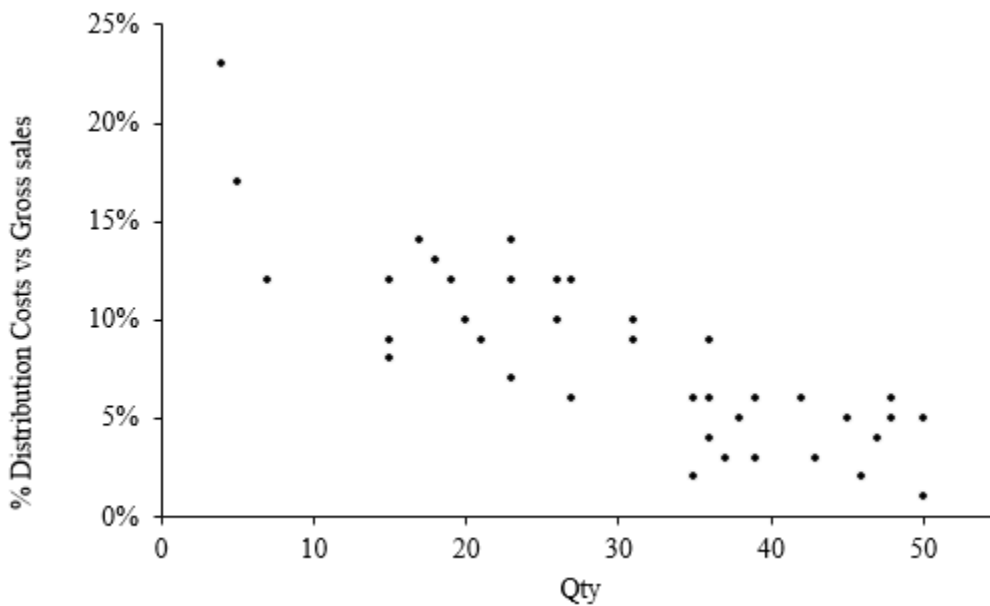


Figure XXIX – Retailers distribution cost Vs. Gross sales transaction analysis

Source: Own elaboration

In retailers exists multiple transactions with zero costs, it is policy of the company to not surcharge the distribution costs of clients with A Classification (large present or expected

representativeness of gross sales). The transactions in the Figure XXIX reveal a pattern along the quantity axe, as the quantity increases the less the relative distribution cost.

- Wholesalers

Wholesalers have a lower distribution cost than retailers, in fact, as result of the classification of the client, more efforts are made to please the customer. That policy is, sometimes, a little expensive to the company, as Figure XXX shows, low quantity orders and distribution costs consuming 40-55% of gross sales.

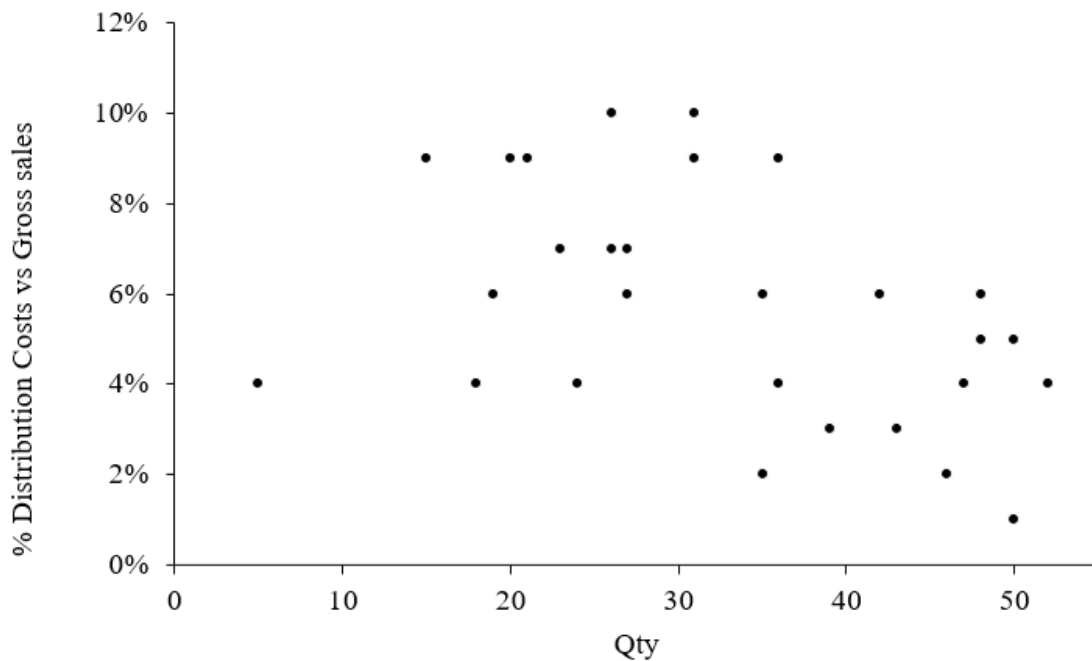


Figure XXX – Wholesalers distribution cost Vs. Gross sales transaction analysis

Source: Own elaboration

As the retailers, the distribution costs in this cluster are surcharged only for customers with a classification different than “A”.

viii. Bonus, Cash Discounts and Other Costs

We cannot segment bonus because they are only awarded in special situations arising from negotiations.

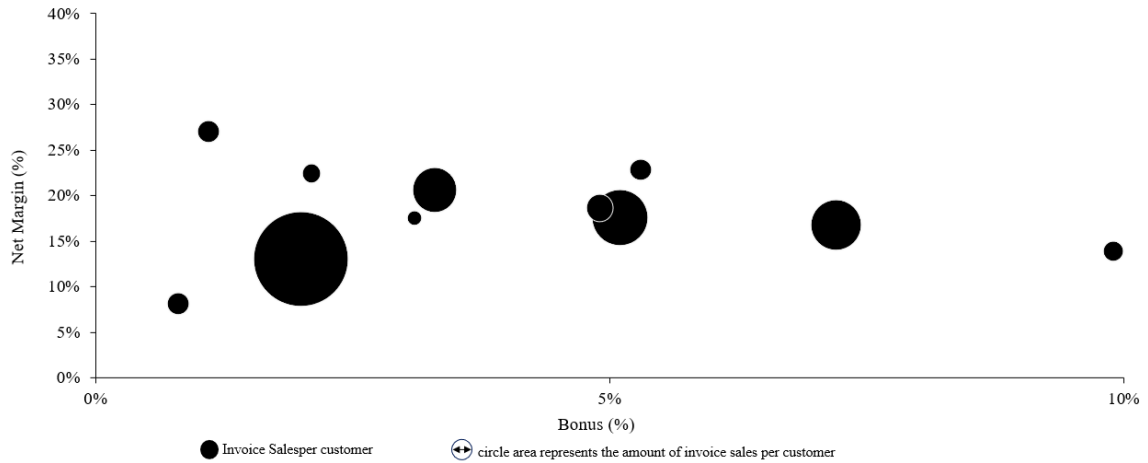


Figure XXXI – Bonus per sales and net margin

Source: Own elaboration

There is no correlation between net margin and bonus conceded to customers. An assessment plan to each bonus conceded is not necessary in this case because of their relatively low amount, but it is necessary to verify why bonus above 5% are conceded especially when the customer sales are low. At cash discounts the situation is similar, only a few situations give a customer access to a cash discount, usually a prompt payment.

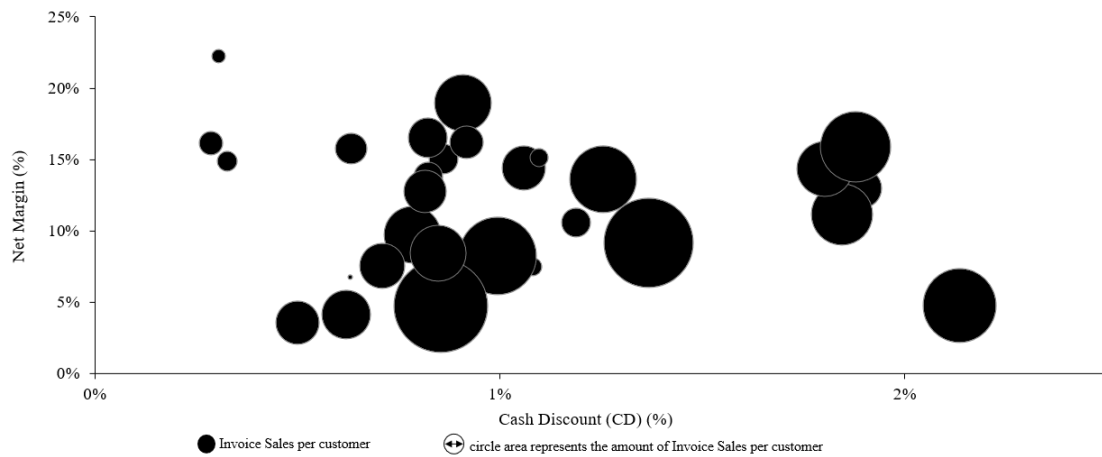


Figure XXXII – Cash discount per sales and net margin

Source: Own elaboration

The conclusions about Figure XXXII are simple: there is no correlation between net margin and cash discounts; There is also no correlations between the amount of invoice sales per customer and cash discount. The main concern about Figure XXXII analysis is that probably there is no minimum invoice sale value to get access to cash discount,

granting a cash discount to smaller customers only erodes CM because a shorter payment term at smaller order do not have material impact in company treasure. The Other Costs represent 12% of retailers and 19% of wholesalers gross sales, these costs are diversified and because of their singular irrelevance, the benefit taken of the analysis would be residual, so we will not include Other Costs' analysis in this work.

ix. Strategic actions

In this section the logic it's to apply the "4 box" model proposed by Brown (2010), using the information collected at the previous analysis as guide to price and policies fixation.

In the company strategic view, the company distinguishes customers by classification, as mentioned in section iii – Segmentation.

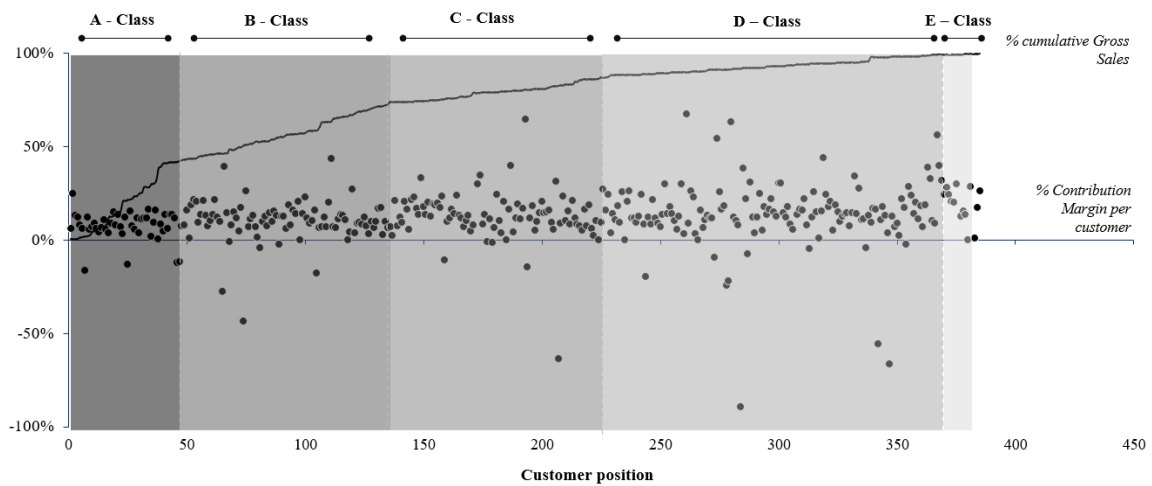


Figure XXXIII – Customer profitability by classification

Source: Own elaboration

Exists more negative contributors in customers classified as D, what is expectable, because they are low sell customers, so any extra cost could mean a larger contribution cost variation. The main problems are the negative customers classified as A and B; they are making the company lose money!

The application of "4 box" model in the strategic process will determine the actions to take to reverse unprofitable situations. To apply the model correctly, we need first to define the strategic customers and unprofitable customers.

- Strategic customers: Customers classified as A, B and C;
- Non-strategic customers: All the others customers; and

- Unprofitable customers: Customers with contribution margin >0%.
- Unprofitable and strategic customers

It's maybe the most important analysis, because customers are unprofitable and, at the same time, we want to do business with them. To improve the relation between the company and their customers, Brown (2010) proposes to transform them into profit or, at worst, move them to breakeven. There are a few customers in this type of situation, an individual analysis for each one is deserved, meanwhile, we will only present deep analysis to the top 3 unprofitable ones, and general view of the improvements for this customer classification.

Loss Maker 1 is unprofitable because of claims related to three different products. The cause of the claim is the bad conditions of the products. These products are commonly claiming target. After items profitability analysis for consecutive years, we conclude that these three products aren't profitable in none of the years. We know these three products are important for our strategic customers, and if company want to maintain and increase strategic customers sales, need to fix their products profitability. The recommendations are:

- Implement a more effective audit process on products load and discharge; and
- Create exceptions on customers' discount agreements regarding these products.

The total gains of the recommendations could ascend to 12% of the contribution margin.

Loss maker 2 unprofitability was due to excessive commercial discounts, we analyze Figure XXVI and Figure XXVII and conclude that a great number of customers are surpassing the commercial discounts limit policies, including this customer. In order to improve general profitability with action on commercial discount we recommend to:

- Give to salesforce penalties on bonuses for each customer with commercial discounts above established limits, except in very special situations; and
- Establish an appropriate action plan for each customer and communicate to customers the changes in their commercial conditions.

If the company implement the recommendations above, will gain up to 27% of contribution margin.

The Loss maker 3 issue is the high cost of service, mostly because of high distribution costs. As Figure XXIX and Figure XXX evidence, higher gross sales represent lower relative distribution costs. Distribution costs should not be a reason for loss of customer profitability, to avoid these situations we suggest:

- Level the customers with above average distribution costs to the average distribution costs;
- Fixate a minimum quantity with free charges; and
- Analyze their classifications and evaluate the service model provided to them, in order to adapt and reduce cost of service to customers with low profitability.

Level the customers with above average distribution costs to the average distribution costs lead at 4% gain in contribution margin.

- Profitable and strategic customers

The company should retain this type of customer and increase their business if possible, as Brown (2010) said. To successfully accomplish the task of retain and increase their business, we recommend the following action:

- Reinforce the communications with the customers, visiting or calling them more frequently;
- Reinforce service level provided, with focus on the marketing communication to also attract new customers; and
- Explore all the client potential, if necessary, using commercial discounts as tool to incentivize the customer to increase sales, always on the preestablished limits.

The contributes of the recommendations mentioned could affect the contribution margin volume in a positive way.

- Unprofitable and non-strategic customers

At non-strategic and profitable customers, sales volumes and contribution needs to be replaced, with increasing of selling prices and with no effort spent developing these

customers (Brown, 2010). This type of customer has more pragmatic recommendations because they are out of the company focus, as follows:

- Identify customers with lower volume of sales and review their discount conditions;
- Provide very low service level;
- Analyze the mix of items purchased by these customers, redirecting their sales to more profitable items;
- Assessing and deciding whether to continue or stop selling unprofitable items, if they exist; and
- Assess and decide whether to serve or stop serving these customers.

The non-strategic customers who aren't profitable are easy to eliminate but, if the company pretends to have business relations with non-strategic customers, it's because the gains are sufficiently attractive and useful. The gains with the negative clients should be brought to the average, taking that action leads at 1% gain in contribution margin.

- Profitable and non-strategic customers

At these customers the orders and service levels should be regularly monitored to ensure nothing changes that causes them to become non-profitable customers (Brown, 2010). Although these customers are not strategic, they give a positive contribute to the organization, so we prefer to adopt the recommendations of "Profitable and strategic customers", although, in a conservative way, because the focus should be on strategic customers.

- Traditional segments

The recommendations at traditional segments are in a anomaly corrections perspective. One useful tool to do that is comparing clusters at most relevant products and find possible inconsistencies.

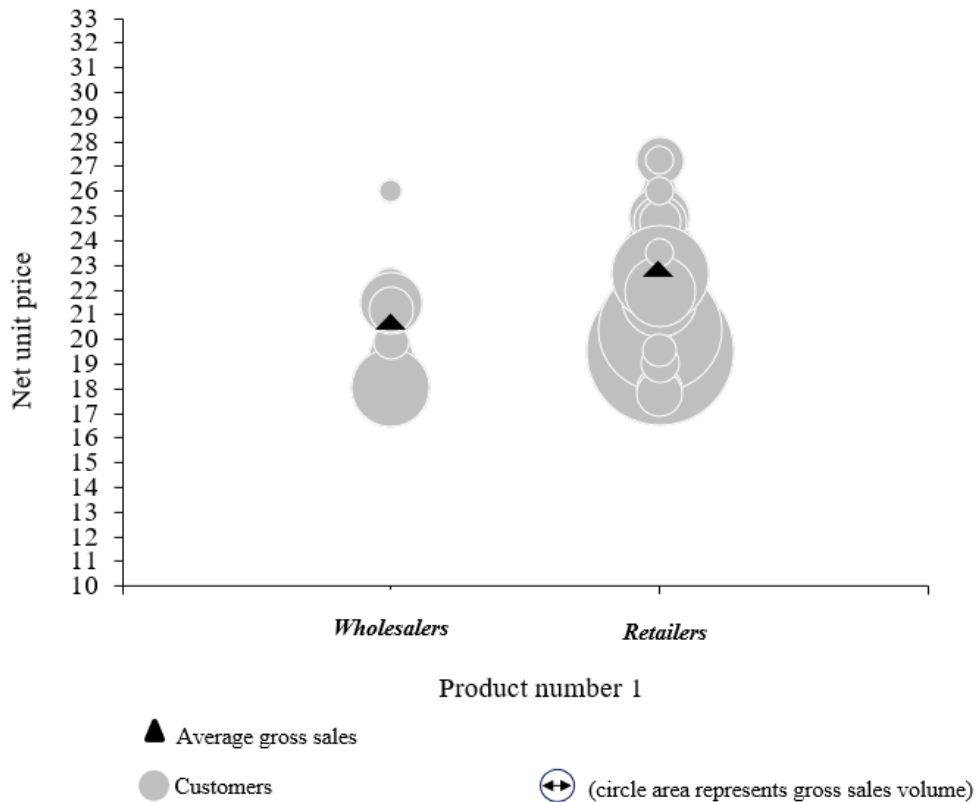


Figure XXXIV – Product number 1 transactions by cluster

Source: Own elaboration

We chose a product to analyze, as Figure XXXIV shows, retailers have a higher net unit price average, indicating that wholesalers are getting more discounts than retailers, and that is the expected. The bigger the bubble, the lower the net unit price, because the discounts are mostly applied at customers with larger sales. We noticed through Figure XXXIV that there are some smaller circles with a net price below the average, to that customers there is no reason to have that kind of special net unit price, the company should move them to a upper net unit price. For the customers with lower net sales but with an interesting sales volume, the company should try to move them to the average. With this type of analysis, we get a way to pricing every customer and ensuring the fair price for them. Moving customers with net prices lower than average in every product to the average price would result in a gain of 50% in contribution margin.

In Table V, we resume the actions to take, the basis of an action plan used to implement the methodology, with defined accountabilities and the time to do it.

| Segment | Actions | Expected impact % contribution margin |
|--|---|--|
| Unprofitable and strategic customers | Implement a more effective audit process on products load and discharge | 5% |
| Unprofitable and strategic customers | Create exceptions on customers' discount agreements regarding products with high claims | 7% |
| Unprofitable and strategic customers | Correctly execute commercial discounts policies | 27% |
| Unprofitable and strategic customers | Level the customers with above average distribution costs to the average distribution costs | 4% |
| Unprofitable and strategic customers | Fixate a minimum quantity with free charges | 2% |
| Unprofitable and non-strategic customers | Identify customers with lower volume of sales and review their discount conditions | 10% |
| Unprofitable and non-strategic customers | Analyze the mix of items purchased, redirecting their sales to more profitable items | 2% |
| Unprofitable and non-strategic customers | Stop serving recurrent unprofitable customers | 4% |
| Unprofitable and non-strategic customers | Stop selling them unprofitable items | 1% |
| Traditional segments | Move small sales customers with lower net price than average to their fair position | 15% |
| Traditional segments | Move to average all customers with lower net unit price and higher average sales volume | 35% |

Table V – Action recommendations summary

Source: Own elaboration

The gains are individual and not cumulative. Most of the gains are in the traditional segment analysis, it's because they have a general recommendation that covers a part of the remaining recommendations. The traditional segments analysis is fine to identify abnormal situations in individual customers and using the remain analysis, in an individual base, to identify the causes of each abnormal situation and act on it. The remaining recommendations are the most appropriated to integrate into the company strategy, acting not accordingly to the most profitable action at the time but accordingly to the company strategy, evens if it means lose money now, with the expectation of future return.

CONCLUSION

This work presents a methodology to measure and increase the customer profitability. The theoretical chapters give an overview about the accounting systems to measure the customer profitability, highlighting the main tools to apply in the analysis. It is also presented the main CRM models and concepts, and the logics of pricing and real value to the customer (perceived value). Further, the application model is supported on a case study of Benelux, a subsidiary (sale unit) of a Portuguese multinational manufacturing company. The methodology started with a profitability waterfall, to state the main profits and costs lines, with further drill down by customer or group of customers (the company defined the clusters using the distribution channel role of the customers). The transactional data was collected directly from the company system (BaaN), being complemented by costs drivers defined by the company, mainly for the logistic activity (the core of the sale unit under scope). The analysis was effective to identify the causes of unprofitable customers and to identify possible opportunities to increase the general profits. Levelling techniques have been applied to calculate the opportunities value.

This case study involved 2 meetings, with the country manager, the sales and marketing global director, the business controller and the CFO, one for preparing and validating the assumptions used in the model and the global outlook and the final one to discuss the recommendations. Additionally, several other organization members were involved at the process, mainly for data collecting. The major challenge of the study was data sourcing and data validation; the necessary data to realize the analysis was scattered across multiple companies and it was necessary to manually integrate and validate the data.

The company operates in a competitive sector – flooring - with pricing transparency and was facing a non-profitable situation. We found across multiple analysis that a small number of customers was representative of a large volume of the profits. Individual analysis exposed one customer largely unprofitable, the most profitable customers cost structure was very simple, with only two cost lines; on the other hand, the most unprofitable customers cost structure had multiple cost lines. The segmentation and the cluster frame allowed a deeper analysis, leading to the identification and quantification of potential gains through the application of massive policies, as commercial discounts leveling technique. Pricing components analysis brought useful information about the commercial policy execution: commercial discount policies were not being respected (several customers were having discounts above what is allowed by company and the same

situation was happening with other discounts), this discretionary commercial execution was causing significant losses. Finally, the application of the Four Box Model leads to several action recommendations that could possibly increase the overall customer profitability.

The success in implementing the recommendations will depend on the actions to-do list, with clear objectives, clear responsables and on the frequency of the follow up reporting. The opportunities to improve customers and organization profitability were identified, presented and discussed with all the high top managers. The overall reaction was very positive with this case study and the to-do list has been validated and allocated for a further close follow up.

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