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From Business Plan to Value Creation

A Strategic B2B Marketing Plan for a Start-Up in the Digital Health Care Market

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Dissertation written under the supervision of Professor João Cotter Salvado, with the collaboration of industry expert Rute Xavier.

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I. Abstract

Title: From Business Plan to Value Creation - A Strategic B2B Marketing Plan for a Start-Up in the Digital Health Care Market

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The digital health market is becoming increasingly important and is driven by the current COVID-19 pandemic. Despite the increasing importance of the market, the existing literature does not sufficiently cover direct marketing applications.

The dissertation therefore directly addresses this research gap and is intended to demonstrate how concrete B2B marketing strategies can be designed for the digital health market. To illustrate this kind of marketing plan, the Portuguese start-up Mentora Health served as an example. Based on a comprehensive situation analysis, a positioning strategy was derived and captured in a B2B marketing mix.

By adopting a mixed research approach, empirical qualitative and quantitative results could be combined with existing findings from corresponding literature. Thus, results from various expert interviews and a survey were formulated into specific marketing strategies.

The dissertation illustrates the entire journey of a startup from business plan towards value creation and provides deep insights into the Portuguese hospital market.

This dissertation was submitted in partial fulfilment of the requirements for the MSc. in Management at the Universidade Católica Portuguesa and was part of a consulting project with the digital health start-up Mentora Health.

Keywords: B2B Strategy, Strategic Marketing, Digital Health, SWOT-Analysis, Porter's Five Forces, Value Proposition Canvas, Segmentation, Targeting, Positioning, Marketing Mix, Van Westendorp's Price Sensitivity Meter

I. Abstrato

Título: Do Plano de Negócios à Criação de Valor - Um Plano Estratégico de Marketing B2B para um Start-Up no Mercado Digital de Cuidados de Saúde

Autor: Alexander Burgmayr

O mercado da saúde digital está a tornar-se cada vez mais importante e é impulsionado pela actual pandemia da COVID-19. Apesar da crescente importância do mercado, a literatura existente não cobre suficientemente as aplicações de marketing directo.

Por conseguinte, a dissertação aborda directamente esta lacuna de investigação e destina-se a demonstrar como estratégias concretas de marketing B2B podem ser concebidas para o mercado digital da saúde. Para ilustrar este tipo de plano de marketing, a Mentora Health, empresa portuguesa em fase de arranque, serviu de exemplo. Com base numa análise abrangente da situação, uma estratégia de posicionamento foi derivada e capturada numa mistura de marketing B2B.

Adoptando uma abordagem de investigação mista, os resultados empíricos qualitativos e quantitativos poderiam ser combinados com os resultados existentes da literatura correspondente. Assim, os resultados de várias entrevistas de peritos e de um inquérito foram formulados em estratégias de marketing específicas.

A dissertação ilustra todo o percurso de um arranque, desde o plano de negócios até à criação de valor e fornece uma visão profunda do mercado hospitalar português.

Esta dissertação foi submetida em cumprimento parcial dos requisitos para o Mestrado em Gestão na Universidade Católica Portuguesa e fez parte de um projecto de consultoria com a Mentora Health, empresa de saúde digital em arranque.

Palavras-chave: Estratégia B2B, Marketing Estratégico, Saúde Digital, Análises SWOT, Cinco Forças de Porter, Tela de Proposta de Valor, Segmentação, Alvo, Posicionamento, Marketing Mix, Medidor de Sensibilidade de Preços da Van Westendorp

II. Acknowledgments

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Last but not least, I would like to thank my parents who have supported me in any possible way during my academic journey. Thanks to their endless support, I am now able to end this journey, after stops in Milan, Munich and New York City, finally in Lisbon at one of the most prestigious universities in Europe.

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V. List of Abbreviations

AI	*Artificial Intelligence*
AMA	*American Marketing Association*
APR	*Acceptable Price Range*
B2B	*Business-to-Business*
B2C	*Business-to-Consumer*
COVID-19	*Corona Virus Disease 2019*
DH	*Digital Health*
IOT	*Internet of Things*
IP	*Interview Partner*
IPP	*Indifference Price Point*
MH	*Mentora Health*
mHealth	*Mobile Health*
OECD	*Organization for Economic Co-Operation and Development*
OPP	*Optimal Price Point*
PMC	*Price of Marginal Cheapness*
PME	*Point of Marginal Expensiveness*
RQ	*Research Question*
STP	*Segmenting-Targeting-Positioning*
SWOT	*Strengths-Weaknesses-Opportunities-Threats*
TAM	*Total Available Market*
VP	*Value Proposition*
VPC	*Value Proposition Canvas*
4 P	*Product-Price-Place-Promotion*

1 Introduction

Innovations in digital health (DH) care continue to gain importance not only in numbers but also in expertise and competence. Representing a market that can delivers value for several diverse stakeholders, including hospitals, patients, research organizations, pharmaceutical companies as well as health insurances. Due to its immense potential, this market offers a great opportunity to satisfy specific needs of either one of those stakeholders by introducing just one single product (Mathews et al., 2019).

Inspired by this great market potential and the vision of improving cancer patient's quality of life, the idea of Mentora Health (MH) was born. MH is a Portuguese start-up bridging the gap between hospitals and cancer patients' daily needs with the goal to improve clinical and personal outcomes.

Based on data and an artificial intelligence (AI) the platform offers different features such as a personal health diary for recording medications, symptoms, treatments, physical activity and a broad variety of lifestyle recommendations in order to increase the empowerment of patients. Patients and holistic services represent the B2C site of MH's business model, while the B2B site focuses on providing value to pharmaceutical companies, hospitals, research organizations and insurances through the collection of real-world cancer patient data as well as patient experience programs.

From a B2C perspective, MH can be characterised as a digital cancer companion that provides an online marketplace, where cancer patients can find suitable offers from a variety of physiologists, nutritionists and psychologists based on a pay-as-you-go option.

Owing to the huge revenue potential on the B2B side, this dissertation focuses on a customer centric approach of the B2B business performance in order to develop a strategic marketing plan.

1.1 Problem Statement and Research Questions

Starting up in the DH sector is considered to be the most challenging stage in the launch of a new service. The future success and business growth will be defined by these first strategic decisions (Muhos et al., 2019). As MH is in this process of preparing for the first pre-seed round, it is crucial to make a analysis of the market need that the product aims to satisfy. It is all about identifying the perceived customer value in order to convince opinion leaders to support the service.

The current state of research provides plenty of empirical findings on the technological aspects and the resulting market potential of DH care. However, the existing literature does not sufficiently cover direct marketing applications in this specific market. Hence, this dissertation addresses the following three main research questions (RQ) in order to fill the existing research gap and to develop a strategic B2B marketing plan for MH:

RQ 1: *How is the B2B market of MH defined and where is its current position?*

RQ 2: *How is MH adding value to the B2B market and where is it effectively positioned?*

RQ 3: *What are specific approaches for the application of MH's B2B marketing strategies?*

1.2 Scope of Analysis

This dissertation is part of a consulting project through a cooperation between Católica SBE and the Portuguese start-up MH. The objective of the project in this early business development stage is to research and define strategic approaches for a marketing plan. By evaluating the market situation, defining clear marketing goals and formulating strategies and instruments, the project will serve as a basis for MH's future B2B marketing. The dissertation focuses specifically on the B2B market and does not directly address aspects of the B2C business.

1.3 Structure

To answer the RQ's and for the development of the strategic B2B marketing plan first the existing literature is reviewed. Therefore, the first part of the dissertation concentrates on the theoretical findings from academic research for marketing and management, as well as for the DH market. The objective is to identify which strategic frameworks and models can be adopted to this specific B2B market.

The second part introduces the methodology used in the dissertation. In this section, the applied empirical methods for data collection are presented. Based on these empirical findings the strategic marketing plan is presented and developed in the third part.

2 Literature Review

This chapter examines the existing academic literature and its implications for strategic marketing and the DH market. First, the market is described in terms of marketing relevant factors. Therefore, the market is defined more precisely on the basis of drivers and barriers. The second part presents appropriate analysis and models from existing literature, which can be applied for the development of the strategic marketing plan.

2.1 The Increasing Importance of the Digital Health Market

The health care systems are now more in focus than ever. This is not only due to the current COVID-19 pandemic. Rising costs, outdated systems and an ever-ageing society are pushing the health market to change (OECD, 2019). Today, for instance, major pharmaceutical companies are hiring so-called chief digital officers who are exclusively concerned with digitization processes in the market (van Velthoven et al., 2019). The establishment of such new functions is also urgently needed. The entire healthcare industry lags behind other industries in the implementation of new technologies and is currently undergoing a radical digital revolution. It is transitioning from an industry-oriented model to a service-oriented one. Providing an excellent environment for innovative DH business ideas to grow (Muhos et al., 2019). In fact, market investments are increasing significantly and are currently at a record level. This is not only related to the potentially high return rates but also to certain drivers that are currently taking place in this market (Klonoff et al., 2019).

2.1.1 Drivers in the Digital Health Market

There are several drivers that are decisive for the current increase in importance of the DH market. One driver lies in the already outlined high level of financial investment. In the year 2018, a total of 8.1 billion US dollars was invested in DH start-ups (Klonoff et al., 2019). For investors, it seems to be a particularly promising segment for sustainable and also scalable business models (Safavi et al., 2020). According to the OECD (2019), an economic profit of around 600 billion US dollars annually can be generated only through small digital implementations in existing healthcare systems. This is one of the reasons for the current stable investment level and the projected high market valuation of 639 billion USD by 2026 (Statista, 2021).

This investment development is also driven by political and legal changes. These are crucial drivers, as they represent the underlying framework for the entire market. In recent years, there have been very positive tendencies in this area. New policies and regulations enable DH innovations to grow. Especially in Europe, the government has invested heavily in the development and implementation of DH innovations (Pinto & Baracsi, 2012). The foundation for this new policy and regulation framework is certainly also based on new evidence in clinical studies. There is an increasing scientific evidence of the effectiveness of digital innovation. Entire academic innovation centers have been created to research even further (Zajicek & Meyers, 2018).

Another key driver is the technology itself. Technologies such as artificial intelligence, internet of things, blockchain, big data, and robotic are essential components of digitization and are all applicable to healthcare (Zajicek & Meyers, 2018). These technologies are also increasingly demanded and accepted by patients (Rooney et al., 2018).

All of these drivers create this high market potential and are leading to the fact that more and more physicians are working together with non-physicians in order to transform the complex health care market with innovative ideas. This creates a whole new ecosystem of new capacities and collaborations that enable start-ups to be competitively positioned in the market (van Velthoven et al., 2019). However, entering this market is a hard and long process for most start-ups, as there are a number of barriers.

2.1.2 Barriers in the Digital Health Market

Although DH entrepreneurship is expanding rapidly and has already shown several market breakthroughs. There are a number of significant barriers and challenges in the market that are crucial for adoption (Stephanie & Sharma, 2020).

One of the barriers and challenges lies in insufficient regulatory supervision. While a positive countertrend is emerging in recent years, there are still some key obstacles which need to be addressed. Privacy and security concerns are the most critical factors here. These are considered to be one of the major reasons for unsuccessful implementation of DH products (Keeling et al., 2019). Government agencies, third-party companies and professional societies have not yet been able to define standardized regulations (Kao & Liebovitz, 2017).

Risk aversion is a further barrier in the health sector. High investment costs, long implementation processes and the uncertain financial returns of DH products often inhibit the industry (Stephanie & Sharma, 2020). Also, long-lasting product development processes, which

still require clinical trials, often complicate a market entry and are challenging for start-ups (Zajicek & Meyers, 2018).

The final and also highly decisive barrier is related to the complexity of the market itself. Various stakeholders are represented in the market. Usually, they belong to the four groups of patients, providers, payers and partners which all represent potential customers for a DH product. However, each of these stakeholders pursues its own objectives and perceives the product's value in a different context. Hence DH entrepreneurs are facing an immense challenge in reaching and positioning themselves accordingly to each of these stakeholders (Agarwal et al., 2020).

These market barriers are of competitive and strategic relevance and consequently shape the choice of marketing instruments (Chwolka & Raith, 2012).

2.2 Strategic Marketing Planning

Even if the current academic literature does not yet focus specifically on marketing in the DH market, there are established models and approaches from existing literature that can be applied for developing a strategic marketing plan (Grewal et al., 2020).

According to the AMA (2017), marketing can be defined as follows: "*Marketing is the activity, set of institutions, and processes for creating, communicating, delivering, and exchanging offerings that have value for customers, clients, partners, and society at large.*"

These activities and processes can be further structured according to Kotler's (2007) STP approach and the marketing mix of McCarthys (1964). The latter still represent widely accepted valid concept in strategic marketing until present day and forms the framework of the concrete marketing measurements in the dissertation (Slater & Olson, 2001).

Prior to the concrete applications of Kotler's STP approach, it is of great importance to do an extensive situation analysis which filters out major threads as well as opportunities for the market segmentation (Sarasvathy, 2001).

2.2.1 Situation Analysis

Considering the described complexity of the DH market and the radical changes that are now occurring, a situation analysis is crucial. Especially external factors such as the changing environment influenced by political, economic, sociological and also technical circumstances have to be evaluated to realize a strategic positioning in the DH market (Hollensen et al., 2000). In order to analyse both the internal and external environment of MH, two applicable marketing analysis approaches are briefly discussed.

2.2.1.1 SWOT-Analysis

The SWOT analysis is a popular marketing analysis tool for determining market positions and strategy development. In the case of MH, it enables the company to validate which aspects really need to be prioritized as well as how to exploit its opportunities by using its strengths and how to avoid the threats and eliminate the weaknesses. Hence, a SWOT analysis represents an overview of internal strengths and weaknesses in relation to external opportunities and threats, which allows assessing the market from a strategic perspective towards MH (Mcdonald, 2012).

2.2.1.2 Porter's Five Forces Analysis

Porter's (1979) strategy analysis tool serves to determine the attractiveness of an industry and represents a significant component of an extensive situation analysis. This is achieved by analysing and evaluating five components of the industry structure, the so-called five forces. These are defined by the five key factors: bargaining power of suppliers, bargaining power of buyers, threat of new entrants, threat of substitutes and competitive rivalry.

Porter's five forces analysis allows a systematic investigation of an industry's structure and the competitive environment to determine the attractiveness of a business and the potential for long-term profitability. Based on an industrial economics approach, it is assumed that the attractiveness of an industry for an operating company is driven by the market structure, as this influences the behaviour of the market participants.

With regard to MH, the analysis will provide a clear understanding of the DH industry by illustrating the power of suppliers and buyers, the difficulty level for new competitors to enter the market and the risk of customers leaving to the competition. Furthermore, it can evaluate the current intensity of competition in the DH market and, in combination with the SWOT analysis, it defines the internal and external framework for all subsequent marketing decisions (Porter, 1979).

The situation analysis is an important component of strategic marketing planning and forms the base for the further planning process for MH. This first insights from the current market position can help to identify several key indicators for the market segmentation.

2.2.2 Market Segmentation, Targeting and Positioning

A successful marketing strategy also implies the identification of target segments and customer groups. This requires a differentiated market approach, which breaks down the market in order to subsequently concentrate on the most appropriate segments (Sarasvathy, 2001).

For this purpose, a STP strategy can be applied, which focuses on strategic aspect of segmentation, targeting and positioning in the market. The objective of this process is to improve marketing performance, increase customer satisfaction and distinguish from the competition to improve profitability (Kotler, 2007).

2.2.2.1 From Segmentation to Targeting the Market

Segmentation reflects the current market situation and divides a market into individual smaller groups to gain a competitive advantage. In B2B marketing this process is crucial, as there are fewer customers to target than in B2C. Hence, it is even more important to segment and to identify specific needs of each potential customer (Marquardt et al., 2011).

Segmentation can be performed based on a variety of criteria, however, in most cases geographical, psychographic, demographic and behavioural factors are determining segmentation. Each of these individual segments has to meet certain evaluation criteria. These lie, according to Kotler (2007), in measurability, accessibility, substantiality and actionability, which define the attractiveness of the segment. Factors such as market size, profitability, growth, structure, reachability in terms of communication and the ability to differentiate the segment from others are therefore of importance.

These evaluations are already an essential part of the targeting process. Targeting aims to select the most attractive segment for the company and is probably one of the biggest challenges in the STP strategy. For such a decision, various parameters have to be taken into account, which do not always refer to the purchase intention of a segment but also depend on the capabilities and resources as well as the intensity of competition. (Freytag & Clarke, 2001).

If a company decides to target several segments, it becomes particularly challenging as each individual segment requires an individual positioning strategy (Nadube & Didia, 2018).

2.2.2.2 Market Positioning and Value Proposition

"Positioning is the act of designing the company's offering and image so that they occupy a meaningful and distinct competitive position in the target customers' minds"(Kotler, 2007). This means that positioning is not only about the product itself but more about what the buyer associates with it or with the organization as a whole. Positioning can be realized in two main ways. In a functional way, where a feature is linked to a benefit leading to a value, and in an expressive way where egoistic, social and hedonic aspects dominate (Nadube & Didia, 2018). Effective positioning is therefore associated with the ability to serve a market segment with a better or a different value to the competition (Marquardt et al., 2011).

In the case of MH, the STP approach allows to better understand and define the DH market and it' s segments. However, even after the successful positioning in the DH market, there are as already described several barriers that impede start-ups from entering the market. One key marketing factor for the rejection of DH services lies in a weak value proposition of DH start-ups (van Velthoven et al., 2019). From a strategic perspective, a strong value proposition creates the most effective opportunity to differentiate from competitors, increase DH's adoption and build long-term B2B relationships (Zajicek & Meyers, 2018). For the development of a VP, the literature suggests one model that is particularly well established in managerial practice, the VP Canvas (VPC) by Osterwalder (2014).

The VPC is a visual graphic tool that is designed for the systematic construction of a VP to align products or services with the segment's customer needs in accordance with tasks to be performed (see Figure 1). It consists of two parts, the customer profile and the value map. The customer profile describes a specific customer segment in terms of jobs, pains and gains. Customer jobs are tasks that customers try to solve in a certain situation. This includes not only functional tasks, but also social and emotional factors. Pains, on the other hand, are the aspects that prevent customers from completing these tasks while gains are the desired results that customers want to achieve. The left side of the VPC is the value map which represents the vendor's perspective by listing products and services that are relevant to the target customer segment. Pain relievers describe how these offers can solve one or more customer problems. Similarly, the gain creators illustrate how these offerings can provide value to customers. A clear VP results from a fit between the customer profile and the value map. It is a process of

testing and revising until the key customer needs are identified and how a product or service can reduce pains and create gains (Osterwalder et al., 2014).

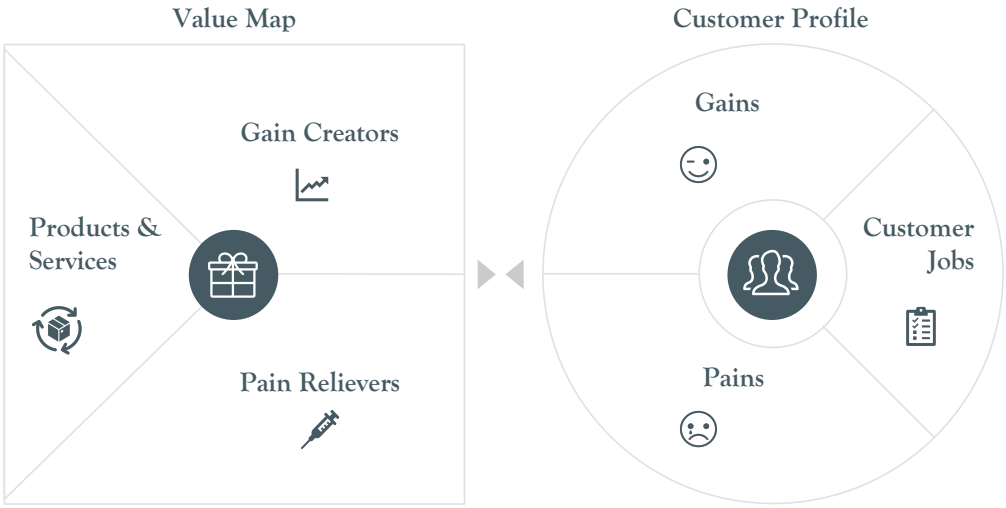


Figure 1: Value Proposition Canvas

Source: Illustration of the author based on Osterwalder (2014)

Since the relevant strategic approaches for the development of a marketing plan are now discussed, the operational level can be addressed through marketing tactics. The main focus of marketing tactics in literature is the marketing mix (Varadarajan, 2010).

2.2.3 Marketing Mix

Research in this field concentrates around the concept of the 4 P (product, price, promotion, place). This concept refers to the coordination of individual marketing instruments that are determined by the indicators product, price, promotion and place, which are briefly described in the following (Morgan, 2012).

Product defines all activities and management processes that are related to the selection, development and characteristics of tangible products and intangible services. It also provides information about which products should be launched or even withdrawn from the market. An important aspect in this respect is the clear understanding of the product life cycle and its integration into the planning process.

Price refers primarily to the process of determining the price at which products and services are sold. The objective is to realize a company profit and offer customers a fair price-performance ratio.

Promotion covers all measures of advertising or marketing communication to promote sales and approach customers. Promotion pursues a clear differentiation from competitors and the creation of a long-term customer relationship through the implementation of specific communication activities.

Place covers all activities that regulate the distribution of the service or product from the vendor to the customer. It defines also which channels are most effective to engage with target customers (McCarthys, 1964).

3 Methodology

This chapter discusses the applied methodology for answering the RQ's and for the development of the strategic B2B marketing plan. Given the practical nature of the research and the objective of obtaining rich and comprehensive data for MH, the dissertation adopts a mixed-methods approach and is based on a combination of different research methods. This enables a more systematic examination and evaluation of the start-up's problem from different perspectives and appears in literature as an effective method for translating research into practice (Ivankova & Wingo, 2018). Thus, secondary research, qualitative and quantitative methods are combined to gain valuable practice-relevant information to support MH's further strategic business development.

The entire project builds on a clear understanding of the DH market. In order to achieve this understanding, first a secondary research method is applied. Therefore, existing data sources from the DH market are first processed and interpreted appropriately for the case of MH. This approach is derived from market specific reports and studies, as well as corresponding journals that statistically deal with the DH market. The method of secondary research supports the elaboration of the situation analysis and provides valuable insights for the market positioning as well as the subsequent tactical design of the marketing mix.

For the qualitative research, several expert interviews from the DH market were conducted in order to obtain the latest industry developments and to gain a deep understanding of the market regarding MH. For this purpose, seven semi-structured expert interviews were conducted, where five industry experts from the Portuguese healthcare market and two founders of MH were interviewed. By using this approach, both start-up internal and external opinions could be included in the strategic analysis. The semi-structured method enabled the extraction of valuable additional information in the interviews, which lasted on average between 40 and 60 minutes, apart from predefined questions. Table 1 presents an overview of the different experts including their professional backgrounds and assigns them a unique ID, which is used in the following part of the dissertation for referring to the experts (see Table 1).

ID	Interviewee	Position	Industry
IP1	Henrique M.G. Martins	Consultant in eHealth *Former President of the Board of the Shared Services and eHealth/IT authority of the Ministry of Health*	Digital Healthcare Systems Goverment
IP2	Maria M. Ornelas	President of the Management Board IPO Coimbra *Executive Member of the Board of Directors of the Entre o Douro e Vouga Hospital Cente*	Hospitals | Oncology
IP3	Rita Veloso	Executive Board Member Centro Hospitalar Universitário Porto *Former Member of the Health Parliament Portugal and Former Director of the IPO-PORTO's Patient Management Service*	Hospitals | Goverment
IP4	Francisco R. Gonçalves	Head of Market Access and Public Affairs at Sanofi *Former Director Healthcare Technologies Management Luz Saúde/IPO Porto*	Hospitals | Pharmaceuticals
IP5	Pedro Couceiro	Director of the Information Systems Management Department IPO Coimbra	Hospitals
IP6	Nuno Gato	CEO of Mentora Health *Deputy Marketing Director & Digital Transformation Manager at Luz Saúde*	Hosptials | mHealth
IP 7	Catarina Ribeiro	Medical Advisor of Mentora Health *Oncology physician*	Hospitals | Oncology

Table 1: Overview of the interview partners in qualitative research

Source: The author

For the development of a strong VP and for a better understanding of the potential MH customers, an additional quantitative research has been conducted, aiming to define and identify key factors of the customer profile within the hospital segment. A survey was therefore designed exclusively for hospital professionals who are involved in the treatment of cancer patients. To address this particular sample, the survey was placed with the assistance of interview partners in four leading Portuguese oncology hospitals. In this way, the survey was distributed in the hospital *Francisco Gentil Portuguese Institute of Oncology* at the locations Coimbra, Lisbon and Porto, as well as in the *Centro Hospitalar Universitário* in Porto. Through this process, a total of 98 completed responses could be obtained from different hospital professional groups and were included in the data analysis (see Figure 2).

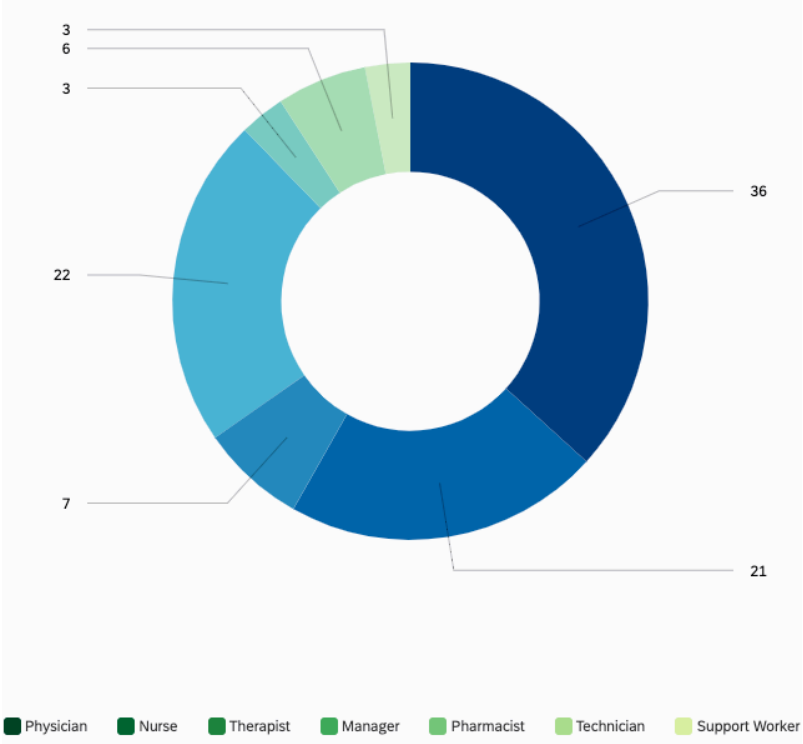


Figure 2: Survey participants overview

Source: Qualtrics survey results obtained by the author

The quantitative research approach allowed to survey different professional groups in hospitals about specific problems in the treatment of cancer patients as well as about certain aspects of the MH product between March 6 and March 22, 2021 (see Attachment 1). In this context, theoretical topics and models could be developed based on quantitative practical findings from the target segment of hospitals. The collected data was analysed statistically using SPSS version 26 and interpreted for the dissertation.

4 Strategic B2B Marketing Plan and Results

In this part of the dissertation, the main findings out of the mixed research approach are introduced and discussed. First of all, an understanding of the market and the operating start-up is fundamental for the further development of the strategic marketing plan. Therefore, the key findings of the external interviews regarding the market and the startup were summarized (see Table 2).

Interview data collection		IP1	IP2	IP3	IP4	IP5
Major threats for MH	Risk-averse healthcare industry		✓	✓	✓	
	Rising competition in mHealth	✓	✓	✓	✓	✓
	Privacy and security conerns	✓	✓		✓	✓
Major opportunities for MH	Great potential in DH data	✓	✓	✓	✓	✓
	Increasing awareness of changing working methods of traditional health organisations	✓	✓	✓		✓
	Accelerating the adoption of digital solution			✓	✓	
mHealth market attractiveness	Treath of new entrants	High	High	Moderate	Moderate	Moderate
	Bargaining power of buyers	High	Moderate	High	High	High
	Rivalry among existing competitors	Moderate	High	Moderate	Moderate	Moderate
	Threat of subsitute products	Moderate	Low	Low	Moderate	Low
	Bargaining power of suppliers	Low	Low	Low	Low	Low
Key product-related attributes	A more self-organized Patient		✓	✓		
	Patients that have more knowledge about their disease pattern		✓			
	Monitoring and assessing the patient's symptoms at any time	✓	✓	✓	✓	✓
	A digital way to communicate and intervene with the patient at any time	✓	✓	✓	✓	✓
	Implementation of sports programs and improved nutrition for the patient		✓	✓		
	The improvement of mental health of patient	✓	✓	✓	✓	✓
	Data about the exact medication intake of the patient	✓	✓			
Most valuable segments for MH	Hospital	✓	✓	✓	✓	✓
	Pharmaceutical				✓	✓
	Health Insurance	✓			✓	
Evaluation of MH	MH has the potential to create value in the B2B market	✓	✓	✓	✓	

Table 2: Key findings from external interviews

Source: Main perceptions from the external expert interviews summarized by the author

Table 2 is the result of a qualitative content analysis (Mayring, 2015) and does not reflect all findings. Further interview findings are included throughout this section in additional models and analyses.

4.1 Understanding the Landscape of Mentora Health

MH business model centers around a mobile application solution for cancer patients and is therefore located in the most promising DH sub-segment of mobile health (mHealth) (see Attachment 2). This high potential of the sub-segment results from the rapid growth and a rising demand of mobile health solutions (Rooney et al., 2018). MH is entering the mHealth market with the mission of improving cancer patient's quality of life by combining clinical data with personalized lifestyle information and providers in the nutrition, exercise and psychology areas. To achieve their vision of bridging the gap between hospitals and patients / families daily needs to improve outcomes. The mHeatlh market and the start-up can be further characterized by a detailed situational analysis, starting with a SWOT matrix.

4.1.1 Mentora Health's SWOT-Analysis

The SWOT analysis of MH is testing the underlying premises and the subsequent suitability for the intended mHealth market. Demonstrating whether MH is on a successful course and whether or where the MH's business model needs to be adjusted. To capture and frame the current state, it is crucial to separate internal and external perspectives in order to obtain a synthetic view MH's current state. Hence, the internal assessment of strengths and weaknesses is derived exclusively from internal interviews and analyses within the start-up. On the other hand, the assessment of opportunities and threats is based on external interviews to clearly separate the startup's and the customer's perspective (see Figure 3).

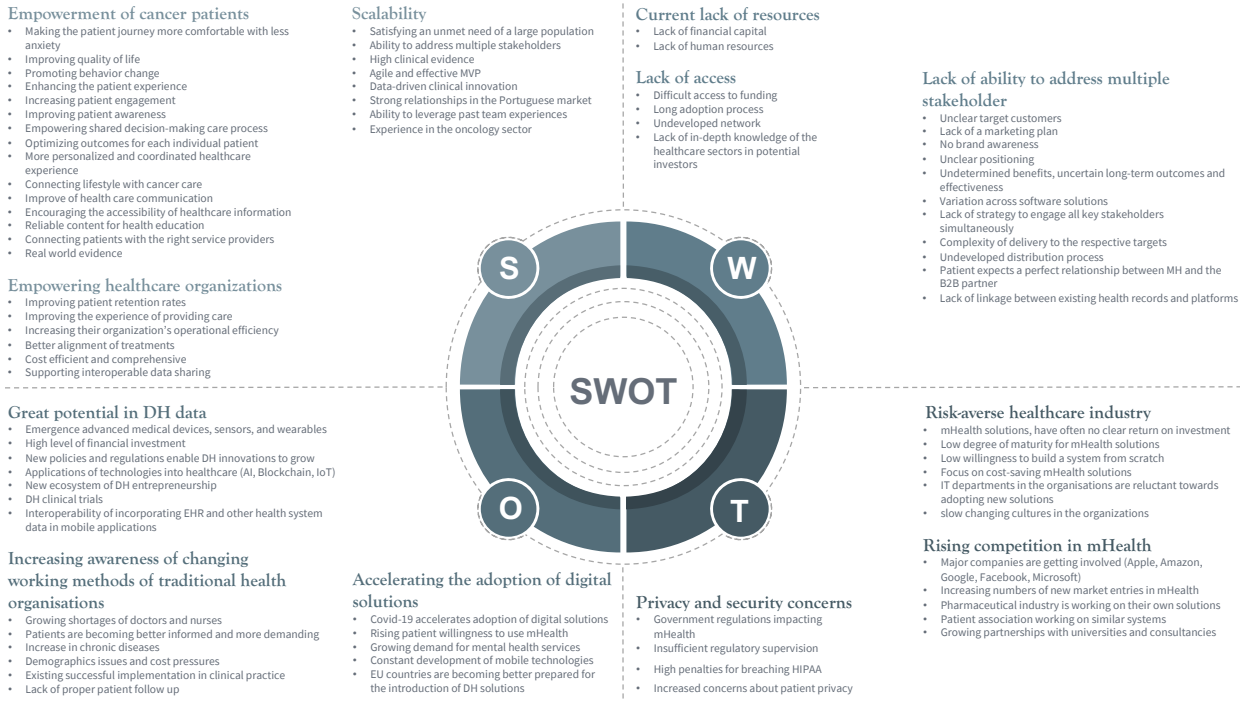


Figure 3: Mentora Health's SWOT analysis

Source: Illustrative summary of external and internal interview findings by the author

Strengths of MH can be clustered into three major areas. According to an internal evaluation, these lie in the areas of MH's scalability, the empowerment of cancer patients and the empowerment of health organizations. Each area of strength is the result of a variety of factors, which are determined by MH mHealth's solution as well as by the given team's strong experience and expertise in the Portuguese healthcare market (IP6, IP7).

Weaknesses of the start-up relate to the three main issues of current lack of resources, lack of access and the lack of ability to address multiple stakeholders. This reflects the complexity of the market, as the development of a single strategy to address all stakeholders appears to be extremely challenging (IP6, IP7).

Opportunities for MH in the market arise from the accelerating adoption of digital solution, the increasing awareness of changing working methods of traditional health organizations and the overall great potential in DH data. In particular, the current COVID-19 pandemic is shaping opportunities, as it affects and accelerates many processes throughout the entire DH market (IP1, IP2, IP3, IP4, IP5).

Threats emerge for MH around the issues of privacy and security concerns, the risk-averse healthcare industry and the increasing competition in the mHealth market. According to the external expert interview findings, the increasing competition in the rather risk-averse industry represents the major threat for MH (IP1, IP2, IP3, IP4, IP5).

The purpose of the SWOT analysis is the formulation of central problems as well as the determination of positive initiatives arising from MH's current situation. Results obtained from the SWOT analysis can be displayed in a confrontation matrix, illustrating connections between external and internal variables. On the one hand, it highlights where MH's internal strengths can be used to seize opportunities and minimize threats. On the other hand, the matrix suggests where internal weaknesses can be improved by seizing opportunities and avoiding threats (see Figure 4).

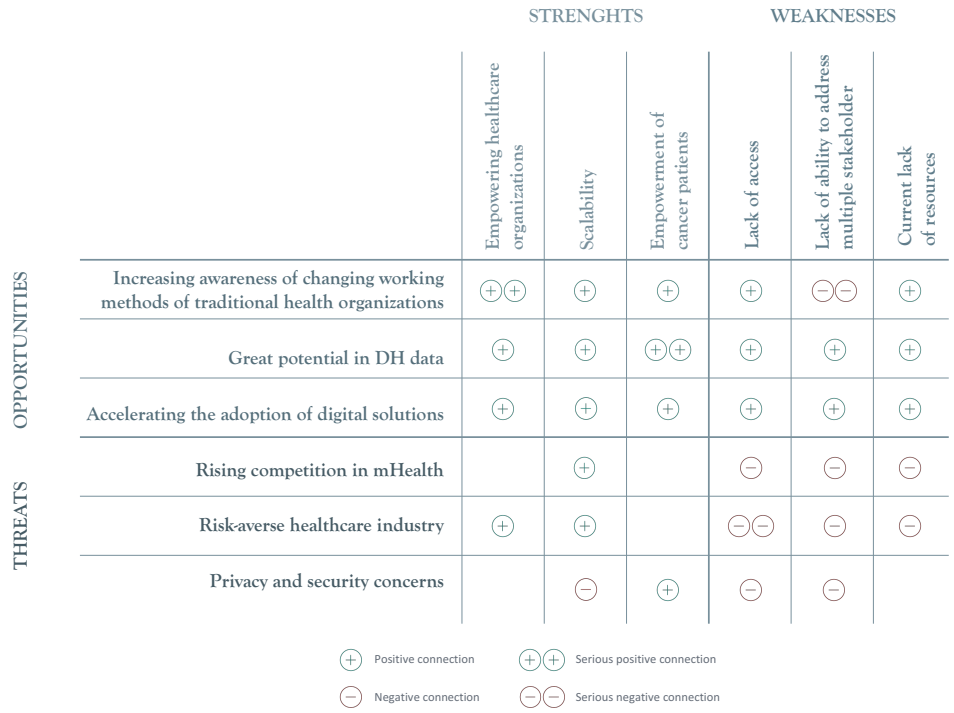


Figure 4: Mentora Health's SWOT confrontation matrix

Source: Summary of findings from expert interviews by the author.

Considering the serious connections, the key issues for MH can be derived out of the confrontation matrix. MH's strength of empowering healthcare organizations can be enhanced through the possibility of the increasing awareness of changing working methods of traditional healthcare. Interoperable data sharing can support the lack of proper patient follow up and by increasing operational organizational effectiveness can counteract the rise of chronic diseases and the growing shortage of doctors and nurses. Another positive key issue relates to the fact of the great potential in DH data and the empowerment of cancer patients by MH. The emergence of advanced medical devices, sensors, and wearables, as well as the implementation of more technologies such as blockchain, AI and IoT, can further enhance the patient journey and improve the connection between lifestyle and cancer care.

Due to the current lack of access and rather risk-averse nature of healthcare organizations, MH is facing here a negative key issue. MH has to provide clear benefits with its mHealth solution or show a definite return on investment to convince organizations otherwise the current lack of access cannot be minimized. In addition, there is a very strong negative link between MH’s weakness in addressing all stakeholders and the increasing awareness of changing working methods of traditional health organizations. Even if there is a great opportunity to meet

a customer need, MH is not able to address a specific target customer due to an unclear market positioning and undetermined benefits for the B2B side.

While the negative issues form the central problem of the MH, positive issues can be initiatives to develop strategies. Therefore, the strategic marketing plan aims to solve the central problem by seizing the appropriate initiatives. However, before concrete marketing strategies can be derived, the market must be investigated on a meso level. For this purpose, the market attractiveness of the mHealth market is evaluated in the following by Porters five forces framework.

4.1.2 Market for mHealth in Porter's Five Forces Framework

To ensure a long-term profitable development of MH, it is crucial to systematically examine the competitive situation in the sector. Therefore, the already described five forces by Porter are analyzed and specified on the basis of interview findings and secondary research for the mHealth market, starting with the evaluation of the threat of new entrants.

Threat of new entrants directly affects rivalry among existing competitors, as new capacity is offered to the existing market demand, depressing the yield of all market participants (Porter, 1979). Considering the already described barriers for entering the DH market, the market entry for new players is clearly impeded. However, there are still other key factors that are relevant in this regard. Capital requirements in mHealth are rather low compared to other fields of the DH market (IP4, IP7). Nevertheless, product development and implementation processes are long and need investments in R&D and testing, which implies a certain level of cumulative experience (Stephanie & Sharma, 2020). Based on several expert interviews, the B2B side indicates moderately high customer switching costs after successful establishment (IP2, IP3, IP5). Incumbency advantages independent of size, such as brand loyalty and brand equity are considered as rather low. While big companies such as Google, Microsoft, Apple, Amazon and Facebook have tried to capture the market, they have not yet been able to generate sufficient customer adoption and establish the necessary partnerships with health care providers (Kao & Liebovitz, 2017). Being a market of digital platforms, it is also characterized as multi-sided by its economies of scale, control over data and network effects, whereby the access to distribution channels is less complicated (Gawer & Cusumano, 2014). Government policies, on the other hand, have to be classified as moderate due to the complexity of the market and the conflicting interests of the individual stakeholders (van Velthoven et al., 2019). Considering all these

factors and including the increasing number of apps in the areas of fitness, wellness, disease prevention and management, with around 250,000 alone in 2018, the threat of new entrants has to be evaluated as high (McKinsey, 2020a).

Threats of substitute products fulfilling the same basic needs lie, on the one hand, in the traditional health care organizations. There is a certain threat that these organizations develop their own new patient-oriented models and find solutions that are beyond mHealth concepts towards a more interpersonal approach (IP1, IP3, IP3, IP5). On the other hand, a threat of substitute products emerges from the fast-growing market of smart wearables. Smart wearables, such as the Apple watch series, have the potential to be routinely integrated into virtual consultations providing real-time health data to improve diagnosis and treatment decisions (Deloitte, 2019a). However, the threat of substitute products can be estimated as relatively low, as there is a high perceived level of product differentiation in the market with a significantly lower relative price-performance ratio to the substitutes (IP2, IP3, IP5). Additionally, buyers' propensity to substitute can be considered low due to the overall long adoption process of health care solutions, which result in higher switching costs (Deloitte, 2019b).

Bargaining power of buyers is high in the market, as the actual buyers are on the B2B side. In contrast to B2C-based markets, there are a comparatively small number of potential buyers, such as hospitals, pharmaceutical companies and research organizations, as well as insurers and payers, who could be supplied with a particular product. Taking into account the diversity of these potential buyers and the opportunity of high purchase volumes, the market offers sufficient sales possibilities while maintaining a high degree of bargaining power (Roland Berger, 2016). The high bargaining power results from a high price sensitivity and a high buyer's ability to substitute. These findings were confirmed in the expert interviews; in particular, hospitals were described as being especially price-sensitive for mHeatlh products. In addition, it was emphasized that some initiatives are already taking place in the pharmaceutical field, which indicates a high buyer’s ability to substitute (IP1, IP2, IP4, IP5). Even if there are perceived differences with competitors and relatively high switching costs, the buyer remains well informed about the market and requires clear incentives for adopting such digital solutions (Bain & Company, 2020).

Bargaining power of suppliers can be classified as low in the mHealth ecosystem (IP6, IP7). The suppliers here are predominantly large hardware and software services, as well as digital distribution platforms that are necessary for the implementation of mHealth solutions in order to retain architectural control (Stephanie & Sharma, 2020). Although there may be unfair competitive advantages for the digital distribution platforms through manipulation of displays and ratings, the ability of suppliers to significantly reduce the profitability of the industry remains low (Gawer & Cusumano, 2014).

Rivalry among existing competitors is directly influenced by the other four forces and is rated as moderate. mHealth represents the fastest growing and most promising sub-segment of the DH market and is characterized by a high number of competitors (Rooney et al., 2018). Despite the intensity of competitors, the market offers a high level of diversification and quality differences allowing businesses to become even more diversified. For instance, there are 123 applications for cancer available on the major mobile application marketplaces, whereby 61 of them are specialized in specific types of cancer. The range of features offered by all participants varies significantly and demonstrates the potential for diversification in the market by using certain features and areas of specialization (Charbonneau et al., 2020). At present, the industry concentration is still rather low, while having acceptable switching costs and low barriers to exit, leading to a moderate valuation of the rivalry (Aapro et al., 2020).

Examining all of Porter's forces collectively provides an initial understanding of the mHealth market and supports the development of MH strategy that is adapted to the competitive environment. Overall, the mHealth market is characterized by high threat of new entrants, a high bargaining power of buyers with a low threat of substitute products and a low bargaining power of suppliers, leading to a moderate rivalry among existing competitors (see Figure 5).

Figure 5: mHealth market in Porter's five forces framework

Source: Illustrative summary of the literature review and interview findings by the author.

In the case of MH, it can be concluded that the market is currently still attractive for a market entry as there is no existing brand loyalty and a low industry concentration. However, the potential threats must be taken seriously, as the strong industry growth and the recent trend towards mHealth solutions may intensify the forces in the near future. Based on various market reports, rivalry among existing competitors is expected to increase significantly as entry barriers will decrease and enable new competitors to penetrate the market (Bertelsmann Stiftung, 2018; Deloitte, 2020; PWC, 2019). It is therefore crucial to reduce the bargaining power of buyers at an early stage by building strong partnerships with customers by offering good incentives and value-added benefits (IP4). For MH, it is essential to be well positioned in the market in order to clearly differentiate itself from its competitors today and in the near future. To achieve such a position, the current competitive situation of MH needs to be analyzed in more detail.

4.1.3 Mentora Health's Competitive Landscape

COVID-19 accelerates many processes in the DH market and is consequently also shaping the landscape of mHealth solutions. As the adoption of DH is increasing, new providers are entering the market (Lu et al., 2021). Therefore, it is crucial to first determine the relevant competitors for MH in the B2B environment in order to maintain an accurate picture of the current situation. For this purpose, MH's competitors are assigned to three clusters depending on their respective products and target customers (see Figure 6).

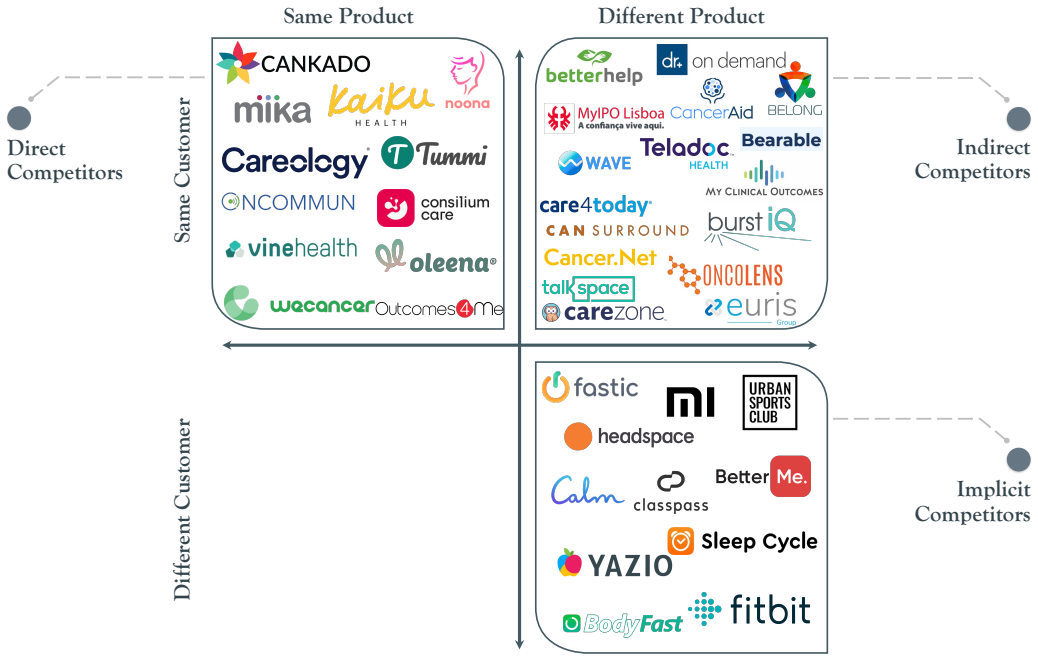


Figure 6:Mentora Health's competitive landscape

Source: Summary of the author's competitive analysis

Implicit competitors are competitors that clearly differ in terms of product characteristics but are similar in terms of user capabilities targeting a different customer group (Buchholz, 2009). In the case of MH, these are primarily applications that are related to single functions of the MH solution concept. While these applications are not specifically designed for cancer patients, they satisfy a common need. Through an evaluation and analysis with the web analytics service SimilarWeb (2021), the relevant implicit competitors of MH could be identified. Therefore, the best applications in the domain of health in Portugal that provide similar functions to MH are listed in this section. These applications are associated with the categories of nutrition, fitness, mediation, sleep and the recording of activity data. Although they belong to a different category, they represent relevant competition for MH as they can

support cancer patients in a similar way. However, their business models are based primarily on the B2C side in the DH market and are not competing directly with MH in the B2B market.

Indirect competitors, on the other hand, also differ from MH's product, but meet a similar need of the B2B customer group (Buchholz, 2009). These include symptom trackers, which can provide healthcare organizations with valuable data about patients and medications. According to a study from 2021, the best evaluated cancer symptom trackers are Wave, Bearable, and Cancer.Net (Lu et al., 2021). Furthermore, telehealth solution providers for cancer patients that provide direct communication channels between physicians and patients or software solutions providers that optimize cancer organization are in indirect competition with MH. Here the most relevant providers were selected for the cluster.

Direct competitors for MH are those competitors who have the opportunity to address the same B2B customers with the same type of product (Buchholz, 2009). Therefore, the most relevant players with similar business models to MH have been identified and included into the matrix (Crunchbase, 2021). These are representing the strategic group for MH, as they are focusing on the same market segments and are pursuing comparable strategies. Direct competitors are crucial and are therefore further specified by including factors of the firm's profile, market information's, financials and respective SWOT variables. For a more detailed overview, the five direct competitors Consilium Care, Kaiku Health, Cankado, Vinehealth and Careology were selected based on the more favorable market, funding, revenue and partnership factors in order to provide an accurate portrait of MH's direct competition (see Attachment 3).

Based on the findings gained from this detailed analysis of the market and the start-up's current situation, strategic marketing concepts can be formulated. To ensure that MH's value can effectively impact the market, a differentiated market approach will be developed using Kotler's STP strategy in order to achieve a clear and profitable market position for the start-up.

4.2 Segmenting, Targeting and Positioning in the Portuguese market

Segmentation refers to the current market situation and aims to identify and define customer groups where MH's product can satisfy actual needs. This is a decisive process for the further marketing strategy, as the identification and targeting of individual segments in the health market enables a more accurate adaptation of the marketing mix (Kotler, 2007).

4.2.1 Targeting the most valuable Segments

By a breakdown approach, the healthcare market can be divided into the large segments of healthcare providers, healthcare financiers and life sciences. According to a study of the global management consulting firm McKinsey, hospitals as healthcare providers, health insurance organizations as healthcare financiers and pharmaceutical organizations in the field of life sciences are the most promising segments for mHealth solutions in terms of value creation (McKinsey, 2020b). Hence, the health market can be macro-segmented and vertically divided by sector. The potential of these specific sub-segments for MH was also confirmed in the expert interviews (IP1, IP2, IP3, IP4, IP5). According to the experts, the decisive criteria for the selection of the segments in the case of MH include the willingness to adopt an mHealth solution in the introduction phase and the degree of similarity of the objectives and values to the start-up. Therefore, Table 3 provides a brief overview of the three potential segments, considering the total available market (TAM) in Portugal and the buyer-seller similarity as well as the adoption probability in existing product maturity stage of MH solution (see Table 3).

	Hospital	Pharmaceutical	Health Insurance
Qualitative TAM:[1]	230	28	39
Adoption probability in existing product maturity stage:[2]	High	Low	Medium
Buyer-seller similarity:[3]	High	Low	Medium

[1] Statista (2020)
[2] Roland Berger (2016)
[3] IP6 & IP7

Table 3: Segments with high value creation potential for mHealth solutions

Source: Potential target segments overview by the author

With a TAM of 230, the number of B2B market participants in the hospital segment is significantly higher than in the pharmaceutical and insurance segments. However, more important is the factor of adoption probability for MH's mHealth solution, which is crucial for the start-up to even have access to the Portuguese healthcare market. In addition, there is a strong connection to MH strengths found in the SWOT and the hospitals segment. All identified strengths of MH can be leveraged in the segment as they share a common mission of improving cancer patients' quality of life. For these reasons and the emphasis from the expert interviews on the significance of the segment for market entry as well as for the future development of further values for all other B2B customers, the following strategy focuses on the hospitals segment. Targeting this individual segment enables a hospital-specific development of a VP

and a more targeted communication. This reduces scattering losses in marketing and sales and allows a segment-oriented pricing strategy. If the startup decides to target multiple segments in the future, there is a strategic imperative of adapting the value proposition for the respective positioning, as needs vary in each segment. The following strategic positioning therefore refers exclusively to the hospital segment.

4.2.2 Strategic Positioning in the Hospital Segment

The positioning, as the final step in the STP strategy process, defines the alignment of all marketing measures to address specific emotional, social and functional needs of the target segment. Positioning refers to how MH is perceived in the segment and can be defined by creating a clear VP.

In the VP, the customer profile is based on findings from external expert interviews while the results from internal interviews and analyses are forming MH's value map. By asking specific questions about correlations using the laddering interview method, the relevant determinants of customer jobs, pains and gains in the treatment of cancer patients in hospitals are identified and captured in the VP (see Figure 7).

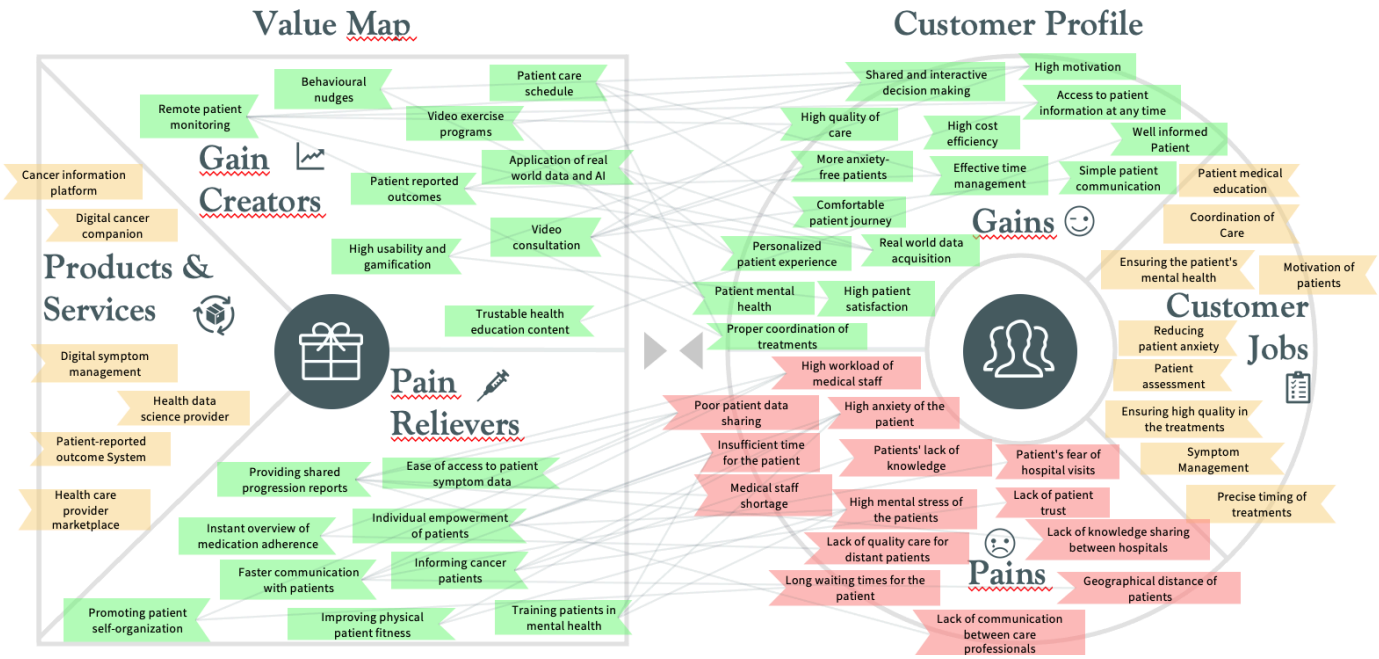


Figure 7: Mentora Health's Value Proposition for the hospital segment

Source: Summary of interview findings on the value proposition by the author

The first step in the development of a strong value proposition is a clear understanding of the various pain points that arise for hospitals in the treatment of cancer patients. Therefore, the area of pain is analyzed in more detail. Out of the five external expert interviews, a total of 47 pain points could be identified, which can be assigned to four different clusters (see Attachment 4). 15 pain points result from the lack of information and 13 arise from the high emotional stress of patients. In addition, there are 12 functional pain points, which are mainly due to the lack of capacity, and 12 temporal pain points, resulting from a lack of time in the treatment. All identified points were grouped into top points and are listed in the VP pain section.

The elaboration of the VP illustrates clearly that MH's products and services are creating the relevant gains and reducing respective pains arising from the customer jobs in the hospital segment. There are distinct links between the individual factors of the value map and the customer profile, indicating that the MH mHealth solution is addressing the needs of hospitals effectively. Hence, there is a so-called problem solution fit showing the creation of the value proposition in a segment-specific way.

Complementary to the interview findings, hospital pain points were also assessed in the quantitative research study using Likert scales and then compared by including the median value. According to the survey findings, the majority of hospital professionals perceive problems related to patient geographic distance, patient mental health, and the present COVID-19 situation (see Attachment 5).

Especially the factor of patient's mental health appears to be of high relevance in the mixed research approach. In fact, several reports state that mental health is a key issue in the current health care system as it is gaining importance in the COVID-19 pandemic (Caruso & Breitbart, 2020; Fernando, 2020; Wang et al., 2020). This was also confirmed in the expert interviews. Four out of five external experts consider patients' mental health to be one of the main challenges in today's treatment of cancer patients (IP2, IP3, IP4, IP5).

Given the importance of this single factor out of the VP, the patient's mental health may be used for a concrete formulation of the VP. According to Osterwalder (Osterwalder et al., 2014) a VP formulation can be described by referring to the products and services, the target segment, the customer jobs, as well as the customer pains and gains. In the case of MH, a potential VP formulation can therefore be defined as follows:

"Our digital cancer companion helps hospitals who want ensure the mental health of cancer patients by reducing high mental stress and increasing patient overall satisfaction."

This is a practical example of MH's VP formulation, systematically developed with the VPC, allowing MH to position in the market for the hospitals segment.

After determining the most valuable segment for MH for entering the Portuguese healthcare market and defining the startup's positioning strategy, the following section elaborates the key marketing instruments to effectively achieve this positioning for the hospital segment.

4.3 Enhancing the Power of Mentora Health

To exploit the full potential of MH, specific B2B marketing strategies are derived and adapted to the target customers of the hospitals by incorporating the marketing mix of McCarthy (1964). For this purpose, concrete measurements for the classic four instruments of product, price, promotion and place are systematically applied for MH.

4.3.1 Mentora Health's Product

In B2B markets, the product focuses on solutions that address business needs and generate value. For MH, this implies a clear understanding of the benefits of its mHealth solution in hospitals. While the creation of the VPC already provides a clear framework of these benefits, the individual product features on which the start-up should focus remain unidentified. To close this information gap, hospital professionals were asked in the quantitative survey to rate aspects that would facilitate their work with cancer patients the most. For the analysis, the nonparametric Friedman test is used in order to investigate whether there are differences in the perception of the importance by individual factors (see Attachment 6).

The Friedman test rejects the null hypothesis of equal mean ranks ($p = 0.000$). Hence, it can be concluded that certain factors of MH's product are perceived as more important in the treatment of cancer patients by the hospital professionals. The ranking values range from 1 to 7, where 1 is the most important aspect and 7 is the least important aspect in the ranking. As a result, two important aspects from the hospitals' point of view can be derived from the analysis. In particular, the factors of improving the patient's mental health and the access of patient symptoms at any time are considered by hospitals to be of primary importance. The majority of the surveyed hospital professionals see in these aspects potential benefits that could simplify their work in the treatment of cancer patients.

The importance of these aspects for MH is also reflected by the Spearman's correlation test (see Attachment 7). For the correlation analysis, the variables from the ranking were recoded,

changing 7 to be the most important value and 1 to be the least important. The Spearman's correlation test indicates two significant positive correlations regarding a respondent's perception of MH as a valuable tool in their hospital.

The first correlation is associated with the improvement of patient mental health ($p = 0.036$). With a correlation coefficient of 0.212 this aspect directly influences the assessment of MH's solution. Therefore, hospital professionals who placed a higher weight on the mental health factor tended to perceive MH as more valuable for their hospital.

The second significant correlation is related to the monitoring and assessing the patients' symptoms at any time ($p = 0.047$). Comparable to the factor of mental health, there is a positive correlation with a correlation coefficient of 0.201 towards the assessment of MH's solution. Hence, hospital professionals with higher weighting on the factor of symptom monitoring tend to perceive MH as being more valuable for their hospital.

Spearman's correlation shows that the decisive product factors for the hospital simultaneously have a certain influence on the perception of MH as a valuable tool for their hospital. The factor of patient mental health is important and could already be identified in the VP as one of the major pain points in hospitals. Based on these quantitative survey results and the experts' confirmation regarding the significance of this increasing issue in hospitals, MH should align its product around the patient's mental health. This allows MH to directly address an existing business need of hospitals by providing a convincing mHealth solution. However, besides the product focus on mental health, MH also has to maintain the required functionality in symptom management by enabling hospitals to access patient symptom data, as this also emerges as a crucial product factor.

4.3.2 Mentora Health's Place

In MH's B2B area, the place in the marketing mix focuses on gaining access to the target segment of hospitals. Based on the internal interviews, the product distribution channel is defined by MH's hospital system, the website and the mobile application (IP6, IP7). Moreover, the external interviews suggested a fourth placement channel. Two experts stated that MH's product has great potential to be distributed through major electronic health records companies (IP1, IP4). Partnering with such companies might be a powerful channel for MH to access hospitals, as these companies already benefit from full access and a strong distribution network. However, apart from potential distribution partnerships, MH needs to understand which channels are most effective in reaching hospitals with their product.

Therefore, a study by the marketing research company Kantar (2020) is used for a more detailed definition of MH's place. The study highlights channels that are most important to medical professionals as a source of information. According to the study, these lie in the hospital itself, professional portals, medical journals, as well as in email and professional conferences. The hospital itself as an important channel is also confirmed in the expert interviews (IP2, IP3, IP5) and a further study of McKinsey (2020a). Hospitals are the most accessible of mHealth solutions through pilot programs and testing phases in the hospital. In addition, MH's activities should focus on the other main channels of the study. Publications in medical journals about the efficiency of MH's product can be a good approach to gain interest and access. Effective email marketing is still crucial in this segment and even more important than any social media platform.

In summary, this area of the marketing mix requires the start-up to focus not only on distribution, but also on the channels that allow them access and engage with hospitals. This is a crucial step in order to transport MH's value proposition successfully.

4.3.3 Mentora Health's Promotion

For the field of promotion, there were no relevant findings obtained from the expert interviews. The executive board member of Centro Hospitalar Universitário Porto stated: *"We don't need advertising to be convinced; we need experts with good ideas"* (IP3).

Similar opinions were expressed in the other interviews. Although there are no clear findings regarding promotion strategies in the interviews, a tendency towards the perception of mHealth providers as experts is apparent. This tendency combined with findings from literature can result in a special promotion approach for MH.

According to the insights of two reports by management consultancies (Deloitte, 2019a; McKinsey, 2016), the adoption of mHealth solutions in the B2B sector can be accelerated by a thought leadership strategy.

Thought leadership stands for demonstrating a high level of expertise in a specific field while representing innovation and visions. In the context of promotion, it's all about presenting in-depth knowledge and communicating it in an engaging way. It is about creating innovative and forward-thinking content in order to impact industries (Terstiege, 2020).

To develop a concrete promotion strategy for MH, a model from the marketing consultancy Edelman is used (see Figure 8). The so-called Edelman thought leadership flywheel enables the definition of strategic promotion approaches for MH (Edelman, 2020).

The thought leadership flywheel consists of 6 different elements which supports the process of defining MH's promotion strategy. Each of these elements is explained and interpreted for the case of MH in the following.

Figure 8: Edelman thought leadership flywheel

Source: Illustration of the author based on Edelman (2020)

White Space describes opportunities to engage and lead relevant industry conversations. In this regard, MH could respond to industry trends and address the already described challenges and pain points of hospitals with its innovative solution concept. One example could be the publication of empirical evidence regarding the effectiveness of MH's solution. Based on an analysis with the content marketing research analytics tool Buzzsumo (2021), publishing empirical evidence of mHealth seems to be particularly effective in reaching a wide audience by MH's direct competitors.

Relevance refers to the ability to specifically address the target group with targeted communication. Thanks to the previous analyses performed with the STP approach and the VPC, it is now possible for MH to engage in relevant communications, as it has been precisely defined where and how customer needs can be addressed in a relevant manner.

Vision is crucial for MH to convince decision makers of their approach. Here it is not about individual features or benefits it is about the big picture of bridging the gap between hospitals and patients and creating a new digital hospital environment.

Trust is a prerequisite for a thought leadership strategy. MH can gain this trust with their team, which has years of relevant experience in healthcare. It is also about showing the hospitals how they can solve problems themselves, which could be for example in writing advices on

how doctors can deal with metal stressed patients. Such measures can increase confidence from the hospital side in MH.

Brevity in promotion refers to the content reduction to the key message. Reaching the stressed hospital professionals requires short, informative communications. MH needs to be able to communicate complex aspects of their system in a simplified way. One good example would be a short video of less than one minute explaining the key features and benefits of MH in hospitals.

Attribution refers to the internal success measurement of the thought leadership promotion strategy. Based on the internal interviews, the most important KPI for the start-up is the generation of leads in order to gain brand awareness in the Portuguese hospital market. Also, the cost per lead and the number of customers acquired per campaign are perceived as crucial for MH in measuring the effectiveness of this promotion strategy (IP6, IP7). It is essential to determine this KPI in advance to ensure that the thought leadership strategy is constantly reviewed and adapted to the given situation.

With the Flywheel, a strategic framework for the creation for future content marketing is now defined and provides guidance for MH in all promotional activities.

4.3.4 Mentora Health's Price

To determine a segment-oriented price of MH’s solution for hospitals, the van Westendorp analysis is applied. The van Westendorp analysis can be used to determine the demand curve depending on price as well as the resulting potential revenue at different pricing levels. The method is established as a market-based pricing model for complete product packages as well as for individual services and is therefore a valid method in the case of MH. The objective of the van Westendorp analysis is to identify an acceptable price range and an optimal price for innovative products or services while estimating the resulting demand based on a consumer survey. Hence, it aims to predict the price sensitivity of a certain segment (Paczkowski, 2018).

In accordance with this analysis procedure, the participants in the quantitative survey were asked at what price point they perceive MH solution as too cheap, a bargain, expensive and too expensive. However, according to the expert interviews, the decisive positions in hospitals for the adoption and establishment of mHealth solutions are physicians, managers and technicians.

Consequently, only these decision makers were targeted in the survey for the determination of the price, excluding all other participants from different professional groups. In addition, participants who showed no previous interest in MH solutions were also excluded in order to obtain a representative result. Ultimately, 53 participants who met these criteria were surveyed.

The aggregation of the survey results and the plotting of the cumulative frequency on the price leads to four price-sales curves (see Attachment 8). From the intersections of the price-sales curves, the optimal price and the indifference price for MH can be determined (see Figure 9).

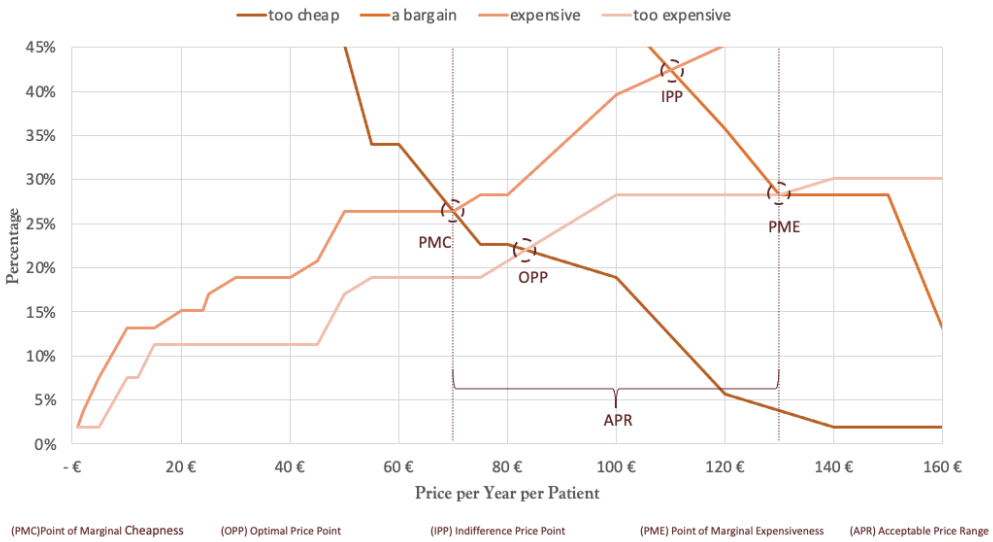


Figure 9: Van Westendorp analysis for Mentora Health's product

Source: Graphical illustration of survey results by the author

Optimal price point (OPP) represents the intersection of the cumulative frequency distributions for the questions *too cheap* and *too expensive*. Here, the overall resistance to purchase is lowest, as at this price the number of respondents who consider the product to be *too expensive* is identical to the number who consider it to be *too cheap*. For MH, the OPP is 83€ per patient per year and is optimal in terms of maximizing sales volume or market share.

Indifference price point (IPP) describes an even price image. Approximately an identical number of customers rate the product as *expensive* or *a bargain*. Here, most customers are indifferent to the price. In the case of MH, the IPP is 110€.

Examining the price difference between these two intercepts allows an indication of the price sensitivity. The smaller the distance between the OPP and the IPP along the x-axis, the higher is the predicted price sensitivity. In the case of MH, hospitals show a certain degree of price sensitivity, which is however not high, given a difference of 27€ between the two price points.

For the determination of the acceptable price range, where the majority of buyers agree with the price, lies between the price of marginal cheapness and the point of marginal expensiveness.

Price of marginal cheapness (PMC) represents the intersection of the *too cheap* and *expensive* curves and sets the lowest reasonable price limit. Below this price limit, the number of people who consider the product *too cheap* is higher than the number of people who consider it as *expensive*. Consequently, a price setting under the PMC of 70€ could lead to image damage and revenue losses for MH.

Point of marginal expensiveness (PME) defines the upper limit of the reasonable price range and is formed by the intersection of the curves *too expensive* and *a bargain*. Above this price limit, there are more people who consider the product *too expensive* than people who consider it as *a bargain*. A price setting above the PME of 130€ is accepted only by a few customers and is most likely associated with sales and revenue losses for MH.

In summary, it can be stated that the majority of accepted prices for MH lie between 70€ and 130€. Both the OPP and the IPP of MH's solution are within the acceptable price range.

4.3.5 B2B Perceptions about Mentora Health

During the development process of the strategic B2B marketing plan, several insights from interviews as well as assessments from quantitative research regarding MH could be captured and will be summarized in the following.

The assessments of the external expert interviews on MH business model can be considered as favorable. 4 out of 5 external experts see great potential for MH in the Portuguese market and are convinced of MH's business idea. Only one expert expressed doubts about MH's solution approach, as the technical requirements of the startup and the Portuguese hospitals appear to be too low.

The quantitative results also provide initial assessments of MH. 50% of the participants strongly agreed and 29.6% somewhat agreed that MH could be a valuable tool for their hospital in the treatment of cancer patients. Only 3.1% strongly disagreed and 4.1% somewhat disagreed that MH could be a valuable tool. Furthermore, managers in hospitals in particular see high potential in MH, as 77.3% of all managers consider MH to be a very valuable tool for their hospital (see Attachment 9). This is crucial for the startup as, according to the expert interviews, managers are the key decision-makers in the acquisition and establishment of mHealth solutions. However, the Pearson Chi-Square of 0.265 in the cross-tabulation shows that there are no significant associations between the different professional groups and that the results are statistically independent.

The first evaluations from the B2B side derived from the interviews as well as from the survey demonstrate clearly that MH has a certain potential to enter the Portuguese market through the hospital segment.

5 Conclusion

As all findings and models for the strategic B2B marketing plan have been discussed, this last part of the dissertation provides a concise summary of the key findings of the project.

5.1 Research Questions

Three research questions were developed at the beginning of the dissertation and will be addressed in the following:

RQ 1: *How is the B2B market of MH defined and where is its current position?*

This RQ was answered by the comprehensive situational analysis. By including a detailed SWOT, it was possible to examine MH internally and externally, including strengths, weaknesses, opportunities and threats. The SWOT and the confrontation matrix were decisive for the further strategic positioning and illustrated the current situation and position of MH.

It was illustrated that due to the lack of ability to address multiple stakeholders in the risk-averse healthcare market, the start-up is still in a weak position and is currently not able to compete with its various competitors. However, MH's potential driven by the empowerment of healthcare organizations and cancer patients, as well as its scalability, was also demonstrated in this context enabling the start-up to enter the mHealth market in the near future.

The definition of the B2B market was examined with regard to its market attractiveness using Porter's five forces framework. The framework proved the B2B mHealth market to be still attractive. Despite some very strong forces, non-existing brand loyalties and a low industry concentration as well as the low bargaining power of suppliers and a low threat of substitutes are keeping the market attractive for MH. Nevertheless, the startup has to act fast, as the forces are expected to intensify soon in the growing market of mHealth.

RQ 2: *How is MH adding value to the B2B market and where is it effectively positioned?*

RQ 2 was answered using the STP approach. Therefore, the most valuable segments in terms of value creation for MH were determined on basis of the situation analysis. Hospitals, pharmaceuticals, and health insurances were defined as the high value segments and were

evaluated after considering the TAM, the buyer-seller similarity, and the adoption probability in the existing product maturity stage of MH. As hospitals proved to be particularly promising in terms of these factors, the targeting process focused on the single segment of hospitals.

In the course of the strategic positioning, the VPC clearly illustrated how MH can create value in the target segment of hospitals. For the positioning, patient mental health was identified as a key factor and an appropriate VP was formulated to position MH in the mHealth market effectively.

RQ 3: *What are specific approaches for the application of MH's B2B marketing strategies?*

This question was answered by formulating specific strategies in the areas of MH's product, place, promotion and price. MH's product factors of monitoring and assessing the patients' symptoms at any time and the improvement of patient mental health were identified as being particularly important for the hospital segment.

In the place strategy, emphasis was given to the hospital itself and MH system for the distribution of their solution. In addition, professional portals and medicals journals were defined as essential to get access to the target segment.

The Edelman thought leadership flywheel provides the framework for MH promotional strategy and presents distinct approaches for future content marketing campaigns.

The last step in the definition of specific approaches in the marketing strategy was the segment-specific determination of the price. Based on the van Westendorp method, the OPP for MH was calculated to be 83 € per patient per year.

Hence, all RQ's could be answered appropriately in the elaboration of the strategic B2B marketing plan. Considering that existing literature does not yet cover direct marketing applications in the mHealth market, this dissertation directly addresses this research gap and demonstrates which strategic B2B marketing concepts can be defined for this specific market.

5.2 Limitations and Future Research

The central limitations of the present work result from the practical nature as well as from the lack of reliable company data.

First, there is a general lack of complete, reliable material and records provided by the company. As MH is still in the pre-seed stage, many processes and product characteristics are not yet fully developed and clearly formulated. Therefore, it is not possible to make a statement about the reliability of the internally obtained company data.

Second, there is a limitation in the determination of the price with the van Westendorp analysis. In the quantitative research with the van Westendorp analysis, it was not possible to illustrate and explain all product characteristics of MH, thus a certain basic knowledge of product benefits is required. While this limitation has been addressed by the very targeted sampling of hospital professionals, the calculated price points can only represent a guideline and cannot be considered as definite prices for MH's solution.

The entire development for MH strategic marketing plan refers exclusively to the B2B side of the hospital segment. Therefore, all the gained results can only be applied to this single segment and cannot be used for other segments of the B2B sector. Hence, future research could address other B2B segments of mHealth and investigate correlations in the respective customer profiles.

6 Attachments

Attachment 1 | Qualtrics Survey Questionnaire

Introduction

This questionnaire is created in the scope of obtaining the Master's Degree by the Católica Lisbon School of Business and Economics.
The survey is designed **exclusively for professionals working in hospitals**, aiming to uncover existing issues in hospital care. This should help to identify certain areas in which mobile health solutions can be used in the treatment of cancer patients.
Please note that your following answers are entirely confidential. Additionally, I would kindly ask you to give honest answers, as for the possibility to obtain valid and trustworthy results.

Thank you very much in advance. Please click the arrow below to start (duration is **less than 5 minutes**).

Best regards,
Alexander Burgmayr

_____
MSc in Management
Católica Lisbon School of Business & Economics

Professional Group

To which **professional group** in the hospital can you most likely be assigned?

Physician
Nurse
Therapist
Manager
Pharmacist
Technician
Support Worker

Existing System

Does your hospital already have any kind of **mobile application** to support the **treatment of cancer patients**?

Yes

No

Pains

Please select your **level of agreement or disagreement** for the following statements. All statements refer to your personal assessment of various factors directly **related to your hospital and its patients**.

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
We have the capacity to provide patients with all relevant information about their disease.	O	O	O	O	O
We can give the patient the opportunity to fully participate in the decision making process.	O	O	O	O	O
The patient demonstrates entire trust in our hospital and in the treatment.	O	O	O	O	O
Patients have realistic expectations about the benefits of certain exams and treatments.	O	O	O	O	O

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
The patient is fully aware of the treatment goals.	O	O	O	O	O
Patients take their medication as instructed.	O	O	O	O	O
Patients attend their appointments at the hospital.	O	O	O	O	O
We have a well established communication between doctor and patient.	O	O	O	O	O
We have the ability to fully understand and respond to patients' feelings.	O	O	O	O	O
We have the ability and capacity to reduce the stress of patients.	O	O	O	O	O
We have the ability and capacity to take care of the patient's mental health.	O	O	O	O	O
We are able to motivate the patient.	O	O	O	O	O
We can support the patient to get a good sleep rhythm.	O	O	O	O	O
We have the ability and capacity to reduce the anxiety of patients.	O	O	O	O	O
We have enough data about the patients' symptoms.	O	O	O	O	O
We have the ability and capacity for providing the best follow-up of the patients.	O	O	O	O	O

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
We have the ability and capacity to refer patients to the best specialists outside of the hospital.	○	○	○	○	○
Patients are not afraid to come to the hospital due to COVID-19.	○	○	○	○	○
We can avoid duplicate or redundant measures in the patients treatment.	○	○	○	○	○
Our patients come from geographical proximity and can always visit the hospital.	○	○	○	○	○

Benefits

Please **rank** the following items regarding your personal and professional preference.
Where **1 is the most relevant** and **7 is the least relevant item.**
What would **simplify your work in the treatment of cancer patients** at your hospital the **most**?

Data about the exact medication intake of the patient.

A digital way to communicate and intervene with the patient at any time.

Implementation of sports programs and improved nutrition for the patient.

A more self-organized patient.

Monitoring and assessing the patient's symptoms at any time.

The improvement of the mental health of the patient.

Patients that have more knowledge about their disease pattern.

Mentora Health

Brief description of Mentora Health's solution:

Mentora Health is a **mobile health application** bridging the gap between hospitals and cancer patients' daily needs with the goal to **improve clinical and personal outcomes**. A **digital cancer companion** that provides accurate data on **patient symptoms, medication** and **health conditions**. **Empowering the patient** through specific activities, exercises and educational content with the goal to create a benefit for the patient's mental health.

Please indicate here again your **level of agreement or disagreement** in the following statement.

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
Mentora Health would be a valuable tool to support the treatment of cancer patients in our hospital.	○	○	○	○	○

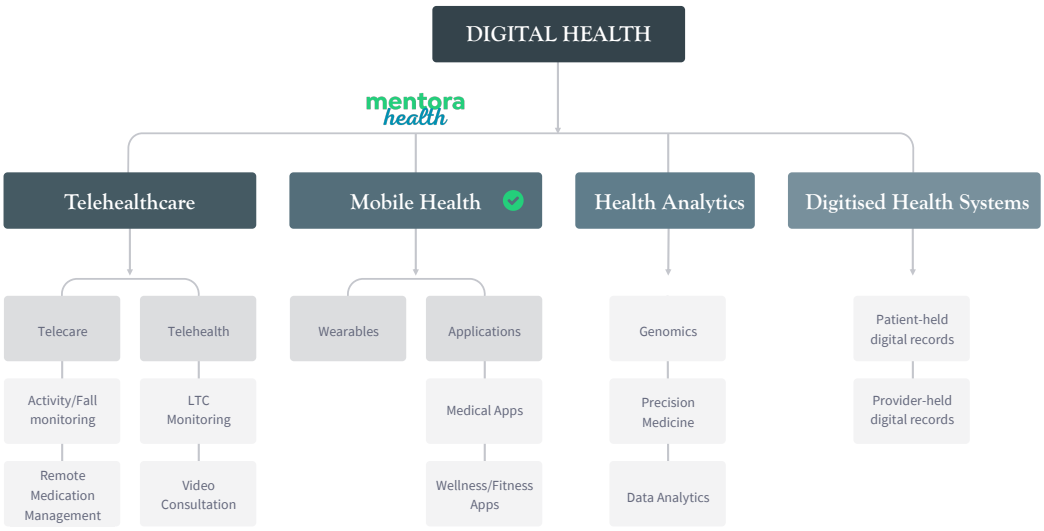
Thinking here of a price for **one year** for **one patient**, at what price would you begin to think that Mentora Health's solution is **so inexpensive** that you would not buy it because it would be poor quality (in EUR €)?

Thinking here of a price for **one year** for **one patient**, at what price would you think Mentora Health's solution is **a bargain** - a great buy for the money (in EUR €)?

Thinking here of a price for **one year** for **one patient**, at what price would you think Mentora Health's solution is **getting expensive**, but you still might consider it (in EUR €)?

Thinking here of a price for **one year** for **one patient**, at what price would you begin to think Mentora Health's solution is **too expensive** to consider (in EUR €)?

Attachment 2 | Sub-Segments of the Digital Health Market



Source: Illustration of the author based on Rooney (2018)

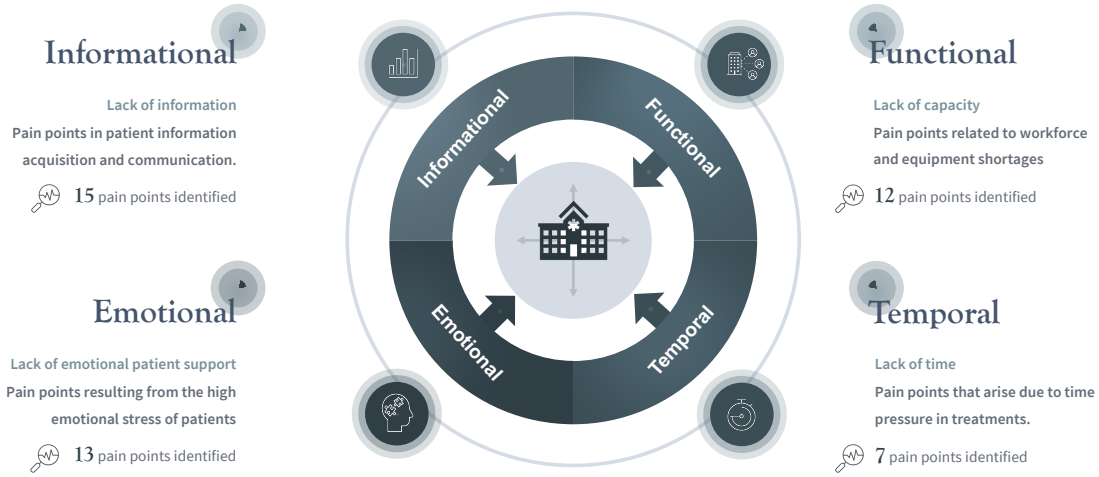
Attachment 3 | Detailed Overview of MH's Direct Competitors

Competitor	consilium care	kaiku HEALTH	CANKADO	vinehealth	Careology
Company Profile	• Founded **2014** in **Switzerland** • Employees: **7**	• Founded **2012** in **Finland** • Employees: **+30**	• Founded **2017** in **Germany** • Employees: **+50**	• Founded **2018** in **UK** • Employees: **13**	• Founded **2017** in **UK** • Employees: **+20**
Target Countries	**Switzerland, Germany, Austria**	**Switzerland, Germany, Italy, Sweden, and Finland**	**worldwide**	**United Kingdom, USA**	**United Kingdom**
Revenue[1]	**< $1000.000**	**> $5.000.000**	**> $7.200.000**	**> $2.000.000**	**> $4.000.000**
Funding[2]	Funding via strategic partner **Infosys**	Total Funding Amount: **$6.600.000** Seed Round: **$940.000**	**Unfunded**, financed by research projects and studies	Total Funding Amount: **$4.010.700** Seed Round: **$1.659.600**	Total Funding Amount: **$2.074.500** Seed Round: **$1.521.300**
Strengths	• **International** platform • **Strong IT provider** supported by global players	• **Strong corporations** and **partnerships** in the oncology sector	• Provides the **leading system for multilingual** patient care	• **Highest-rated** cancer app	• **Strong** and **sophisticated personalized support** features
Weakness	• **Limited features** for the patient due to focus on symptom monitoring • (Still not break-even)	• **Less agile** as there is a great dependency to the holding corporation **Elektra**	• **No implemented consultation** and **diagnostic algorithms** by a virtual assistant	• **Under funded** to operate in the UK and USA simultaneously	• **Brand perception** is strongly associated with their Corona symptom manager in the UK

[1] Owler (2020)
[2] Crunchbase (2020)

Source: Illustrative summary of competitor analysis by the author

Attachment 4 | Identified Hospital Pain Points in Clusters



Source: Illustrative summary of external interview findings by the author

Attachment 5 | SPSS Results for Weighting of Pain Points in Hospitals

Statistics

		Capabilityto provide patients with all relevant information.	Capability to fully participate in the decision making process.	Patients trust in the hospital.	Patients realistic expectations about the benefits of treatments.	Patients are fully aware of the treatment goals.
N	Valid	98	98	98	98	98
	Missing	0	0	0	0	0
Mean		3.63	3.77	3.92	3.29	3.30
Median		4.00	4.00	4.00	3.00	3.00
Std. Deviation		1.029	1.033	.870	.952	1.028
Minimum		1	1	1	1	1
Maximum		5	5	5	5	5

Statistics

		Patients take their medication as instructed.	Patients attend their appointments at the hospital.	Communicatio n between doctor and patient.	Capability to understand and respond to patients' feelings.	Capability to reduce the stress of patients.
N	Valid	98	98	98	98	98
	Missing	0	0	0	0	0
Mean		3.64	4.08	3.33	2.79	2.73
Median		4.00	4.00	4.00	3.00	3.00
Std. Deviation		.876	.846	.993	1.387	1.328
Minimum		1	2	1	1	1
Maximum		5	5	5	5	5

Statistics

		Capability to take care of the patient's mental health.	Capability to motivate the patient.	Capability to support the patient sleep rhythm.	Capability to reduce the anxiety of patients.	Data about the patients' symptoms.
N	Valid	98	98	98	98	98
	Missing	0	0	0	0	0
Mean		2.54	3.08	2.66	2.77	3.29
Median		2.00	3.50	3.00	3.00	3.50
Std. Deviation		1.317	1.382	1.251	1.314	1.210
Minimum		1	1	1	1	1
Maximum		5	5	5	5	5

Statistics

		Capability for providing the best follow-up of the patients.	Capability of referring patients to specialists.	Patients' anxiety of COVID-19.	Duplicate or redundant measures in the patients treatment.	Patients geographical proximity to the hospital.
N	Valid	98	98	98	98	98
	Missing	0	0	0	0	0
Mean		3.53	3.20	2.38	3.13	2.18
Median		4.00	3.00	2.00	3.00	2.00
Std. Deviation		.955	1.112	1.328	1.109	1.078
Minimum		1	1	1	1	1
Maximum		5	5	5	5	5

Source: Survey results in SPSS output by the author

Attachment 6 | SPSS Results of the Friedman Test regarding MH's Product Aspects

NPar Tests

Descriptive Statistics

	N	Percentiles 25th	50th (Median)	75th
Data about the exact medication intake of the patient.	98	3.00	5.00	6.00
Monitoring and assessing the patient's symptoms at any time.	98	1.00	2.00	4.00
The improvement of the mental health of the patient.	98	1.00	2.00	4.00
Patients that have more knowledge about their disease pattern.	98	3.00	5.00	6.00
A digital way to communicate and intervene with the patient at any time.	98	2.00	3.00	5.00
A more self-organized patient.	98	4.00	6.00	7.00
Implementation of sports programs and improved nutrition for the patient.	98	4.00	5.00	6.00

Friedman Test

Ranks

	Mean Rank
Data about the exact medication intake of the patient.	4.41
Monitoring and assessing the patient's symptoms at any time.	2.79
The improvement of the mental health of the patient.	2.74
Patients that have more knowledge about their disease pattern.	4.48
A digital way to communicate and intervene with the patient at any time.	3.52
A more self-organized patient.	5.07
Implementation of sports programs and improved nutrition for the patient.	4.99

Test Statistics[a]

N	98
Chi-Square	121.885
df	6
Asymp. Sig.	.000

a. Friedman Test

Source: Survey results in SPSS output by the author

Attachment 7 | Spearman's Correlation Test

Correlations

			The improvement of the mental health of the patient.	Evaluation of MH as a valuable tool in the hospital.
Spearman's rho	The improvement of the mental health of the patient.	Correlation Coefficient	1.000	.212*
		Sig. (2-tailed)	.	.036
		N	98	98
	Evaluation of MH as a valuable tool in the hospital.	Correlation Coefficient	.212*	1.000
		Sig. (2-tailed)	.036	.
		N	98	98

*. Correlation is significant at the 0.05 level (2-tailed).

Correlations

			Monitoring and assessing the patient's symptoms at any time.	Evaluation of MH as a valuable tool in the hospital.
Spearman's rho	Monitoring and assessing the patient's symptoms at any time.	Correlation Coefficient	1.000	.201*
		Sig. (2-tailed)	.	.047
		N	98	98
	Evaluation of MH as a valuable tool in the hospital.	Correlation Coefficient	.201*	1.000
		Sig. (2-tailed)	.047	.
		N	98	98

*. Correlation is significant at the 0.05 level (2-tailed).

Source: Survey results in SPSS output by the author

Attachment 8 | Van Westendorp Analysis Frequencies out of the Survey

Statistics

		too cheap	a bargain	expensive	too expensive
N	Valid	53	53	53	53
	Missing	0	0	0	0
Std. Deviation		42.69890	80.64646	151.09706	255.14562
Minimum		1.00	1.00	1.00	1.00
Maximum		200.00	300.00	650.00	1000.00

too cheap

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.00	8	15.1	15.1	15.1
	2.00	1	1.9	1.9	17.0
	5.00	4	7.5	7.5	24.5
	10.00	4	7.5	7.5	32.1
	20.00	3	5.7	5.7	37.7
	24.00	1	1.9	1.9	39.6
	30.00	4	7.5	7.5	47.2
	35.00	1	1.9	1.9	49.1
	40.00	3	5.7	5.7	54.7
	50.00	6	11.3	11.3	66.0
	60.00	4	7.5	7.5	73.6
	70.00	2	3.8	3.8	77.4
	80.00	2	3.8	3.8	81.1
	100.00	7	13.2	13.2	94.3
	120.00	1	1.9	1.9	96.2
	130.00	1	1.9	1.9	98.1
	200.00	1	1.9	1.9	100.0
	Total	53	100.0	100.0	

a bargain

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.00	4	7.5	7.5	7.5
	2.00	1	1.9	1.9	9.4
	5.00	1	1.9	1.9	11.3
	10.00	2	3.8	3.8	15.1
	12.00	2	3.8	3.8	18.9
	15.00	1	1.9	1.9	20.8
	20.00	1	1.9	1.9	22.6
	30.00	2	3.8	3.8	26.4
	37.00	1	1.9	1.9	28.3
	50.00	4	7.5	7.5	35.8
	60.00	2	3.8	3.8	39.6
	70.00	2	3.8	3.8	43.4
	75.00	1	1.9	1.9	45.3
	80.00	3	5.7	5.7	50.9
	100.00	7	13.2	13.2	64.2
	120.00	4	7.5	7.5	71.7
	150.00	8	15.1	15.1	86.8
	160.00	1	1.9	1.9	88.7
	200.00	2	3.8	3.8	92.5
	300.00	4	7.5	7.5	100.0
	Total	53	100.0	100.0	

expensive

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.00	1	1.9	1.9	1.9
	2.00	1	1.9	1.9	3.8
	5.00	2	3.8	3.8	7.5
	10.00	3	5.7	5.7	13.2
	20.00	1	1.9	1.9	15.1
	25.00	1	1.9	1.9	17.0
	30.00	1	1.9	1.9	18.9
	45.00	1	1.9	1.9	20.8
	50.00	3	5.7	5.7	26.4
	75.00	1	1.9	1.9	28.3
	100.00	6	11.3	11.3	39.6
	120.00	3	5.7	5.7	45.3
	130.00	3	5.7	5.7	50.9
	150.00	2	3.8	3.8	54.7
	180.00	3	5.7	5.7	60.4
	190.00	1	1.9	1.9	62.3
	200.00	10	18.9	18.9	81.1
	250.00	1	1.9	1.9	83.0
	300.00	3	5.7	5.7	88.7
	400.00	3	5.7	5.7	94.3
	600.00	2	3.8	3.8	98.1
	650.00	1	1.9	1.9	100.0
	Total	53	100.0	100.0	

too expensive

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.00	1	1.9	1.9	1.9
	10.00	3	5.7	5.7	7.5
	15.00	2	3.8	3.8	11.3
	50.00	3	5.7	5.7	17.0
	55.00	1	1.9	1.9	18.9
	80.00	1	1.9	1.9	20.8
	100.00	4	7.5	7.5	28.3
	140.00	1	1.9	1.9	30.2
	170.00	1	1.9	1.9	32.1
	180.00	3	5.7	5.7	37.7
	200.00	6	11.3	11.3	49.1
	220.00	1	1.9	1.9	50.9
	240.00	1	1.9	1.9	52.8
	250.00	3	5.7	5.7	58.5
	280.00	1	1.9	1.9	60.4
	300.00	8	15.1	15.1	75.5
	350.00	1	1.9	1.9	77.4
	400.00	1	1.9	1.9	79.2
	500.00	5	9.4	9.4	88.7
	600.00	1	1.9	1.9	90.6
	800.00	2	3.8	3.8	94.3
	1000.00	3	5.7	5.7	100.0
	Total	53	100.0	100.0	

Source: Survey results in SPSS output by the author

Attachment 9 | B2B Perception about MH in Crosstabulation

Evaluation of MH as a valuable tool in the hospital.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	3	3.1	3.1	3.1
	Somewhat disagree	4	4.1	4.1	7.1
	Neither agree nor disagree	13	13.3	13.3	20.4
	Somewhat agree	29	29.6	29.6	50.0
	Strongly agree	49	50.0	50.0	100.0
	Total	98	100.0	100.0	

Professional Group * Evaluation of MH as a valuable tool in the hospital. Crosstabulation

			Evaluation of MH as a valuable tool in the hospital.					
			Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree	Total
Professional Group	Physician	Count	1	3	4	12	16	36
		% within Professional Group	2.8%	8.3%	11.1%	33.3%	44.4%	100.0%
	Nurse	Count	1	1	4	6	9	21
		% within Professional Group	4.8%	4.8%	19.0%	28.6%	42.9%	100.0%
	Therapist	Count	0	0	2	2	3	7
		% within Professional Group	0.0%	0.0%	28.6%	28.6%	42.9%	100.0%
	Manager	Count	0	0	0	5	17	22
		% within Professional Group	0.0%	0.0%	0.0%	22.7%	77.3%	100.0%
	Pharmacist	Count	0	0	1	1	1	3
		% within Professional Group	0.0%	0.0%	33.3%	33.3%	33.3%	100.0%
	Technician	Count	1	0	0	3	2	6
		% within Professional Group	16.7%	0.0%	0.0%	50.0%	33.3%	100.0%
	Support Worker	Count	0	0	2	0	1	3
		% within Professional Group	0.0%	0.0%	66.7%	0.0%	33.3%	100.0%
Total		Count	3	4	13	29	49	98
		% within Professional Group	3.1%	4.1%	13.3%	29.6%	50.0%	100.0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	27.889[a]	24	.265
Likelihood Ratio	28.646	24	.234
Linear-by-Linear Association	.386	1	.534
N of Valid Cases	98		

a. 29 cells (82.9%) have expected count less than 5. The minimum expected count is .09.

Source: Survey results in SPSS output by the author

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