ISCTE ⬡ Business School
Instituto Universitário de Lisboa

MARKETING PERSONA FORMULATION AND CONTENT STRATEGY ANALYSIS FOR PHC SOFTWARE, SA

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Project submitted as partial requirement for the conferral of

Master in International Management

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September 2016

ISCTE ◇ Business School
Instituto Universitário de Lisboa

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Acknowledgements

Abstract

The customer's role has grown in importance through the years. In the current technological and information age, it is crucial for companies to understand the customer's needs and motives, as well as ways to attract new customers (Derunova and Semenov, 2013).

In this paper, the persona tool is created for each of the PHC Software SaaS Products, PHC Business FX, PHC Billing FX and the PHC POS FX. Personas are fictitious representations embodying behaviours, pain points, goals and characteristics of real customers or target audiences (Junior and Filgueiras, 2005) that can be used as a tool to better understand customers and from there develop strategies.

After the analysis of the main target audiences for these products, this paper then, elaborates an analysis of the correspondent content marketing strategy. By analysing the current content and its communication channels, this paper aims to find gaps in the current strategy with the use of the persona's tool and provide recommendations on how the company might minimize its distance to the customers and further improve its relationship.

Keywords: Marketing; Personas; Marketing Content; PHC Software.

JEL Classification System: M15; M31

Resumo

O papel do consumidor tem vindo a ganhar importância ao longo dos anos. No atual panorama tecnológico e informacional, compreender as atuais necessidades e motivações do consumidor, assim como, novas formas de atrair novos clientes é determinante para as empresas (Derunova e Semenov, 2013).

Neste trabalho, a ferramenta 'Persona' é criada para cada um dos produtos SaaS da PHC Software: PHC Business FX, PHC Billing FX e o PHC POS FX. Personas são representações ficcionais que incorporam os comportamentos, adversidades, objetivos e características de consumidores reais ou públicos alvo (Junior e Filgueiras, 2005), que podem ser utilizados como uma ferramenta para melhor compreender os consumidores e a partir dai desenvolver estratégias.

Após a análise do público-alvo destes produtos, é elaborada uma analise à correspondente estratégia de conteúdo da empresa. Ao analisar o conteúdo atual e os meios de comunicação utilizados, este trabalho tem por objetivo encontrar lacunas na atual estratégia, através do uso de personas, e fornecer recomendações de como a empresa poderá minimizar a distância e otimizar as relações para com os atuais consumidores e público-alvo.

Palavras-Chave: Marketing; Personas; Conteúdo de Marketing; PHC Software.
Sistema de Classificação JEL: M15; M31

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Executive Summary

The increasing pace of technologic progression, forces companies to adapt and innovate to maintain their position, especially in the technological sector. The world is drowning in content and information. As marketers and companies struggle for customer attention, content is globally moving in milliseconds entertaining consumers (Brenner, 2013).

Persona is a type of user modelling technique, more commonly used by high-tech companies, that represents a target audience that shares the same pain points, goals and characteristics. It is a fictitious representation of real consumers in which a picture, name and life story is included to 'bring the persona to life' (Miaskiewicz and Kozar, 2011).

In this paper, personas for each SaaS product of PHC Software SA are drawn which, if correctly used, can allow a better understanding of their own customers and potential consumers, by the company.

The identification of the different components of personas is done through the use of different methods each complementing the other, from the unpredictable assumptions to quantitative and qualitative research, in order to gain better insight.

Moreover, with the persona's tool in consideration, a gap analysis of the company's content strategy is made. From the type of content used, to the level of engagement made through the online communication channels, the website or social media. The goal is to understand which type of content and social media can be improved in accordance to the what the target audience is looking for.

With this paper, it is expected that PHC will be able to create and improve the customer relationship, engagement and retention, by having a more targeted approach to the consumer and the market.

I. Contextualisation

The notion of high technology is an ambiguous one. There are several variations of definitions for this concept. This term is usually connected with something new and advanced (Gronhaug, and Moller, 2005).

The Organisation for Economic Co-operation and Development (OECD) classifies high tech products and services as those whose development has demanded the highest R&D investments.

The European Network for Small and Medium Enterprises (SME) Research (2002) classifies enterprises as high-tech if they meet one of the following three criteria: high innovative and/or R&D intensive and/or using sophisticated and complex production technologies.

According to Moriarty and Kosnik (1989) and Mohr *et al.*, (2010) in order for a company to be classified as high-tech, it must have characteristics such as Market Uncertainty, Technology Uncertainty and Competitive Volatility.

Other researchers define high technology based on the input used in the manufacturing of the end product, either human resources, technology or machinery. Output used definitions are also plausible where high technology companies are characterised based on the services or products offered (Yadav, *et al.*, 2006).

Technological products and services create a natural complementary system. As the number of users of a given technology increases, additional complementary technology becomes available as well as substitute products or services, hence raising exponentially the value of the overall system for both existing and potential users. (Yadav, *et al.*, 2006). This industry is seen today as the main booster of the worldwide economy and considered a decisive factor of country influence.

Software belongs to the category of information goods that can be delivered and sold either in material or in an intangible form through the internet (Ojala,2013). It can be divided in Systems Software, including the operating system and all utilities that allow the computer to function and Applications Software where all programs used by users are inserted.

The worldwide software revenue has increased 4.8 %, totalling $407.3 billion in 2013, as can be seen in Table 1 (Gartner Inc.,2014)

Rank 2013	Rank 2012	Vendor	2013 Revenue (billion)	2012 Revenue (billion)	2012-2013 Growth Rate (%)
1	1	Microsoft	65.7	62.0	6.0
2	3	Oracle	29.6	28.7	3.4
3	2	IBM	29.1	28.7	1.4
4	4	SAP	18.5	16.9	9.5
5	5	Symantec	6.4	6.4	-0.8
6	6	EMC	5.6	5.4	4.9
7	7	HP	4.9	5.0	-2.7
8	9	VMware	4.8	4.2	14.1
9	8	CA Technologies	4.2	4.3	-2.6
10	12	Salesforce.com	3.8	2.9	33.3
		Others	234.6	224.0	4.7
		Total	407.3	388.5	4.8

Table 1. Top 10 Worldwide Software Vendors, Worldwide, 2012-2013 (Billions of Dollars)
Source: Gartner (March 2014)

Microsoft continues to be the world leading Software Company, followed by Oracle and IBM. The United States is the country with the highest share of the most influential and successful software companies. In Europe these type of firms are generally small sized and exclusively concentrated in serving their home markets (Alajoutsijarvi, Mannermaa, and Tikkanen,2000).

In Portugal, the technology sector (ITC) is analysed in €12.804 Million (2012), representing 6 % of the GDP (Informa D&B, 2014). Nevertheless, the biggest slice of the revenue results is from telecommunication enterprises.

Position	Company	Turnover 2013 (Million)
1	NOVABASE	23
2	IBM	17
3	BIZDIRECT	16
4	EXICTOS	14.8
5	REDITUS	14.4
6	JP SÁ COUTO	13
7	PRIMAVERA BSS	12.9
8	CPCDI	12.1

Table 2 - Ranking of the biggest software companies in Portugal by turnover (Sousa,2014)

In the Portuguese IT sector, the 200 biggest companies reported a €4.9 billion turnover in 2013,28% being from overseas, a result that represents a 7% growth compared to 2012 (Sousa, 2014). In Table 2, NOVABASE is seen as the biggest company in terms of software revenue, followed by IBM and BIZDIRECT.

The software market in Portugal is composed mainly by SMEs. These, are the main type of general technological companies in Portugal, with an estimated growth of 3.2 for each insolvency (Informa D&B, 2014). The main export markets for Portuguese high-tech companies are Spain, Holland, Germany and China (Informa D&B, 2014).

In the words of Joanne Correia, Vice President of Gartner, the software market has been changing through the years and the internet of things (IoT) is revolutionising businesses. Presently, the cloud is the main intervenient in this change as software vendors acquire and deliver applications and technology to support the cloud movement.

The cloud is predominant in a wide variety of businesses. Ojala (2013) considers cloud computing to cover not only software applications delivered through the internet, but also the system software in which data centres provide these services.

A Software-as-a-Service (SaaS) provider can potentially eliminate the maintenance and implementations of software applications. Here, the customer can access the software online instead of permanently installing on their computers. (Ojala,2013)

The up-front cost reduction, the flexibility and mobility, and the periodically updated anti-virus and security monitoring are leading SaaS to surpass the traditional software (Fan, Kumar, and Whinston, 2009)

However, this type of products is still seen with concern and scepticism due to different features from the traditional software. Plus, SaaS create major uncertainties related to the data storage in a public cloud server and the necessity for a reliable internet connection (Ojala, 2013).

II. Context of the issue

This project was developed in cooperation with PHC Software Portugal, a software company that caters mainly to small and medium enterprises, helping them increase their productivity and performance through their products.

The main goal is the creation of Personas, a fictional characterisation of real buyers, based on real data, with common characteristics and goals (Kusinitz, 2014), and analysis of the Marketing Content for each of the PHC FX Products.

This necessity arises due to the novelty of the PHC FX, a SaaS that compiles a set of products with distinct settings and functions with the possibility of complementing one another. This allows companies to choose the appropriate product for the required needs. Having not yet attained the intended results, PHC believes there is the need for a more focused approach towards the products and potential clients.

The personas will serve as a guide to the design team of PHC FX and as support to the formulation of marketing strategies mainly of digital purpose.

The PHC FX products to be analysed are: PHC POS FX, PHC Business FX and PHC Billing FX. For each of these products there will be the creation of five personas.

Each of these products has specific marketing content already developed that will be further analysed after each persona's creation. The personas will give insights on the type of content that best suits the audience.

Hence, existing problems/conflicts between each component will be identified as well as certain matters that require posteriori solution for additional reformulation.

The current content comprises of videos, webinars, infographics, product reviews and feedback by current customers, research and original data, articles, slideshare presentations, cartoons, social media (Facebook, Twitter and LinkedIn), among others.

The company believes the PHC FX products have a complex portfolio, possibly making it a challenge for customer to understand all features for each of the products.

Therefore, this project will allow PHC to know more about their customers for each product and adapt its content to fit customer's needs. Plus, it will help the company achieve the intended objectives and increase focus on their target audience.

III. Literature Review

3.1 Introduction

Nowadays, with the pace of technological progression, the level of insight from businesses on customers, competition and persons of interest lead to a large amount of pressure on all parties. To understand and know the customer, companies procure several tools, techniques and strategies, to later implement the best actions for attaining and engaging the target audience.

In the first part of this project, there is a theoretical framework in which the foundation of the following sections is shaped.

Initially, a differentiation of the field of marketing in Business-to-Business (B2B) Market from the Business-to-Consumer (B2C) is set; and afterwards the difference from the high technological sector to the the low technological sector. Here, in this last section, the marketing challenges and characteristics are mentioned.

Next, the main themes are approached. Primarily, personas are defined and characterised, afterwards, arguments against and in favour are discussed, and finally the role of personas in Marketing is analysed. To conclude, the marketing content definition, importance and organisational goals are addressed.

3.2 Marketing in the High-Technology Sector

Marketing is a discipline that analyses customers, competitors and industry trends to formulate an overall understanding of the market (Pruitt & Adlin, 2006).

B2B Marketing	B2C Marketing
✓ Relationship driven	✓ Product driven
✓ Maximise the value of the relationship	✓ Maximise the value of the transaction
✓ Small, focused target market	✓ Large target market
✓ Multi-step buying process, longer sales cycle	✓ Single step buying process, shorter sales cycle
✓ Brand identity created on personal relationship	✓ Brand identity created through repetition and imagery
✓ Educational and awareness building activities	✓ Merchandising and point of purchase activities
✓ Rational buying decision based on business value	✓ Emotional buying decision based on status, desire, or price

Table 3- Difference between B2B and B2C Marketing (Wall, 2012)

As can be seen in Table 3, marketing methodologies differ from Business-to-Consumer (B2C) to Business-to-Business (B2B) markets. In this paper, there will be a focus on B2B Marketing strategies and approaches.

Marketing in the high-technological sector has characteristics that differ from the low-technological markets (Moriarty and Kosnik, 1989). With the current evolution pace, a marketeer must recognise that both technological and market conditions are rapidly changing. Figure 1 shows the marketing challenges in the technological sector.
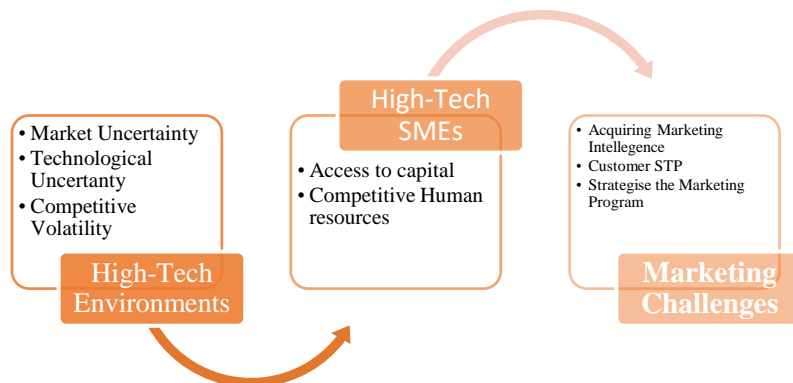
Figure 1- Marketing in the High-Tech Sector (Gliga, and Evers, 2010)

Competitive Volatility is a common characteristic that all high-tech companies face due to the fierce competition encountered in this sector. **Technology Uncertainty** is the customer's concern for not knowing whether the product or service acquired will deliver the expected outcome.

Finally, **Market Uncertainty** is the result of customer anxiety. High technological products are often difficult for the general public to understand creating the FUD factor - fear, uncertainty and doubt (Moore, 2001). This leads to some reluctance when buying certain high tech products.

Meuter et al. (2003) introduced a concept named **Technology Fatigue** that describes this problem. Technology fatigue occurs when buyers must deal with lack of information regarding a product, leading to the postponement of their purchase decisions or investments until the costs and benefits of the new technology are fully comprehended or the technology itself undergoes additional improvements.

Another challenge for marketers in high-technological markets is to surpass the knowledge gap between the customer and the seller. There must be the attention to ´translate´ the product in a language the end consumer understands. (Sarin and Mohr, 2008). The adoption of high technology products or services is a complex process for the customer, requiring deep analysis. In Figure 2 we can observe the lifecycle adoption of a new technological product or service. Here we can observe a community's acceptance of

a disruptive innovation, divided in four stages and where the concept of ´valley of death´, gap or chasm is present (Moore, 2001). The chasm is considered a critical point for both customers and enterprises. At this point, the crossing for the adoption of a technological innovation between the early adopters and the mainstream markets is necessary. Often, this crossing does not occur as technology that suits early adopters often does not work for the pragmatists and conservatives.
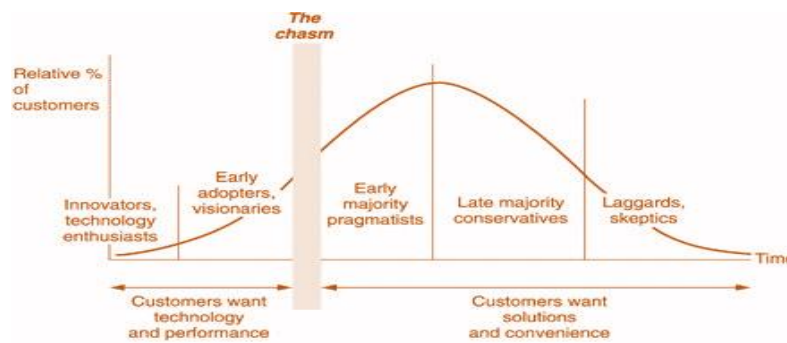
Figure 2- The high tech product adoption lifecycle (Moore, 2001)

Plus, high-tech products are characterised for having short lifecycle periods being rapidly replaced by a new version within the same brand or confronted by a new model of a competitor. This, often leads the customer to postpone the purchase in order to wait for a ´better´ product or service.

The decision to purchase a high-tech product or service requires, as previously stated, a high degree of complexity. The quantity and quality of information on the product, quality, assistance and support received and the customer's emotional connection with the brand and product may generate reluctance from the consumer. (Dovleac, and Balasescu, 2013)

Currently, the market is very saturated. Customer's preferences are shifting at an alarming rate as new products are constantly being introduced to the market. As result, marketers must have a comprehensive knowledge about the buyer, either regarding the purchasing process or his/her motives and reservations (Derunova, and Semenov, 2013).

User modelling techniques have been a common tool in marketing for many years (Moore, 2001). There are several types of user modelling techniques (Figure 3):
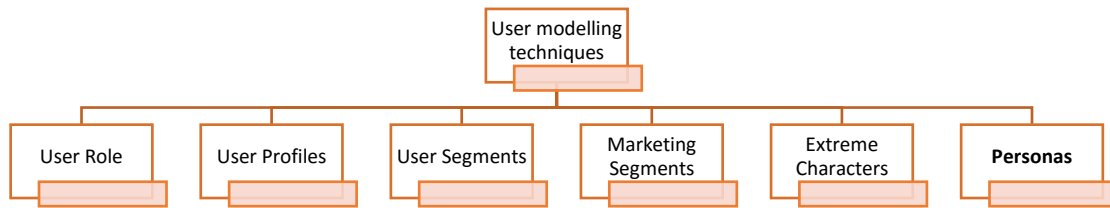
Figure 3- Different types of modelling techniques (Junior, and Filgueiras, 2005)

The **user role** and **user profile** are respectively, a definition of the customer either by the intentional interaction with the product or by the summarisation of the customer's goals and motivations. The **marketing segments** and **user segments** include the description of a group of people who will use the product. Market segmentation relies mostly on demographic data to classify users (Sinha, 2003).

On the other hand, **extreme characters** are radical personalities modelled to cover all types of customers or users.

3.3 Personas

The term ´Persona´ first appeared in 1999 in Alan Cooper's book ´*The Inmates are running the Asylum: Why High-Tech Products drive us Crazy and How to Restore the Sanity´*, presented as hypothetical archetypes of actual users. In its simplest form Cooper describes this tool's function as to create a precise description of the product or service user and his motives.

This tool was created from the necessity to embed digital products' software applications with end users' requirements and needs. Cooper argued that designers often had an erroneous idea of their target users leading to possible failure of customer retention.

Cooper (1999), defines two types of personas: primary and secondary. The primary persona is the vital focus of the design, it represents the user that must be satisfied, whereas, the secondary persona represents those whose needs are only satisfied after the primary persona's ones.

The persona concept was further developed by other authors and, today, created with different methodologies and implemented with diverse techniques, yet leading towards the same goal, understanding the behaviour pattern of the consumer.

In 2002, Pruitt & Grudin extended Cooper's technique. They refer personas as a medium of communication, a channel of information about users and work environments. In 2006,

Pruitt joined Adlin to define personas as abstractions of an aggregate of real consumers or target users who share common characteristics and needs.

Sinha (2003) argues that personas substitute the abstract and elastic user with a vibrant presence by becoming part of the design process and helping the definition of the product. It differs from previous authors by using quantitative data in its creation.

Junior & Filgueiras (2005) define personas as fictional user representations created to embody a group of users' behaviours and motivations during a project development process. All definitions above refer to this tool as used in the process of product design.

Design personas separate the market according to people's goals and behaviours in the specific standpoint of using a product. Alternatively, marketing usually segments along various dimensions and is mainly concerned with foreseeing behaviours and motives within the context of buying a product (Pruitt & Grudin, 2003).

Marketing personas, also referred as buyer personas are, therefore, examples or archetypes of actual buyers that help marketers to craft strategies to promote products to current and potential customers.

Personas are in essence, created to represent a real person describing his/her motivations, behaviour patterns and demographic characteristics representing a whole customer segment (Klishina, 2013).

Adele Revella (2015), founder of the Buyer Persona Institute and currently considered a leading expert in this tool, defines personas as a composite frame of the real people who buy, or might buy a company's product based on the learning of direct interviews with real buyers.

The persona technique shows several advantages comparing to other techniques due to the representation of a real person, encouraging the importance given by the company to the user. (Junior, and Filgueiras, 2005)

3.3.1 Characteristics and types of personas

Personas can be characterised and differentiated by three key variables (Figure 4): the source of information; the amount of detail, and the purpose for which has been constructed. (Floyd, Jones, and Twidale, 2008).

The first variable is the **source of information** used in the creation of a persona. Empirical data is attained through studies as ethnography, focus groups or surveys; whereas fictional components arise from the stereotypes or fictional creations to justify

certain aspects of a persona, for instance the use of a face to characterise the persona. The latter can be used to complement empirical data personas by giving them fictional aspects that might help authenticity.

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                    ┌──────────────┐
                    │   Personas   │
                    │  Attributes  │
                    └──────┬───────┘
          ┌────────────────┼────────────────┐
   ┌──────────────┐ ┌──────────────┐ ┌──────────────┐
   │Source of Data│ │  Detail of   │ │  Intended    │
   │              │ │ Description  │ │  Purpose     │
   └──────┬───────┘ └──────────────┘ └──────┬───────┘
          │                                 │
   ┌──────────────┐                  ┌──────────────┐
   │Empirical Data│                  │ Purpose for  │
   │              │                  │creating persona│
   └──────────────┘                  └──────────────┘
          │                                 │
   ┌──────────────┐                  ┌──────────────┐
   │  Fictional   │                  │Use of persona│
   │ Components   │                  │              │
   └──────────────┘                  └──────────────┘
                                            │
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                                     │  Method of   │
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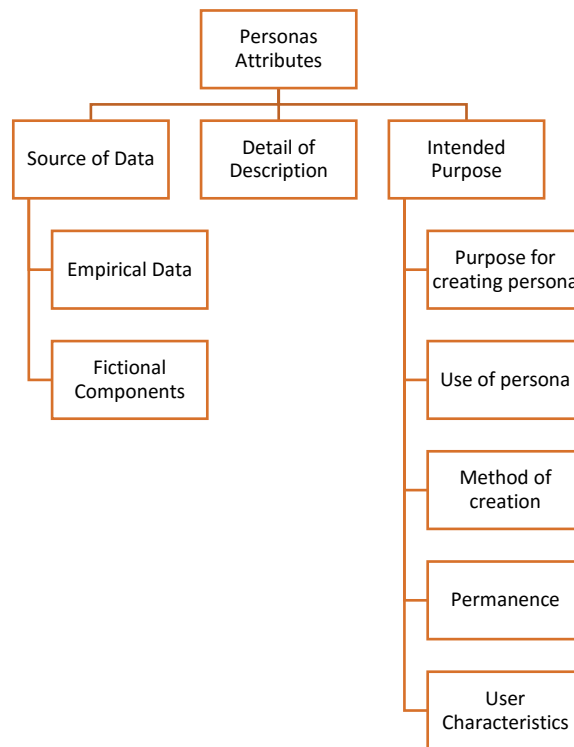
Figure 4- Personas' attributes (Floyd, Jones, and Twidale, 2008)

The **amount of detail** used in a persona's description may vary, depending on the final intent of the persona. Some argue that personas' description should not be longer than a single page, while others believe the more the merrier to have a clear idea of the end user. However, as it will be explained in the following section (section 3.3.2), when creating personas, one must be careful with the ´Curse of Dimensionality´.

The third major variable described by Floyd, Jones, and Twidale, is the **purpose** for which personas are created. This variable is complex, leading to a wide number of attributes.

The **purpose for creating a persona** is referred to the intentionality behind constructing a persona; **the use of persona** defines how and why the persona is used and applied; the way this tool is constructed is described in the **method of creation** attribute; **permanence** refers to the customer's retention; and finally the **user characteristics** attribute represents the space of customer characteristics which the persona kind covers.

Regarding types, Cooper differentiates three types of personas: Design personas, Proto-personas and Marketing personas (Ilama, 2015).

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The aim of design personas is to be remembered throughout the product development process, it emphasises on user goals, pain points and current behaviour. On the other hand, Proto-personas are not verified by data research and are used when there is limited time and money. Finally, according to Cooper (1999), marketing personas are ideal for the evaluation of the potential return on investment (ROI) of a product and what kind of customers will be receptive to certain products or content. These personas are characterised by demographic information, buyer motivations, preferences and fears, media habits, among others.

Nunes, Silva, and Abrantes, (2010) define personas as a Human-Computer Interaction tool (HCI). This connotation does not differ from the Cooper's definition of design persona; the main difference is the limitation to study a particular user group when using an object.

Another type is Ad-hoc personas, introduced by Norman in 2006. These, reflect the designers' intuitive understanding of users, they are non-empirical personas created by designers to comprise their intuitions about the user behaviour.

Ardath Albee (2015) in her book *Digital Relevance: Developing Marketing Content and Strategies that drive results* differentiates personas as: Buyer personas, Customer personas and User personas. Here, Albee (2015) differentiates types of personas according to its final use instead of the information provided.

Buyer personas are created to solve a problem or meet a goal relating a product. These are usually represented by roles; User personas are what we previously referred as design personas. Customer personas are indicated for people that are currently a customer of the product meaning that the goal of the persona's creation is to increase retention, value and loyalty.

The success of personas depend on which kind of personas are being used, how they are being used and for which purpose (Floyd, Jones and Twidale, 2008).

3.3.2 Opponents to this method

Several issues and concerns have been pointed out throughout the years against the use of this technique.

The fact that personas are fictitious characters may cause some ambiguity. Product designers often look at personas as too abstract, preferring to use the data on which they are based, developing their own conclusions (Faily, and Lyle, 2013).

According to Chapman, and Milham, (2006) the impossibility of verifying if the created personas are accurate is the most serious limitation. Problems that initially created the necessity for personas would eventually arise if failure to properly validate or maintain personas throughout the process occurs.

Other problem identified by the same authors is the '**Curse of Dimensionality'**- as the specificity of a persona increases, the proportion of the population represented decreases. Furthermore, it is argued that one cannot use scattered data points to gather a composite description relationship with a population with a probability equal to 1.0. Hence, the generalization from a specific persona to a population of interest is not possible (Chapman, and Milham, 2006).

3.3.3 Benefits of personas

Contrarily to the previous section, advantages are more common within the existing literature.

Pruitt and Adlin (2006) characterised three main advantages: first, self-centredness can be avoided and user-centeredness can be promoted; then users are increasingly complex and the use of personas can help the understanding of their needs and preferences; and finally personas can act as a proxy of customers.

The most powerful characteristic of this tool as stated by Pruitt and Grudin (2002) is the engagement it can create within a company. People are often engaged in fictional characters in movies or television programs. One of the features used in personas is pictures or images characterising the persona, creating a more realistic feeling towards this technique. Well-crafted personas can create this feeling among team members resulting in an effortless projection of the persona for current situations.

This will then increase communication within a team, leading idea's discussion and a better understanding of the customer and the product itself (Nunes,.et al 2010).

The concerns of Chapman and Millham, previously mentioned, were later addressed in 2009 by Frank Long in his work *The effectiveness of using personas in user design.* Here the author proved that personas are indeed as effective as defended by Cooper or Pruitt.

Long (2009), used student surveys, focus group feedback and students' design work to create objective evidence. One of the conclusions reached is that personas indeed increase concern and attention on the end-user or customer as well as his/her motivations, tasks and goals. Plus, personas can guide decision-making within the teams toward the consumer's needs by making those needs more explicit and easy to understand.

Also, Long's study confirmed Pruitt and Adlin's premise that personas can improve communication.

3.3.4 Personas in Marketing

This method has shifted from the IT system development where was initially applied whether by Cooper (1999) or Pruitt (2006) with focusing on design, to being applied to a wider variety of settings, from product development to marketing or business strategy

The goal of Business-to-Business (B2B) persona is to function as a tool that provides guidance and helps define the marketing programs and strategies regarding a specific market segment. Each company creates unique personas, even if in the same industry, due to different business models, values and demographics (Albee, 2014).

When marketers have insights on their buyer's expectations they know which buyers their message needs to influence and which of their solution's attributes are adequate and important for the consumer's decision (Revella,2015).

Adele Revella (2015) in her book *Buyer Personas* describes the universe of buyers divided into five categories:

1. The customer (those who consider you and chose you);
2. Those who consider you and choose a competitor;
3. Those who consider you and decide to maintain the status quo by keeping things as they were;
4. People who never considered you and choose another
5. Those who are currently considering your solution.

Personas will provide buyer insights that will help a company align their marketing strategies with the buyer's expectations. Revella, (2015) describes five rings of buyer insights: Priority Initiative, Success Factors, Perceived Barrier, Buyer's Journey; and Decision Criteria.

The **priority initiative** gives feedback on the reason why a buyer decides to buy either the competitor's products, the company's products or maintain the current situation; the **Success factors** describes the results the consumer expects from the product acquired; **perceived barriers** are the opposite of the previous insight, as it shows the marketer the reasons preventing the buyer from acquiring the company's product; the **buyer's journey** is the narrative describing the buyer path on evaluating options and settling their final choice; finally the **decision criteria** describes the compared products' attributes evaluated by the consumer.

3.4 Content Marketing

Personas are often used to support content marketing creation. Content marketing is the marketing and business process of generating and distributing valuable and captivating content to attract, acquire and engage a target audience (Pulizzi, 2014). This concept can be applied to everything that engages the customer, from newsletters to webinars, mobile apps, blogs etc., it is a soft-selling approach that moves beyond the brand promotion to the assistance or entertaining of the customer. (Korosec, 2012).

The buyer journey identification is often used in this stage. This, is the journey a person goes through as he or she becomes a buyer (Nickoaisen, 2015). Traditionally, this journey is divided in three stages: **awareness**, **consideration** and **decision**. The first stage is the realisation of a problem or the customer's needs; consideration is the stage in which the buyer is considering all possible solutions for the problem, researching and understanding it; and the final stage is the decision on a specific product or vendor (Kukesh, 2014).

Content marketing can be employed at any stage of this process, from awareness-oriented strategies to loyalty ones.

There are three mapping fundamentals in content marketing around the buying process, as we can see in Figure 5.
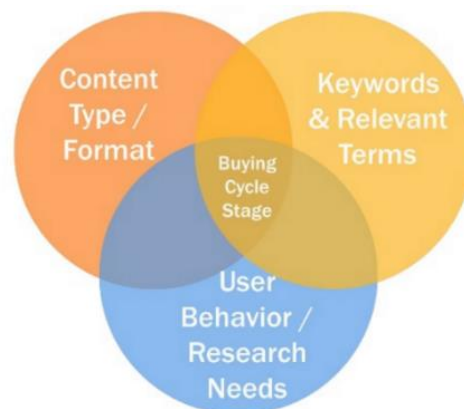

Figure 5-Three content mapping fundamentals (Kukesh, 2014).

Personas can help marketers achieve their goals in content creation by mapping content to the buying stages, optimising resources by only allocating content to the audience's preferred channels, brainstorming new content; and finally allowing the writer to understand and grasp the customers' interests quickly (Albee, 2014). If the marketer is able to find the ´sweet spot´ between the buyers needs and the solution capabilities, the goal is reached. In this ´sweet spot´ effective messaging is found between what the customer wants to hear and what the company wants to say and offer.

Companies can adjust their current messaging to the buyer persona's insights to obtain effective results and create an effective communication channel. (Gollner, 2013). A great experience from the customer can also be obtained with a great content by enhancing the relationship between the company and its target audience. Specific keywords identified to help increase the content effectiveness is another point that is crucial for the success of the content created. Finally, of course, the type of format used is very important to attract the intended attention of the target audience.

Social networks are vital to the success of content marketing strategies. They are the intermediary between the company's content and the customer. Social media marketing usually tends to focus on two main goals: brand awareness by creating activity and discussion surrounding the brand, and customer retention and satisfaction, where forums can use social channels for direct dialogues with the consumers answering to issues or questions that these might have.

On the other hand, the lead generation is often a website content marketing focus. Where, the brand is developed and can reach the desired goals, leading towards a lead conversion or purchase. (Pulizzi, 2014). According to Pullizi (2014), the essence of the content marketing strategy is the belief that if businesses deliver constant and consistent valuable information to the target audiences, these will reward the company with purchase and loyalty.

IV. PHC Software, S.A

4.1 Introduction

PHC Software is a Portuguese company that provides management software mainly for Small and Medium Enterprises (SME's) to support its business and enhance their capability of generating revenue and results

It has offices in Lisbon, Porto, Madrid, Luanda, Maputo and London. With over 160 employees it has recorded over 8 million euros in profit in 2014. PHC is structured as follow:
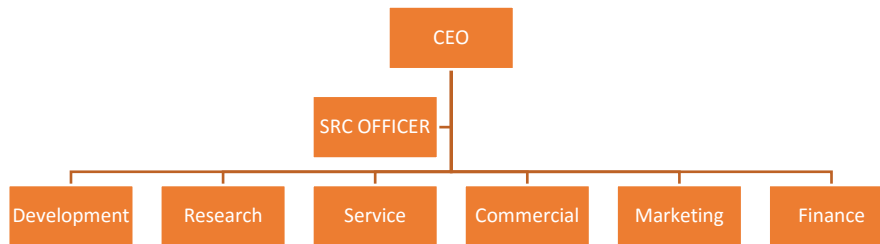

Figure 6 - PHC Software Portugal Organogram(Source: http://www.slideshare.net/PHCsoftware)

4.2 History

Ricardo Parreira, the CEO and Miguel Capelão, the Strategy, Risk & Control (SRC) Officer founded PHC Software in 1989. Initially the objective was to create a consulting company but later the project ended up being software development. At the time, the software was developed within the client company.

Only in 1997 does PHC launch the software platform CS which has been in development ever since, widening its offer and customer range, reaching 100.000 users in 2009.

The PHC CS is a management software platform designed for a wide variety of industries to help increase productivity and functionality of the companies. With over 123.000 users worldwide, this is the main product offered by the company.

This product is provided through third parties that sell it in physical stores. It includes solutions for human resources department, technical support, retail, logistics and distribution, Customer Relationship Management (CRM), construction, among others.

In 2010 the PHC FX is launched. This is a Software-as-a-Service (SaaS) model characterised for being accessed through a web browser, typically the Internet, where users log into the system.

Through PHC FX, the company provides customers with several different types of software: PHC POS FX, PHC Business FX, PHC Billing FX, PHC CRM FX, PHC

Service FX, PHC Team FX, and PHC Documents FX. Nowadays, it has over 20.000 clients.

This type of product is frequently provided on a subscription basis, with the software being located on external servers rather than on local servers. (Radcliffe, 2011)

PHC Software is nowadays, a SME ranked 73th in the 200 Biggest IT companies in Portugal, being considered a reference company in the Portuguese software industry. In 2011 was considered the SME leader by IAPMEI; in 2012 Best Cloud Service Product Award by EuroCloud and 2013, 2014 and 2015 Awarded Best Management Software by PC Guia.

4.3 Competitors

PHC has several competitors in the Portuguese market for the PHC FX product, the critical and important ones are as follow:

KeyInvoice is a one management and billing software provider, founded in 2007, it has over 10.000 users. The product can integrate CRM and Point of Sale (POS), if the correspondent features are chosen. With nearly 17.000 likes, Facebook is clearly the social media chosen to interact with customers. This product competes directly with the PHC Billing FX and indirectly with the PHC POS FX.

InvoiceXpress, was the first online invoicing Software-as-a-Service (SaaS) in Portugal. Launched in 2010, has now more than 2750 active clients. It is a service provided by Rupeal, created in 2007 by Rui Alves, today it has over 25.000 users in Portugal and abroad. InvoiceXpress is considered an example of success within the Portuguese start-ups standpoint. With over 8.000 likes on Facebook and 600 followers on Twitter, it is considered a direct competitor of PHC Billing FX.

Sage Portugal, ranked 49th in the 200 Biggest IT companies in Portugal, competes with PHC with the product Sage One. This, is characterised by being an online billing software that allow clients to issue invoices, consult current accounts, control the company's financial situation and issue sales documents efficiently. With 400 000 likes on Facebook and 1380 followers on twitter Sage Portugal competes directly with PHC Billing FX.

Primavera Business Software Solutions SA, founded in 1993 is a major competitor of PHC Software, ranked 43rd in the 200 Biggest IT companies in Portugal, it has businesses in more than 20 countries and more than 40 thousand clients. It provides, through the product Primavera Business Suite, CRM, inventory, current accounts and sales

management. With 5300 followers on LinkedIn and 20 550 likes on Facebook, the company, through its product, is a direct threat mainly to the PHC Business FX.

Moloni is a management software intended for micro, small and medium enterprises. It allows orders, purchasing and document management, client, suppliers and inventory management, billing issuance and event calendar. With 3300 likes on Facebook and 1590 followers on Twitter this product is directly competing with the PHC Business FX

Vendus is a POS APP, created in 2015 that can be accessed online by any device. It provides performance reports, billing invoice, real time access to several stores or more than one selling point, stock management and client management for micro and small companies. With the incentive of three free months for entrepreneurs, this app competes directly with the PHC POS FX product.

4.4 PHC FX

The PHC FX is a 100% online software that allows customers to experience a flexible, complete and secure system for a more economical price without having to install anything.

This product is targeted to micro and small enterprises where one to five users are able to access remotely the software.

It can be accessed in any browser (Internet Explorer, Firefox, Google Chrome, Safari etc.) and operating system (Mac, Windows or Linux). There is also a feature that allows to work either in English Spanish or Portuguese and personalise the whole software, from colours or letter type, to the main features shown on the dashboard.

At the start, the PHC FX allow users to choose the option between beginner and advanced, where for the beginner several tips and hints serve to help the user to go through the program.

Integrated with all PHC FX products comes the PHC Dashboard FX. This, allows the user to get all analysis, statistics and indicators on any mobile device interactively.

The PHC Dashboard FX has a very similar layout to the Microsoft Windows Application or Desktop.

4.4.1 The PHC Business FX

The PHC Business FX is a very complete software designed to manage all the vital departments of a company. It can provide data on clients, suppliers, stock levels, orders and billing.

The PHC business FX has all the features of the following product (in section 4.3.2) and more, allowing companies to be up to date with their business situation and get access to the entire information of the company. It is, for instance, an excellent product for a business start-up, a service or a trade company who want to manage purchases and treasury.

4.4.2 The PHC Billing FX

The PHC Billing FX is specifically designed for the electronic billing management software in order to increase operational efficiency. It was created mainly for micro enterprises and sole proprietors that need a certified software to issue invoices.

According to the Portuguese legislation, all billing software has to be properly certified by the tributary authority.

4.4.3 The PHC POS FX

The PHC POS FX was created to support companies with necessity for stock management, billing and points of sale. These can be retail stores, family own businesses, fairs or anywhere one wants to sell their products.

POS means Point of Sale and simplifying, it is a system that involves a group of networked computers that send and collect information from a central computer. In other words, it is the software that manages a company's process of selling to customers.

4.5 Selling Process

PHC Software uses its partners as a sales main channel, leaving the function of customer support to fall entirely on the PHC partner's responsibility. PHC has over 400 partners with four levels of partnership for PHC FX: Developer, sales, support and total.

When there is a new customer, the process can go in two different ways, either the client already has a preferred partner and it is allocated to him, or in case it does not have one, it is allocated by PHC itself taking into consideration the customer's location.

The sales partners only have the role of the solution pre-sale and sale. Afterwards, the client will receive support by a support partner. The support partner only collaborates if the customer wishes so. The main roles of the support partner are help with implementation, formation and after sales.

The total partner is qualified for the whole selling process from the pre-sale to the formation and customer assistance.

Somewhat different from the previous partners, the developer is a company or entrepreneur accepted by PHC to develop external applications using the PHC FX Engine system.

As we can see in figure 7, this extension leads to the integration of external applications in the PHC FX software, allowing the platform to be more adapted to the needs of each specific customer.

Figure 7- PHC Engine FX Model

However, PHC also has a Customer Success Team (CST), which assists the partners in the sales process and support, either regarding questions relating to the products or other important issues.

4.6 Content Marketing

Nowadays, customers would rather look for the brand and product information than be overwhelmed by it.78% of consumers start the buying process with a web search, and 50% turn to social media and peer reviews to help with their decision (Anderson, 2016). A study by OberCom shows that in 2014 around 57.2% of households have internet subscription in Portugal and 72.9% of individuals use the internet on a daily basis. (Cardoso et al, 2014)

Marketers have now the role of convincing the target audience that their brand is actual relevant to them. Therefore, a good content marketing strategy is of the utmost importance.

Content marketing is a broad term that is applied to a variety of subjects, from newsletters and white papers, to podcasts or blogs, virtual events such as webinars, social media posts and even consumer generated videos.

As are the majority of brands and mainly the B2B companies, PHC Software is already online. It has two main websites in Portugal: www.phc.pt where it includes all

information regarding the company in general and the product PHC CS; and another for the cloud products, the PHC FX, www.phcfx.com . It also has adapted websites for the different regions where PHC is operating in (Peru, Spain, Mozambique and Angola).

PHC is also present on several social media networks, with two accounts for Twitter and Facebook each for PHC Software and PHC FX; LinkedIn, Google + and YouTube Channel.

4.6.1 PHC FX Website

The website is the most important communication channel between the company and the general public.

The website is accessed mainly from Portugal with 77% of traffic, 19% from Spain and the rest 4% not specified. The English website also have the highest rate of traffic from Portugal, followed by USA and UK. The *homepage*, *"about phcfx"* and the *demo request page* reported the highest rate (Google Analytics Report June 2015 to August 2015).

The website contains all the announcements relevant to the public, from new product launches to new features or simply future webinars or conferences; plus, explanatory videos about the product and FAQs where questions and answers about doubts that users might have regarding the product.

Furthermore, the company's blog is a crucial source of information where posts regarding the products or general topics related to the PHC FX product, technology or cloud software in general, create a source of engagement between both company, clients and the general public.

The strategy used by PHC is to maintain a frequency of one blog post per week regarding subjects around the scope of interest of those who work in a company or have a business. Furthermore, there is not a division between products when it comes to content publication and creation, all content is in the same place with some articles referring to one product and others to another.

Finally, through the website, people can sign up for newsletters regarding products regularly publicised.

4.6.2 Social Media

On social media the PHC engagement with the public is mainly through Twitter and Facebook, having the last the highest rate of engagement. With 3.586 likes the PHC FX page is not far behind the PHC Software page with 5.654 likes. PHC FX posts on Facebook has a frequency of every one to two days.

Regarding Twitter, PHC FX has 590 followers with the last post in December 30th 2015. On LinkedIn, PHC Software has 5.229 followers yet, posts regarding the PHC FX are scarce, the last one was published in November 2015.

The YouTube channel has 76 subscribers and 53.421 total views and 77 videos that are mainly shared on the website and throughout the others social networks.

4.6.3 Type of content

The content marketing message differs from communication channel. There are four goals when transmitting a message through the internet: entertain, inspire, educate and finally convince (Bosomworth, 2014). Entertainment is related to brand awareness as inspiration creates a bond between the brand and the consumer. Education is very important especially when products are complex, finally when convinced the consumer can take the final step- purchase and the company has reaches its final goal (Bosomworth, 2014).

The Matrix, in Figure 8, shows the researcher's analysis of the current type of content message that the PHC uses and through which it has communicating channels.

The **YouTube** is mainly composed of educational, informational and customer feedback videos that are later posted on the website therefore being located between the educational side of the matrix. This channel is mainly used to store content and embed videos.

Twitter is a very common marketing tool in the B2B market. PHC FX uses this means of communication to post engagement banners, infographics, website blog articles, trends, and event promotions.

Facebook posts include a diverse type of content, from workshop, webinar and product promotion to infographics, daily trend banners and branded photos and videos.

Facebook is mainly used to promote the blog posts and share eventual banners, and the twitter is used as an extension of Facebook.

On **LinkedIn**, PHC has an account, not only for the PHC FX, but for the company in general, contrarily to the two previous social networks mentioned.

Although the content is generalised, it is mainly focused on webinars, educational advertising, case studies and generalised product promotion.

PHC has also a **Pinterest** account where solely infographics are shared and stored.

The website is the most important communication channel between PHC and the public. Therefore, the principal objective of all social media and communication channels is to attract the public to the website.
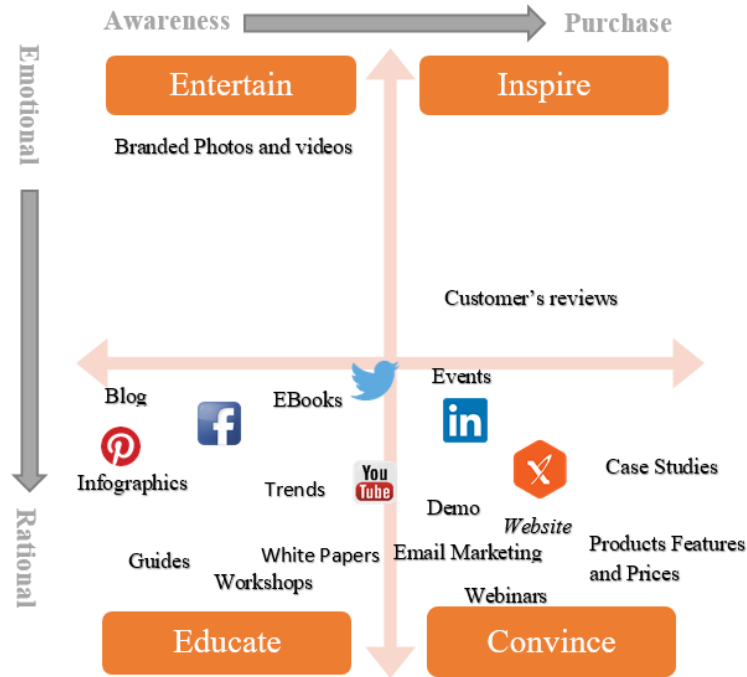
Figure 8- PHC FX's Content Marketing Matrix

Here all the information regarding products, prices and features are present. Furthermore, the demo and the videos allow the public to experiment and get to understand more about the company and the products itself.

Also present on the website is the blog, where articles posted are of considerable importance. This type of strategy is used to engage customers while educating them. Mainly explaining how, why and which PHC FX product is suitable for the reader. The person might discover necessities or issues he was unaware of having in the business that can be solved or minimised with a PHC's product.

V. Research Methodology

According to Rajasekar, Philominathan and Chinnathambi (2013), research is a logical and systematic search for knowledge by discovering new and valuable information on a specific subject.

For a better understanding of the following sections and to provide better insight on the subjects, an exploratory research is required. Literature concerning the Personas and Content Marketing was researched throughout a variety of books, scientific and non-scientific articles, white-papers and official websites and webpages.

In order to analyse the current situation of the PHC Software SA., data was collected regarding the background information of the company via the official website, online information, news releases and social media. Furthermore, information was exchanged via email (Annex 1) and through a first meeting with Ana Morais, Product Marketing Coordinator and Rita Gomes, Business Analyst at PHC.

5.1 Personas

For the persona creation, there will several stages with different methods used.

Cooper's (1999) method includes ethnography to create more detailed characters. In other words, the creation of personas should be based upon interviews and observation.

Grudin & Pruitt (2002) improved Cooper's concept by arguing that the persona process creation should entail both quantitative and qualitative information, as a crucial point in unveiling the representative user. They argue that this tool derives from a combination of several methods, from ethnographies to user's studies, interviews, observation, market research, among others.

When creating personas stereotyping has always been a concern for most researchers leading to non-precise personas, nonetheless Turner & Turner (2011) reasoned that complementing the designer's stereotype with user data and ethnographic research might lead to more efficient personas.

The creation of each of the PHC FX product's persona follows the same methodology. Both quantitative and qualitative data is collected, analysed and crossed.
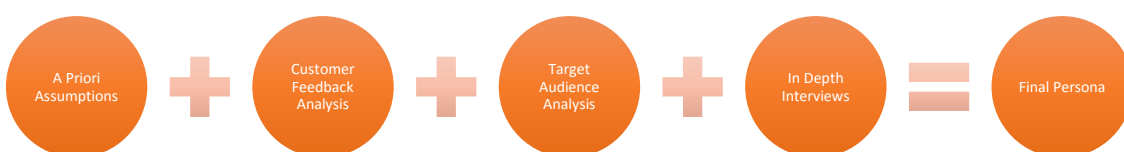

Figure 9- Persona Creation Methodology

At an initial stage, there is a deductive approach where qualitative data is extracted. This stage is divided in two steps: a priori assumptions created by the researcher and the analysis of the questionnaire presented to the PHC FX Team.

Archetypes are initially constructed from a priori assumptions, developed with support from the existent literature, the in depth analysis of the PHC FX Products and its specifications, for a better understanding of the customer itself. Competition will be also taken in consideration, as well as all information present on the company's website, social media or blogs.

The following step includes the submission of an online questionnaire to the PHC FX Team from PHC Software with the objective of understanding their opinions on the ideal buyer for each product. A total sample of 16 answers was retrieved, all characterised as valid. This questionnaire is divided into five parts. Initially it starts with two questions with a general basis regarding PHC and its customers; afterwards it is divided in four different parts each concerning a specific PHC FX Product in the following order: PHC POS FX, PHC Business FX and PHC Billing FX. (Annex 2)

This step will provide new insight to be crossed with the previous assumptions, increasing reliability and consistence.

The personas created at this stage will be crucial for the next stages and the final outcome. Because this is an initial stage where the personas created are not based on empirical data, they are still non-reliable or sustainable as a marketing tool.

The next stage includes the analysis of the customer feedback presented in the PHC FX's website (Annex 3). The testimonies were made by current customers of the products regarding the motive of choosing PHC.

The customer feedback has a sample of 30 results of which 21 refer to the PHC Business FX; 8 to the PHC Billing FX; and 1 to the PHC POS FX. This analysis includes the collection of demographic information and information regarding the impression each customer has of the product and the company.

The demographic information covers the name of the company, size, and industry; plus, name of customer, his/her position within the company, roles, age, matrimonial status and education.

The information regarding the company and the product covers how the customer knows about PHC; why the need for this kind of software, why PHC and not another competitor,

the experience the customer is looking for; his/her values and goals, the technological background and the decision drivers.

Finally, important keywords are taken from each customer's feedback in order to further complement each persona.

Subsequently, the target audience is contacted via email, social networks such as Facebook or LinkedIn and by the researcher personally, in order to answer an online questionnaire.

This questionnaire is divided in four parts, the initial part is aimed to gather socio-demographic information; the second part is to gather information on the respondents' needs, choices and preferred characteristics of this type of software; the third part focuses on the decision process and the communication channels preferred by the respondents to obtain information regarding this type of products, and lastly there are two final questions focusing on PHC Software and its products to understand if the respondent has knowledge of the PHC FX products. (Annex 4)

A total of 119 results were retrieved in this stage, from which 107 are valid and 12 null. The null results are either for lack of response, for being a large-size business or repeated answers.

A total of 43 are interested in a business software, therefore linked to the PHC Business FX; 31 for PHC Billing FX; and finally 33 for the point of sale.

The final stage includes semi-structured individual interviews for each product conducted face-to-face between the researcher and a specific individual, targeted thoroughly after the previous stages results. The structure drafted for the interview have a total of 26 questions, initiating with demographic questions such as name, age, education level, position and role. Then, there are questions regarding challenges and motivations related to the correspondent business activity.

Later, the interview inserts the opinion of the respondent regarding the software in use, the characteristics valued, the availability for a SaaS and their decision process.

The next questions focus on the online preferences of the individual, both the social media or devices used, the tech level or even how this person stays informed on technology. The last question is a brief description of the daily routine of this person, in order to help later on develop the fictional story of the persona. (Annex 5)

A total of 13 interviews are made, 4 for each persona of PHC Business FX, PHC Billing FX and for the PHC POS FX's personas and 1 for the PHC FX General persona.

5.2 Content Marketing

The methodology used on the Content Marketing creation includes three steps (Figure 10).
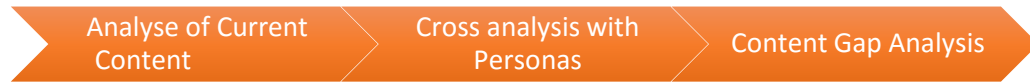

Figure 10- Content Marketing Creation Methodology

Initially, there is a qualitative research to analyse the digital presence and influence of PHC Software and mainly of the PHC FX Products.

This first step encompasses an in-depth analysis to the company's social media content, e-books, white papers, blog, webinars and website analytics.

Afterwards, this content marketing analysis is crossed with each persona created for PHC POS FX, PHC Billing FX and the PHC Business FX. Keywords, online behaviour patterns and general preferences are identified, which later can be used in content creation to improve engagement levels and customer retention.

Lastly, a content gap analysis is made with the aim of identifying which type of content is having higher engagement levels and what can be improved, as well as the main channels of communication and overall strategy.

VI. Persona Creation

6.1 Introduction

As the technological sector is growing more and more aggressive, companies need to drive their attention to their target audience needs and interests. B2B enterprises are increasing investment in marketing teams to understand customers, have a differentiation strategy, generate leads and gain competitive advantage.

The software industry has a very complex task when approaching regular customers, whom are not familiar or lack understanding with the technology being sold. For PHC Software it is no different.

Ana Morais, Product Marketing Coordinator at PHC considers that at the moment, the PHC FX has a very complex portfolio that requires concentration and focus from the end customer in order to understand all functions and features of each of the products. Therefore, Ana believes the company needs a more targeted approach for the PHC FX products, to get to know better the product's audience.

Each persona created for a PHC product will represent the needs of a cluster audience thus, a total of four personas will be created for each of the products: PHC Business FX, PHC Billing FX and PHC POS FX.

The goal is to minimise the distance between the company and the target audience, either current customers, prospect customers or even people who might not have yet considered the product. The existing amount of information will decrease and be segmented accordingly, as methods progress, initially there is far generalised information, afterwards the focus increases until finally reaching the final goal (Figure 11).
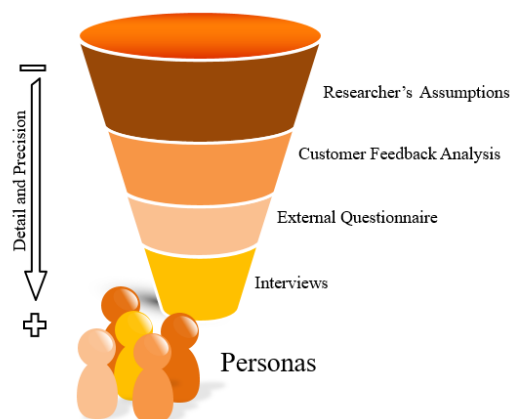

Figure 11– Level of detail and precision throughout the persona's creation process

6.2 Persona Structure

When dividing and selecting the results, by common characteristics, there are several methodologies. There is no correct way to segment users, what matters is determining users that are important for the company (Goltz, 2016).

As cited by Allan Cooper (1999, p.129) *"It is more important that a persona be precise than accurate"*. In other words, a persona does not have to correspond exactly to the customer base as it has to be precise according to its information and objective of use.

The intention when creating this tool for PHC is the use in the medium and long term. Therefore, the content involved in its creation has to be general enough for this period of time, and precise enough to be reliable, grounded and able to be used in strategic decisions.

The final persona will comprise of three sections of main information: the fictional profile, the demographic information and finally the attitudes towards the product.

The fictional profile includes a fictitious photo and a name representing the persona. Plus, a small story around the persona's personal and professional life is created, in order to give more credibility and deliver a sense of reality and personification. However, the story is not as detailed as is usually presented, to represent the highest number of prospect and current customers as possible.

On the other hand, information concerning demographic, attitudes and feelings towards the product, are based in qualitative and quantitative research. The demographic information comprises the age range, level of education and location of the persona, plus the size of the company and the work position within it.

Finally, the relationship towards the product provides information on the reasons the persona might have to choose the product, the challenges, either personal or professional, are faced with daily and the goals or objectives that she or he has.

Both the information regarding the researcher's assumptions and the PHC FX team are crossed in accordance to common characteristics. The process begins with the segmentation of the information into reasons why the buyer might choose the product in analysis. Here, there is the answer to the question: why would individuals use this product in the first place?

Afterwards, the goals the buyer aims to achieve and in which the product can be related to are selected and linked to each segment accordingly. There are three types of goals: life goals, experience goals and end goals.

Life goals are related to the person's personal life and are generally not that useful when designing personas; **Experience goals** reflect how a persona wants to feel when using the product; and **end goals** focus on what a persona could retrieve when using the product (Goodwin, 2008). This last, is generally related to professional outcomes or indirect benefits of using the product, such as more proactivity or effectiveness from the persona. Goodwin (2008) believes each persona developed should entail at least three or four goals.

Subsequently, the challenges that might appear during the choosing process that can lead to a change of mind on the purchase or simply on the product itself related to each segment already defined.

Lastly, a connection between all these characteristics clustered in each of the segments, the professional positions within a company as well as the size of the business itself. This last division is only possible if the characteristics of each segment are well defined and divergent enough to typify each job role.

6.3 Archetypes based on Assumptions

The initial stage of the personas' creation are the assumptions, where the final content cannot yet be used to formulate concrete conclusions or deliver answers.

Norman (2006) describes Ad-Hoc (Assumption) personas as not being based on any strong empirical foundation, but rather derived from intuition and experience. These type of personas are quicker and easier to formulate creating a significantly jump-start to the data-driven persona creation process (Chang,Lim and Stolterman, 2008).

Information regarding the PHC FX's clients is analysed by the researcher from several online sources: the website, social networks and blog.

The assumptions to be created are based on the researcher's readings and ideas and the analysis of the results presented by the questionnaire presented to the PHC FX Team (Annex 2.1). These, will be very superficial and incomplete as substantial lack of information resides. At this stage, fictional components such as the name, face or story are impossible to outline. Therefore, with the available means, sketches of personas are developed for further shaping in later sections until reaching the final outcome.

6.3.1 PHC Business FX

The PHC Business FX is designed to manage all the critical parts of a company, from clients to suppliers, billing to product orders and even employees' performance.

This product is in the researcher's supposition ideal for any type of business or company with departments, billing and clients to manage. Start-ups are also an ideal target, where the necessity of dealing with several details and problems of a newly business entering the market faces, and where the obvious excel sheet is not enough anymore. In addition, the simple dissatisfaction with the current software or method in use might be another reason that leads an individual to select this product.

Concerning the features of the product, the company states that the fact that this product is very complete, including a series of functions regarding billing, client management, department management, among others, is the key aspect that might lead to a competitive advantage when compared to competitors. Mobility and ease of use are considered equally important following the previous features.

Entrepreneurs and business men are assumed by the researcher to be the main target audience, with CEO, managing partners, department directors or IT manager positions.

With this type of target audience in mind, technological know-how and security issues would not be considered a critical challenge. However, due to the familiarity with the product's features and technology expertise, specific characteristics prove to be more suitable according to the user's opinion to his business and necessities, leading to more precise requests. The product might then not be able to answer the demands, triggering the customer to have reservations or end up selecting an alternative.

PHC visualises the customer as a male individual with age between 35 and 40 with an intermediate technological level. Plus, when asked about the main reasons that might lead consumers to choose competitors or not choose PHC, the answer was substantially heterogeneous. High price was considered the main reason, followed by the opinion that the PHC Business FX offer an unattractive product package and finally, the difficulty of understanding the product and the lack of information provided by the company.

The customer is, according to the PHC FX team's assumptions, when procuring this kind of product expecting ease of billing, mobility and efficiency, as outcomes in performance. Lower costs and an intuitive product are also important factors that can influence the buying process.

As a final result, the researcher believes individuals would, above all, want to witness the success of their company in terms of return on investment (ROI), the improvement of productivity and efficiency or the solution of a current issue.

As demographic information is still scarce there is the impossibility to develop further conclusions. However, regarding the attitudes towards the product there are substantial

conclusions made out from both stages of the assumptions. As result, it is possible to outline and segment the information accordingly. To create a basis for personas, an initial profile of the target audience is drawn, with the division in two different segments of information according to the individual's necessities:

Segment one - the need for a better management software due to the current one lacking functionalities or not be adequate for the company;

Segment two - the fact that the individual is initiating a business leading to procure a management software adequate to his/her needs.

Segment one is related to the necessity of a complete software to answer to clients, inventory or the different departments management in which the previous system used was inadequate.

On the other hand, individuals represented by the segment two are those who need a primary software to assist in starting a business. Usually, the reason for choosing this product is not the number of features in it, but the option of a central point of information management; and mobility, as every aspect and information of the business is available anywhere, twenty-four hours a day. Another important reason is the requirement of having a certified software by the tributary authority.

After dividing the needs accordingly, the researcher can match the goals and pain points correspondent to the personas represented in each segment.

The goals identified for segment one are the increase in efficiency, either among individuals or departments, cost reduction, better resource employment and the improvement in communication and information flow within the company.

For the segment two the persona's goals are to ensure the success of its product or service entering the market, with return on the initial investment as fast as possible and ability to have access to the company's information, as well as to solve issues from different places, anytime needed.

The challenges or pain points for segment one can be characterised by the inability to oversee and be up to what is going on inside the company and each department; and the requirement of a software that delivers every detail and feature needed to answer to the specific needs of the company.

For the persona in segment two, the pain points referred in the assumptions analysis are the low budget, the lack of time and the lack of information. The lack of information is

related to the fact that individuals initiating business do not yet have experience or even if they have had experience in the past, it is probably the first time initiating a business and having to take care of several procedures, amongst which the acquisition of a software tool. This implies some limited knowledge and experience in the software features needed and the overall buying journey.

Each segment corresponds to a persona that represents several buyers, customers and public in general. The persona in segment one is, according to assumptions, part of a SME, with several departments to manage, thus with positions of either managing partner or general director with very high expectations on the product's performance. The rough sketch of Persona one can be seen in Figure 12.
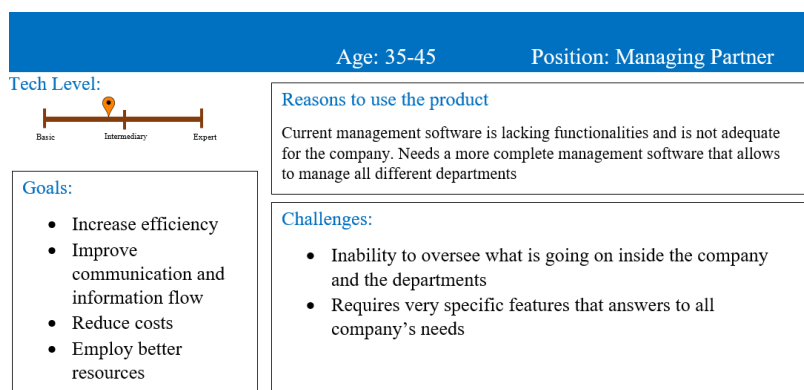

Figure 12- Rough sketch of PHC Business FX Assumption Persona

Segment two corresponds to persona two (Figure 13), representing individuals initiating business, typically a start-up where, according to assumptions CEO or managing partners take the lead with the buying process.
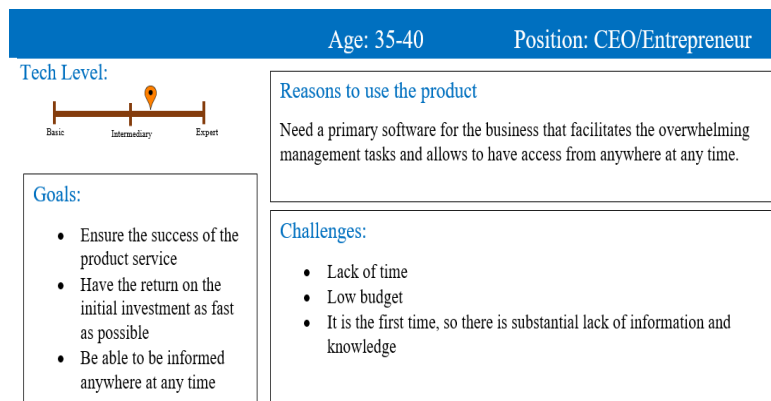

Figure 13- Rough sketch of PHC Business FX Assumption Persona

The age range of both segments is very similar, as it results from the assumptions relating to the PHC Business FX in general and not to the segmentation made. However, in further sections, this age range will most probably shift as information deepens and becomes more concise.

6.3.2 PHC Billing FX

The PHC Billing FX is a very simple and plain software used only for bill tracking, handle time and invoice customers for products and services.

This product is ideal for micro and small businesses that do not require a client portfolio or stock management.

The researcher's hypothesis is that the general reasons for individuals to choose this product are its cost, mobility, flexibility and above all being a certified product. The key product competences highlighted by the survey, made to PHC FX Team, were the number of features that the product has compared to the competition, its mobility and the speed of functioning. The fact that this product is under certification by the Portuguese Tributary Authority is the following feature brought up.

In Portugal, from January 2013, all transfers of goods and provision of services even if not requested, whatever the activity sector in question, have mandatory invoice issuing. Plus, all businesses initiating activity after this date or with over €123.000 in overall revenue have to standard audit all documents for tax purposes to the tributary authority (Portal das Finanças, 2016).

This new legislation led to the necessity of a certified system throughout the country, leading businesses to invest in better management and billing systems.

According to the PHC FX Team, the experience the customer is looking for is ease of billing, low costs and mobility. Furthermore, the researcher states small businesses look forward to reducing unnecessary costs and improving time management.

When asked about the reasons the customer might have not to choose this product, the company emphasised the high price, the unattractive product package and the lack of information provided to customers. The researcher believes that the main challenges faced by these companies are essentially the limited understanding in technology, lack of time and security concerns due to all company's information being stored in the cloud.

Owners, managing partners and sole proprietors are the main target audience. The company visualises its ideal customer as a 30 to 35-year-old individual with a level of expertise in technology ranging from basic to intermediate.

With the assumptions outlined, a segment and subsequently a sketch of a persona can be delineated.

Many people in small businesses are used to managing everything manually or using a simple excel sheet. One of the reasons that leads the target audience to this type of

software is the inefficient and inadequate processes used to manage billing, often causing several issues.

This persona, with this product, aims to reduce unnecessary costs, facilitate the billing process and stop wasting so much time with small issues. However, some pain points can get in the way, as the fear of looking bad or a fool due to the low technological know-how and capabilities, money constraints and security uncertainties with information being stored in the cloud. The rough sketch of the Persona can be seen in Figure 14.
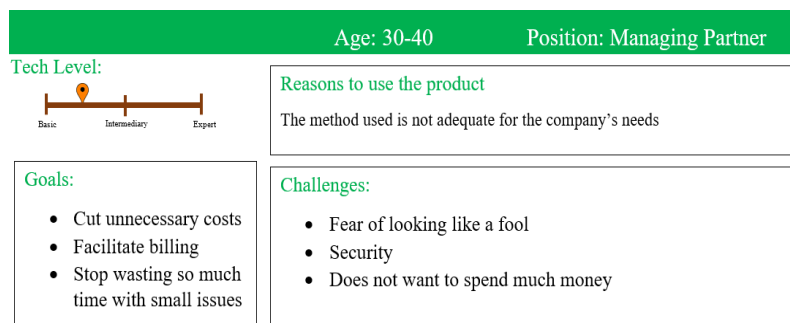

Figure 14- Rough sketch of PHC Billing FX Assumption Persona

6.3.3 PHC POS FX

The PHC POS FX is a software that manages the selling process to customers and allows inventory management and billing.

This product is ideal for retail stores, family owned businesses, fairs or any general selling point. Nowadays, even though legislation has changed, several of these establishments are still running cash registers and managing their businesses with excel sheets. Plus, according to a survey by Software Advice ™ , the number of users interested in cloud based software declined from 2013 to 2014 (Aberle,2016).

The researcher believes this is mainly due to the target audience's difficulty in accepting change and endorsing innovation. Technology is a rough path for this audience, as they are used to the "usual" management systems and do not like change.

High price and lack of information were the issues selected by the company that might lead individuals to choose a competitor or have concerns during the buying process of the PHC POS FX.

The vital feature of the product according to the company is its mobility, however an appealing interface, the ease of use and the system's simplicity are also seen as important. When queried about the experience the customer searches when procuring a POS, several factors were highlighted: mobility as the main factor, followed by simplicity in billing

and low costs. Furthermore, both intuition and efficiency are expected, once using this type of product.

On the other hand, the researcher believes the reasons are flexibility and ease of use the product provides. Also, according to the researcher these features have to be "proven to exist" for engagement and interest to materialise.

The target audience is composed by owners and managing partners. Where challenges faced are the overwhelming time consumed to manage simple tasks, and maintenance costs.

Contrarily to the researcher's assumptions, the company pictures its model customer as a male individual with age between 25 and 30 or 30 to 35 with an intermediate level of technology know-how.

In the end, the main objectives for these businesses are to increase sales and productivity while reducing costs and unnecessary resources.

According to the assumptions there is enough material to create a division into two segments:

Segment one: Those who require software that is easy to use;

Segment two: Those who need software that can be accessed anywhere as sales can be made from a variety of places.

The persona (Figure 15) correspondent to segment one aims to improve inventory management, ease the billing process, facilitate selling operations for every member of the staff and increase efficiency. The main challenges are the lack of information the persona has either on technology and the product itself, commodity with the process already use and unacceptance of change, and the inability to identify current issues that could be easily resolved.
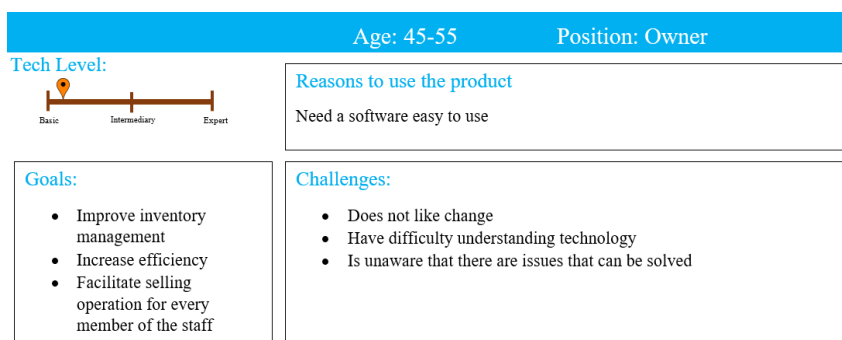

Figure 15- Rough sketch of PHC POS FX Assumption Persona

For segment two, the main goals are to increase sales: the ability to manage the selling process from different places, cut unnecessary costs and manage clients more efficiently. Some pain points are: the low budget, the level of internet connectivity as sales are made from a variety of places that might not be suitable for internet connection and the fact that the front office and back office are not communicating and working efficiently.
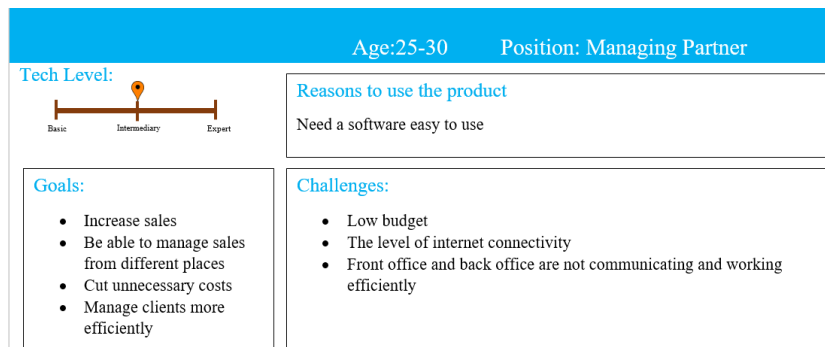The rough sketch of Persona two can be seen in Figure 16.

Figure 16- Rough sketch of PHC POS FX Assumption Persona

6.4 Customer Feedback

Customer feedback is paramount when defining buyer's desires and tastes, mainly when a new product is introduced to the market (Suttle,2016).

The customer feedback videos present in the PHC FX website are of utmost importance, as it gives the opportunity to obtain real insight from actual consumers. The goal in this section is to incorporate the 'voice of the customer' into the persona tool. This information can be considered of the highest level of accuracy, seeing that they represent, with exactness, part of the target audience. Consequently, the level of accuracy of the current sketches increases and furthers the clustered audience and consequently identifies personas.

However, as this is a feedback process used for marketing purposes, lack of information persists. Analysis and results can be seen in Annex 3. Pain points and demographic information are scarce leading to the impossibility of formulating the overall persona.

6.4.1 PHC Business FX

Up to this point, two sketches of personas have already started to be developed. Now, with the analysis of the customer feedback on this product (Annex 3.1), these can be further completed.

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For persona one, one new goal and two new pain points are identified. Regarding the goals, the persona can also aim to serve better the customers. As for the pain points, according to the customer feedback, their company has a variety of suppliers with different payment terms and amounts, making it difficult for management process and a waste of too much time with technicalities.

On the other hand, for persona two, a pain point and one goal are clustered. The challenge identified is the propensity to lose too much time with small and insignificant tasks. Contrarily, one goal is to be able to devote more time to the company itself, working on the product or service' development and improvement.

Furthermore, with the information collected it is possible to develop new persona sketches by identifying new necessities for use of this type of product in this analysis. A total of two sketches are developed and divided into the following segments:

> **Segment one:** The need for integration of management software with the current online store
>
> **Segment two:** The need to automate the company's management and billing system

For **segment one,** corresponding to the **third persona**, the goals identified are: ability to work effectively with an elevated number of clients, ease in current billing process, be awareness of current debt situation of clients and partners (in some cases physical stores), selling and shipping abroad, posterior recognition as a brand. The pain points identified for this persona are the many options for the public to choose from on the web, easy to substitute; the inefficient and unreliable system of contacting clients and suppliers and the incorrect process for inventory stock management.

Segment two refers to the **fourth persona** where the goal is to improve the workflow facilitating current daily tasks and cutting unnecessary resources by better management of the inventory. As for the challenges, this persona is afraid of taking as it is used to working the same way a long time.

6.4.2 PHC Billing FX

The customer feedback analysis (Annex 3.2) regarding the PHC Billing FX leads to several new conclusions.

First and foremost, the persona profile, created in the previous section, was identified within this group of customers and for that reason some rearrangements are possible. According to customer feedback, this persona can also encompass the position of CEO and business owners. Plus, new pain points and motivations have been identified. This persona may aim to motivate staff, increase productivity, and not be concerned with management tasks. As for pain points, this persona can be afraid of looking bad when it comes to making new decisions, mainly when it regards subjects he or she are not comfortable with. Furthermore, new information that leads to the creation of further persona sketches have been encountered within the information provided from the customers to the company. A total of two segments can be outlined:

Segment one: The business activity is progressively growing leading to the need for adoption of a software;

Segment two: Need to integrate with its own software or Application (APP).

Segment one represented by the **second persona**, a CEO or managing partner who aims to achieve better management control, increase in billing efficiency, ease of access to analysis and reports, allowing several people to access the platform without the necessity of a central point. The pain points identified are the unorganised and out-of-hand business activity, the constant lack of access to the overall information and the current unknown status of the business.

Segment two (persona three) represents the cluster audience with the need for a software that integrates with the company's own software or APP. The persona represents the position of Chief Information Officer (CIO) or IT manager with a high level of technological expertise. This persona aims to increase performance and agility within the company, allow clients to invoice through the company's software by integrating the product and to be recognised locally and abroad. The main pain points identified are lack of time, the amount of deadlines to be met and fear of malfunction or incompatibility in APP's integration, leading to further delays.

6.4.3 PHC POS FX

As there is only one customer feedback for the POS product, the information drawn is not substantial enough compared to the previous products.

A persona cannot be developed from this analysis, as it represents one customer and not a segment of the target audience. Yet when furthering developing this tool, this information can be used as a supplement.

6.5 Target Audience Analysis

At this stage, several personas have already begun being moulded for the correspondent products. With the product's target audience in mind, a questionnaire to the general population was developed to acquire further information to finalise the personas (Annex 4.1).

In this part, the researcher will be able to match the results among the personas' sketches already created, and identify further information where the previous matching was not possible, creating a new segment and consequently a new persona.

There might also be the impossibility of identifying goals and pain points for the new personas created in this part, leaving it to the next stage.

This is the most important stage of the persona creation, where the highest amount of information is retrieved. Here, information regarding age, position, type and size of the business, technological expertise, professional role, online preferences and physical location is obtained.

These, allow the researcher, in the following and last stage of the persona's creation, to look back at the assumptions analysis and the customer feedback to link and develop further conclusions on the persona's role, challenges, pain points, goals, interests and create the fictitious components - story, photo/face and name.

6.5.1 PHC Business FX

The **primary persona** created for this product was identified by the clustered audience using a management system which lacks the necessary functionalities or causes setbacks within the company's overall functioning.

Corresponding to the primary persona there were six results identified (Annex 4.2.1). From the analysis of these results, the researcher reached the conclusion that both the technological knowledge and the professional position previously concluded (CEO, CFO, Managing Partner) are in accordance with the new information. The main role of this persona is, therefore to manage a department, while overseeing the other departments or/and the entire company's operations.

Regarding to the age of the persona, the range widened, from 35-40 to 30-45, as the analysis showed 90% of the results within this last range.

When asked how they had knowledge or were informed about these products, 50% of the individuals answer, through technological magazines and 33% through search engines occasionally accessing this type of information. Furthermore, this persona believes the best means of communication, between companies and the public in general, is through online explanatory videos, social media and email.

The decision process involving the purchase of this type of products for this persona is slightly simple, as half of the respondents defend the best means is to request feedback from someone who has already used the product and 30% agree searching and analysing companies and competition can also aid the final decision.

For the **second persona** a total of three results were analysed (Annex 4.2.2). The age range for the persona was modified at this stage, where the results pointed to 25 to 35 years old. The type of business in this case can likely be either a start-up or a micro company that has started activity recently. Here the position maintains as CEO or Entrepreneur.

For this persona the decision process is simple, by having knowledge of this type of product, mainly through search engines and advertisement, the persona uses mainly the internet to compare products and companies in order to make the best purchase decision. Even though this persona might spend a lot of time online, he or she rarely read or show interest in companies' news and blogs.

The **third and fourth personas** created in the previous section, were analysed separately in this section which, can lead to the conclusion that both personas have several characteristics in common, but above all, the same goals.

Hence, the researcher merges, in this section, both personas into one. This will still be named the **third persona** with an overall of 19 answers (Annex 4.2.3).

After merging both personas the researcher reaches the final conclusion regarding the goals and pain points of this persona. This persona believes, by automating, the company's operations results will improve. The merged goals are namely, to have the ability to see the company working effectively with a high number of clients, allow access by the high members to the current debt situation between the company and its clients, and in some cases also its partners (stores, etc.,), who are able to see the company having

clients abroad and reach international recognition; and finally, increase the products' differentiator factors and value compared to other competitors.

The pain points of this persona are identified as: an inventory stock management with loopholes; a very slow system used to manage and contact clients and suppliers; and the existence of many substitutes and competitors.

This persona is within the 30 to 35 age range with the professional position of Managing partner, CTO or IT Manager. The main role of this persona is to manage the IT department (in case of existence), the product development (in the same terms), or be responsible for all informatics operations within the company and improvement of efficiency.

As a technological individual, this persona is always online, yet only from time to time is he interested in reading other company's blogs and news, unless it is job related. The decision process is ultimately made with accordance between the managing partners, yet this persona's suggestions and advice are the main opinion taken into consideration and possibly the final decision. This persona believes that reaching a decision is fairly simple, mainly by searching and analysing products and companies on the web, or by asking for the feedback and opinions from known users or peers.

The **fourth persona** is created based on new information retrieved from the results of the questionnaire. The researcher became aware of the need for a system that enables a company to work with a high number of clients and suppliers, for small companies, in industries such as transportation, construction or retail. A total of five results are analysed ([Annex 4.2.4](#)).

The main issue in these areas is the need for a software which is easy to use, that at the same time can increase production efficiency and improve the overall management of the company. The management functionalities of the system are mainly used by high executives such as CEO or managing partners, whereas the inventory and production management functions are used by the operational staff.

This persona, is in the administration either an owner or has the role of managing the operational staff reporting to the managing partner. This is the individual that is aware of the companies' necessities, communicating these to the top management.

The persona is between 40-55 years of age and aims to see the company improve operations. Either by increasing the workflow, or cutting unnecessary resources, and better manage distribution. The pain points, are the high number of staff to manage, the

low level of education that may be balanced by the number of years of experience the risk aversion.

6.5.2 PHC Billing FX

The **first persona,** originating from the previous sections, has been identified among the questionnaires' results with a total of five responses (Annex 4.3.1). This persona's current method in use within the business activity is visibly not adequate to achieve the intended results. This can either be a traditional management software or SaaS, which is not satisfactory, the traditional excel sheet or even the simple calculator still used by many old-fashioned business owners.

The previous conclusion stated that this persona is in the age range of 30 to 40 years. However, new information has led the researcher to modify this statement and determine that this persona is within 40 to 55 years of age.

The size of the business is small, and in some cases is a family business. The persona retains the professional position of managing partner or owner.

As the ease of use is the clear characteristic valued by this persona, the price and security are the main concerns when it comes to this type of product. As for the decision process, this persona values above all the opinion of third parties that might already have used the product.

The **second persona** created in the previous section, has been identified in six individuals in this research part (Annex 4.3.2). This persona is witnessing a progressive growth in his business, creating a variety of necessities that require attention. The age range of this persona is from 30 to 40 years old, with managing partner or administrative positions within the company.

The technological knowledge of this persona is intermediary-high, therefore considering the decision process when it comes to this type of product, fairly easy, however this persona prefers using a third party in the purchase process. Search engines and technological magazines are the main source of information on these type of products.

This persona only reads company's information and blogs, from time to time, believing the best way to receive information is through email.

The **third persona,** also created in the previous section, has been identified in five of the results ([Annex 4.3.3](#)). The age range is from 35 to 45 with CEO, CTO or IT manager positions. This persona has an expert level of technological knowledge, considering the decision process of easy nature. The main reason to choose such product is its constant updates.

This persona can be presumed to be always online, believing that search engines and online explanatory videos are the best means of communication between companies and the public, preferring the use of the search engine when it comes to be informed on these products.

A **fourth persona** was identified among the results with nine responses ([Annex 4.3.4](#)). This persona arises from the need of acquiring an easy billing system that allows the resolution of a variety of problems within the business. The size of this business is between micro and small, being in some cases a family business. The main goals of this persona are to see the billing system simplified, increase the number of clients and improve stock management. The pain points identified are the uneasiness with dealing with new technology and innovation, a low budget, need for security and fear of bankruptcy.

This persona prefers receiving information of the company through the email as it rarely chooses to read companies' news and blogs. The age range is from 50 to over 55 years old, being the position within the company managing partner or owner.

6.5.3 PHC POS FX

The **primary persona** was identified within eight results of the questionnaire ([Annex 4.4.1](#)).

After the analysis, the age range has widened, with the new results, from 45-55 to 40 to 55 years old. The position within the business is either managing partner, owner or store manager. The business is of small size, possibly a family business.

The technological expertise of this persona is low, as previously concluded, hence the decision process for this persona is complex, preferring to ask for feedback to known people whom he/she trusts. To be informed on these types of products, this persona uses mainly search engines and the opinion of third parties such as family, friends or even suppliers. Yet, on its own initiative, reading on this topic is rare.

The **second persona** was identified in three of the results (Annex 4.4.2). Regarding the persona's age and professional position, the results were inconclusive.

This persona requires a system that allow for a type of business to be based on mobility. From the results, the researcher can conclude this persona values, above all, the flexibility provided by this product yet, is concerned with the security it might involve.

When it comes to being informed on this type of technology, these individuals prefer to receive information through online explanatory videos or social networks, and by using search engines, specialists, partners or technological magazines.

The decision process mainly involves requesting opinion from users or help from a third party to make the correct decision.

A **third persona** is identified within the results with eight responses (Annex 4.4.3). The issue was identified as businesses that can be subject to seasonality, which requires specific consideration. This persona's age ranges between 40 and 50 years old, with positions of either managing partner, owner or general director. This business is of small size, and the persona has an intermediary technological level. The preferred characteristics in this types of products are the possibility of allowing more flexibility and, to facilitate the use and understanding when managing the overall process. Price and security are the main concerns.

To be informed on these products, search engines and newspapers are the main sources, however, interest lacks for anything within this topic. To receive information from the companies, these individuals pointed out online explanatory videos.

A **fourth persona** is also identified in this section with nine results (Annex 4.4.4). This persona was identified as the collaborator, store manager or assistant in a business. The main role is to provide customer service and make sure the store is in order, as well as the stock. This persona is not part of the purchase decision process however, the individuals' feedback is crucial, being this person the user of the software.

This persona has a low technological expertise and even with some time to spend online, there is no interest in reading news regarding these products or technology in general. This, can be related with any of the previous personas as the collaborator or employee in their business.

6.5.4 New Persona

This new persona, created in this section, represents those whom do not consider having a Software as a Service (SaaS) in their company. However, they are still within the target audience, as the researcher believes the reasons behind the refusal cannot be considered as a final obstacle for a software provider.

The reasons stated are mainly security issues, the existence of a traditional software in the company, the dissatisfaction of a previous SaaS used or finally, the fact that some individuals are not even aware this type of product exists on the market.

This persona arises from answers regarding to the three products (Business, Billing and POS), and therefore is a general persona directed for the overall PHC FX products, with 21 results (Annex 4.5).

From these 21 results, 43% are referred to a business software, and 29% each for a billing software and a POS.

The age range is from 40 to 55 years old, with a position in the administration of the company or as a managing partner. This persona has an intermediary technological level and when it comes to be informed on this type of technologies, this persona prefers the use of search engines, technological magazines and newspapers. Nevertheless, the main obstacle for this persona, when it comes to this type of product, is the security.

For this reason, the decision process for this persona is slightly complex and can be assisted by the use of a third party or simply by doing a solo search to competitors and products until reaching a final conclusion. This persona prefers being contacted by companies regarding product advertisement or information through email or online explanatory videos. The goals and pain points were unidentifiable within the information provided by the questionnaires.

6.6 Interviews

The most efficient methods to gain insight on customers and users are to interview and observe them. These methods are not just used to acquire data, but also to gain a thorough understanding of the audience and their perspectives (Goltz,2014).

This is the last stage of the data acquisition for the personas 'creation. In this stage the personas' sketches are identified within the public and where an informal interview was requested.

The main goal is to ask introductory questions that might lead to a natural and fluent conversation between the interviewee and the researcher. This allows a better and deeper understanding of the customer itself, instead of a rough idea.

Even though, some of this information is very specific for the type of business of the interviewee, it can be an excellent source of information to help with the creation of the fictional characters.

Each persona is identified within at least one individual to which the interview is made. After the analysis, the last conclusions regarding the persona's goals and motivations, interests and pain points can be settled. Furthermore, the creation of the last fictional characteristics (story, photo and name), with resource to previous analysis made can now be made possible, leading to the finalisation of the persona's tool.

Anonymity is provided in each of the following answers by the interviewees at request.

6.6.1 PHC Business FX

The **first persona** is identified in the managing partner of a mini market, a business with 50 people. This person is satisfied with the current software in use, but agrees if some new features were to be added on it would only help even more. The main challenges of this managing partner are referred as stock management, due to the probability of excessive stock or ruptures; team management as different personalities can be very hard to manage; and control of business expenses.

The main characteristics valued on management software are intuition (easy for employees to use and adapt to) and responsiveness (able to fill the needs of all the operations the company needs).

The social media used is mainly LinkedIn and Facebook, every three or four days.

The decision process is based on the software capabilities, what operations it allows to do, what information it gives out and how useful it is to the business. Therefore, requesting experimentation or demonstration previous to purchase is expected. Plus, advice given by experts, is immensely valued.

The **second persona** is identified in a technological start-up with 20 workers. The CEO faces the overwhelming number of tasks expected for any business on the brick of launching a product.

One challenge identified during the interview is the importance of product demonstration. This persona every day, has to prove the company's product is the best innovation on the market and worth the purchase by a potential client.

As this person is in the technological sector, it is easy to be informed about any type of technology, and his habits online are different from the regular public. The use of social media is frequent, from Facebook to Twitter or LinkedIn. The main interests are business intelligence, artificial intelligence and programing.

This information cannot be generalised to the whole persona, as not all start-ups are of technological background. However, when asked to describe a day in his live, the CEO gives an important piece of information. As the CEO and founder of this business, he is the one who best understands the concept of the company, therefore the one responsible with meeting potential clients and convincing them of the potential of the product, therefore he is often out of the office.

Also, there is the responsibility towards the investors, showing results and giving feedback on the current situation. This piece of information can be applied to the overall persona.

The **third persona** is identified in a small consulting firm, where the CEO is responsible for managing the operations AT the headquarters in Madrid, from Lisbon. This interview is conducted by phone call leading to less complete and detailed answers from the interviewee.

It becomes clear that mobility is the main feature that would lead this person to integrate a SaaS in the company's operations. Even though, some meetings are done via skype, the CEO explains that there is lack of routine in his daily work, as he is constantly travelling to meet foreign potential or current clients, or even meetings at the headquarters in Madrid. He is very often online and likes to read blogs or business news. The preferred social media is LinkedIn and as he is always travelling, the mobile phone or the laptop are the main devices used. It became clear in the interview that his family is his top priority, being the reason why he is managing his own company from a different country. He also enjoys reading and spending time with close friends.

The **fourth persona** is identified after the researcher realizes that a pharmaceutic was discontent with the management software in use. After requesting an interview with the responsible pharmaceutic, some relevant information was retrieved.

The challenges and motivations are very similar to those identified for this persona. Yet one pain point is identified as relevant for this persona – the existence of numerous suppliers with different payment terms and amounts. This person has little or no interest in reading about technology, the main interest is around science. When asked about the online preferences, this person, in terms of social media, uses Facebook from time to time. This person enjoys spending her free time with her family, reading and travelling.

6.6.2 PHC Billing FX

The **primary persona** is identified in a Neurology Clinic with three staff members, two doctors and a secretary. The interviewee was one of the doctors who is also the manager, in partnership with the other doctor.

The challenges pointed by the interviewee are very characteristically of the health sector and cannot therefore be taken into consideration. Nevertheless, when asked about the characteristics most valued in a product like this, security, ease of use and improved efficiency were highlighted.

Social media for this person is rarely used and the use of internet is mainly for intellectual reading or news.

The **second persona** is identified as the managing partner of a lawyer's office, when he told the researcher the increase in number of clients in comparison to last year has created an overload of work that he would not have managed without his interns.

The main source of information is through newspapers; he is regularly online but does not give much importance to social media. As he works the entire day, not always being in his office, getting home and being with his family is the main priority.

The **third persona** was identified as the CEO of a software company with eighty people. The CEO when asked why he would need management software, answered that it was to integrate their own app and facilitate the billing through it. The main challenges faced during the day, at work, are to maintain the clients and workers' satisfaction, the brands' name and quality.

With the highest level of expertise in terms of technology, the decision process, when it comes to a tech product purchase is fairly easy, especially when there is also self-interest for technology and innovations, and the main object of conversation among friends and

peers is this. Internet, books, talks, workshops and even meetups are examples of sources of information in technology this person uses. The main social media in use is Twitter, Facebook, LinkedIn and Google +, however the frequency is not too often as the CEO stated that thirty minutes are enough to search and see everything needed.

The **fourth persona** is the owner of a small fitness gymnasium where the main tasks are managing clients and their payments, debt situation, the billing process and the staff.

This business does not have a software management system; the billing is done manually or with the assistance of an excel sheet. The researcher identifies the need for an easy billing system after the interviewee expresses the challenges of managing staff and the billing process itself due to different payment options, marketing campaigns and discounts

The level of technological expertise is low, yet this person spends extraordinary amounts of time online in social media networks such as Instagram or Facebook. The main interests for this person are sports, friends, family and leisure activities

6.6.3 PHC POS FX

The **primary persona** was identified by the researcher as the owner of a tea shop, that also serves as a regular café. It is a small sized family business, the owner apart from taking care of all the financial and billing matters also does customer service. This tea shop imports all tea from abroad.

The main challenges are the uncertainty related to the number of clients each day, the maintenance of the products quality and brand's value and the availability to serve correctly and provide the best customer service possible.

Having a client database, manage the debt situation of partners and suppliers, manage the stock inventory and have an efficient billing system are the main reasons to need a management software.

The owner admits to having a low technological level and must ask for help when there is a decision involving technology to be made. The only social media in which she is present is Facebook, used daily mainly via laptop.

The **second persona** was identified by the researcher as the owner of paddle and aquatic sports material to rent, with three to five workers varying on their availability. He does

not have a management software and the process of billing is manual. He is still finishing his course at the university therefore, is frequently away to study or work on projects.

The main challenges are not knowing the number of clients per day and the availability of the staff. The clients usually book previously giving the owner time to arrange all equipment and necessary conditions, yet there are people that often appear at the stand to rent the equipment without previous booking, and that requires having someone at the stand all day.

The owner values above all the mobility and ease of use that a product can offer. Social media and technology websites are the main source of information. Facebook and Instagram are the mainly social media used, not only for personal reasons but also as a marketing tool for the business.

The **third persona** was identified by the researcher as the owner of a beauty clinic and only worker therefore, it is up to her to manage the whole business and provide the service to the customers. She does not have a management software and the process involves manual billing.

The owner of the beauty clinic was not aware of the existence of software that could be accessed through the internet until the researcher explained the product. Even though she demonstrated interest, she admitted she had previously had a management software and did not like the experience.

For her, the main challenges are the uncertainty regarding the number of clients every day, can vary from a full day to having none. The highest level of clients is in the summer season that lasts three to four months, after that the owner feels she is working to pay overdue bills. Furthermore, in this sector the competition is increasing exponentially, which has led to a decrease in the results in the past years. All this combined causes high levels of stress and pressure.

The price and costs involved, are the decision drivers when it comes to new business decisions. As for online preferences, social media is the main source of information, from Instagram to Twitter or preferably the Facebook. The main interests for this person are music, family and sports.

A **fourth persona** was identified in a perfumery. This persona had not yet been considered in previous sections.

The persona is the user and not the decision maker when it comes to the product's purchase, demonstrating different needs. The persona here identified might be related with any of the personas above as a member of the staff that only works with the software and does customer service but does not actually make any substantial decisions. However, the researcher has to consider that the POS software is mainly operated by this target audience and it is therefore crucial to consider them as an important segment.

The interviewee is the store manager of a perfumery in Coimbra that is part of a store chain with other stores in Aveiro and Leiria. The store manager has, as tasks to manage all things concerned to this store, from inventory to client management and serve customers, to bill and staff guidance. Plus, she also gives feedback and shows results to the business owner.

The challenges faced are the unstable demand, stock management, as sometimes some products that are in the store for large periods of time, reducing investment in new products or brands that could lead to higher demand.

This person has a very low technological expertise and when the current software was installed there was the need for formation and, a period of experimentation.

6.6.4 New Persona

The **new persona** characterised and identified in the previous section, was identified in a gourmet shop, as the marketing manager. She explained that it was never considered and still does not believe a SaaS is appropriate for the business. The feeling is of insecurity of confidential data and not being enough to manage a company.

The business has 30 people, the marketing manager believes the main challenges are the supply chain management and optimisation, and the amount of work and pressure to succeed.

The marketing manager was the interviewee in this case as the management software is of crucial importance for this department. It is used to manage the clients' profile and necessities, billing in the stores, payments and product delivery schedules with suppliers and to manage the staff in general.

The main characteristics valued by this person in a product such as this, are the speed, the ease of use for the staff and the existence of restricted features for top management.

The pointed ultimate decision driver is the proof of quality and value of the software by the supplier company.

6.7 Formulation of Personas

At this stage, the researcher has all components available to formulate the final persona. The following figures show the final personas for each product. There are a variety of different ways to document personas, the researcher chose to use the traditional one pager with all the components inserted in a more dynamic form, in order to facilitate the information retention, when using these personas as tools.

Since these personas are purely for PHC Software 's internal usage, the researcher might use images searched on authorised and public web pages. The fictional story is slightly based on the interviews, yet the main part is of the researcher's own imagination. The professional role is based mainly on the type of persona and position.

As for the sex of the persona, the results from the PHC FX team questionnaire and the customer feedback are the data taken into consideration. The fictional name is namely based on the researcher's idea, with abbreviations for better memorization of the persona. The following figures show the final personas formulated in this paper for each of the product.

6.7.1 PHC Business FX

The **first persona** for PHC Business FX is **Pedro Gastão,** known as Gastão (Figure 18). He likes to read about business topics, financial news and anything that might give him extra expertise or intel his own business. His family and friends are the main part of his life. Most of his working days are at the office but there are some meetings and appointments that are taken outside of the company.
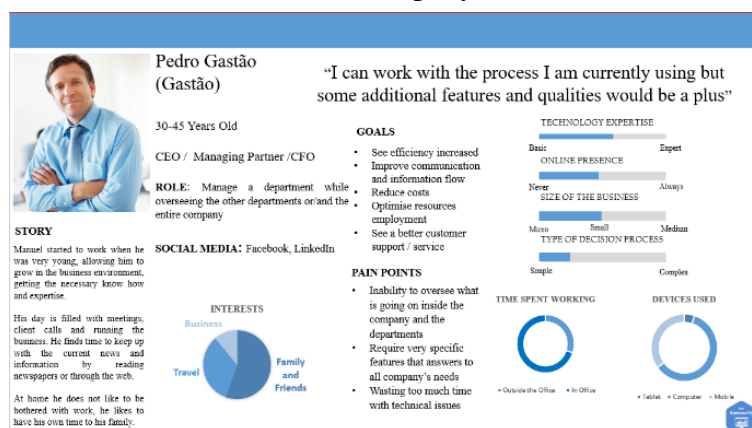

Figure 18- Persona 1 PHC Business FX

Maria João, or MJ is the **second persona** for this product (Figure 19). She is the CEO and founder of a new business, in which she has the main role. She is a very proactive person and cherishes her new business, above all. She is often outside of the office in business meetings or with prosperous clients. She is a very busy person and as much time as she can with her family and friends.
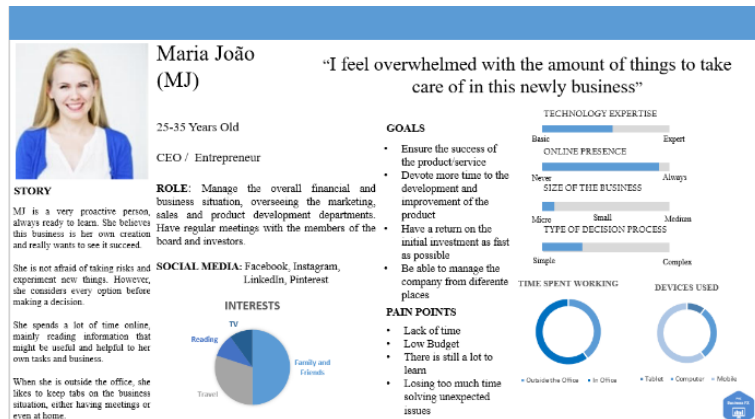

Figure 19- Persona 2 PHC Business FX

The **third persona** for PHC Business FX is **Rui Mesquita** (Figure 20), responsible for the management of the IT department, efficiency improvement and informatics operations. He is a results driven person, constantly searching for new forms of improving the business. He is often outside the office in meetings and product demonstrations. The main device used is the laptop and the mobile phone.
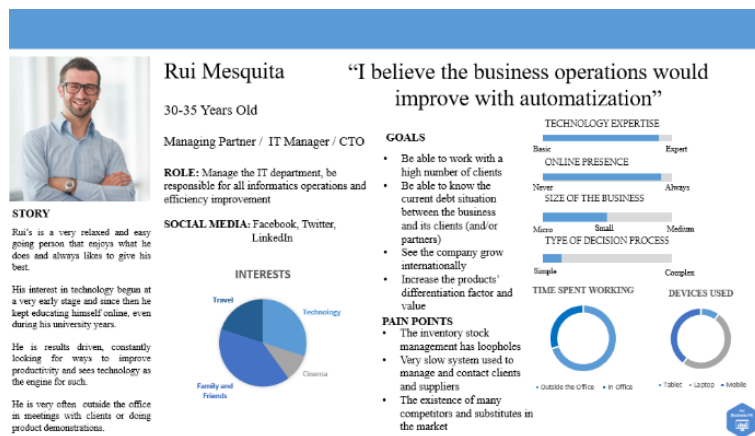
Figure 20- Persona 3 PHC Business FX

Finally, the **fourth persona** is **Manuel Silva**, known as Sr.Silva (Figure 21). He is over 55 years old and has worked in this business his entire life. His technological expertise is low and has no social media account. Even though this business is between small and medium size, due to a high number of operational personnel needed, with high stock inventory and suppliers, the use of a management software would only be required to be used by the top management.
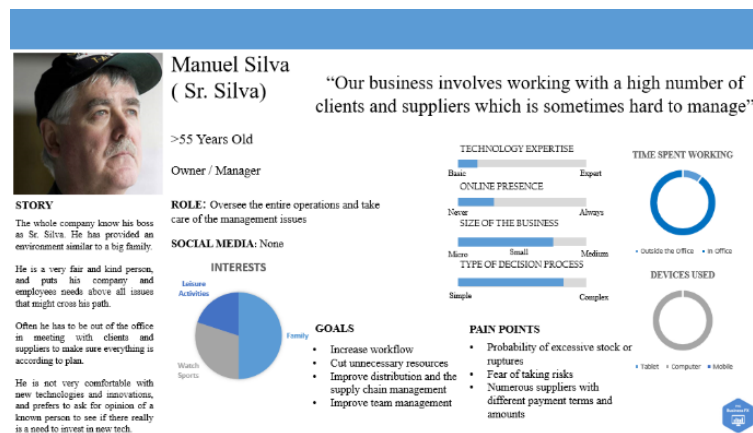

Figure 21- Persona 4 PHC Business FX

6.7.2 PHC Billing FX

Miriam Sousa is the **first persona** for the PHC Billing FX (Figure 22). She is the one who makes sure the business is running without any problems or setbacks. She knows the current method is not adequate for what she really needs, causing her to lose more time and effort to take care of the finances and the overall billing, at the end of the month. Nevertheless, she is very wary and afraid to be misled to the wrong decision about tech.
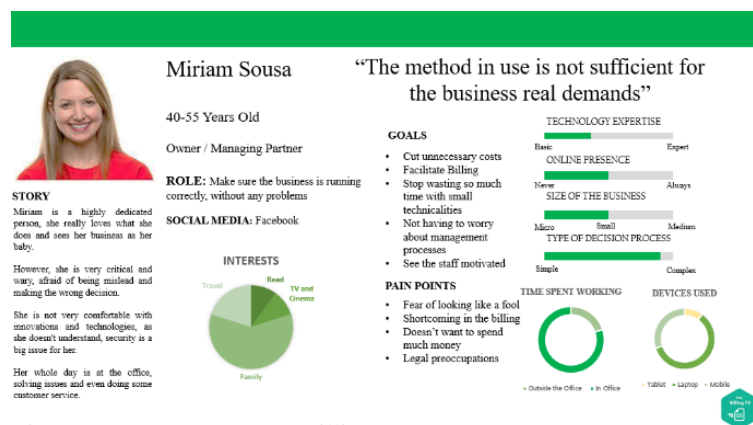

Figure 22- Persona 1 PHC Billing FX

The **second persona** for this product is **Gil** (Figure 23), the Managing partner or CEO of a business with an increased ratio of clients and results. He is an ambitious and hardworking person, always reading and trying to be informed in new ways to improve the business. The decision process for products like this is fairly easy, he is demanding on the features needed but, he knows exactly how to correctly invest the money.
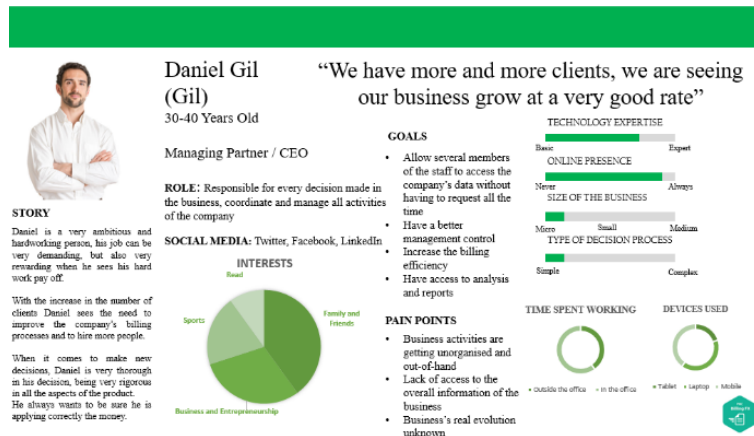

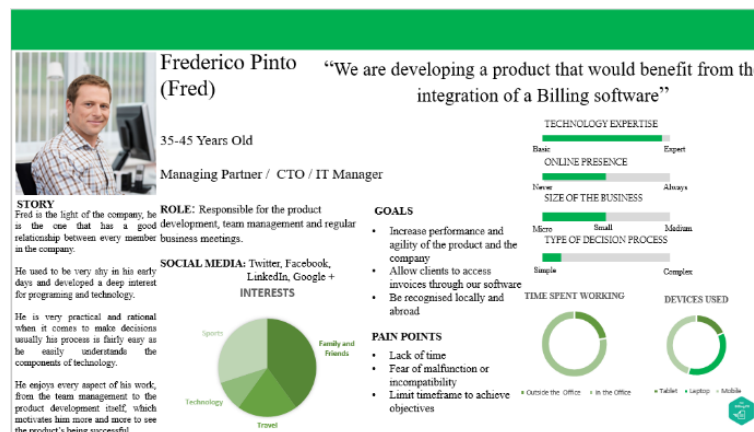Figure 23- Persona 2 PHC Billing FX

Figure 24- Persona 3 PHC Billing FX

Fred is the **third persona** for this product (Figure 24), he is responsible for the product development, team management and also has regular business meetings. He accesses the social media every day but does not spend much time. The decision process for this type of products is fairly easy for him, yet the decision is made in accordance with the other managing partner or CEO.
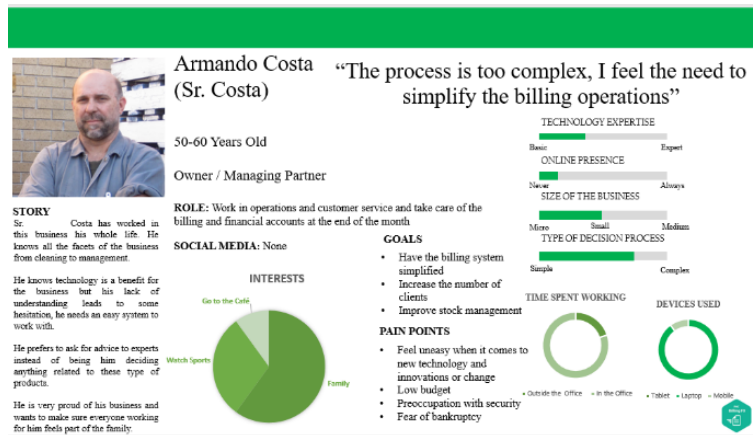
Figure 25- Persona 4 PHC Billing FX

The **fourth persona** is **Sr. Costa** (Figure 25). He is not very comfortable with new technologies that he does not understand. He only uses the laptop sporadically, to organise eventual documents. Every other aspect of the company's management is done manually. He fears bankruptcy due to the current economic situation in Portugal.

6.7.3 PHC POS FX

For the PHC POS FX the **first persona** is **Dona Paula** (Figure 26), a very outgoing and sociable person that enjoys the perks of being in direct contact with the clients. She is responsible not only for the customer service, but also for the inventory and the financial management.

None of the several staff members at her disposal are comfortable around different types of technology and innovations.
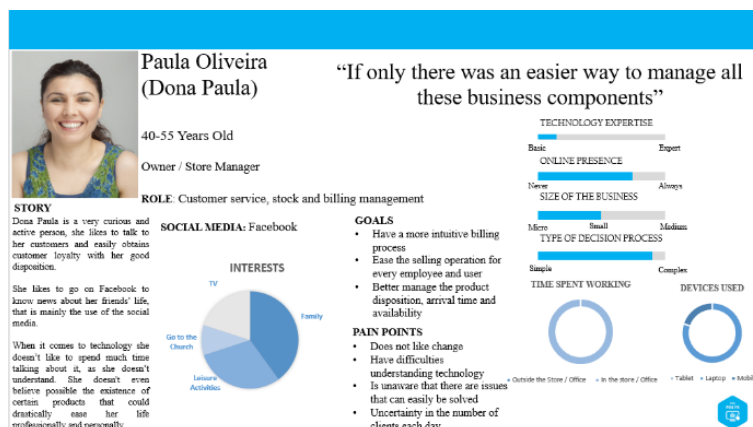

Figure 26 - Persona 1 PHC POS FX

Gago is the **second persona** for this product (Figure 27), he is always on the move, selling from place to place. As a person in his late 20's to mid-30's he is very comfortable around technology. He owns an account in several social media providers. Due to always being on the move, the mobile phone is the device used more often, followed by the laptop.
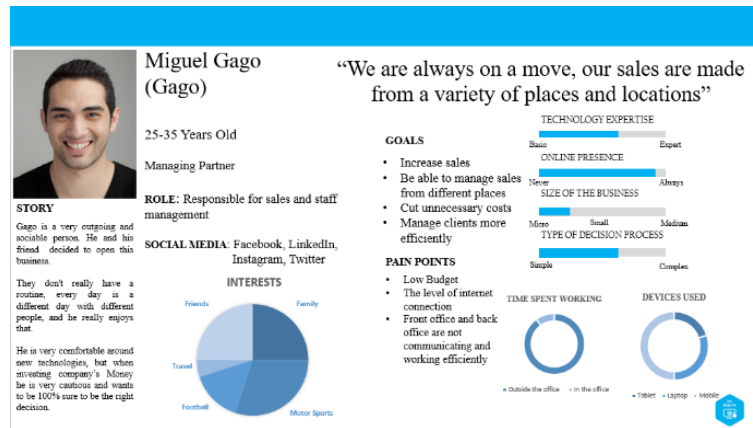

Figure 27- Persona 2 PHC POS FX

Gaspar is the **third persona** (Figure 28); his role is to manage the whole business activity. Seasonality has always been a preoccupation but these last years with the economic situation in Portugal, results have been worsened. As he feels the high season profit is to pay the bills and the debt accumulated, he is afraid of not having the conditions to maintain the business open, which causes high levels of stress.
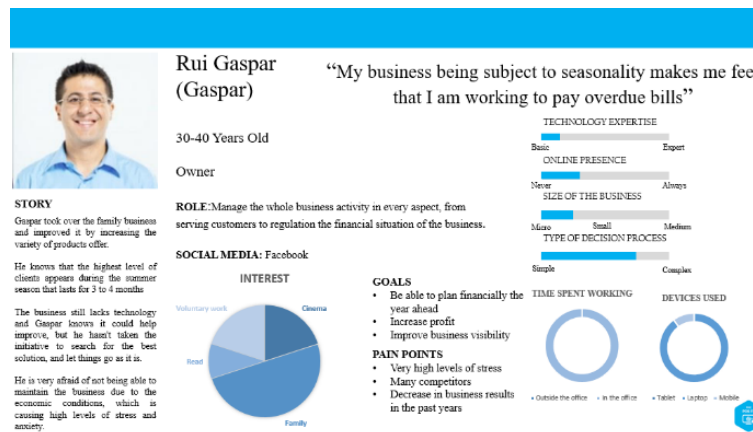

Figure 28- Persona 3 PHC POS FX

Lastly, the **fourth persona, Fátima** is, contrarily to the previous personas not the decision maker when it comes to these products, but the main user (Figure 29). She is the store manager or collaborator that has as functions to provide mainly customer service but is also in charge of stock management, as well as assisting the rest of the staff. As the owner of the business is rarely present, regular decisions are made by her. As the sales processor, she is a valuable contributor to the final decision, giving her feedback and identifying if she can easily work with the software.
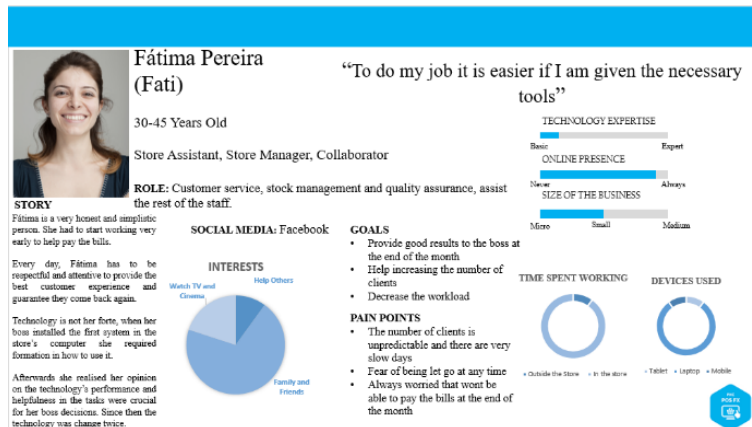

Figure 29- Persona 4 PHC POS FX

6.7.4 New Persona

Inácio is the **new persona** created in the previous section (Figure 30). He represents those who do not show interest in acquiring a SaaS. His technological expertise is intermediary, as he believes the current software or process used is more than sufficient for the needs of the company and does not feel the need to invest in new products that in his opinion might not even be secure.
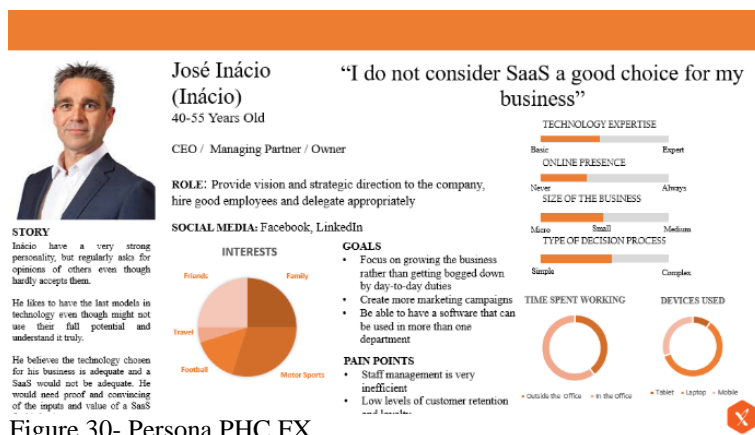
Figure 30- Persona PHC FX

After developing the previous persona and with PHC's suggestion, a **new persona** is created (Figure 31). **Ricky** is a student in his final year at the university who plans to open his new business once finished. As a youth, his easiness with technology is natural, however there is the lack of expertise and money, that might come as barrier to new investments. He is a very proactive and outgoing person, involved in extra-curricular activities who tries to learn as much as possible.

Figure 31- Persona PHC FX

VII. Content Gap Analysis

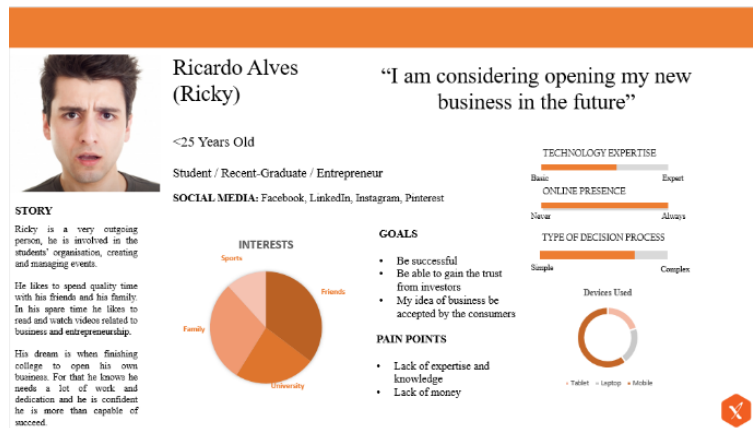In this stage there will not be a content strategy formulation, but a content gap analysis. The current content strategy used by PHC Software, regarding the PHC FX products, is analysed, with the goal of understanding which type of content is effective and what can be improved. There are two important inputs for the gap analysis: the company's users and the buyers' journey (Strategic Content LLC, 2016).

The first input are the personas previously developed. Personas allow marketers to create content that the audience is actively seeking or interested, instead of guessing it. On the other hand, the buyer journey, earlier mentioned and explained in section 3.4, allows to understand in which stage the personas are, and which type of content is most suitable for them. The researcher believed the traditional buyer journey previously mentioned was incomplete for this precise situation and the required type of needs of the personas created. Therefore, a more complete process is created by the researcher based on the work of Joana Lord (2013). The crossing of the buyer journey with the personas created can be seen in figure 32.
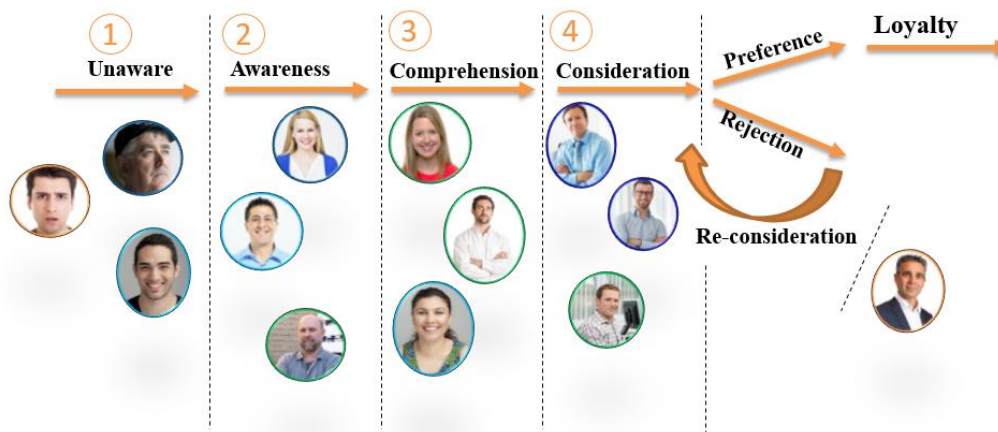
Figure 32- Buying Process for each persona

Each of the personas created are matched to a buying stage, according to the researcher predicament. The researcher believes that prior to awareness, there is a stage in which there are those who might come to develop a need for the product, yet at this stage these people are still unware. Furthermore, after consideration, there are those who choose to opt for a competitor or not buying at all, as is the case of Inácio. However, the researcher believes with the right tools and approach from the supplier, the consumer might re-consider and revert the decision.

Each of these stages have general corresponding keywords (figure 33). The keywords for the awareness stage also apply to those personas unaware of the need.

Figure 33 – General keywords according to buying stages (Source: Hubspot.com)

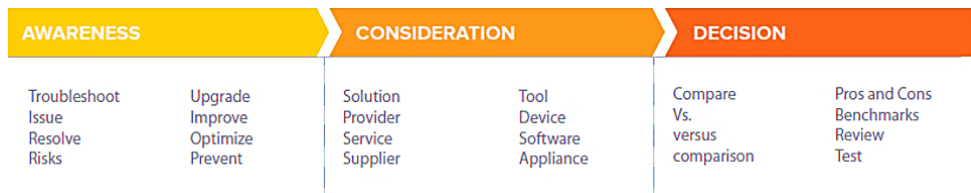Nonetheless, the researcher found in the data analysis that, each of the personas have created have specific keywords characteristic of each target audience they represent:

- **Gastão**: efficiency, features, product responsiveness, results and productivity.
- **MJ**: cost, mobility, reliability, time saving, ROI
- **Mesquita**: fast, effective, results, features, agility / mobility
- **Sr.Silva:** intuitive, security, stock or inventory and team management, easy
- **Miriam:** complete, certified product, cost, easy, safe / security
- **Gil:** client management, information access, simplification, quality, mobility
- **Fred:** integration, performance, quality, time saving, features
- **Sr. Costa:** trustful, cost, easy, security and reliable, billing management
- **Dona Paula:** intuitive, for everyone, organised management, simplification
- **Gago**: cost, mobility / agility, client management, sales management, devices
- **Gaspar**: seasonality, stress, profit, accessible, management
- **Fati**: helpful, easy, accessible, formation, assistance
- **Inácio:** differentiation factors, ROI, multi-user, reliability, quality
- **Ricky:** opportunity, business opening, assistance, cost

As each type of user is understood, the type of content characteristic for each buyer stage varies. Knowing the right keywords to apply in the content creation helps to reach the intended outcome. Table 4 shows the type of content appropriated for each stage, completed by the researcher's ideas and conclusions. This table not only shows inbound marketing strategy as blog writing, infographics or eBooks; but also outbound marketing as event creation and workshops. Furthermore, the researcher believes the use of influencers in the first two stages are crucial to increase credibility and brand awareness. The wanted results do not actually come from content, but from content that moves (Schaefer,2015). With the current information density, every opportunity must be taken

and differentiator factor used. Shareability is critical, and it is here where the importance of social media is seen.

The type of content used on Facebook should be slightly more friendly, light, informal and entertaining than the one used on other communication channels.

Unaware	Awareness	Comprehension	Consideration	Loyalty
Video Intro	Analysis reports	Live Interactions	Pricing Guides	Survey
Infographics	EBooks	Video	ROI Calculators	E-News
Blog Posts	Expert Content	Webinars	Live Demo	Articles
Industry Reports	Whitepapers	Newsletters	Case Studies	Entertainment Posts
White Papers	Influencers	Email Campaigns	Trial Download	Branded Photos
Influencers	Events	FAQs	Testimonials	Branded Videos
	Landing Pages		Specification sheets	Workshops

Table 4- Type of content for each stage (Source: MacInnis, 2015)

Facebook is used by the PHC to promote blog entries, events, branded photos, videos among others. It is the researcher's conclusion that Facebook is the main social media used by the personas in general and the only, in some cases (Dona Paula, Gaspar, Miriam and Fati). For this reason, it is crucial for the company to create engagement through this social network, and the researcher believes PHC is already applying this strategy.

Twitter has, on the other hand, not been used often by the company. Twitter can promote the same way as Facebook does, and even more. Yet, in this case the audience reached is fewer than on Facebook, but no less important. The company resuming the use of twitter as a digital marketing tool, might lead to a better brand awareness and seriousness by the audiences. Personas such as Gago, Fred, Gil and Mesquita are targets in this type of social media. A very good approach for a strategy is the 4-1-1 rule: for each self-serving tweet, the company should re-tweet one relevant tweet and share four pieces of relevant content written by others (Miller,2012), plus, PHC should also continually re-share previous content created. **LinkedIn** is another tool used by PHC to promote events, webinars, blog posts etc. The problem is the researcher observed that mainly the non-SaaS product offered by PHC are promoted. LinkedIn is a powerful tool for the B2B markets and to create engagement among peers and with consumers.

For personas without access to social media, PHC has the main website rightly prepared with the necessary information.

Youtube is another means that can be used to engage with audiences from awareness to consideration. Videos introducing and explaining the concept of the company and the products are crucial, as well as tutorials for software use.

VIII. Forms of Implementation

In this section the researcher provides suggestions on how to use and implement the personas as a tool inside PHC and how to continually manage to improve content and its strategy.

Generally, individuals working in a company have different ideas on who the target audience and final user is (Nunes, Silva and Abrantes,2010). A first step in this tool's implementation should be sharing the personas across the team and especially printing and putting the personas on a visible spot for everyone to see. It is crucial that every member has the same vision of the company's ideal customers (Harris,2015).

With the use of personas, the PHC FX team can also personalise its marketing for the different segments of the audience. An example is to tailor and adapt the message transmitted to the people according to the intel retrieved from the different personas, instead of sending the same lead nurturing emails for the whole database. The company can also segment the contact database with the personas in mind to facilitate this strategy. The company should create content for every stage of the customer's journey (Nickolaisen,2015). A good approach is to review the current content analytics to know which are getting better results and engagement. Afterwards, analyse the personas and the correspondent keywords, reviewing the list of keywords each persona uses at different stages of the buying cycle adapting the corresponding content to better engage the target audience. Plus, PHC should not forget current customers who are still crucial and need the required attention. Creating content to guarantee assistance and create loyalty is a good strategy. A good approach to do this effectively is to develop a blog editorial calendar around topics the personas want to know about.

Another suggestion is the use of the relationship with the PHC partners to promote the company's content even more, in order to generate additional traffic and, engage with those personas not present on social media or who rarely use the internet.

Furthermore, as the researcher created this tool on an evergreen content, the need for continuously updating the personas might not seem that important, but it is. The researcher suggests that the marketing team should at the very least verify if the personas are still applicable in some time in the future.

IX. Academic and Business Contributions

The persona creation method used (Figure 9), encompasses more than one method commonly used. This can be later used for academic projects or by firms when aiming to create their own personas.

Furthermore, this tool is still used mainly by companies in the technological sector and B2B markets. Even though this paper enters that category, it can be used as basis for further research on the benefits of personas also within consumer goods and services and the B2C market.

The benefits of personas can be wide as these can be used as a tool that provides a deep insight on the customer from the design process to the final stage of the buyer journey, not only affecting marketing processes but every aspect of the product and company itself. Moreover, this paper can help companies and especially marketing departments realize that there is the need for an increase focus on the customers. Marketers still undermine the importance of the use of personas when creating content, simply using their own self-made idea of the consumer as basis.

This is mainly due to the shortage of studies and papers on the benefits of personas and its importance in content marketing creation or for the company in general.

X. Conclusion

The principle aim of this paper was to create personas for the PHC FX products, to be later used by the company as a tool to support future decisions and help better gain understanding of the company's target audience.

Companies in the high technological market, as is the case of PHC Software, face specific challenges that differ from other markets (Figure 1), requiring a special inclination for innovation and creativity. The marketing departments are of outmost importance when defining the differentiators of a company towards its competition.

Personas can be a tool that help achieve those differentiator factors. As seen in Section 3.3.3, there are a variety of advantages in using personas, for companies and even customers, as their necessities and expectations are better understood. Plus, this understanding of consumers can help marketers achieve their goals in content creation.

Using a combination of research methods (Figure 9), the researcher identified four personas for each of the products, focusing on the main issue affecting the correspondent target audience. Furthermore, within the results, the research found several people that were not up to acquiring such a product (Section 6.5.4). This led the researcher to create a further persona in which the company would consider this a target audience, for whom the main challenge is to prove the product would be a plus and advantage for the business. Finally, with the suggestion of the company, another persona was created for the PHC FX in general (Figure 31), considering those who might be interested in a foreseeable future to open a business and have the necessity of buying this type of product.

After developing the personas and using it as a pillar, an online content analysis was done with the objective of understanding which communication channels and type of content were being used in accordance to the customer's needs (represented in the personas), and which are not.

The researcher concluded Facebook is the main communication channel used by the company, distributing blog content, engaging with videos and images and acting as a good communication channel with the customers. Contrarily, Twitter and LinkedIn have not been given such importance by the company. The researcher found younger audiences use Twitter to search for content or even distribute their own.

PHC can now use the persona's tool to better understand its customers and improve even further the content created by having in consideration keywords, needs and characteristics of each target audiences.

10.1 Limitations

Some limitations are exposed in this paper, which do not diminish the quality or accuracy of the final conclusions, but might be important to take into account by the PHC FX team in future researches.

Assumptions personas are not based on real data, but on observations, which can lead to misleading results. There are several methods to create personas, but these are a very abstract tools and any other researcher would most certainly reach different results in non-data based conclusions.

The analytics regarding the PHC digital means of communication to the public, either the website or the social media, are very limited compared to the amount of information a member of the PHC Marketing Team might have access, allowing a deeper analysis and conclusions.

Furthermore, this paper does not address the importance personas can also have in the designing process of the product, focusing mainly on their marketing use and strategy. Future research and strategic analysis might be developed around the advantages of these personas for the PHC FX team, when designing, developing and improving the products.

Bibliography

Aberle, C. (2016). *Survey Results: Who Is Seeking New Point of Sale Software*. *Pointofsale.com*. Retrieved 6 February 2016, from http://pointofsale.com/201412103869/Point-of-Sale-News/Survey-Results-Who-Is-Seeking-New-Point-of-Sale-Software.html

Alajoutsijärvi, K., Mannermaa, K., & Tikkanen, H. (2000). Customer relationships and the small software firm. *Information & Management*, *37*(3), 153-159. http://dx.doi.org/10.1016/s0378-7206(99)00039-7

Anderson, B. (2016). *B2B Marketers Invest More In Social Media To Drive Demand*. *Demandgenreport.com*. Retrieved 9 February 2016, from http://www.demandgenreport.com/features/industry-insights/b2b-marketers-invest-more-in-social-media-to-drive-demand

Araujo, V. & Vazquez, J. (2013). Business and Technical Requirements of Software-As-A-Service: Implications in Portuguese Enterprise Business Context. *IJFCST*, *3*(6), 1-14. http://dx.doi.org/10.5121/ijfcst.2013.3601

Automated Marketing Solutions – Turnkey Lead Warming. (2016). *Gamechangingsales.com*. Retrieved 14 May 2016, from http://gamechangingsales.com/manage-your-pipeline/

Brenner, M. (2013). *How To Create Epic Content Marketing*. *Digitalist Magazine*. Retrieved 14 June 2016, from http://www.digitalistmag.com/lob/sales-marketing/2013/09/05/create-epic-content-marketing-0549942

Borg, E. (2009). The marketing of innovations in high€ technology companies: a network approach. *European Journal of Marketing*, *43*(3/4), 364-370. doi:10.1108/03090560910935479

Cardoso, G., Mendonça, S., Lima, T., Paisana, M., & Neves, M. (2014). *A Internet em Portugal - Sociedade em Rede 2014* (1st ed.). OberCom. Retrieved from http://www.obercom.pt/client/?newsId=548&fileName=internet_portugal_2014.pdf

Chang, Y., Lim, Y., & Stolterman, E. (2008). Personas: From Theory to Practices. *Nordichi 2008*, 439-442.

Chapman, C.N., & Milham, R.P.(2006). The Persona's new clothes: methodological and practical arguments against a popular method. HFES

Clark, L. & Wright, P. (2007). Development of a framework for understanding online consumer behaviour. *IADIS International Conference E-Society 2007*, 305-309.

Chiesa, V., & Frattini, F. (2011). Commercializing Technological Innovation: Learning from Failures in High-Tech Markets*. *Journal of Product Innovation Management*, *28*(4), 437-454. doi:10.1111/j.1540-5885.2011.00818.x

Collage of 16 Different Men and Women Smiling stock photos - FreeImages.com. (2016). FreeImages.com. Retrieved 26 May 2016, from http://www.freeimages.com/premium/collage-of-16-different-men-and-women-smiling-1516280

Cooper, A. (1999). *The inmates are running the asylum*. Indianapolis, IN: Sams.

De Pinho, Vítor Pedro. 'SaaS: Análise De Impacto Na Transformação Da Investigação E Desenvolvimento De Produto Para Serviço'. Mestrado em Engenharia de Serviços de Gestão. Faculdade de Engenharia da Universidade do Porto, 2009. Print.

Derunova, E. & Semenov, A. (2013). Modeling Consumer Behavior in Selecting High-Tech Products Based on the Level of Novelty and Features of Consumers' Perception of Products and its Role in Promoting the Development of High-tech Sales and the Market. *World Applied Sciences Journal*, *27*(ISSN 1818-4952), 63-68.

DOVLEAC, L. & BĂLĂŞESCU, M. (2013). PARTICULARITIES OF MARKETING DECISIONS FOR INNOVATIVE COMPANIES FROM HIGH-TECH INDUSTRY. *Management & Marketing*, *XI* (1/2013).

Dutta, S., Narasimhan, O., & Rajiv, S. (1999). Success in High-Technology Markets: Is Marketing Capability Critical? *Marketing Science*, *18*(4), 547-568. doi:10.1287/mksc.18.4.547

Envato Market (2016). *Smiling People*. Retrieved from http://photodune.net/item/smiling-people/3551207

Fan, M., Kumar, S., & Whinston, A. (2009). Short-term and long-term competition between providers of shrink-wrap software and software as a service. *European Journal of Operational Research*, *196*(2), 661-671. http://dx.doi.org/10.1016/j.ejor.2008.04.023

Floyd, I., Cameron Jones, M., & Twidale, M. (2008). Resolving incommensurable debates: a preliminary identification of persona kinds, attributes, and characteristics. *Artifact*, *2*(1), 12-26. http://dx.doi.org/10.1080/17493460802276836

Freepik - Free Graphic resources for everyone. (2016). *Freepik*. Retrieved 21 September 2016, from http://www.freepik.com/

Gartner Newsroom. (2016). *Gartner.com*. Retrieved 12 April 2016, from http://www.gartner.com/newsroom

Gliga, G. & Evers, N. (2010). Marketing challenges for high-tech SMEs. *Innovative Marketing*, *6*(3), 104-112.

Goltz, S. (2016). Provisional Persona Workshop 1.0. Slideshare.net. Retrieved 21 February 2016, from http://www.slideshare.net/

Goltz, S. (2014). *A Closer Look at Personas: A Guide to Developing the Right Ones (Part 2) "Smashing Magazine*. *Smashing Magazine*. Retrieved 6 February 2016, from https://www.smashingmagazine.com/2014/08/a-closer-look-at-personas-part-2/

Goodwin, k. (2008). *Perfecting your personas | Cooper Journal*. *Cooper.com*. Retrieved 3 March 2016, from http://www.cooper.com/journal/2001/08/perfecting_your_personas

GRØNHAUG, K. & MÖLLER, K. (2005). High-tech Marketing: Fact or Fiction? Discussion pp.91-104

Gross, N., & Coy, P. (1998). The Technology Paradox. *Business Week*, pp. 24-31.

Retrieved from http://www.businessweek.com/1998/35/z3414001.htm

Gruding, J.&Pruitt,J.(2002). Personas, participatory design and product development: An Infrastructure for engagement. In proceedings of the participatory design conference (pp.144-1619- ACM Press.«

Harris, J. (2015). *How to Create Easy, Yet Actionable, Content Marketing Personas*. *Content Marketing Institute*. Retrieved 28 September 2015, from http://contentmarketinginstitute.com/2015/04/content-marketing-personas/

Hatzichronoglou, T. (1997), "Revision of the High Technology Sector and Product Classification", OECD Science, Technology and Industry Working Papers, 1997/02, OECD Publishing. http://dx.doi.org/10.1787/134337307632

Heracleous, L. (2013). Quantum Strategy at Apple Inc. *Organizational Dynamics*, *42*(2), 92-99. doi: 10.1016/j.orgdyn.2013.03.002

HOW TO MAP CONTENT TO THE BUYER'S JOURNEY & THE MARKETER'S FUNNEL [IN…. (2016). *Slideshare.net*. Retrieved 14 June 2016, from http://www.slideshare.net/HubSpot/kukesh9-16-2014final

Ilama, E. (2015). *Creating Personas | UX Booth*. *Uxbooth.com*. Retrieved 16 March 2016, from http://www.uxbooth.com/articles/creating-personas/

Informa D&B, (2014). *Radiografia Do Sector Das Tecnologias Da Informação E Da Comunicação (TIC) Em Portugal*. Barómetro informa D&B. Retrieved from https://www.informadb.pt/biblioteca/ficheiros/estudo-radiografia-das-TIC-em-Portugal.pdf

Internetsociety.org, *Global Internet Maps*. Retrieved 3 March 2016, from http://www.internetsociety.org/map/global-internet-report

Junior, P. & Filgueiras, L. (2005). User Modeling with Personas, 277-281.

Klishina, N. (2013). *The 3 Main Types of Personas and Why They're Important*. *Faction Media*. Retrieved 13 February 2016, from http://factionmedia.com/the-3-main-types-of-personas-and-why-you-need-them/

Kusinitz, S. (2014). *The Definition of a Buyer Persona* Blog.hubspot.com. Retrieved 3 November 2015, from http://blog.hubspot.com/marketing/buyer-persona-definition-under-100-sr#sm.0000ihvr6lveifqtycq1rduqqdfah

Long, F. (2009). Real or Imaginary: The effectiveness of using personas in product design. *Irish Ergonomics Review*.

Lord, J. (2013). *A Quick Guide to Customer Journey Mapping*. *Bigdoor.com*. Retrieved 14 August 2016, from http://bigdoor.com/blog/2013/11/01/a-quick-guide-to-customer-journey-mapping/

MacInnis, D. (2015). *Strategic Service Design*. *Small Business Marketing | Marketing Consultant | Customer Centric Marketing | Melbourne*. Retrieved 14 August 2016, from http://www.macinnismarketing.com.au/blog/strategic-service-design

Map the Gap. (2016). *Strategic Content*. Retrieved 14 June 2016, from http://strategiccontent.com/map-the-gap/

Melbourne, B. (2011). *Explaining Personas used in UX Design – Part 1. Melbourne, as in the city.*. Retrieved 6 April 2016, from https://asinthecity.com/2011/05/13/explaining-personas-used-in-ux-design-%E2%80%93-part-1/

Meuter, M.L., Ostrom, A.L., Bitner, M.J. & Roundtree, R. (2003). The influence of technology anxiety on consumer use and experiences with self-service technologies, Journal of Business Research, 56, pp. 899-906.

Miaskiewicz, T., & Kozar, K. (2011). Personas and user-centered design: How can personas benefit product design processes? *Design Studies*, *32*(5), 417-430. http://dx.doi.org/10.1016/j.destud.2011.03.003

Miller, J. (2012). *The 4-1-1 Rule for Lead Nurturing*. *Marketo Marketing Blog - Best Practices and Thought Leadership*. Retrieved 14 June 2016, from http://blog.marketo.com/2012/07/the-4-1-1-rule-for-lead-nurturing.html

Melbourne, B. (2011). *Explaining Personas used in UX Design – Part 2. Melbourne, as in the city.*. Retrieved 6 April 2016, from https://asinthecity.com/2011/05/13/explaining-personas-used-in-ux-design-%E2%80%93-part-2/

Mohr,J.; Sengupta,S.; Slater,S. 2010. Marketing of High—Technology Products and Innovations. New Jersey.

Moore, G. (2001). Crossing the Chasm. Marketing and Selling High-Tech Products to Mainstream Customer (revised edition), New York, Harper Collins Publishers.

Moriarty, Rowland and Kosnik, Thomas (1989). "High Tech Marketing: Concepts, Continuity, and Change," Sloan Management Review, 30 (4), 7-17.

Mulder, S., & Yaar, Z. (2007). *The user is always right*. Berkeley, CA: New Riders.

Munnukka, J., & Järvi, P. (2011). The value drivers of high-tech consumer products. *Journal of Marketing Management*, *27*(5-6), 582-601. doi:10.1080/02672571003737783

Nickolaisen, M. (2015). *How to create content that follows the buyer's journey*. *WP Curve*. Retrieved 7 May 2016, from http://wpcurve.com/create-content-follows-buyers-journey/

Nielsen, L. & Hansen, K. (2014). Personas is Applicable- A study on the use of personas in Denmark. *CHI 2014, One Of A Chind, Toronto, ON, Canada*, 1665-1674.

Ojala, A. (2013). Software-as-a-Service Revenue Models. *IT Professional*, *15*(3), 54-59. http://dx.doi.org/10.1109/mitp.2012.73

Olenski, S. (2015). Business And Marketing Software Trends To Watch Out For In 2015. *Forbes*. Retrieved from http://www.forbes.com/sites/steveolenski/2015/03/25/business-and-marketing-software-trends-to-watch-out-for-in-2015/

Pereira, J. (2015). Sector de tecnologias de informação cresceu ao fim de cinco anos. *Público*. Retrieved from http://www.publico.pt/tecnologia/noticia/sector-de-tecnologias-

de-informacao-cresceu-ao-fim-de-cinco-anos-1685044

Pandian, J. (2015). *Create Precise Buyer Personas With SEO Data: A 10-Step Guide. Content Marketing Institute*. Retrieved 28 September 2015, from http://contentmarketinginstitute.com/2013/07/create-precise-buyer-personas-seo-data/

Personas: 3 Steps to Getting Personal with Prospects » DemandLab: Total Revenue Marketing. (2012). *DemandLab: Total Revenue Marketing*. Retrieved 21 May 2016, from http://www.demandlab.com/blog/personas-3-steps-to-getting-personal-with-prospects/

Prezant, J. (2013). *Only 20% of Marketers Truly Know Their Customers. Direct Marketing News*. Retrieved 3 March 2016, from http://www.dmnews.com/multichannel-marketing/only-20-of-marketers-truly-know-their-customers/article/306535/

Pruit, J., &Grudin, J. (2003) Personas: Practice and Theory. *Proceedings of the 2003 Conference on Designing for User Experiences, 1-15*

Pruitt,J., & Adlin,T. (2006). *The Persona Lifecycle. San Francisco,CA: Morgan Kaufmann*

Pulizzi, J. (2014) *Epic content marketing: How to Tell a Different Story, Break through the Clutter, and Win More Customers by Marketing Less*.

PwC,. (2015). *2015 Technology Industry Trends*. Retrieved from http://www.strategyand.pwc.com/perspectives/2015-technology-trends

Quensenbey,W. Using Personas: Bringing Users Alive, *STC Usability SIG Newsletter-Usability Interface.2004,* available from internet http://wqusability.com/handouts/personas-overview.pdf

Radcliffe, B. (2011). *Software As A Service (SaaS) Definition | Investopedia. Investopedia*. Retrieved 24 January 2016, from http://www.investopedia.com/terms/s/software-as-a-service-saas.asp

Rajasekar, S., Philominathan, P., & Chinnathambi, V. (2013). *Research Methodology* (1st ed.). Tamilnadu, India. Retrieved from http://arxiv.org/pdf/physics/0601009.pdf

Revella, A. (2016). *Buyer Persona Institute. Buyerpersona.com*. Retrieved 13 January 2016, from http://www.buyerpersona.com/

Revella, A. (2015) *Buyer personas: How to Gain Insight into your Customer's Expectations, Align your Marketing Strategies, and Win More Business*.

Ritchie, A. (2015). *3 Tips for Keeping Your Buyer Personas Fresh and Alive. Content Marketing Institute*. Retrieved 28 September 2015, from http://contentmarketinginstitute.com/2013/04/tips-keeping-buyer-personas-fresh/

Saji, K., & Mishra, S. (2012). Antecedents and consequences of technology acquisition intent: empirical evidence from global high-tech industry. *Journal of Strategic Marketing*, *20*(2), 165-183. doi:10.1080/0965254x.2011.606913

Sarin, S. & Mohr, J.J. (2008). An introduction to the special issue on marketing of high-technology products, services and innovations, Industrial Marketing Management, 37, pp. 626-628.

Schaefer, M (2015). *The Content Code: six essential strategies for igniting your content, your marketing, and your business* - 1st ed.

Sinha, R. R. (2003). Persona Development for information-rich domains. *CHI Extended Abstracts, 2003, 830-831*

Smiling Human Face | Emotion and Expression Illustration Portra stock photos - FreeImages.com. (2016). *FreeImages.com*. Retrieved 21 May 2016, from http://www.freeimages.com/premium/smiling-human-face-emotion-and-expression-illustration-portra-1054017

SoftResources,. (2015). *SoftResources | Software Selection Consulting | Software Evaluation Consulting*. Retrieved 26 September 2015, from http://www.softresources.com

Software de Gestão PHC. (2016). *Phc.pt*. Retrieved 21 August 2016, from http://www.phc.pt/portal/programs/cindex.aspx

Sousa, A. (2014). Um ano melhor para as TI. *Jornal De Negócios*, pp. 18-21. Retrieved from: http://www.safira.pt/Ficheiros/PDF/clipping/2014/26-11-14-ranking-200maiores-empresas-tic-semanainformatica.pdf

STAMFORD, Conn. *Gartner Says Worldwide Software Market Grew 4.8 Percent in 2013;* 2014. Available at: http://www.gartner.com/newsroom/id/2696317. Accessed September 25, 2015.

Suttle, Rick. "The Importance of Customer Feedback". *Smallbusiness.chron.com*. N.p., 2016. Web. 29 Feb. 2016.

Toner, L. (2016). *What Does a Great Buyer Persona Look Like? Dissecting 3 Real-Life Examples*. *Blog.hubspot.com*. Retrieved 6 February 2016, from http://blog.hubspot.com/marketing/buyer-persona-examples

Traynor, K., & Traynor, S. (2004). A comparison of marketing approaches used by high-tech firms: 1985 versus 2001. *Industrial Marketing Management*, *33*(5), 457-461. doi:10.1016/j.indmarman.2003.08.013

Turner, P., & Turner, S. (2011). Is stereotyping inevitable when designing with personas? *Design Studies*, *32*(1), 30-44. http://dx.doi.org/10.1016/j.destud.2010.06.002

Usability.gov,. (2016). *Personas*. Retrieved 6 February 2016, from http://www.usability.gov/how-to-and-tools/methods/personas.html

Viardot, E. (2004). *Successful marketing strategy for high-tech firms*. Boston: Artech House.

Wall, C. (2012). *B2B Social Media Marketing - Hanover Research. Hanover Research*. Retrieved 14 May 2016, from http://www.hanoverresearch.com/2012/04/09/b2b-social-media-marketing/

Wonglimpiyarat, J. (2012). Technology strategies and standard competition â€" Comparative innovation cases of Apple and Microsoft. *The Journal Of High Technology Management Research*, *23*(2), 90-102. doi:10.1016/j.hitech.2012.06.005

Yadav, N., Swami, S., & Pal, P. (2006). High Technology Marketing: Conceptualization and Case study. *The Journal for Decision Makers, VIKALPA*, *31*(2), 57-74.

Zambito, T. (2013). *Follow the Road to Content Marketing Effectiveness with Buyer Persona Story Mapping*. *BuyerPersona - Tony Zambito*. Retrieved 14 June 2016, from http://tonyzambito.com/follow-road-content-marketing-effectiveness-buyer-persona-story-mapping/

Appendices

1. Emails exchanged with PHC Software (Translated to English)

1.1 First Email

Q. First and foremost, I would like to know if possible (as a confirmation) that if I say "The goal of PHC in the use of personas is as a tool which guides the PHC FX design team and the Marketing Strategies, mainly of digital content in order to achieve the objectives as efficiently as possible and the company to focus on their target audience" is in accordance with your perspective?
A. Yes, Completely

Q. Do you consider the PHC Market Driven or Technology Driven?
A. Both

Q. How do you consider to be the relationship between the customers and the company?
A. PHC uses, as a prime sales channel, its partners, not giving direct support to the clients, as this role falls to the PHC Partner's functions. When there is a new client, the process can occur in 2 different ways: on one hand, if the client already has a preferential partner, that partner is given to him. If not, automatically it is given one, by PHC, having the geographic localization in consideration.
In the case of "friendly clients", which are clients chosen by PHC to help testing new products, support is directly given by us, namely by the Quality Department. PHC has a CST (Customer success team), that helps the partners in the support and sales process, every time there is any question related to our products.

Q. Do you consider the PHC Products difficult to understand by the clients?
A. Yes. At this moment, the PHC FX has a very complete portfolio that requires some concentration on the client's part, in order to understand every feature of each one of the products. However, with the 12 days' free demos, this comprehension is facilitated, because in every demo there are data available to simulate their own business processes.

Q. How does PHC do their customer research?

A. PHC has a research department responsible for all the market research, competition analysis (international and national), and looks to understand the main needs of the company near the market.

Q. Are the PHC FX products prepared to be uses by large enterprises?

A. No. The PHC FX Products are directed to micro and small enterprises, between 1 and 5 users.

1.2 Second Email

Marketing Content

Q. What do you believe to be the mean of communication more influent and dominant in the interaction with the target audience?

A. In line with what the product is, we focus on digital forms of communication. Hence, email marketing is a key mean.

Q. Is there anyone in the company solely responsible for the content creation?

A. there isn't a person which function is solely the content creation. This is concentrated in the marketing team although, often in harmony and synergy with the research team and the production of the use of software support contents.

Q. From your point of view, what is the scope and purpose in the use Facebook as a communication channel? And Twitter?

The Facebook has been used to promote whitepapers and content created on the blog. Currently, especially for a digital product, it is true what was said before about having a website: Who has not, does not exist. The main purpose of our presence is to attract people to our site. The Twitter has worked just like a Facebook extent and where we disclosing the contents that are published on Facebook.

Q. Can you give me a brief summary, of what is the PHC FX content strategy?

A. We work to keep a rhythm of a posting once per week in the blog, of subjects surrounding contents that interest anyone that has a company.

Q. Do you think the legislation changes in January 2013 leading to mandatory adoption of a software certificate by companies is still one reason that leads individuals to adopt the PHC FX products?

A. Yes. The requirement to have a software is a conditioning element for companies to adopt a management software / billing since the beginning of activity.

Q. What do you believe leads individuals to stop being PHC FX clients? Price? Quality?

A. The highest dropout rate is a result of business failures. As is directed to small businesses is a market where bankruptcies and creation of new businesses is a constant. Furthermore, we know that the price is a factor to have in consideration, seen that there are competitors with lower values or free, although the features are more limited.

Q. There are many complaints that the PHC should adopt HTML 5 instead of Flash in your applications, do you think this has been a factor influencing the adoption of the product?

A. Yes, it's something that has been identified by the PHC.

Q. Do you think it would be important / relevant to place a persona that was not at the start interested in having a SaaS?

A. Yes. There may be 2 personas within this type "that is not at the start interested in SaaS." One may be the potential entrepreneurs including students of the last years of management that is a target that is likely to interest future. Another may be the entrepreneur who today use software that is not in the Cloud (Client Server) but there will be some probability / tendency to shift to software in the SaaS model.

2. Internal Questionnaire- PHC FX Team

This questionnaire is under the Thesis Project that aims at the creation of Marketing Personas and Content for the PHC FX products. The purpose of this questionnaire is to address the PHC FX team in order to understand the existing perception within the company in relation to the profile and needs of the consumers. The questionnaire is entirely anonymous. Thank you for participating

1. What do you think leads the customers to choose PHC?

☐ Price

☐ Quality of the Product

☐ Differentiation

☐ Other:

2. **In your opinion which do you believe to be the most common mean for the consumer to have knowledge of PHC Software and consequently PHC FX products?**

☐ PHC Website

☐ Magazines

☐ Sponsorships

☐ Social Media

☐ Other:

> Regarding the PHC POS FX
> **The following questions will be solely about the PHC POS FX product.**

3. **What do you believe to be the experience the customer is looking for?**

☐ Mobility

☐ Ease of Billing

☐ Lower Costs

☐ Intuitive

☐ Layout

☐ Efficiency

☐ Other:

4. **What do you believe to be the key features of the product?**

5.What do you think are the main reasons for consumers not to choose this product or even choose a competitor?

- ☐ Lack of Information
- ☐ Other products have better quality
- ☐ High Price
- ☐ The product is difficult to understand
- ☐ Unattractive Product Pack
- ☐ Customer support is not efficient
- ☐ Other:

6. By imagining the hypothetical consumer of this product what age would you give him/her?

7. And Name?

8. What do you think is the level of technological knowledge of the hypothetical consumer?

- ☐ Advanced
- ☐ Intermediate
- ☐ Basic
- ☐ None

9. From the images below which one do you believe represent the profile of the PHC POS FX Customer?

- ☐ Image 1
- ☐ Image 2
- ☐ Image 3
- ☐ None of the above

<div style="background-color:#6b4fc4; color:white;">Regarding the PHC Business FX</div>

10. The following questions will be solely about the PHC Business FX product.

What do you believe to be the experience the customer is looking for?

- ☐ Mobility
- ☐ Ease of Billing
- ☐ Lower Costs
- ☐ Intuitive
- ☐ Layout
- ☐ Efficiency
- ☐ Other: [   ]

11. What do you believe to be the key features of the product?

_____

12.What do you think are the main reasons for consumers not to choose this product or even choose a competitor?

- ☐ Lack of Information
- ☐ Other products have better quality
- ☐ High Price
- ☐ Unattractive Product Pack
- ☐ The product is difficult to understand
- ☐ Customer support is not efficient
- ☐ Other: [   ]

13. By imagining the hypothetical consumer of this product what age would you give him/her?

[   ]

14. And Name?

[   ]

15. What do you think is the level of technological knowledge of the hypothetical consumer?

☐ Advanced

☐ Intermediate

☐ Basic

☐ None

16. From the images below which one do you believe represent the profile of the PHC Business FX Customer?

☐ Image 1

☐ Image 2

☐ Image 3

☐ Image 4

☐ None of the above

The following questions will be solely about the PHC Billing FX product.

17. What do you believe to be the experience the customer is looking for?

- ☐ Mobility
- ☐ Ease of Billing
- ☐ Lower Costs
- ☐ Intuitive
- ☐ Layout
- ☐ Efficiency
- ☐ Other: [_____]

18. What do you believe to be the key features of the product?

_____

19. What do you think are the main reasons for consumers not to choose this product or even choose a competitor?

- ☐ Lack of Information
- ☐ Other products have better quality
- ☐ High Price
- ☐ Unattractive Product Pack
- ☐ The product is difficult to understand
- ☐ Customer support is not efficient
- ☐ Other: [_____]

20. By imagining the hypothetical consumer of this product what age would you give him/her?

[_____]

21. And Name?

[_____]

22. What do you think is the level of technological knowledge of the hypothetical consumer?

- ☐ Advanced
- ☐ Intermediate
- ☐ Basic

☐ None

23. From the images below which one do you believe represent the profile of the PHC Billing FX Customer?

☐ Image 1

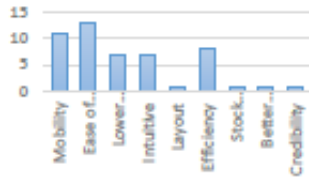☐ Image 2

☐ Image 3

☐ None of the above

24. Do you have comments / suggestions you would like to add?
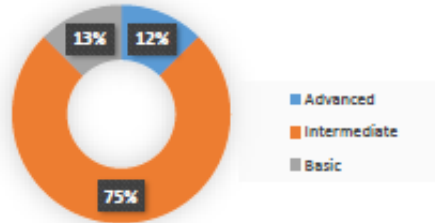
_____

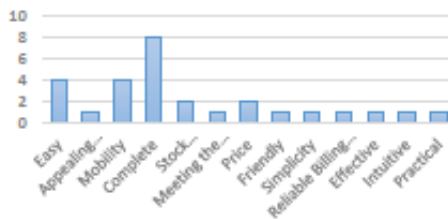## 2.1 Questionnaire Results
2.2.1 PHC POS FX

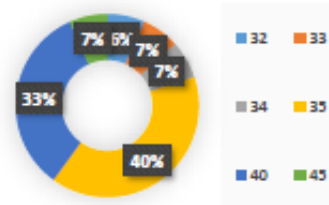**What do you believe to be the experience the customer is looking for?**

What do you thing is the level of technological knowledge of the hypothetical consumer?
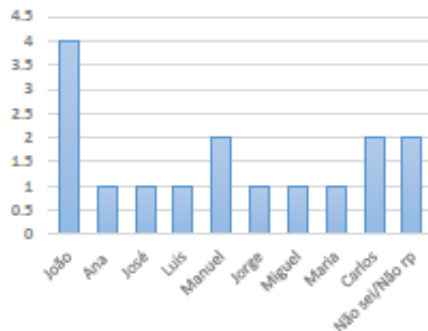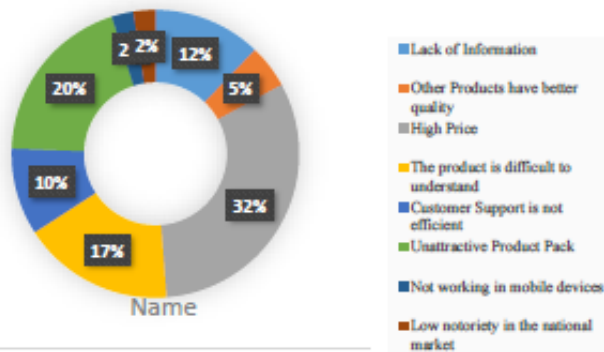

- Advanced: 12%
- Intermediate: 75%
- Basic: 13%

What do you believe to be the key features of the product?

Age

- 32: 33%
- 33: 7%
- 34: 6%
- 35: 40%
- 40: 7%
- 45: 7%

What do you think are the main reasons for consumers not to choose this product or even choose a competitor?

- Lack of Information: 12%
- Other Products have better quality: 5%
- High Price: 32%
- The product is difficult to understand: 17%
- Customer Support is not efficient: 10%
- Unattractive Product Pack: 20%
- Not working in mobile devices: 2%
- Low notoriety in the national market: 2%

Name

Which image do you believe represents the profile of the PHC Business FX customer?	Nº
Image 1	11
Image 2	1
Image 3	2
Image 4	2
None of the above	0

2.2.2 PHC Business FX

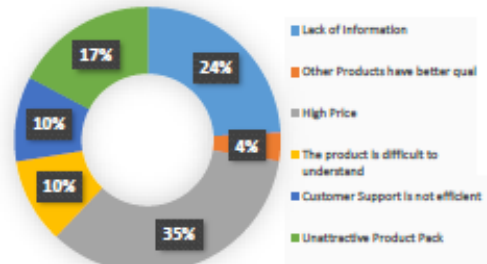**What do you believe to be the experience the customer is looking for?**
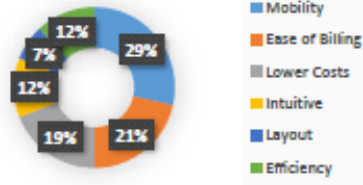
- Mobility
- Ease of Billing
- Lower Costs
- Intuitive
- Layout
- Efficiency

12%, 7%, 12%, 19%, 21%, 29%

What do you thing is the level of technological knowledge of the hypothetical consumer?

- Advanced
- Intermediate
- Basic

6%, 31%, 63%

What do you believe to be the key features of the product?

Feature	N
Ease of use	3
Appealing Interface	3
Mobility	6
Ergonomic	1
Friendly	1
Fast	1
Any Device	2
Meeting the legal...	1
Simplicity	2
Flexibility	1
Layout	1
Usability	1
Small learning curve	1
Allows to make sales	1
Price	1
Receipts print quickly	1

What do you think are the main reasons for consumers not to choose this product or even choose a competitor?

- Lack of Information
- Other Products have better qual
- High Price
- The product is difficult to understand
- Customer Support is not efficient
- Unattractive Product Pack

17%, 24%, 10%, 4%, 10%, 35%

By imagining the hypothetical consumer of this product what age would you give him/her?

Age	N
25	3
30	4
32	1
33	1
34	1
35	5
37	1

Name

Name	N
João	6
Ana	1
Rui	1
Catarina	1
Albertino	1
Bernardo	1
Tomás	1
Cátia	1
Carlos	1
Não...	2

From the images below which one do you believe represents the profile of the PHC POS FX customer?	Nº
Image 1	8
Image 2	1
Image 3	1
None of the above	6

2.2.3 PHC Billing FX

What do you believe to be the experience the customer is looking for?
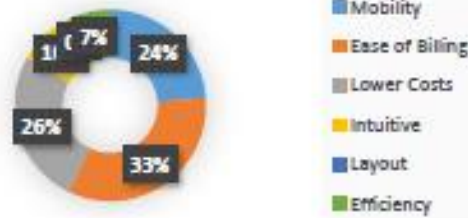
- Mobility 24%
- Ease of Billing 33%
- Lower Costs 26%
- Intuitive
- Layout
- Efficiency 7%

What do you thing is the level of technological knowledge of the hypothetical consumer?

- Advanced 12%
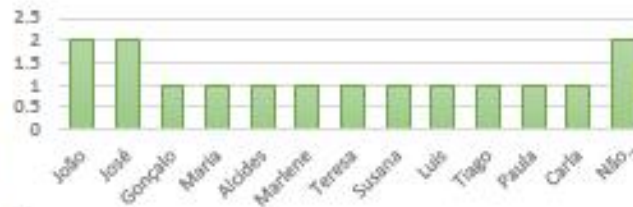- Intermediate 50%
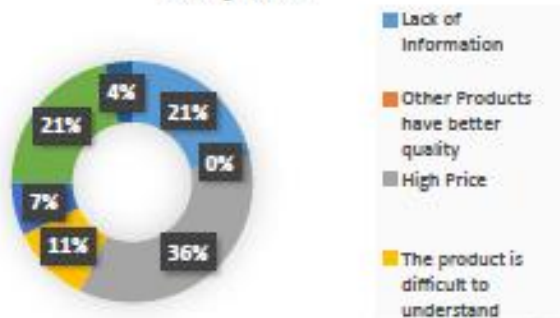- Basic 38%
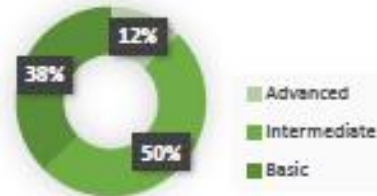
What do you believe to be the key features of the product?
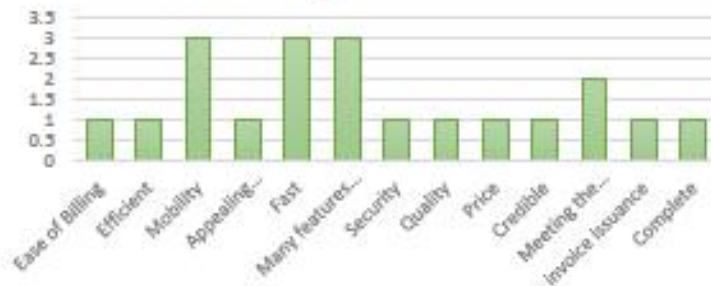
Age

Name

What do you think are the main reasons for consumers not to choose this product or even choose a competitor?

- Lack of Information 21%
- Other Products have better quality 0%
- High Price 36%
- The product is difficult to understand

(4%, 21%, 0%, 36%, 11%, 7%, 21%)

From the images below which one do you believe represents the profile of the PHC Billing FX customer?	Nª
Image 1	3
Image 2	5
Image 3	7
None of the above	1

3. Analyse Customer Feedback

3.1 PHC Business FX

Product FX	nºof results
Business	17

Name of the Customer	Frequency
Rui	2
Filipa	1
Fernanda	1
Pedro	2
Helena	1
Susana	1
Joao	3
nuno	1
vasco	1
jose	1
carlos	1
carmo	1
ricardo	1
Sofia	1

PHC Business Fx

- % of female customer
- % of male customer

29%
71%

Age range of customer

- 30-35
- 35-40
- >55
- no info

5%
5%
5%
85%

Professional Position

- No info: 47%
- Administrative: 6%
- Marketing & Business Director: 18%
- Owner: 6%
- Managing Partner: 24%

- % of north location
- % of South location
- % of center location

41%
59%
0%
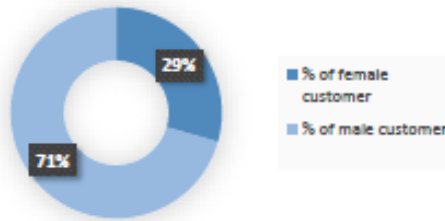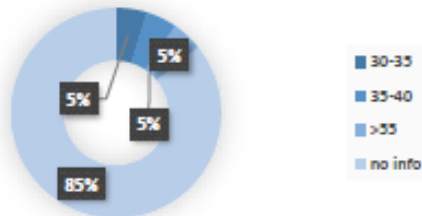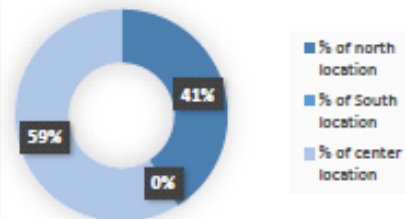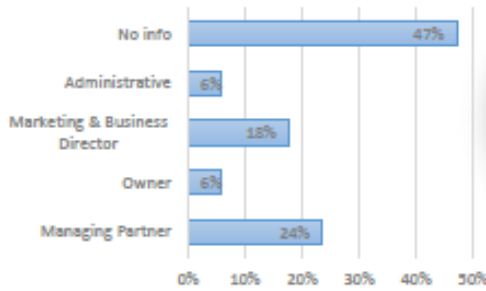
Keywords - PHC Business FX

Intuitive, cost, fast, effective, complete, easy, simple, economical, reliable, agility, mobility, flexible, updates, viable, accessability, legal
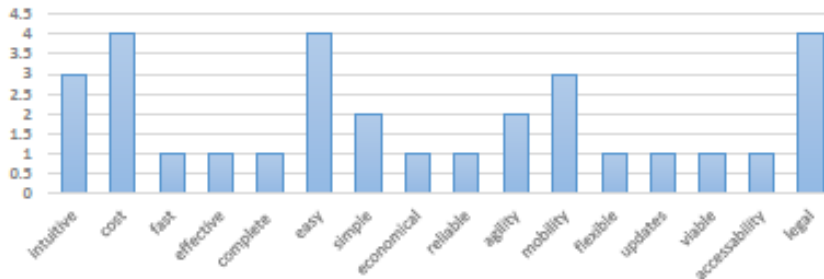
3.2 PHC Billing FX

Product FX	nº of results
Billing	12

Name of the Customer	Frequency
Fernando	1
Paulo	1
Luis	1
Pedro	1
Alexandra	1
Rui	1
Sergio	1
José	1
Joana	1

Age range	%
20-30	8.33%
30-40	0.00%
>55	8%
no info	83.33%

PHC Billing FX

- 25% % of female customer
- 75% % of male customer

- 29% % of north location
- 0% % of South location
- 71% % of center location

Professional Position

	%
Board President	17%
Treasurer	8%
General director	17%
Managing Partner	33%
CEO	17%

Keywords

Keyword	Count
intuitive	4
fast	3
practical	3
layout	2
simple	2
mobility	3
flexible	1
legal	3
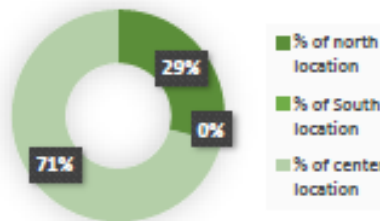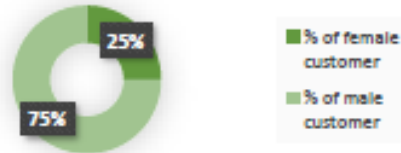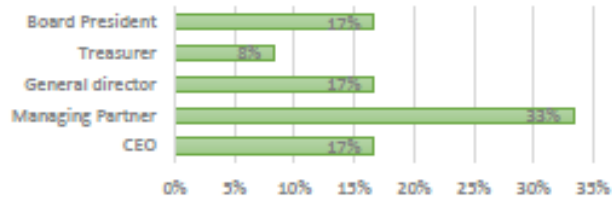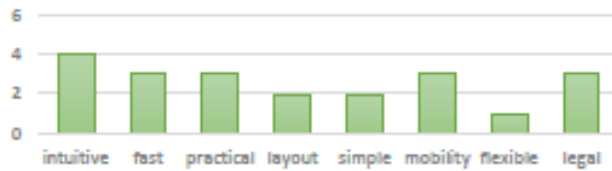
4. General People Questionnaire

Questionnaire on Online Management Software

This questionnaire is part of my Master's Thesis Project in International Management at ISCTE.

The SaaS (Software-as-a-Service) is a type of software that is typically accessed from a web browser via the Internet. PHC Software is one of the Portuguese national companies offering this type of product.

The purpose of this questionnaire is to get to know the consumer understanding the software features most sought by small and medium enterprises (SMEs) and the whole selection process of this product in order to better understand the potential and current customers of PHC Software.

* Required

1. Age *

Mark only one oval.

- ☐ <25
- ☐ 25-30
- ☐ 30-35
- ☐ 35-40
- ☐ 40-45
- ☐ 45-50
- ☐ 50-55
- ☐ >55

2. Gender *

Mark only one oval.

- ☐ Male
- ☐ Female

3. Profession *

Mark only one oval.

Managing Partner

- ☐ General Director
- ☐ CEO
- ☐ Collaborator
- ☐ Administrative
- ☐ Assistant
- ☐ Other:

4. Industry *

_____

5. Business Characteristics *

Check all that apply.

- ☐ Family Business
- ☐ Small-Size
- ☐ Enterprise
- ☐ Medium-Size
- ☐ Enterprise
- ☐ Large Enterprise
- ☐ Non-Profit
- ☐ Organisation
- ☐ Other:

6. What do you consider your level of technological Knowledge? *

Mark only one oval.

- ☐ Expert
- ☐ High
- ☐ Intermediary
- ☐ Low
- ☐ None

7. Are you satisfied with your current management software? *

Mark only one oval.

- ☐ Yes
- ☐ No
- ☐ Not applicable

8. Which reasons would lead you to choose this type of product? *

Mark only one oval.

- ☐ Improve Stock Management
- ☐ Simplify the Billing system
- ☐ Improve Management and Organisation of the Company's Departments
- ☐ Improve Customer Management
- ☐ None of the Above

☐ Other:

9. Would you considered to have a management software that does not require installation and is easily accessible from a web browser through the Internet? *

Mark only one oval.

☐ Yes

☐ No

☐ Other:

10. Which of these Products would you choose?

Mark only one oval.

☐ Point of Sale in your Computer, Tablet or Smartphone

☐ Complete Online Management and Billing Software

☐ Billing Software Certified

☐ None of the above

☐ Other:

11. What would be the reason to need this type of product?

Mark only one oval.

☐ Improve Stock Management

☐ Simplify the Billing

☐ Improve the management of the Company's Departments and its components

☐ None of the above

☐ Other:

12. Which characteristics would lead you to choose this product?

Mark only one oval.

☐ Flexibility (As it can be accessed anywhere)

☐ Absence of installation costs

☐ A Software Always Up-to-date

☐ Layout

☐ Ease of Use

☐ Other:

13. What would be the Biggest Worries in having a SaaS?

Check all that apply.

- ☐ Security
- ☐ Price
- ☐ Quality of Internet connection
- ☐ Layout
- ☐ Lack of information
- ☐ Other:

14. How do you have knowledge of these type of products?

Check all that apply.

- ☐ Search Engines (Google, Bing, etc.)
- ☐ Television/Radio
- ☐ Social Networks (Facebook, Twitter, etc.)
- ☐ Technology Magazines
- ☐ Newspapers
- ☐ Street Advertisements
- ☐ Other:

15. What do you believe to be the best mean of communication for the company to provide information about the product and customer support?

Check all that apply.

- ☐ Online Explanatory Videos
- ☐ Email
- ☐ Customer Support Services
- ☐ Social Networks
- ☐ Other:

16. Do you usually read and follow companies' blogs and news?

Mark only one oval.

- ☐ Always
- ☐ Sometimes
- ☐ Never

17. In case of purchase of a product like this, how do you describe your decision process?

Mark only one oval.

- ☐ Simple

☐ Complex

18. Do you relate with any of these decision processes?

Mark only one oval.

☐ Use a third party in the decision process

☐ Search and analyse companies and competition through the internet until

☐ reaching the right decision

☐ Ask for feedback to known people that have used the product

19. Are you aware of PHC Software and the product PHC FX?

Mark only one oval.

☐ I am a client

☐ I used to be a client

☐ I know the company and the product

☐ I have no knowledge of it

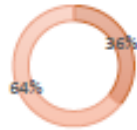## 20. Which of these PHC products do you use or have used?

Mark only one oval.

☐ PHC CS

☐ PHC POS FX

☐ PHC Business FX
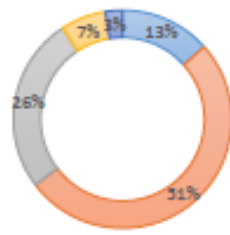
☐ PHC Billing FX

☐ PHC CRM FX

☐ Not Applicable

☐ Other:

4.1 General Results
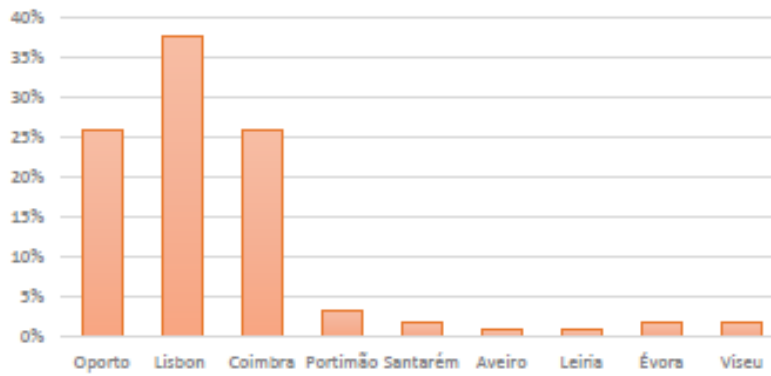
N
119

Female / Male donut chart
- 36%
- 64%

Legend: ☐ Female ☐ Male

Age (bar chart)

<25	25-30	30-35	35-40	40-45	45-50	50-55	>55

Y-axis: 0% to 25%

Type of Business (donut chart)
- 1%
- 13%
- 7%
- 26%
- 51%

Legend: ☐ Family ☐ Small ☐ Medium ☐ Large ☐ Non-Profit Organisation

Consider SaaS (donut chart)
- 32%
- 68%

Legend: ☐ yes ☐ no

District (bar chart)

Oporto	Lisbon	Coimbra	Portimão	Santarém	Aveiro	Leiria	Évora	Viseu

Y-axis: 0% to 40%

	Nº	%
Nulls	12	10%
Valid	107	90%

Satisfied with current soft. (donut chart)
- 12%
- 17%
- 71%
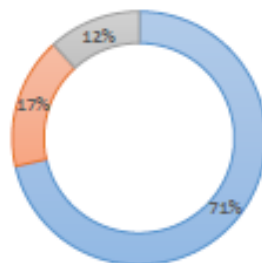
Legend: ☐ yes ☐ no ☐ Not Applicable

Tech Knowledge (donut chart)
- 6%
- 30%
- 45%
- 19%

Legend: ☐ Expert ☐ High ☐ Intermediary ☐ Low

PHC products in use or used?

	PHC CS	PHC Business FX	PHC CRM FX	PHC POS FX	PHC Billing FX	PHC CS ADVANCED 18	Not Applicable

Profession

Business Developer
Store Manager
Technical Director
Assistent
Collaborator
General Director
CEO

0% 5% 10% 15% 20% 25% 30% 35%
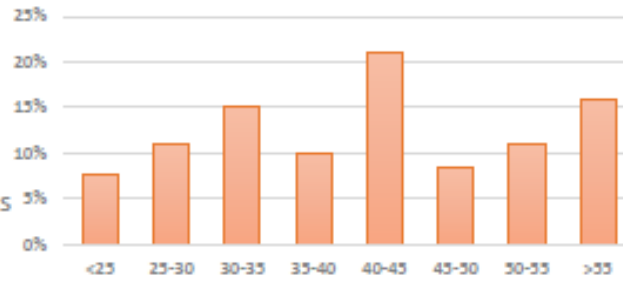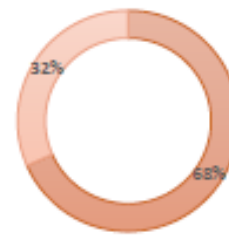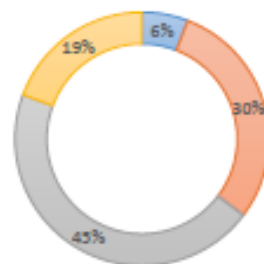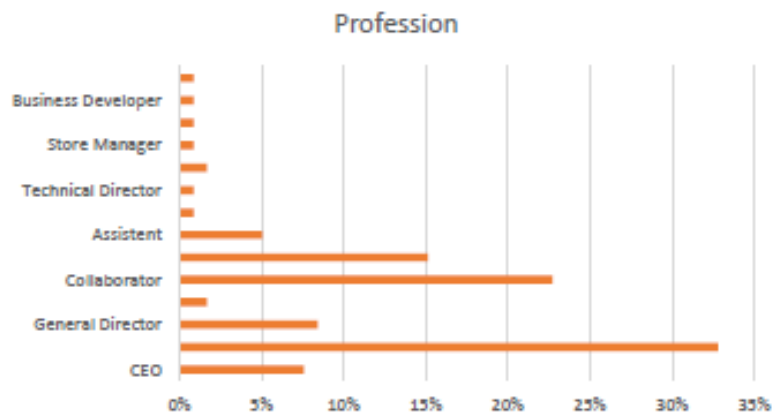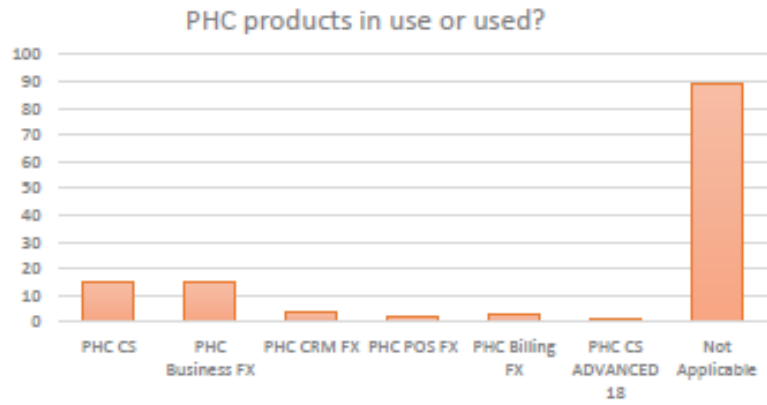
Awareness of PHC Software and the product PHC FX

15%
5%
19%
61%

☐ I am a client   ☐ I used to be a client
☐ I know the company or the product   ☐ I Dont know the company or the product

4.2 PHC Business FX

General   N   43

Female 70% · Male 30%

Age distribution:
- <25: 14%
- 25-30: 12%
- 30-35: 26%
- 35-40: 5%
- 40-45: 14%
- 45-50: 5%
- 50-55: 9%
- >55: 16%

Role distribution:
- Consultant
- Assistent
- Administrative
- Collaborator
- CFO
- General Director
- Managing Partner
- CEO

Type of Business
Family, Small, Medium, Large, Non-Profit Organisation

Tech knowledge
- Expert 9%
- High 35%
- Intermediary 47%
- Low 9%

Satisfied with current Software
- yes 74%
- no 19%
- Not Applicable 7%

Consider SaaS
- yes 77%
- no 23%

xxxviii

4.2.1 Persona One

Primary Persona   N=   6

Age

Profession

Managing Partner | Administrative
Technical Director

Technological Knowledge

High | Intermediary

Type of Business

District

Oporto | Lisbon | Coimbra | Portimão

Reasons to choose this type of product

Characteristics to choose this product

Worries regarding this type of product
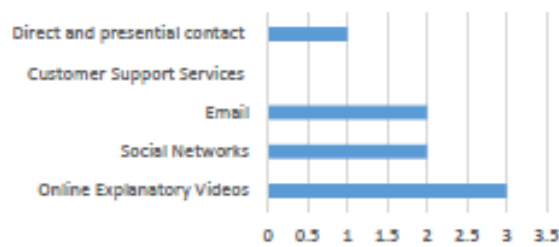

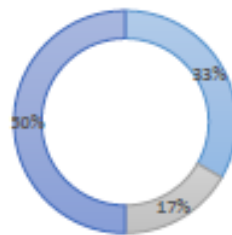## How do you have knowledge of these type of Product

- Search Engines (Google,Bing, etc)
- Technology Magazines
- Colleagues

Best mean of communication between the company and its customers
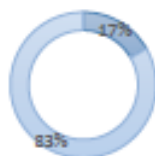

Type of decision process

- Search and analyse companies and competition through the internet until reaching the right decision
- Use a third party in the decision process
- Ask for feedback to known people that have used the product

Frequency of reading company's blogs & news?

- Always
- Sometimes

Type of Decision Process

- Complex
- Simple

xl

4.2.2 Persona Two

Second Persona — N= 3

Age
Female 33% / Male 67%
<25 33% / 40-45 67%

CEO 33% / Collaborator 33% / Assistent 33%

Tech Knowledge
Expert 67% / Intermediary 33%

District
Oporto 33% / Aveiro 33% / Coimbra 33%

Type of business
Small 67% / Medium 0% / Non-Profit Organisation 33%

Reasons to choose this type of product
Improve Management and Organisation of the Company's Departments — 1
Improve Client Management — 1
Simplify the Billing system — 2

Characteristics to choose this product
Flexibility... — 3
A Software... — 2
Ease of Use — 1
Absence of... — 2

Worries regarding this type of product
Price — 1
Security — 3
Quality of Internet connection — 1

How do you have knowledge of these type of Product
Search Engines (Google, Bing, etc) / TV/Radio
33% / 50% / 17%

Best mean of communication between the company and its customers
Online Explanatory Videos — 2
Social Networks — 2
Email — 2
Customer Support Services — 0
Direct and presential contact — 0
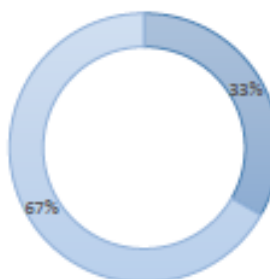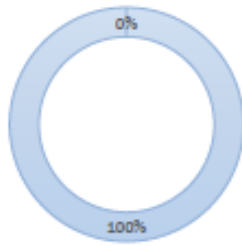
Type of decision process

33%
0%
67%

■ Search and analyse companies and competition through the internet until reaching the right decision

■ Use a third party in the decision process

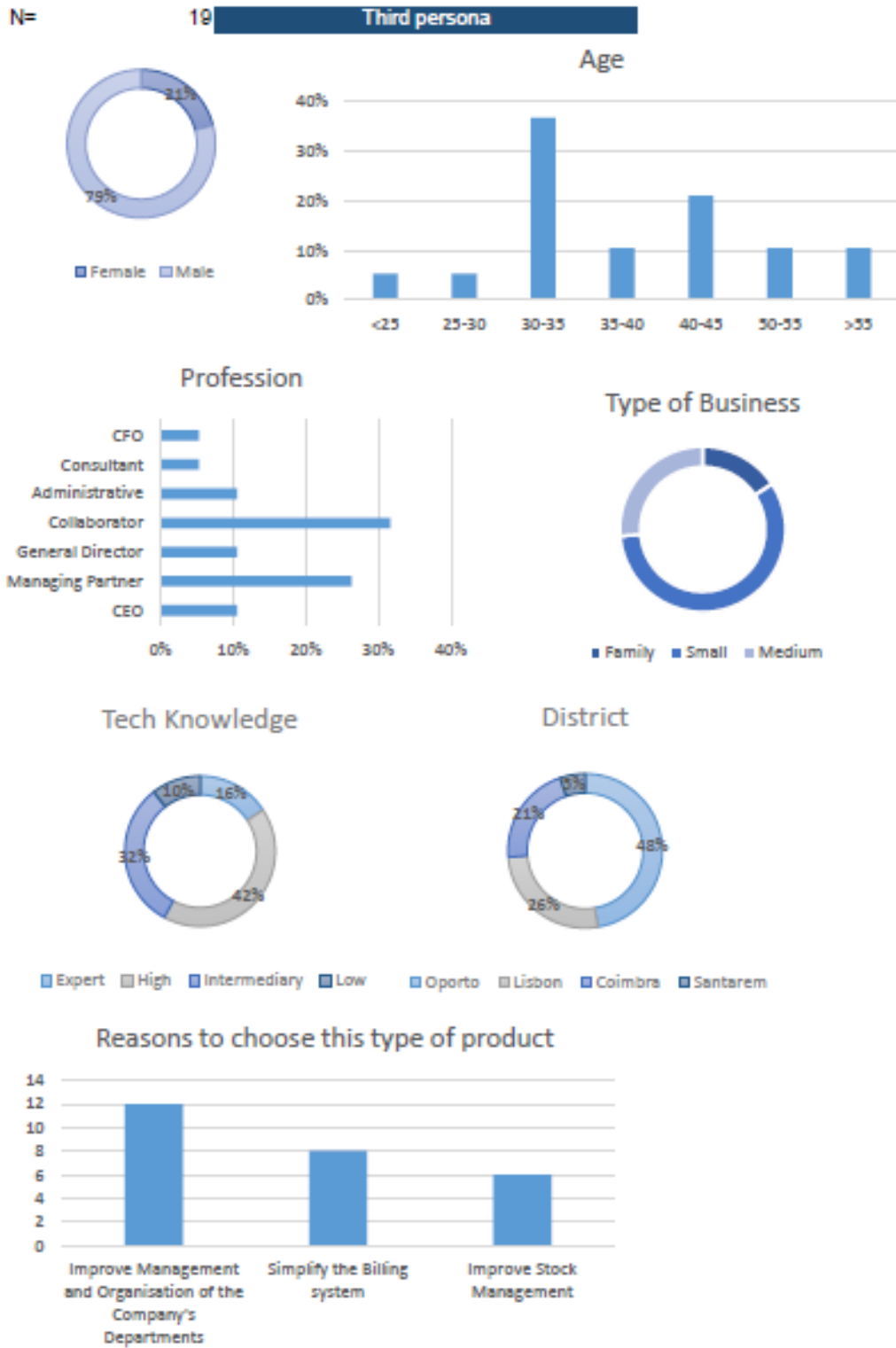■ Ask for feedback to known people that have used the product

Frequency of reading blogs & news ?

0%
33%
67%

■ Always ■ Sometimes ■ Never

Type of Decision Process

0%
100%

■ Complex ■ Simple

4.2.3 Persona Three

N= 19   **Third persona**

Age

Female, Male — 79% / 21%

Profession
- CFO
- Consultant
- Administrative
- Collaborator
- General Director
- Managing Partner
- CEO

Type of Business — Family, Small, Medium

Tech Knowledge — Expert, High, Intermediary, Low — 16%, 42%, 32%, 10%

District — Oporto, Lisbon, Coimbra, Santarem — 48%, 26%, 21%, 5%

Reasons to choose this type of product
- Improve Management and Organisation of the Company's Departments
- Simplify the Billing system
- Improve Stock Management

Characteristics to choose this product

Category	Value
Flexibility (As it can be accessed anywhere)	13
A Software Always Up-to-Date	12
Ease of Use	12
Layout	3
Absence of installation costs	5

Worries regarding this type of product

Category	Value
Price	8
Security	14
Quality of Internet connection	8
Lack of Information	3

Frequency of reading blogs & news

- Sometimes 26%
- Never 69%
- Always 5%

How do you have knowledge of these type of Product

Category	Value
Search Engines...	13
Technology Magazines	6
Newspapers	2
TV/Radio	3
Social Networks...	4
Street Advertisement	1

Type of Decision Process

- Complex 32%
- Simple 68%

Type of decision process

- Search and analyse companies and competition through the internet until reaching the right decision — 53%
- Use a third party in the decision process — 26%
- Ask for feedback to known people that have used the product — 21%
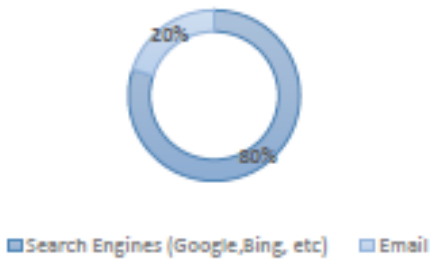
Best mean of communication between the company and its customers

- Online Explanatory Videos — 50%
- Social Networks — 17%
- Email — 33%

4.2.4 Persona Four

Fourth Persona   N=   6

Female   Male

Age

60%
50%
40%
30%
20%
10%
0%
<25   30-35   >55

Profession

60%
50%
40%
30%
20%
10%
0%
CEO   Managing Partner   Administrative

Type of Business

50%   50%

Small   Medium

District

33%   34%
33%

Oporto   Lisbon   Coimbra

Technological Knowledge: Intermediate 100%

Reasons to choose this type of product

17%
83%

Improve Management and Organisation of the Company's Departments

Simplify the Billing system

Characteristics to choose this product

Worries regarding this type of product

Price   Security   Quality of Internet connection

■ Sometimes

How do you have knowledge of these type of Product

Search Engines (Google,Bing, etc)   Email

Best mean of communication between the company and its customers

Online Explanatory Videos   Email

Type of decision process

Search and analyse companies and competition through the internet until reaching the right decision

Ask for feedback to known people that have used the product

Type of Decision Process

Complex   Simple

4.3 PHC Billing FX

General   N=   31

4.3.1 Persona One

Characteristics to choose this product

- Absence of installation costs
- Layout
- Ease of Use
- A Software Always Up-to-Date
- Flexibility (As it can be...

(0, 1, 2, 3, 4, 5)

Worries regarding this type of product

(3.5, 3, 2.5, 2, 1.5, 1, 0.5, 0)

- Price
- Security
- Quality of Internet connection
- Lack of Information

How do you have knowledge of these type of Product

14%
29%
57%

☐ Search Engines (Google,Bing, etc) ☐ Technology Magazines ☐ Newspapers

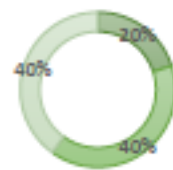## Best mean of communication between the company and its customers

29%
43%
28%

☐ Online Explanatory Videos ☐ Social Networks ☐ Email

Frequency of reading blogs & news

20%
40%
40%

☐ Always ☐ Sometimes ☐ Never

Type of decision process

25%
75%

☐ Search and analyse companies and competition through the internet until reaching the right decision

☐ Ask for feedback to known people that have used the product

Type of Decision Process

20%
80%

☐ Complex ☐ Simple

4.3.2 Persona Two
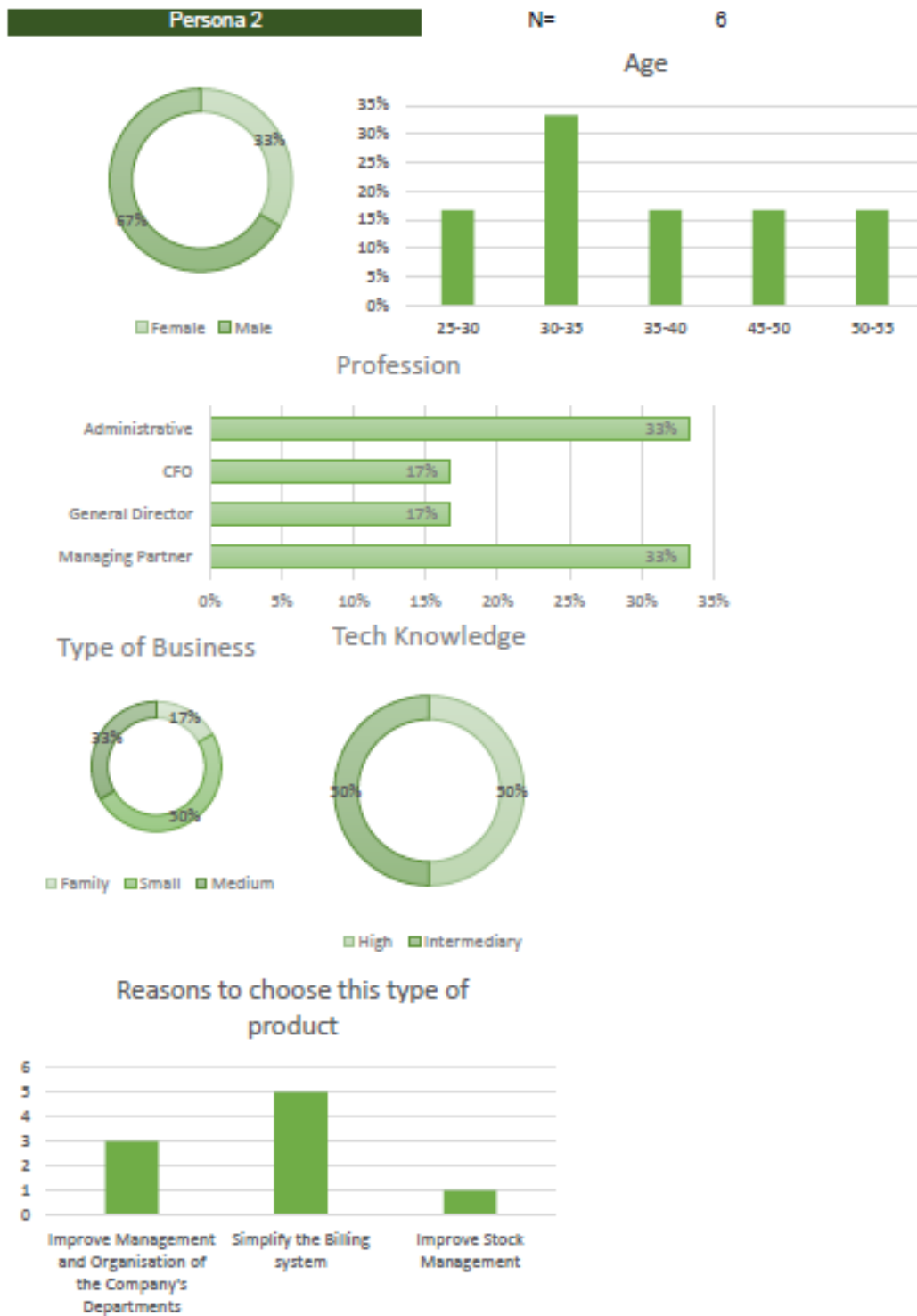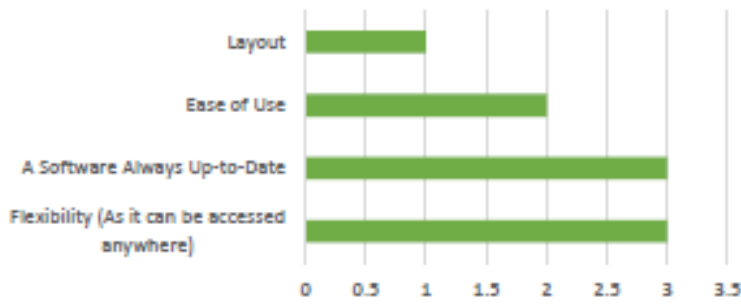
Persona 2 N= 6

Age

Profession
- Administrative: 33%
- CFO: 17%
- General Director: 17%
- Managing Partner: 33%

Type of Business
- Family, Small, Medium (17%, 50%, 33%)

Tech Knowledge
- High 50%, Intermediary 50%

Reasons to choose this type of product
- Improve Management and Organisation of the Company's Departments: 3
- Simplify the Billing system: 5
- Improve Stock Management: 1

Characteristics to choose this product

Characteristic	Value
Layout	1
Ease of Use	2
A Software Always Up-to-Date	3
Flexibility (As it can be accessed anywhere)	3

Worries regarding this type of product

	Value
Price	3
Security	6
Quality of Internet connection	2
Lack of Information	1

Type of Decision Process

17% Complex
83% Simple

☐ Complex ☐ Simple

How do you have knowledge of these type of Product

17%, 33%, 17%, 33%
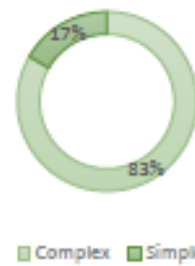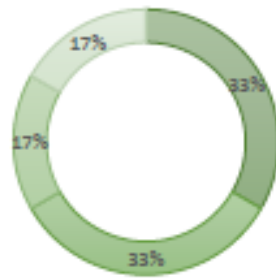
☐ Search Engines (Google,Bing, etc) ☐ Technology Magazines
☐ Newspapers ☐ Social Networks (Facebook,Twitter, etc)

Type of decision process

20%, 80%

☐ Search and analyse companies and competition through the internet until reaching the right decision
☐ Use a third party in the decision process

Best mean of communication between the company and its customers

20%, 80%

☐ Social Networks ☐ Email

Frequency of reading blogs & news

17%, 33%, 50%

☐ Always ☐ Sometimes ☐ Never

4.3.3 Persona Three

Persona 3   N=   5

Age   Profession

20%   33%   50%   50%
80%   67%

☐ Female ☐ Male   ☐ 35-40 ☐ 40-45   ☐ CEO ☐ Collaborator
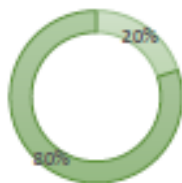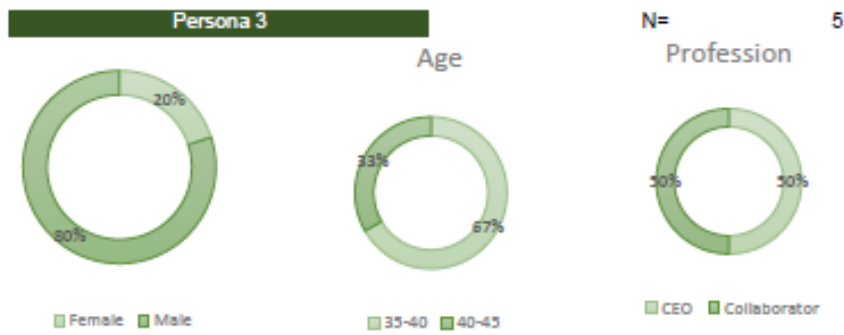
Type of Business : SMALL
Tech Knowledge: Expert

Reasons to choose this type of product

- Simplify the Billing system — 1
- Improve Client Management — 1
- Improve Management and Organisation of the Company's Departments — 2

(0, 0.5, 1, 1.5, 2, 2.5)

Characteristics to choose this product

- Absence of installation costs — 2
- Layout — 2
- Ease of Use — 2
- A Software Always Up-to-Date — 4
- Flexibility (As it can be accessed anywhere) — 1

(0, 1, 2, 3, 4, 5)

Worries regarding this type of product
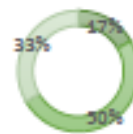
37%
63%

☐ Price ☐ Security

lii

How do you have knowledge of these type of Product

- Search Engines (Google,Bing, etc)
- Technology Magazines
- Social Networks (Facebook,Twitter, etc)

Best mean of communication between the company and its customers

- Online Explanatory Videos
- Social Networks

Type of decision process

- Search and analyse companies and competition through the internet until reaching the right decision
- Use a third party in the decision process
- Ask for feedback to known people that have used the product

Frequency of reading blogs & news

- Sometimes
- Never

type of decision process: simple

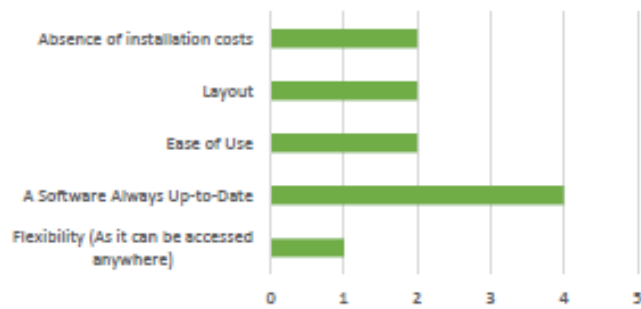### 4.3.4 Persona Four

Persona 4 N= 9

Age

Profession

Type of business

Tech knowledge

Reasons to choose this type of product

Characteristics to choose this product

Worries regarding this type of product

15% 16%
69%
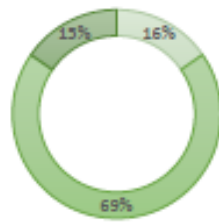
☐ Price ☐ Security ☐ Quality of internet connection

How do you have knowledge of these type of Product

Q

Best mean of communication between the company and its customers

33%
50%
17%

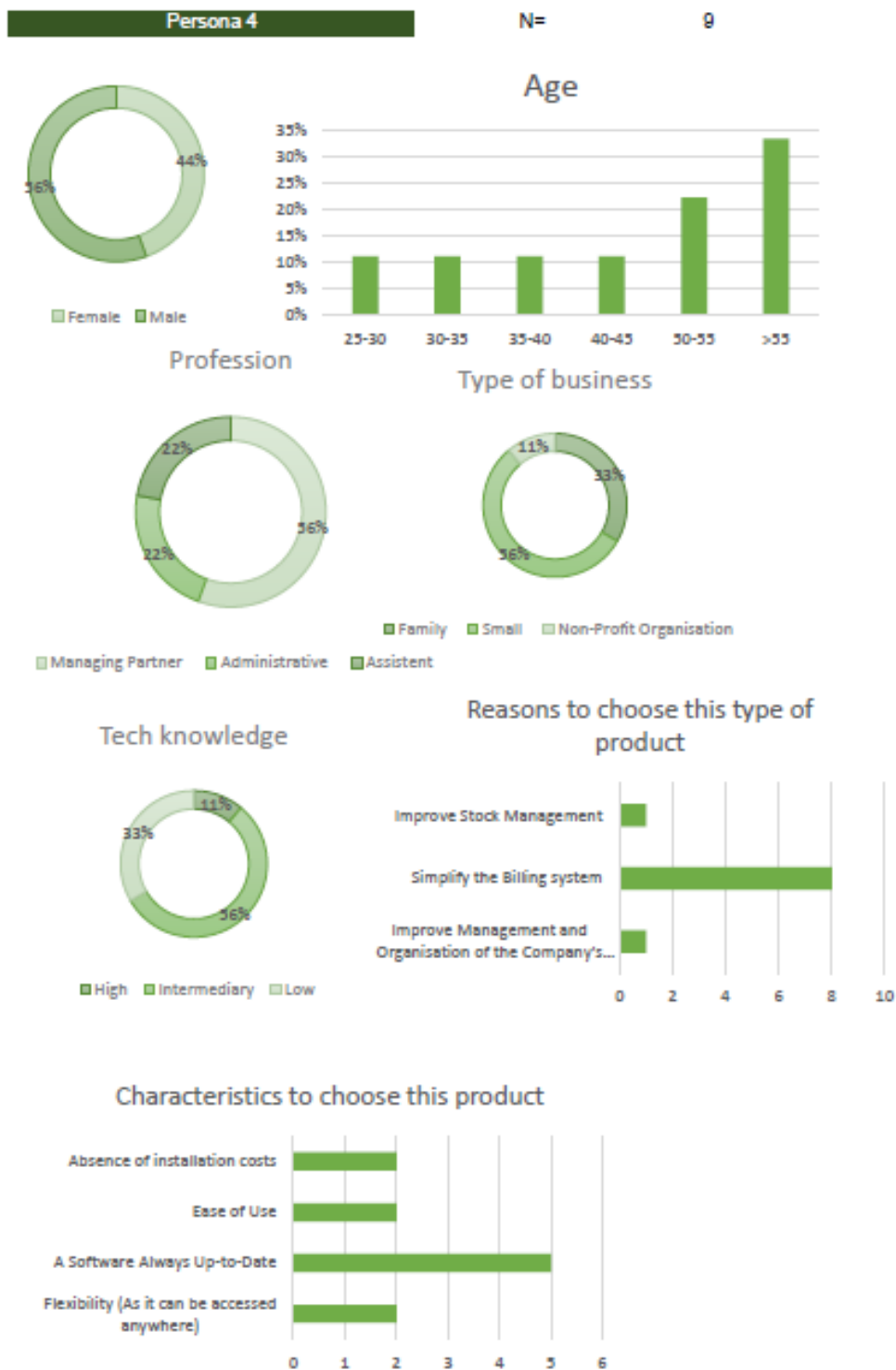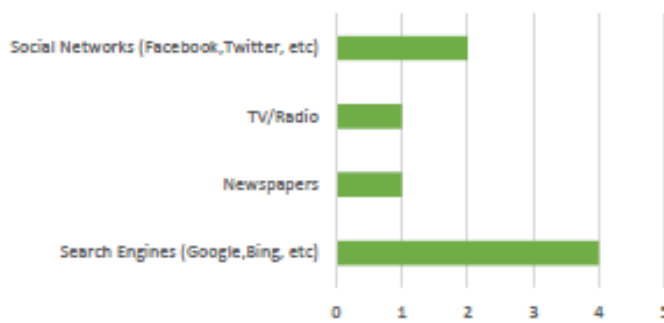☐ Online Explanatory Videos ☐ Social Networks ☐ Email

Frequency of reading blogs & news

11%
89%

☐ Sometimes ☐ Never

Type of decision process

45% 33%
22%

☐ Search and analyse companies and competition through the internet until reaching the right decision

☐ Use a third party in the decision process

☐ Ask for feedback to known people that have used the product

Type of Decision Process

22%
78%

☐ Complex ☐ Simple

4.4 PHC POS FX

General

N=33

33

- Female - Male

Owner
HR Manager
Technical Director
Business Developer
Administrative
Store Manager
Collaborator
General Director
Managing Partner
CEO

- Family - Small - Medium - Large - Non-Profit Organisation

Tech Knowledge

- Expert - High - Intermediary - Low

Satisfied with current software

- yes - no - Not Applicable

Consider SaaS

- yes - no

4.4.1 Persona One

Female   Male

Age

Profession

Owner
Store Manager
Collaborator
Managing Partner
CEO

0% 10% 20% 30% 40% 50% 60% 70%

Tech knowledge

High   Intermediary   Low

Type of business

Family   Small   Medium

Consider SaaS

yes   no

Satisfied with current soft.

yes   no   Not Applicable

Reasons to choose this type of product

Improve Management and Organisation of the Company's Departments | Improve Client Management | Simplify the Billing system | Improve Stock Management | None of the Above

Characteristics to choose this product

Category	Value
Absence of installation costs	2
Layout	1
Ease of Use	4
A Software Always Up-to-Date	4
Flexibility (As it can be accessed...	4

(axis: 0 1 2 3 4 5)

Worries regarding this type of product

Category	Value
Price	3
Security	4
Quality of Internet connection	3
Lack of Information	1

(axis: 0 1 2 3 4 5)

Type of Decision Process

Complex 62%, Simple 38%

How do you have knowledge of these type of Product

Category	Value
Social Networks...	
TV/Radio	
Family	1
Newspapers	1
Suppliers and Clients	1
Search Engines (Google, Bing,...	5

(axis: 0 1 2 3 4 5 6)

Frequency of reading blogs & news

Sometimes 62%, Never 38%

Best mean of communication between the company and its customers

Category	Value
Online...	3
Social...	3
Email	1
Customer...	0
Direct and...	1

(axis: 0 1 2 3 4)

Type of decision process

50%, 25%, 25%

- Search and analyse companies and competition through the internet until reaching the right decision
- Use a third party in the decision process
- Ask for feedback to known people that have used the product

4.4.2 Person Two

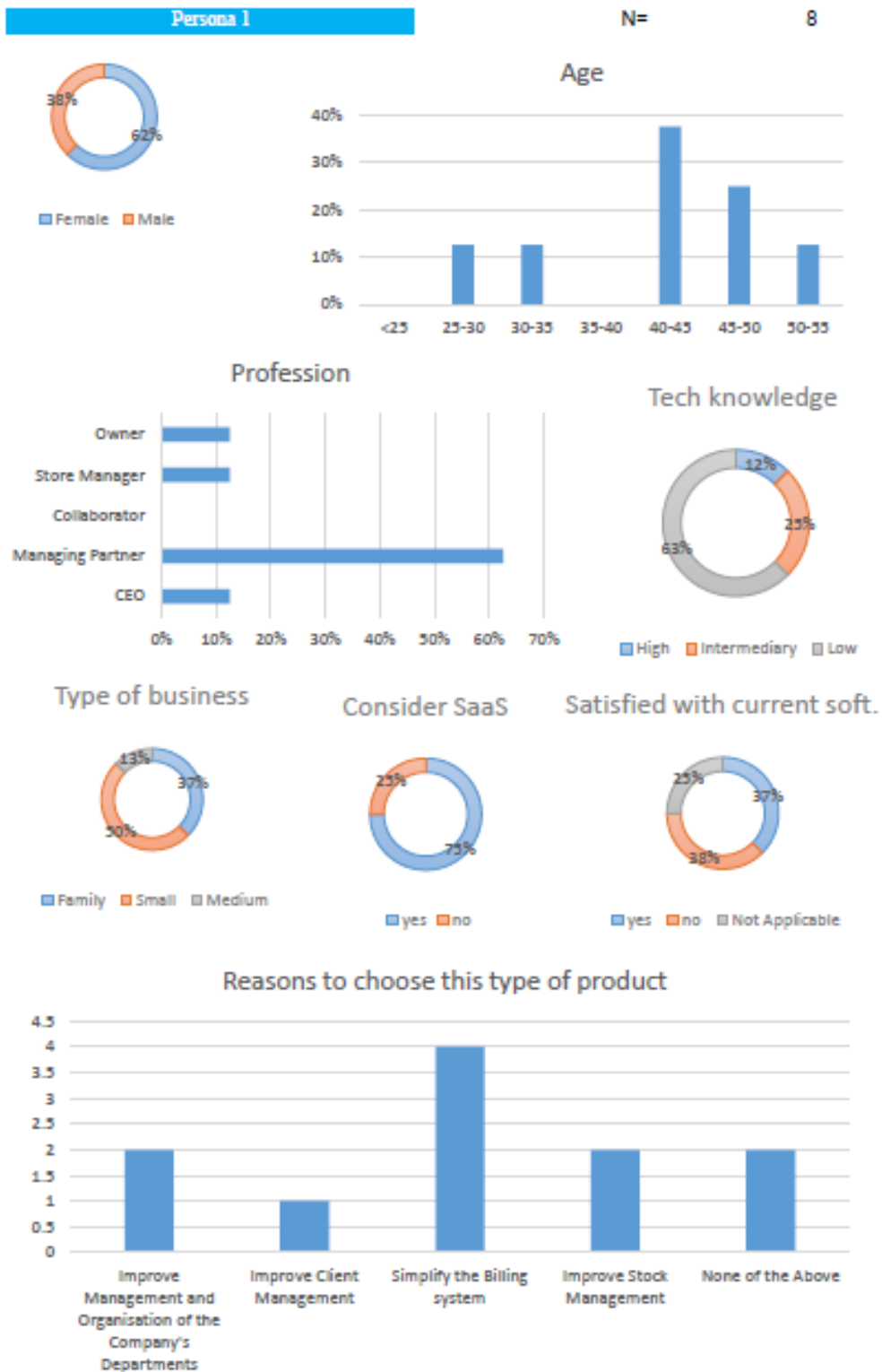Persona 2   N=   3

Age

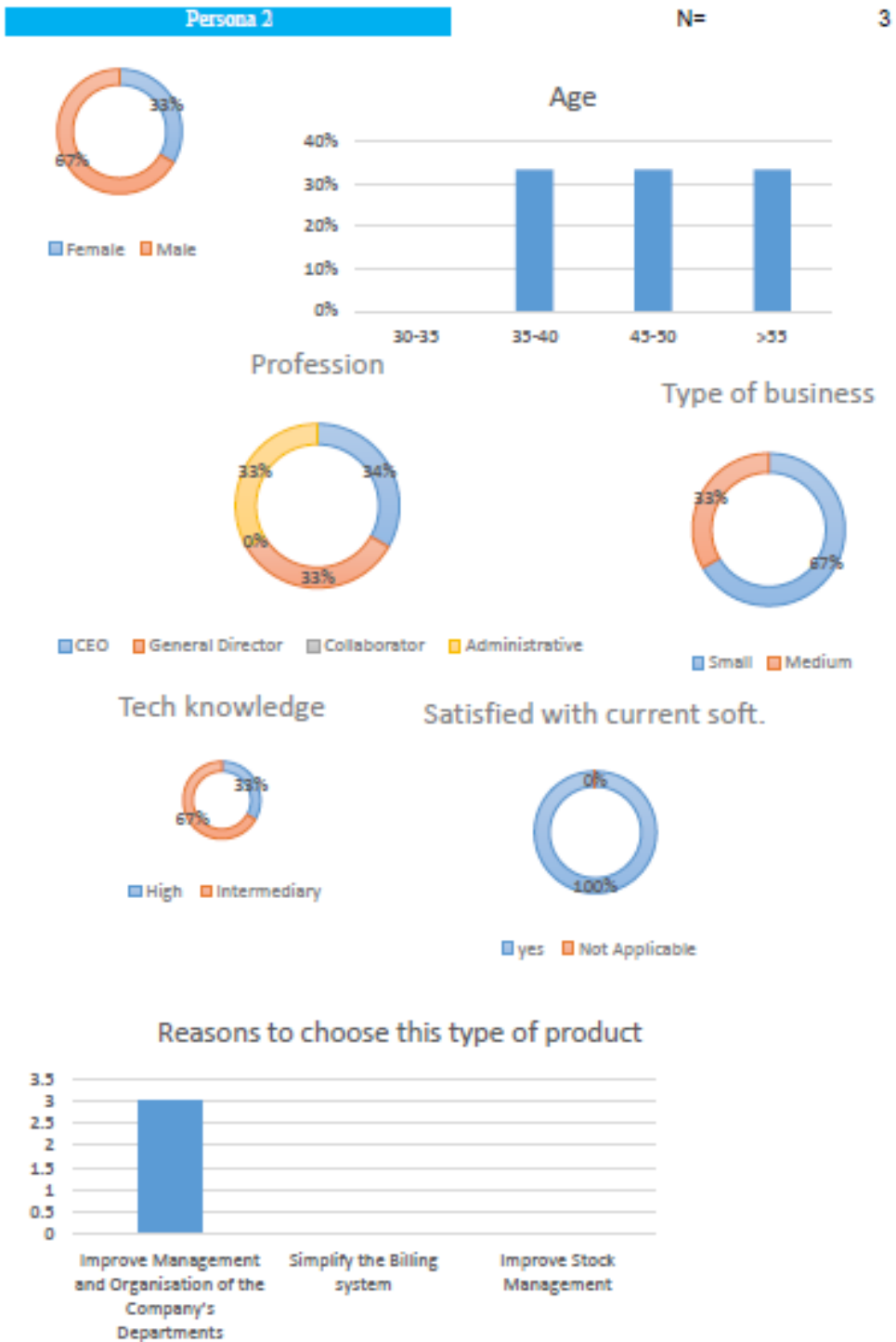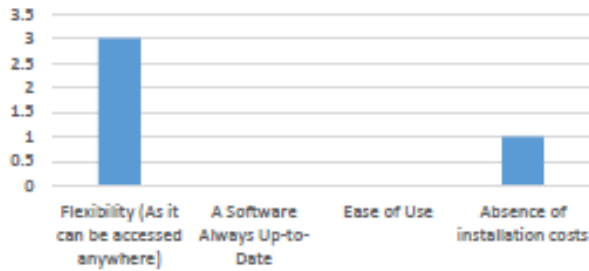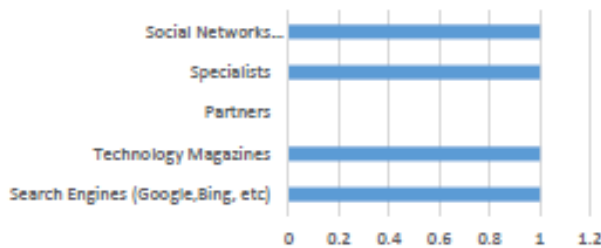Profession

Type of business

Tech knowledge

Satisfied with current soft.

Reasons to choose this type of product

Characteristics to choose this product

Flexibility (As it can be accessed anywhere)	3
A Software Always Up-to-Date	0
Ease of Use	0
Absence of installation costs	1

Worries regarding this type of product

Quality of Internet...	
Security	3
Price	1

How do you have knowledge of these type of Product

Social Networks...	1
Specialists	1
Partners	
Technology Magazines	1
Search Engines (Google,Bing, etc)	1

Type of Decision Process

33% Simple
67% Complex

■ Complex ■ Simple

Best mean of communication between the company and its customers

50% / 50%

■ Online Explanatory Videos ■ Social Networks

Type of decision process

0%
33%
67%

■ Search and analyse companies and competition through the internet until reaching the right decision
■ Use a third party in the decision process
■ Ask for feedback to known people that have used the product

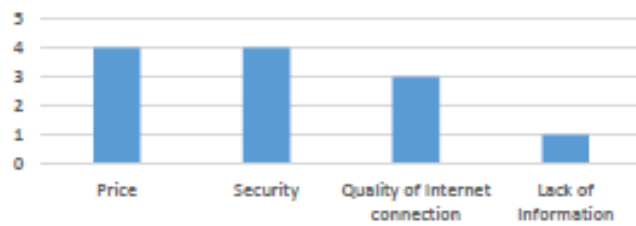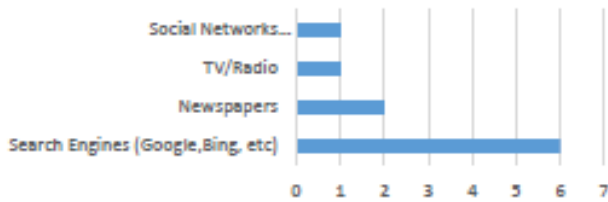**frequency reading blogs and news from companies: sometimes**

4.4.3 Persona Three

Persona 3   N=   8

Female   Male

Age

40%
30%
20%
10%
0%

25-30   30-35   40-45   45-50   >55

Profession

13%
25%
62%

Managing Partner   General Director   Business Developer

Type of business

13% 12%
75%

Family   Small   Medium

Tech knowledge

25% 25%
50%

High   Intermediary   Low

Satisfied with current soft.

43%
87%

yes   no

Reasons to choose this type of product

7
6
5
4
3
2
1
0

Improve Management and Organisation of the Company's Departments   Simplify the Billing system   Improve Stock Management

Characteristics to choose this product

Flexibility (As it can be accessed anywhere): 4
A Software Always Up-to-Date: 2
Ease of Use: 7
Absence of installation costs: 1

Worries regarding this type of product

Price: 4
Security: 4
Quality of Internet connection: 3
Lack of Information: 1

How do you have knowledge of these type of Product

Social Networks...: 1
TV/Radio: 1
Newspapers: 2
Search Engines (Google, Bing, etc): 6

Frequency of reading blogs & new

38% Never
62% Sometimes

☐ Sometimes   ☐ Never

Best mean of communication between the company and its customers

Online Explanatory Videos: 6
Social Networks: 1
Email: 2
Direct and presential contact: 1

Type of Decision Process

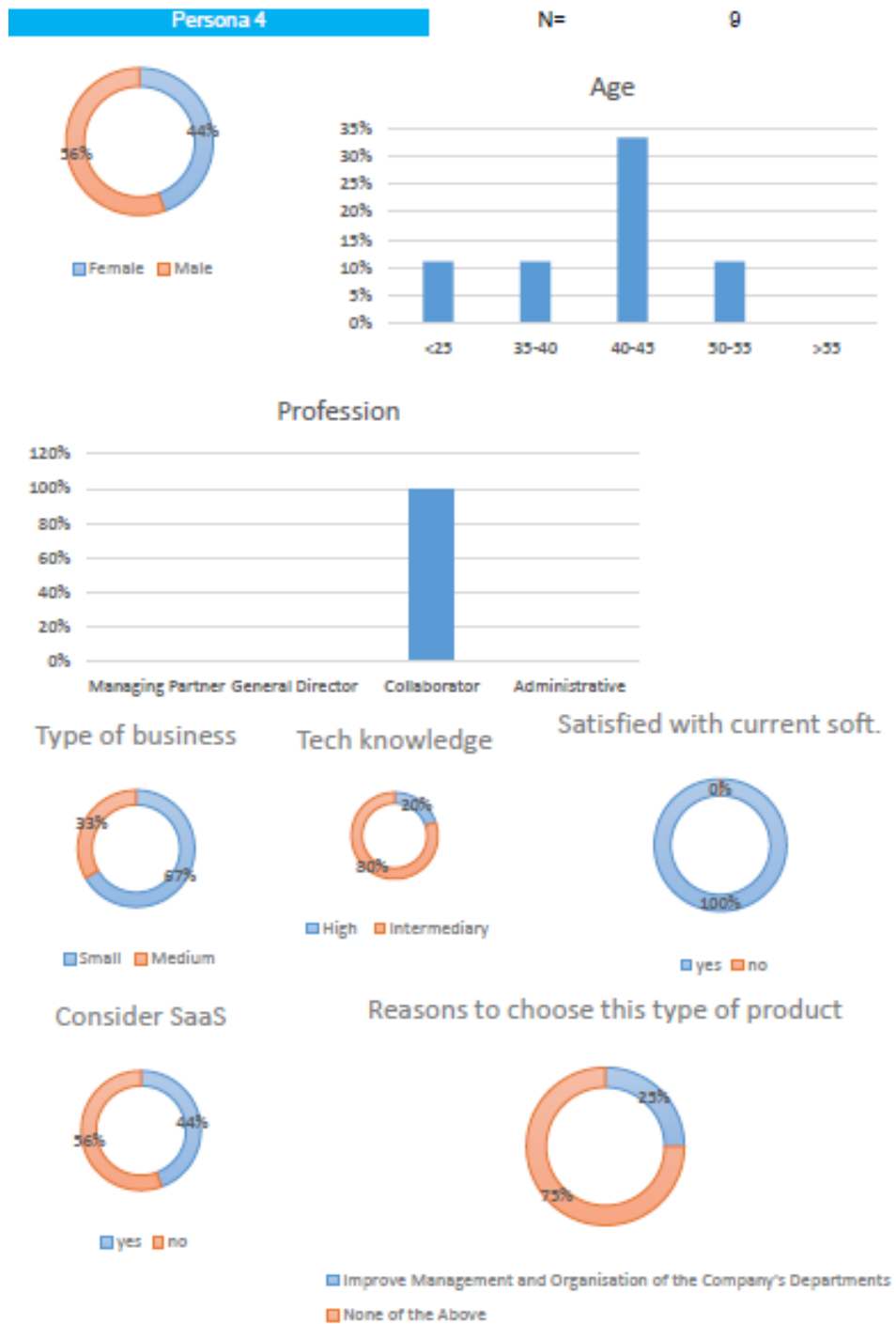37% Complex
63% Simple

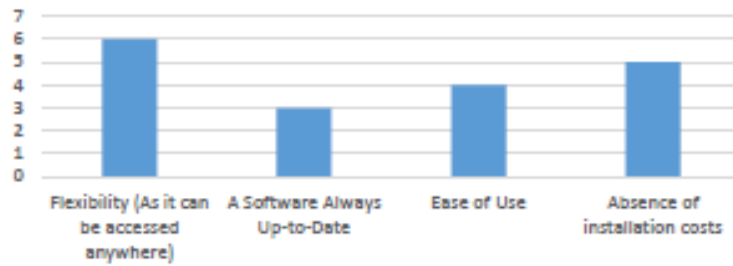☐ Complex   ☐ Simple

Type of decision process

38%
50%
12%

☐ Search and analyse companies and competition through the internet until reaching the right decision

☐ Use a third party in the decision process

4.4.4 Persona Four

Characteristics to choose this product

Bar chart:
- Flexibility (As it can be accessed anywhere): 6
- A Software Always Up-to-Date: 3
- Ease of Use: 4
- Absence of installation costs: 5

Worries regarding this type of product

Bar chart:
- Price: 3
- Security: 5
- Quality of Internet connection: 4
- Lack of Information: 0

Frequency of reading blogs & news

Donut chart:
- Sometimes: 63%
- Never: 37%

How do you have knowledge of these type of Product

Bar chart:
- Newspapers: 0
- Technology Magazines: 0
- Search Engines (Google, Bing,...): 9

Type of Decision Process

Donut chart:
- Complex: 33%
- Simple: 67%

Best mean of communication between the company and its customers

Donut chart:
- Online Explanatory Videos: 33%
- Email: 67%

Type of decision process

Donut chart:
- 33%
- 11%
- 56%
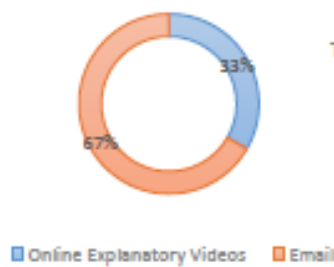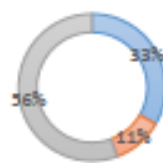
■ Search and analyse companies and competition through the internet until reaching the right decision

■ Use a third party in the decision process

▨ Ask for feedback to known people that have used the product

4.5 New Persona

N=21

Age

Profession

Size of Business

Technological Expertise

Location

Characteristics to choose this product

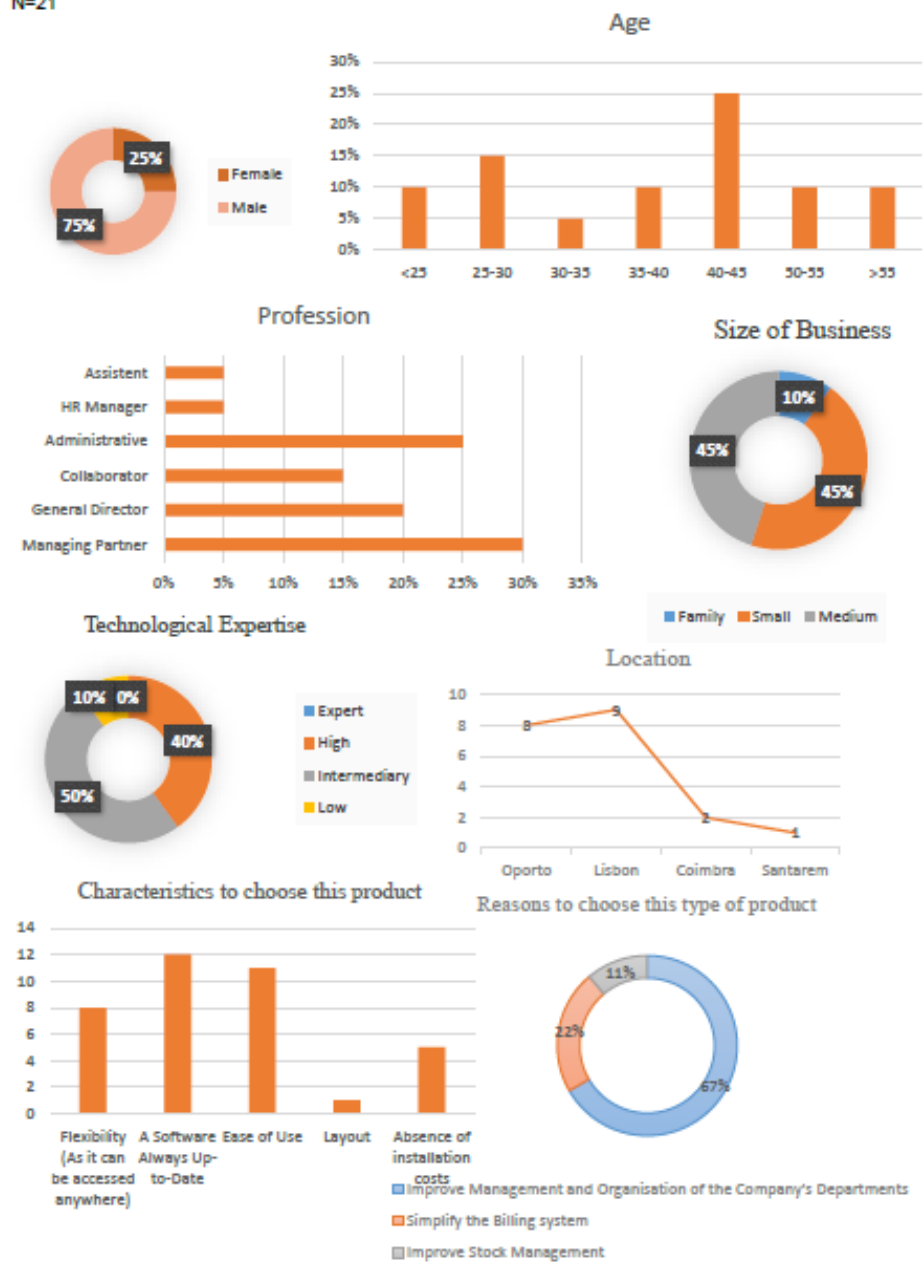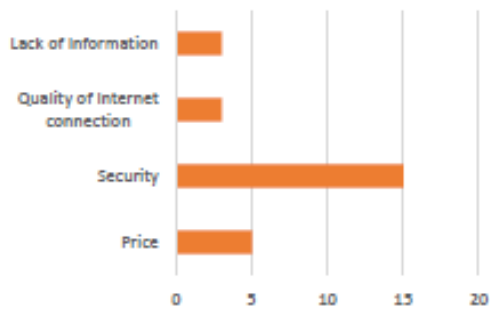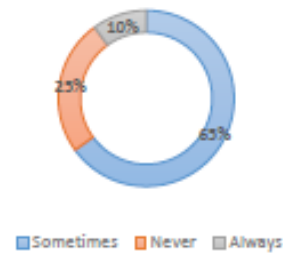### Reasons to choose this type of product

Worries regarding this type of product

Category	Value
Lack of Information	3
Quality of Internet connection	3
Security	15
Price	5

(axis: 0, 5, 10, 15, 20)

Best mean of communication between the company and its customers

- Online Explanatory Videos: 61%
- Email: 39%

How do you have knowledge of these type of Product

Category	Value
Street Advertisement	1
Social Networks...	2
Newspapers	4
Technology Magazines	4
Search Engines (Google,Bing, etc)	14

(axis: 0, 2, 4, 6, 8, 10, 12, 14, 16)

Frequency of reading blogs & news
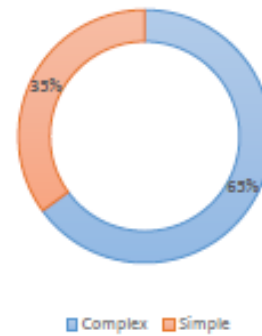
- Sometimes: 65%
- Never: 25%
- Always: 10%

Type of decision process

- Search and analyse companies and competition through the internet until reaching the right decision: 35%
- Use a third party in the decision process: 41%
- Ask for feedback to known people that have used the product: 24%

Type of Decision Process

- Complex: 65%
- Simple: 35%

5. Interview Layout

1. Which PHC FX Product does this interview refer to?

Mark only one oval.

- ☐ PHC Business FX
- ☐ PHC Billing FX
- ☐ PHC POS FX

2. Name

_____

3. Age

_____

4. Type of company the interviewer works in?

Mark only one oval.

- ☐ Micro Enterprise
- ☐ Small Size Enterprise
- ☐ Midsize
- ☐ enterprise
- ☐ Family Business
- ☐ Startup

5. Position

_____

6. Educational Level

Mark only one oval.

- ☐ High School
- ☐ Bachelor
- ☐ Master
- ☐ Doctorate
- ☐ Other:

7. How many workers does your company

have?

8. Which challenges do you face every day at work?

9. What motivate you to continue?

10. Are you satisfied with your current management software? Why? Why not?

11. Why would you need a management software?

12. Would you buy a software that could be accessed on the internet? why? why not?

13. How do you describe your decision process?

14. What kind of characteristics do you value the most on a management software?

15. What are your ultimate decision drivers?

16. How do you find information regarding technology?

17. Do you get most of your information during working hours or at home?
Mark only one oval.

- ☐ Working hours
- ☐ At home
- ☐ Other:

18. Do you get information through word of mouth within your business community?
Mark only one oval.

- ☐ Yes
- ☐ NO
- ☐ Other:

19. What social media do you use?
Check all that apply.

- ☐ Facebook
- ☐ Twitter
- ☐ LinkedIn

☐ Pinterest

☐ Google +

☐ Tumblr

☐ Other:

20. How often do you use social media and for how long?

21. What types of device do you use?

22. Which do you believe to be your level of technology?
Mark only one oval.

☐ Basic

☐ Intermediate

☐ Expert

☐ Other:

23. How easy do you find using different types of technology?

24. What are your main interests?

25. What do you usually do in your free time?

26. How would you describe a day in your life?