Developing a go to market strategy for an assistive technology product



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Master Thesis

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ABSTRACT & KEYWORDS

The number of visually impaired cases have been exponentially rising in recent time; there are 30Mil visually impaired people in Europe . This has lead to the creation of a big industry of assistive technology devices for the visually impaired community. Envision, a start-up developing artificial intelligence products for the visual impaired, wanted to introduce the new Envision Glasses. The project aims to develop a go to market strategy for the Envision Glasses. To answer this research question, the case study approach was used. Furthermore, Root's 1994 international market entry model was used as a framework. Thus, splitting the research question into two: first, what are the market dynamics that impact the business model, and secondly, what are the factors that influence the consumer purchasing behaviour. Multiple perspectives from the different stakeholders were gathered through qualitative and quantitative research. The final outcome of the project was a market entry strategy with a desired customer journey map that can be replicated across the markets selected.

Go to market strategy, new product launch, assistive technology, artificial intelligence, International market entry strategy,

ABBREVIATION

- 1. AMD- Age related Macular Degeneration
- 2. CCTVs Closed Circuit Television
- 3. DED- Diabetic Eye Disease
- 4. EG Envision Glasses
- 5. HCS- Healthcare system
- 6. IC- Insurance Company
- 7. OCR Optical Character Recognition
- 8. RQ Research Question
- 9. VI Visually Impaired
- 10. VIC Visually impaired community
- 11. QL1 Qualitative research with users of Assistive technology
- 12. QL2 Qualitative research with distributors
- 13. QN1- Quantitative research with people who purchased the Envision Glasses in the pre-order sales.

EXECUTIVE SUMMARY

Envision is a technology start-up that helps the visually impaired community, people with no or low vision, get a better understanding of their context through it's artificial intelligence based software. It was started in 2017 by two young entrepreneurs, and has quickly scaled up to have about 30,000 active users on it's android and iOS platforms. However, in 2019 the team decided to expand its product portfolio from just software to developing physical products. Thus, entered the new Envision Glasses. Combining the hardware capabilities of the Google Glasses with the software expertise of the Envision AI, the team began developing a whole new unobtrusive way of experiencing it's services. Developing the product was a daunting task, but getting the product in the hands of the end users was a whole different giant in itself. This led to defining the brief for this Master's Thesis. What would be a suitable go to market strategy for the Envision Glasses.

To develop a befitting go to market strategy, two elements had to be determined, the internal factors and the external factors that would influence the selection of a market entry strategy. The external factors comprised of the market dynamics of the assistive technology (AT)market, and the customer purchasing behaviour of AT. The internal factors comprised of company size & capability of expanding internationally, international experience, product complexity, & risk appetite. Assistive technology are devices that help people with disability to perform regular activities. To understand the external factors influencing the AT market, both qualitative and quantitative research were conducted to get multiple perspective. Seven users and twenty distributors from all around the globe were interviewed.

The vision aid category comprises of many established player that have been around for many years. However, the increasing number of people with visual impairment and the onset of wearable technologies powered by augmented reality and artificial intelligence have seen the entry of many start-ups. The AT market comprises of many stakeholders that are well integrated in the system and influence the functioning of the business model. These stakeholders would comprise of distributors, institutions for the visually impaired, healthcare system, ophthalmologist, opticians, and insurance companies. On the other hand, the consumer purchasing behaviour are influenced by factors such as subsidy scheme, channels presence, touch points & brand reputation. Adoption rate of AT is faster in countries with either larger disposable income or availability of subsidy schemes. Consumers are present on online as well as offline routes. However, the product is finally purchased through an offline route, which allows the user to interact with the product before purchase.

The insights from understanding the market dynamics and the consumer purchasing behaviour were combined with the internal factors to identify the countries that best suited Envision to enter. These countries would include Netherlands, Germany, France, Norway and the United Kingdom. The STEP method of analysis was performed on these 5 countries to check for red flags. The indirect export route was identified as the optimal non-equity based entry mode for Envision. Having identified the entry mode, the next part was to develop a market entry strategy. The Envision glasses will be categorized as a

reading device in the different markets selected, influencing the type of subsidy that can be claimed. With respect to positioning of the Envision Glasses, the start-up is able to provide more number of features at an affordable price, disrupting the current functioning of the market. Also, the glasses is developed as a platform, allowing for the integration of complimentary applications. Envision's brand had a distinct identify as compared to competition. However, a need to refine the brand meaning was identified. By associating itself with celebrating individuality over independence, Envision breaks apart from the clutter. Finally, the findings from the research were assimilated and a desired customer journey map was developed. The customer journey map highlights the different touch points and creates a uniform service offering that can be replicated across the different markets selected.

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INTRODUCTION

Background

Envision AI is a start-up based in the Netherlands that began by developing an iOS and Android application for the visually impaired community to speak out and explain the context to the user. Envision started as a graduation project (2017) in the faculty of Industrial Design at TU Delft when one of the founders, Karthik Mahadevan, was inspired by blind students who expressed their desire to be more independent. Since, then the company has gone to develop an application having more than 30,000 active subscribers.

The principle working of the company focuses on putting the users at the very heart of development. When it comes to deciding on a feature, or the design of the application, Envision takes a very user centric approach. In one of the research sessions with the users, the team realised that the community was in need of a device/ service that would provide an unobtrusive experience to the user. Thus, began the search to identify a suitable wearable technology that can provide an unobtrusive experience.

Envision experimented with different types of glasses, but finally decided to look at the Google Glasses 2nd edition. As the new updated hardware by Google was the best fit for their software. To test the user sentiments towards such a product, the Envision Glasses (EG) was launched for pre order sales in March 2020. And the company received an overwhelming response from the community. Having made up to close to 100 sales in less than four months. The next logical step for the start-up was to identify a suitable way to get the product into the hands of the user. With no background or information in distributing assistive products, the start-up wanted to understand, "What would be a good go to market strategy for the glasses?" This dilemma of identifying an appropriate strategy to enter the market gave rise to this graduation project.

Research question

Developing a product for Envision meant diving into uncharted territories. It can be a daunting task to get a grasp of the entire landscape. This brought about many questions that needed to be answered. The main question on which this thesis lies is

What is a good go-to-market strategy for the Envision Glasses?

To address this question, literature review was conducted on identifying strategies/ frameworks that can help navigate to develop a plan for Envision to enter the various markets. Root (1994) Entry strategies for international markets was used as a framework. This resulted in further sub-questions that needed to be answered.

Research Question (RQ) 1 - What are the parameters/factors the visually impaired community evaluate in making purchasing decisions?

RQ2 - What are the market dynamics that impact the business model of an Assistive technology product?

METHODOLOGY

Methodological Approach

The research project was built in order to get a broader perspective of the AT landscape that would be the bedrock in making all market entry decisions there after. Thus, the explanatory research or case study research was used in this study (Goddard, W., & Melville, S., 2011). The research questions mentioned above required an in-depth understanding of AT in relations to the healthcare systems, customer purchasing behaviour & the current market landscape for AT. The inductive approach to research was used in this study by collecting data and analysing it to come up with insights that could be used by Envision to launch the glasses.

Primary data was collected through qualitative and quantitative research. The qualitative part was used to understand the external factors that governed the AT market from the perspective of the various stakeholders such as users, distributors, industry experts & ophthalmologists. Two quantitative surveys were conducted. First survey was done to understand the customers purchasing behaviour & desirability of the EG, and the second quantitative research was used to validate the various purchasing parameters with the users in the selected countries.

Data Collection

Two qualitative studies were conducted using different semi-structured interviews. These questionnaires are attached in the Appendix A. One of the studies (QL1) was with seven blind users of AT across the globe; to understand their perception of AT and their purchasing behaviour with respect to AT. Facebook and twitter communities were used to reach out to these people. The second study (QL2) was conducted with twenty distributors of assistive technology for the visually impaired across 11 countries. Both these interviews took an average of 1 hour.

From the learnings derived from both the qualitative studies, a quantitative survey (QN1) was developed for the customers who purchased the EG during the preorder sale. The sample size of 30. This study was performed to understand the consistency of the customers purchasing behaviour and desirability of the EG.

After developing a market entry strategy for Envision, many of the elements such as place, price, & promotion needed to be validated with the customers from the countries short listed. Thus, a second survey (QN2) containing 14 multiple choice questions was created. This survey was distributed through Envision's closed group of ambassadors and some were conducted in person. A total of 13 respondents participated in the survey. 11 of whom belonged to the countries of interest.

Analysis of Data

The qualitative interview was transcribed and thematic analysis was conducted. This involved coding all the data gathered, which resulted in six themes for the user of AT study (QL1) and four themes for the distributor study (QL2). Each theme helped in understanding the users beliefs, AT market, competition, stakeholders involved market sentiments, and healthcare system in different countries.

The quantitative data collected for both QN1 & QN2 were inspected for outliers or incomplete submission and these along with any kind of personal information was excluded before the analysis was conducted. Basic tools such as graphs and pivot tables on Excel were sufficient in providing the analysis of the data for both the studies.

Reasons for using the methods

The case study approach was a fitting approach for this research as it has the ability to explain complex causal links in real-life interventions, and the ability to describe the intervention (Yin R., 1994). It also provides a multiperspectival analysis, giving a voice to not just the main stakeholders but also to the interaction between them. It also provides a holistic view of a topic giving a better understanding of the context, which to begin with is very complex. Data source triangulation was obtained by having discussions with visually impaired users, distributors and experts in the field of AT. The combination of qualitative and quantitative study in the research gives an elaborate overview of the functioning of the AT landscape and users purchasing behaviour.





03 LITERATURE REVIEW

LITERATURE REVIEW

Visually Impairment

Literature review began by understanding what is visual impairment and what are the major challenges that people face. A person with a low vision is one whose vision, even with correction (e.g. glasses or contact lenses), medicine, or surgery, adversely impacts his/her performance and ability to complete everyday tasks, or best-corrected visual acuity less than 6/18 to 3/60 (World Health Organization,1992). On the other hand, people who are blind have best corrected visual acuity of less than 3/60. Visual acuity ranges, classification, and categories of visual impairment as per WHO

Snellen VA	VA (Log MAR)	Category	Classification
≥6/18	0.0 - 0.5	0	Mild to no VI
<6/18 - 6/60	0.52 - 1.0	1	Moderate VI
<6/60 - 3/60	1.02 - 1.30	2	Severe VI
<3/60 - 1/60	1.32 - 1.80	3	Blindness
<1/60 - LP	1.82 - 3.0	4	Blindness
NLP	4.0	5	Blindness

Table 1: The Visual impairment Index

Moderate and severe visual impairment (VI) constitutes Low vision. VA - Visual Acuity, Log (MAR) - Logarithm of the minimum angle of resolution, LP - Light Perception, and NLP is no light perception.

A study conducted by the University of Eye Hospital Bonn (Aug 2017) on retinal direseas in Europe gives an overview of the number of cases pertaining to eye diseases that prevails in the top 5 regions (UK, Germany, Italy, Spain and France) in Europe (Li., J. Q., Welchowski, T., Schmid, M., Letow, J., & Wolpers, A. C, 2017).

Age - related Macular Degeneration - AMD

Age-related macular degeneration is a major cause of blindness worldwide. With ageing populations in many countries, more than 20% might have the disorder. Advanced age-related macular degeneration, including neovascular age-related macular degeneration (wet) and geographic atrophy (late dry), is associated with substantial, progressive visual impairment. Major risk factors include cigarette smoking, nutritional factors, cardiovascular diseases, and genetic markers, including genes regulating complement, lipid, angiogenic, and extracellular matrix pathways Lim, L. S., Mitchell, P., Seddon, J. M., Holz,

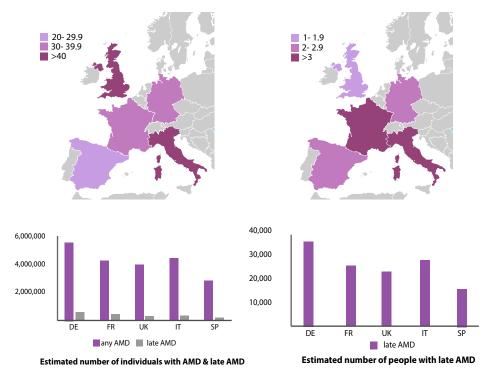


Fig 1: % Prevalence of AMD cases, and % of late AMD cases

F. G., & Wong, T. Y. (2012).

Early stages of the disease, which include early and intermediate AMD are mostly asymptomatic, but slowly progress to late stages of the disease, which can cause severe visual loss. The above figure is a visual representation of the percentage prevalence of AMD cases & the percentage prevalence of late AMD cases. As one can see the % of AMD cases is highest is UK and Italy followed by DE and FR. However, the % of Late AMD cases are more in IT & FR. As per the report there are 2.8Mil people in Europe that suffer from late AMD.

Diabetic Eye Disease (DED)

People with diabetes are at risk of developing diabetic eye conditions, including diabetic retinopathy (DR) and diabetic macular oedema (DMO). Microvascular changes resulting from poorly controlled blood sugar may damage blood vessels in the retina and lead to severe vision loss or blindness. DR is commonly classified as mild, moderate and severe non-proliferative DR (NPDR) and proliferative DR (PDR), according to the "International Clinical Classification Diabetic Retinopathy Severity Scale" Studies vary when defining DMO. Agreement is higher for definitions of clinically significant macular oedema (CSMO). Li., J. Q., Welchowski, T., Schmid, M., Letow, J., & Wolpers, A. C.,2017).

The Fig above shows the % prevalence of DED & PDR cases in Europe. The number of cases are greatest in IT, followed with SP & UK. This is a similar trend that is viewed in the case of PDR.

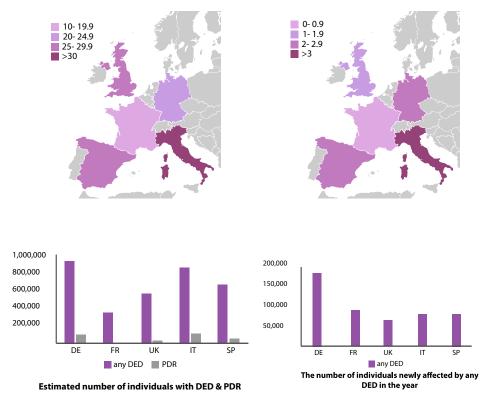


Fig 2: % Prevalence of DED & PDR cases in Europe.

Assistive Technology

Assistive technology (AT) are hardware or software products that can increase, maintain or improve the functional capabilities of people with disabilities to perform tasks independently. In the past few decades more and more emphasis has been levied on incorporating disabilied people by the implementation of law. This has had a direct implication in the development of assistive technology that has enabled people to have better access to education, employment and enhancement of personal life. In this research, AT will be researched from the lens of devices both software and hardware that are beneficial to the betterment of the VI community.

Assistive Technology relating to the sight comprises screen reading softwares, Optical Character Recognition (OCRs) softwares, screen magnifiers, video magnifiers or Closed Circuit Television (CCTVs), & braille displays. Detailed break down of these categories and competition is made in the next chapter.

However, ATs are accompanied with huge barriers. These barriers are detrimental in the effective implementation of these solutions. Some of the barriers captured by literature are AT is expensive, lack of information, unawareness relating to source of purchase, user perception - don't see the benefit of the product and difficult to use (Ward, G., Fielden, S., Muir, H., Holliday, N., & Urwin, G., 2016).

Market Entry Strategy

Entering a new international market has always been a daunting task for many organizations, but it is a risk the organization takes in order to boost one's sales and profit. However, situations are different for different companies, and every market has to be looked at individually to mitigate risk. Internationalization is the product of a series of incremental decisions (Johanson, J., & Vahlne, J.-E., 2017). To yield maximum benefits from the time and efforts invested in entering a new market, it is essential that a systematic approach is taken. Internationalization is a lengthy process in which a firm's strategy changes with the growth and development of the respective market (Aharoni,Y., 1966).

An in depth literature review was conducted on the various market entry strategies frameworks/ models. Two categories of market selection models have been proposed in the literature (Papadopoulos and Denis, 1988): a systematic approach and a non-systematic approach (Andersen & Buvik, 2002). A systematic approach requires a structured and formalized decision making process. Most of the models view market selection as a 3 stage process screening, in-depth screening & final selection (Koch, A. J., 2001). This led to detailed investigation of the following model: Roots (1994), Johnsoon (1997), Kumar (1994) & Cavusgil (1985). For the purpose of this thesis, two models Johnson (1997) & Roots (1994) were combined to help in developing the market entry strategy. The first part from the Johnson's (1997) model was selected as it contains geographic distance that incorporates the effects of psychic/cultural distance in the decision-making process. The psychic distance is defined as the sum of factors preventing the flow of information from and to the market. Examples are differences in language, education, business practices, culture, and industrial development. This was followed by the steps from Root's (1994) model.

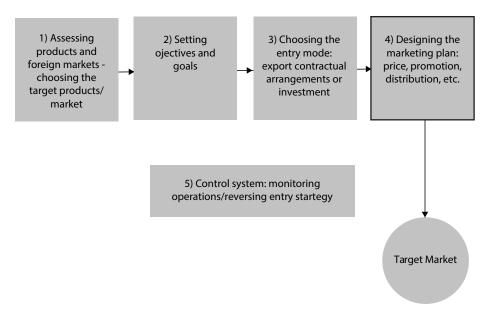


Fig 3: Elements of the entry strategy. Source: Root (1994)

Steps in Market entry strategy

- 1) Assessing product and foreign markets choosing the target market.
- 2) Selecting Objectives & goals
- 3) Choosing the Entry Mode Non equity based or equity based
- 4) Designing a Marketing Plan 4Ps (price, promotion, place, product)

5) Establishing a control system - monitoring operations and revising market strategy

Past studies have shown that the choice of entry modes depends on different types of factors, including firm-specific factors (Erramilli and Rao, 1993), (Kumar and Subramaniam, 1997), (Madhok, 1997), industry-specific and country-specific factors (Anderson and Gatignon, 1986) (Kogut and Singh, 1988).

Internal factors

Internal factors are governed and controlled by the organization intending to venture into international markets. According to Hollensen, S. (2001), the internal factors comprise company size & capability of expanding internationally, international experience, product complexity, & risk appetite. B. ørca, Fletcher, & Brown (2004) added the importance of considering the internal capabilities of the team responsible for executing the internalization. The product plays a major role in deciding the market entry strategy for a fir. Products that are highly differentiated allow the company to have a better control over their pricing strategy (Root,1994). Serviceability of the product is an important factor that needs to be considered in the execution of internationalization.

External Factors

According to Brassington, F., & Pettitt, S. (2000), STEP factors are helpful in identifying the suitability of a given market with respect to the environmental factors. S in STEP stands for sociocultural factors. This contains 'hard' information, such as demographic trends, and less tangible issues, such as changing tastes, attitudes and cultures. Knowledge of demographic trends gives a basic feel for how broad market segments are likely to change in the future. T in STEP stands for technological factors. It is important to understand the trends and advancements in the field of technology that can directly or indirectly affect the company. E in STEP stands for economic factors. These factors include taxation, exchange rate, government spending, exchange rate, interest rates, international trade regulations. P in STEP stands for political and regulator factors that are controlled by the local governments. Market factors such as market size & growth rate, direct & indirect trade barriers, and competitive environment are important factors in selecting a particular country Hollensen, S. (2001).

Market Entry Mode

A company's choice of entry mode has different determinants depending on whether the new market is inside or outside the firm's primary business domain. Entry modes can be broadly categorized into two groups

- 1) Equity Based Entry Modes
- 2) Non- Equity Based Entry Modes

This bifurcation into two broad categories helps in the selection criteria because of the differences that exist among various entry modes and among the criteria of choice at each level (Gatignon and Anderson, 1988).

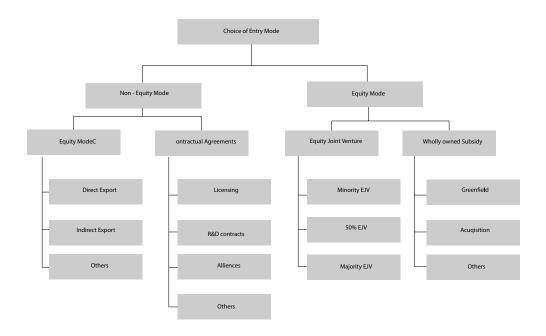


Fig 4: Gatignon and Anderson, 1988) bifurcation of Entry modes

There is a strong rationale to view equity versus non-equity modes as the first level in the hierarchy. Equity modes require a major resource commitment in the overseas location (Anderson and Gatignon, 1986). Thus, in deciding between the two entry modes, firms need to assess the investment risk and return, location choice, adaptation to local environment and management, control of operation, and so on.

Equity based entry mode can be bifurcated into

- 1) Equity Joint Venture
- 2) Wholly owned subsidy

Equity based

Equity Joint Venture

Joint ventures is a business agreement between two parties in which both the parties combine their resources to accomplish a specific task. As these parties contribute their equity, they share in profits, losses, and control of the enterprise. JVs are formed as both the parties take advantage of each other's shortcomings. A joint venture can be divided in three principal forms; minority JVs, 50/50 JVs, and majority JVs. This mode of entry benefits both the parties. The international firm will avail the benefits of having access to local market data and the local company will have access to the latest technology, capital or resources of the international company. Nevertheless, JV's are plagued with a number of disadvantages that include division of effort and the effective control of the new entity. In addition, lack of trust between partners, scarce information, different management and cultural styles, control conflicts, and changes in the business or strategic objectives of partners are some of the more usual pitfalls.

Wholly owned Subsidy

A wholly owned subsidiary is a company whose common stock is 100%

owned by another company also known as the parent company. Whereas a company can become a wholly owned subsidiary through an acquisition by the parent company or having been spun off from the parent company, a regular subsidiary is 51% to 99% owned by the parent company (Kenton, W., 2020). The parent company owns all the shares of a wholly owned subsidiary, there are no minority shareholders. The subsidiary operates with the permission of the parent company, which may or may not have direct input into the subsidiary's operations and management. Gatignon and Anderson (1987) found that locational factors, the degree of multinationality, and research and advertising intensity influence the selection decision between joint ventures or wholly owned entry.

Non- Equity based

On the other hand, non-equity modes do not require the establishment of an independent organization. Rather organizations work with building contractual relationships between parties. Also, equity modes differ from non-equity modes in resource commitment, risk, return, & control. The different types of non- equity based market entry options are Exports (Direct, indirect, & cooperative export) Contractual Agreements - (Licensing)

Exports

Direct Export

Direct Export is the process in which a manufacturer makes sales in an international market directly to the end user. Direct export provides better control while interacting with the end user. It helps the firm also have better margins, as it is rid of any intermediaries. The organization needs to establish an internal sales force that will overlook the development of the various markets. The disadvantage with direct export is that the company may not have enough resources to pursue international opportunities which can be turned into sales and profits. Another disadvantage is the lack of knowledge of the local markets.

Indirect Export

In indirect exports, firms are involved in exporting, sourcing or distribution agreements with intermediary companies who manage, on their behalf, the transaction, sale or service with overseas companies" (Fletcher, 2004, p. 290). Export intermediaries play an important "middleman" role in international trade, "linking individuals and organizations that would otherwise not have been connected" (Peng and York, 2001, p. 328). This route calls for minimum involvement of the firm's resources, leading to reduced risk. Also, there is a better control and knowledge of the user and the respective markets. However, an involvement of an additional stakeholder results in impacting the bottom line of the organization.

Cooperative Export

Kotabe and Helsen (2001) discuss another mode of export known as cooperative export. In this the manufacturer or seller makes an agreement with another company that has local coverage or network presence in the primary market or markets.

Contractual Agreements

Contractual entry modes are long term non equity agreements between the manufacturer or seller and an entity in a foreign target country that involve the transfer of technology or human skills (Root, 1994). Contractual entry

modes entail the transfer of knowledge and skills such as patents, trademarks, trade names, technology, managerial skills, etc. Contractual entry modes include licensing/franchising.

Licensing

Licensing provides a method for profiting from a foreign market without committing sizable funds and taking rampant international risks. Through licensing, the seller can expand its presence by contracting either his technology or skills to reach a broader audience. However, income from licensing can be lower than from other modes of direct foreign market presence. Also, quality control can be another major disadvantage where bad quality can result in damage to the licensor's trademark and reputation (Schirmer, 1996).

Marketing plan

Positioning

Positioning strategy refers to the choice of target market segment which describes the customers a business will seek to serve and the choice of differential advantage which defines how it will compete with rivals in the segment. (Doyle 1983) The positioning statement relates to three interrelated components, which are target customer, competitor target, & competitive advantage (Brooksbank, R., 1994). It is important to build a picture of the marketplace and look at the interrelationship between the three components. The idea is to go for a segment of the market where, by virtue of the company's distinctive strengths, it is able to satisfy customer needs better than (or at least as well as) its competitors (Brooksbank, R.,1994). A marketing mix cannot be used effectively without having a through understanding of the products position in the market (Brooksbank, R.,1994)

Marketing Mix

Once the strategic part was looked into through the positioning, it was essential to look into the tactical elements such as price, place, product & promotion. Neil Borden identifies 12 elements that if properly managed would result in profitable business. This was further grouped into four - elements by Jerome McCarthy (1964). The marketing mix is said to be more effective for mass marketing as it lacks personalization E. (Constantinides, 2006). The marketing mix is a set of controllable variables that the company can use to influence the buyers responses (Singh, M.,2012).

The availability of the product to the end user is an essential element in developing the marketing mix. Being present in the right place greatly impacts the sales of a product. Few producers sell their goods directly to final users. Instead, most use intermediaries to bring their products to market. They try to forge a marketing channel (or distribution channel)—a set of interdependent organizations that help make a product or service available for use or consumption by the consumer or business user (Kotler, P., Armstrong, G., Harris, L. C., & He, H.,2020)

Pricing

Pricing strategy for a product is an integral part in the overall marketing plan. It is important to make use that there is a proper balance between customer perception of the value of the product and the price of the product. If customers perceive that the product's price is greater than its value, they will not buy the product. Likewise, if the company prices the product below its

costs, the company's profits will suffer (Kotler, P., Armstrong, G., Harris, L. C., & He, H., 2020)

Customer value—based pricing uses buyers' perceptions of value as the key to pricing. The company first assesses customer needs and value perceptions. It then sets its target price based on customer perceptions of value.

Cost-based pricing involves setting prices based on the costs of producing, distributing, and selling the product plus a fair rate of return for the company's effort and risk. A company's costs may be an important element in its pricing strategy.

Competition-based pricing involves setting prices based on competitors' strategies, costs, prices, and market offerings. Consumers will base their judgments of a product's value on the prices that competitors charge for similar products

Pricing is also affected by the market in which the firm is competing. There are 4 types of markets, each presenting a different pricing challenge.

Under pure competition, the market consists of many buyers and sellers trading in a uniform commodity, such as wheat, copper, or financial securities. Under Monopolistic competition the market consists of many buyers and sellers trading over a range of prices rather than a single market price. Under oligopolistic competition, the market consists of only a few large sellers. Because there are few sellers, each seller is alert and responsive to competitors' pricing strategies and marketing moves. In a pure monopoly, the market is dominated by one seller

Pricing Strategies for new products - The two types of marketing strategies that exist are market skimming pricing and market penetration pricing. Market skimming pricing is done when organizations set a higher initial price for a product and skim revenues layer by layer from the market (Kotler, P., Armstrong, G., Harris, L. C., & He, H., 2020). This technique is useful when the product quality and image can support the higher price demanded. Product cost cannot be high and competition should not be able to undercut on the higher price. On the other hand, in market penetration strategy, organizations start out by setting a low initial price to penetrate the market quickly and deeply—by attracting a large number of buyers quickly and winning a large market share.

Product

Marketing mix planning begins with building an offering that brings value to target customers. This offering becomes the basis on which the company builds profitable customer relationships. A product is defined as anything that can be offered to a market for attention, acquisition, use, or consumption that might satisfy a want or need (Kotler, P., Armstrong, G., Harris, L. C., & He, H., 2020). Developing a product or service involves defining the benefits that it will offer. These benefits are communicated and delivered by product attributes such as quality, features, and style and design.

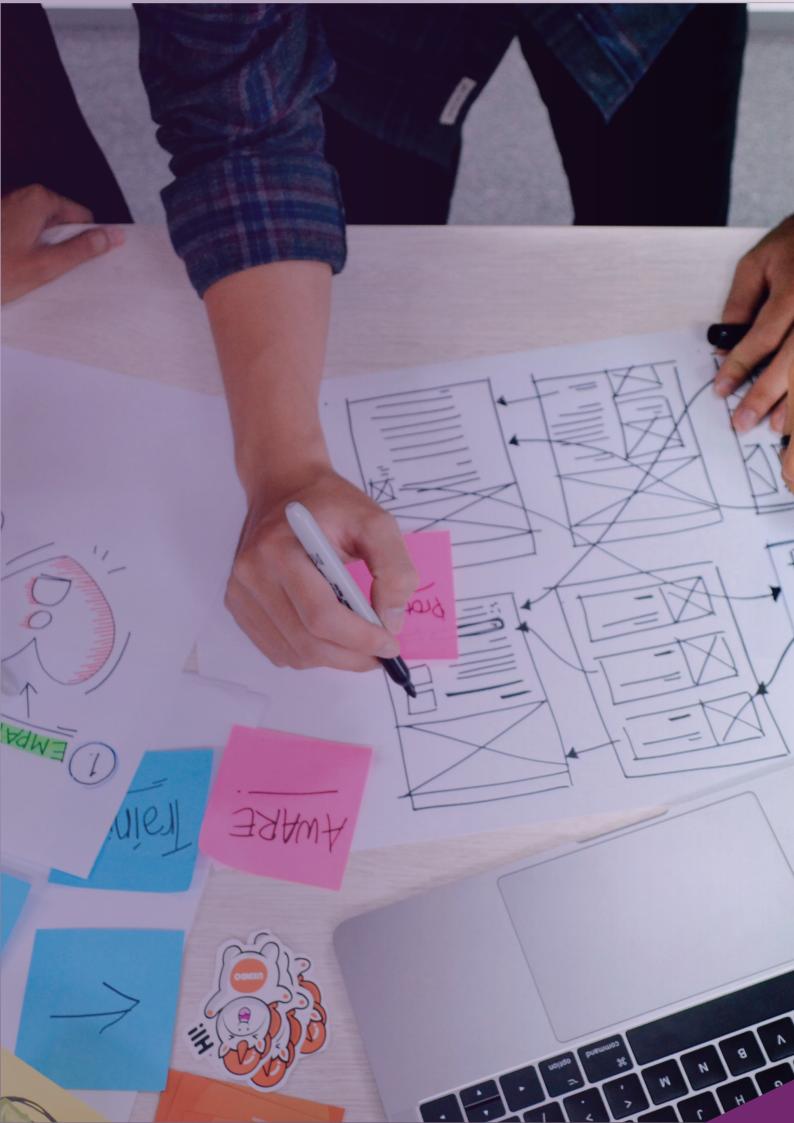
Product like consumers goes through a life cycle of its own and it is necessary to adopt and manage the marketing mix accordingly. The product life cycle is divided into 4 stages 1) market introduction, 2) market growth, 3) market maturity, & sales decline. Customer needs may change over the product life cycle and adopting to a new target audience is a necessary.

Promotion

Companies must do more than just create customer value. They must also clearly and persuasively communicate that value. Promotion is not a single tool but rather a mix of several tools. Ideally, under the concept of integrated marketing communications, a company will carefully coordinate these promotion elements to engage customers and build a clear, consistent, and compelling message about an organization and its products (Kotler, P., Armstrong, G., Harris, L. C., & He, H., 2020)

Measure the marketing plan

For effective implementation and control, the marketing plan should define how progress toward objectives will be measured. Managers typically use budgets, schedules, and performance standards for monitoring and evaluating results. With budgets, they can compare planned expenditures with actual expenditures for a given week, month, or other period. Schedules allow management to see when tasks were supposed to be completed and when they were actually completed. Performance standards track the outcomes of marketing programs to see whether the company is moving toward its objectives. Some examples of performance standards are market share, sales volume, product profitability, and customer satisfaction (Kotler, P., Armstrong, G., Harris, L. C., & He, H., 2020)





04 THE PROCESS

To build the Go-to-market strategy, a process was developed using literature review. This chapter will describe on the four different phases

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Based on the learning from the Root's Framework (1994), and Johnson's framework (1997) a process was developed that would help develop a fitting Go-to-market strategy for the EG. The framework provided an overall structure for the research. It helped guide in developing knowledge necessary to make the go to market plan.



Fig 5: The process flow used for the research

Phase 1 - Company Analysis

In this phase, it is necessary to map the internal factors of the organization that would help in deciding a befitting market entry mode for Envision. This analysis will be achieved by performing desk research about the organization, competition and technology.

Phase 2 - Market Evaluation

After understanding the internal factors, it is essential to recognize external factors that contribute in deciding the market entry mode. The two research questions mentioned above will help in assimilating the customers purchasing behaviour and the landscape of the healthcare system in the different countries.

Phase 3 - Market Selection

The internal and external factors are used as filters to select the countries to begin the market entry strategy with. This is followed by conducting a STEP analysis of the selected countries in order to define an appropriate market entry mode.

Phase 4 - Market Entry Strategy

With the countries selected, it is essential to develop befitting market entry strategy. This phase helps define the place, promotion, price and product aspect that must be considered in launching the EG. Validation of place,

product and promotion was conducted by a quantitative survey. Van Westendorp price sensitivity analysis was carried out to understand user sentiment of price. Along with the above mentioned deliverables, a desired customer journey map (CJM) was created to suggest a uniform service offering across the various countries. CJM would act as a compass for the various new markets Envision decides to enter in the future.



Company Analysis

Envision has been a software company from its inception. Venturing into product development was a completely different strategy. In order to understand the external environment better, it was first necessary to evaluate and understand the organization better. Phase 1 of the process dived into understanding the nuts & bolts of the company.

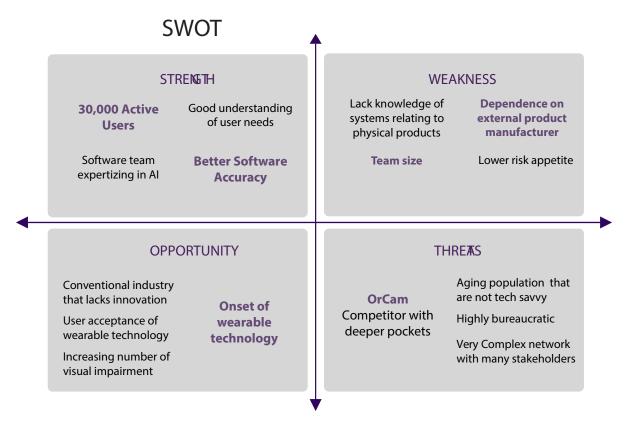


Fig 6: SWOT analysis diagram

The objective of the SWOT analysis (Ansoff, H. I., 1987) was to identify the strengths and weaknesses of the organization. It was not used as a stand alone strategic tool to develop product strategies for the firm, but as one of the many tools (Chermack, T. J., 2005). SWOT stands for strengths, weakness, opportunity, threats. The SWOT analysis helps to improve and share the understanding of the business and factors affecting its performance (Pickton, D. W., & Wright, S., 1998).

Strengths

Envision started as a software development company that created iOS and Android applications that helped the visually impaired community. Having been in this space for over 2.5 years has led to having 30,000 active users all across the globe. Thus, making Envision a recognizable name in the community. Also, this has allowed them to be in direct contact with the end user, giving them an edge is understanding the users needs. The team at Envision comprises designers and developers who have expertise with the latest software development. The EG is developed to be product agnostic, i.e it can port itself to any smart glass that is developed in the future, and is not

stuck to a particular manufacturer. Also, it has developed EG as a platform so that other complimenting applications can be added to it.

Weakness

Since it is a start-up, it has a small team that focuses on the development and design of the application. With the onset of a physical product the team will require more personnel that will help with the running of the sales and supply chain channels. Also, the assistive technology market for physical products is a different space that requires in depts working knowledge of the different markets and the various stakeholders involved. Thus, there is a huge learning curve that the organization needs to acquire in a short duration of time. For the EG, the glasses are procured from Google. That makes Envision dependent on Google, till there is a product with similar hardware features in the market. Finally, Envision is a start-up and does not have deep pockets, curbing their risk appetite.

Opportunities

The assistive technology has been a conventional industry that is dominated by a few big names, and predominantly lacks innovation. Secondly, changing human lifestyle has resulted in a spike in the number of individuals that suffer from visual related impairments. Globally, at least 2.2 billion people have a vision impairment or blindness, of whom at least 1 billion have a vision impairment that could have been prevented or has yet to be addressed (World Health Organization, 2020). This is a big opportunity for news businesses and technologies to cash in. Finally, wearable technology has seen a rampant boost in recent times. With many start-ups and the big tech giants working on developing both hardware and software. Furthermore, the visually impaired community has been quick to adopt wearable tech solutions.

Threats

Some of the most prominent threats to Envision is the presence of its arch rivals, OrCam, an Israel based company, that has been in the assistive tech business developing reading devices since 2012. This is an organization that has received big investment and can invest heavily in R&D and Marketing activities. Secondly, majority of the people with low vision belong to the older population. Who either have no access to the latest tech or are resistant to use new technologies. Finally, assistive technology space is interlinked to the healthcare system, which is a complex and bureaucratic system containing many stakeholders, and is difficult to penetrate for new entrants.

Key Takeaways

From an internal analysis - the biggest asset at Envision's disposal is their iOS & android application that gives them direct interaction with the community. Allowing it to connect and work together with the community. However, Envision has to be quick at developing market intelligence. And it must have alternates in place if Google decides to suspend its B2B sales.

External analysis -

The growing population of people with visual impairment has created a big opportunity space, which Envision must capitalize on. Also, this aging population comprises the baby boomers who are much more financially stable than previous generations. It must be on a constant look out to see how OrCam is performing in the market. Being the market leader allows OrCam to shape the course of the market.

Strategy Wheel

The strategic wheel is an effective tool that is used in the early stage of product development to assess competition between two companies (Buijs, J., & Valkenburg, R., 2005). Envision was juxtaposed against Orcam to chart the strategy wheel to compare the two companies. The strategic wheel was mapped on comparing the following parameters: finance, technological knowhow, development, marketing, personnel, brand, presence in foreign market, & product portfolio. The data to make this comparison was gathered online through the website of Orcam, and through discussions with distributors.

Key Takeaways

OrCam outperforms Envision in all the sections except technology know-how and development

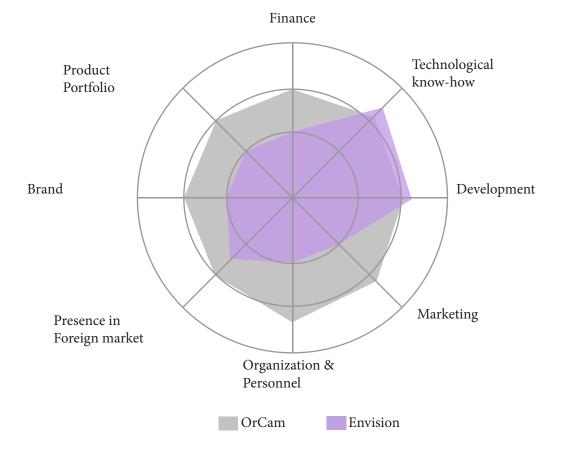


Fig 7: Strategy Wheel

Competitor Analysis

To jot the competitor analysis, online data of products for the VI community were mapped. Overall it was identified that EG would be classified as a reading device.

Product form

Envision Glasses and its close competitor OrCam MyEye2 can be classified as products that are AI Powered Reading Devices. Both these devices offer more features than just reading, but they are primarily considered as reading devices by the community.

Product Category

Reading devices are predominantly of 2 types portable and home installed devices. The EG's is a subset of the portable reading device category. This category comprises handheld screen magnifiers - Optelec Compact 6HD, braille displays, transportable reading device - Clear reader+, & the MyReader2 from OrCam.

Generic Competition

The generic competition can be termed as vision aid, which comprises both physical products and software use for reading. The devices in this category include, IRIS vision, BeMyEyes app, Seeing AI app, Jaws screen reader, etc. Iris Vision - Is a VR based system that allows users to read, Watch TV, see faces, enjoy outdoors, & pursue old hobbies. Be My Eyes - Be My Eyes is a free app that connects blind and low-vision people with sighted volunteers and company representatives for visual assistance through a live video call (Be My Eyes, 2020). SeeingAI - It is an app developed by Microsoft. It is an app that narrates to the blind and low vision community the environment around them. It is one of the biggest competitors of the Envision AI app.

Budget Competition

This category comprises products that are more inclined to the low vision market. These include MaxTV glasses, Jordy, Acesight, & Oxsight that can enhance the visibility for the users interested in watching the television and the surroundings around them.

Key Takeaways

The EG gets classified as a reading device. It will be evaluated on how accurately it can read text. There are various products in the market that cater to the needs of reading depending on the visual acuity of the person. Or Cam is the most expensive product in this category. However, the cap for funds allocated for reading devices in the various countries is much lower. The two biggest competitors for Envision are OrCam, & Seeing AI. Also, there are more products that cater to the needs of the low vision population as compared to the blind.

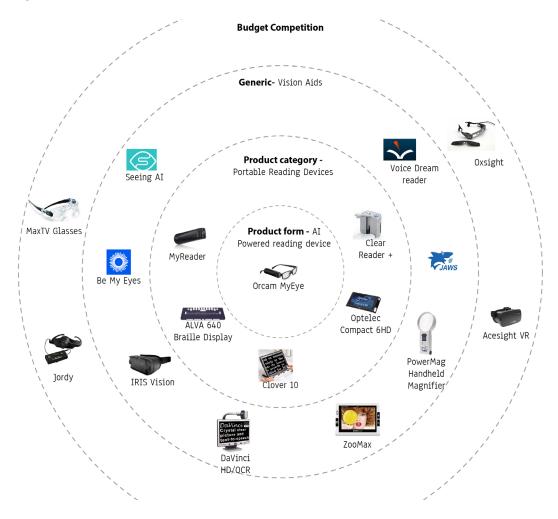


Fig 8: Competitor Analysis map



Synopsis

After conducting the internal analysis of Envision, the following summary was developed.

- 1) Envision 's biggest asset is its android & iOS application that gives it credibility and reach in the international market across borders.
- 2) The product complexity from distribution and manufacturing is low, allowing it to be decimated easily in any of the markets. It is equipped with the same software on the back end that has a proven efficacy.
- 3) Additionally, it is also developed to be a platform that allows other complementary applications to be a part of its ecosystem.
- 4) Offering more options and features to its audience; enabling it to expand organically.
- 5) However, since it is a start-up, it has access to limited financial resources.



Market Evaluation

After completing the internal analysis, it was necessary to look at the purchasing behaviour of the VIC, the market dynamics, market size, and an overview of the AT market. This section will help in answering the two research question

RQ 1 - What are the parameters/factors the visually imparied community evaluate in making purchasing decisions?

RQ2 - What are the market dynamics that impact the business model of an Assistive technology product?

This chapter is broken down into 2 sections

Visual Impaired user's purchasing behaviour

- 1) Qualitative study to understand the purchasing behaviour of the VIC (QL1)
- 2) Quantitative study to understand the purchasing behaviour and desirability of the EG from the early adopters POV $\left(\mathrm{QN1} \right)$

Market Dynamics

1) Qualitative study to understand the market dynamics that impacts the purchasing behaviour of the VIC. (QL2)

Visual Impaired User's Purchasing Behavior

To understand how the VIC purchases AT, a qualitative study was conducted with 7 blind people around the world. Thematic analysis (Appendix C) was conducted and 6 themes were identified. These themes became the initial inputs that were further researched during the interviews with the other stakeholders. Also, these themes were used to develop a quantitative survey for the early adopters of the EG in order to understand their purchasing behaviour.















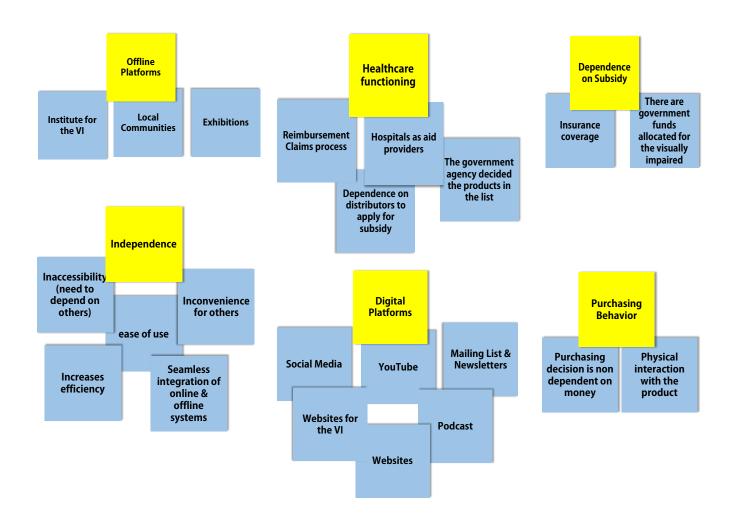


Fig 9: Clustering of the initial codes for QL1

Qualitative research with the VIC (QL1)

Below are the themes that were discovered from the interviews with the VIC..

Independence

For the users, AT was all about tools and devices (both physical & digital) that can be used to bring about their independence in performing tasks and daily activities.

Healthcare Functioning

The healthcare system (HCS) plays an important role in the integration of AT in a region. Providing aid to AT users is a country specific policy decision. Central establishments decide what products can be funded by the HCS. This has a big influence on people's purchasing behaviour. For example, the healthcare system in NL provides funds for AT, but in Algeria there is no support from the government. Having a direct implication on the type of products purchased. Adding on, the HCS brings in many stakeholders that become the point of contact to the user. These stakeholders would include distributors, hospitals, and insurance companies.

Dependence on subsidy

In countries that provide subsidies for AT products, users tend to avail such

schemes to get the product reimbursed. These subsidy schemes are provided by either the government or an IC. A thorough understanding of the subsidy scheme is essential

Channels

The VIC are present on both the digital and offline platforms. They use these platforms to gain the knowledge and information about the latest in AT.

Digital

They are present on social media platforms such as Facecbook and twitter. Many are part of online communities/ groups for the blind and visually impaired. They make use of Youtube and podcasts to learn about new events and products launched. Mailing lists and newsletters are also sources of information. The more conventional way would be to learn about the product either through the product website or websites from the VI.

Offline

Offline platforms are a common touch point for many in the VIC. They make use of local institutes for the VI that helps families & individuals cope with blindness. These institutes are a good source of information about products and tools that a VI person can use to cope with daily activities. Many in the VIC are a part of local groups/communities that allow for knowledge sharing. Furthermore, exhibitions are an important source to interact with the various organizations in the AT space.

Quantitative Study with Early Adopters (QN1)

The learning from the qualitative research with users of AT (QL1) were used to set up a quantitative study (QN1) to understand the purchasing behaviour and desirability of the EG from the POV of the early adopters spread across the globe. The questions of the survey can be found in Appendix A. The sample size of the survey was 30 users all across the globe. It consisted of open ended and rating questions that would give an in depth understanding of the topics in research. The survey provided important demographic details of the users. For confidentiality purposes this data is covered in Appendix D.

The research was set up to identify two major topics

- 1) Product Desirability, and
- 2) Purchasing behaviour

Product Desirability

Open ended questions were asked to understand the desirability of the EG. The main themes that stood out through the QN1 research were

Wearable Technology WT

Users wanted to have a hands free experience while using the product. It is more convenient to direct their head as compared to using the phone, especially when they are walking their dog or on the outside. A hands free approach makes it less cumbersome and more intuitive. Having to use a WT also complements their desire of being independent.

EG as a Platform

The fact the EG is developed as a platform with the possibility of adding more 3rd party applications resonates well with many users. As it offers them multiple use cases for the EG in the future.

Reliability of the Envision App

86% of the participants of the survey are users of the Envision AI App. Accuracy of recognizing text and objects, along with the experience of the app has convinced many participants to purchase the EG without having used it.

Product Features

Recognizing text both instant (78%) and document (82%) were identified as the most crucial feature by the participants. This was followed by features such as describe scene (71%), bar code scanning (71%), find a friend (68%) & find an object (64%). Having this knowledge will be vital when trying to develop a plan to create awareness of the product.

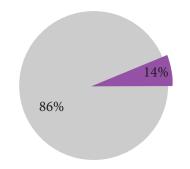


Fig 11: Number of subscribers of the Envision AI App



Fig 10: Graph representing user's preference of the different features in the Glasses.

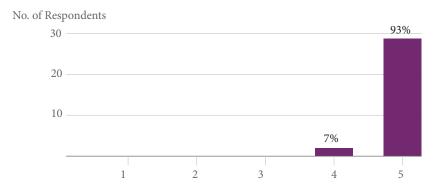


Fig 12: Product quality as a factor in purchasing AT.

Purchasing Behaviour

To understand the purchasing behaviour of the early adopter, factors discovered in the QL1 research and some general purchasing factors were combined to create a questionnaire. Participants were asked to rate the importance of these factors on a scale of not important (1) to very important (5) during their own journey of purchasing the EG. The factors included were product quality, price, subsidy schemes, platform presence, brand, & after sales service.

Product quality is an undisputed factor that users look for while purchasing a product. 93% rated the factor as very important. This is in tandem with the fact that most of the participants are previous users of the Envision AI app and can reference the efficacy of the product. The other factors that were rated as important in making the purchase were price, product review, brand

reputation, and training & customer service. Graphs of which can be found below. These were similar to the insights gathered during the QL1 research.

However, certain factors that were not important to the participants were availability of subsidy schemes, recommendation from a distributor, and reference from friend/family. This is contrary to the findings in the QL1 research, which showcased the reliance of distributors and subsidy schemes in the purchasing behaviour. Nevertheless, the majority of the participants resided in North America where subsidy schemes are not heard of. This would require further investigation and will be looked into in the next part of the chapter.

Furthermore, participants were asked to state all the online channels they used to seek knowledge of the EG. The top platforms were Envision website (58%), Envision AI app (55%), and podcast (51%).

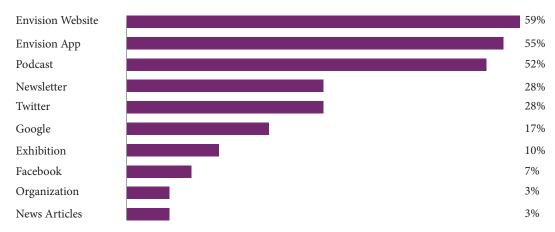


Fig 13: Platforms on which users heard about the Envision Glasses.

Market Dynamics

Globally, it is estimated that at least 2.2 billion people have a vision impairment or blindness, of whom at least 1 billion have a vision impairment that could have been prevented or has yet to be addressed. This 1 billion people includes those with moderate or severe distance vision impairment or blindness due to unaddressed refractive error (123.7 million), cataract (65.2 million), glaucoma (6.9 million), corneal opacities (4.2 million), diabetic retinopathy (3 million), and trachoma (2 million), as well as near vision impairment caused by unaddressed presbyopia (826 million) (Vision impairment and blindness, 2018). This comprises the entire market of the VIC that Envision can target for their glasses. As per literature review, visual impairment can be grouped into two categories

- 1. Low vision category 1 to 2
- 2. Blind category 3 to 5

However, it would not be feasible to study all the countries with respect to market opportunity. To short list the countries that needed to be further examined, the pre-order sales data was analysed. The analysis of this data can be found in Appendix D. Furthermore, desk research was carried out on the countries selected to understand the total market size. Websites such as Euroblind, WHO, RNIB, SSB, NCBI, CCD, etc were used to collect the market

size data. An aspect to make note of, every website had different parameters while collecting data of the VI, and the data was not collected in the same year.

Qualitative research with the distributors (QL2)

To understand the marketing dynamics, a semi-structured interview was conducted with twenty distributors across 11 countries. The questionnaire of the interview is attached in Appendix A. The distributors were asked questions pertaining to their working model, the AT market, HCS, & customer journey. Thematic analysis was conducted on the interviews. The coding of the interviews are in Appendix C. This resulted in four overall themes, & customer journey maps for all the countries.



Fig 14: Images of some of the distributors from around the globe

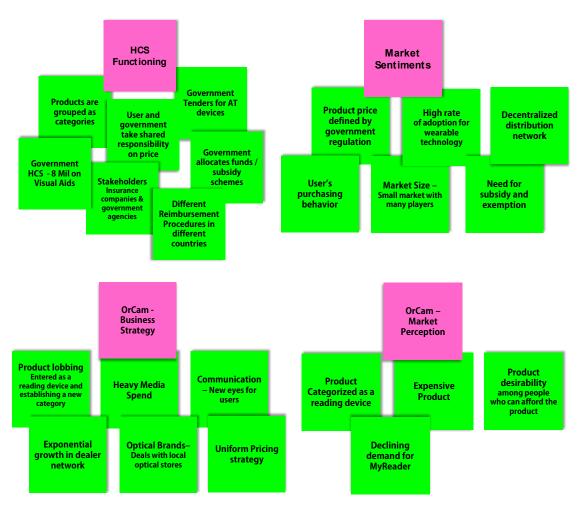


Fig 15: Clustering of the initial codes from the qualitative research (QL2) with the distributors

Insights from the Qualitative Research

The coding of the interviews with the distributors resulted in 4 themes across the 11 countries. As the distributors were across different countries, clustering was first done with the countries and then observed holistically. This section will synthesize the overall insights gathered and give an overview of the AT market. Also, valuable market information was available for each of the countries. This data was recorded in the next part of the chapter.

Assistive Technology Market functioning

The working of the AT market is different in the various countries. AT products are grouped in categories that are assigned fixed prices. These prices are decided by either the government or the IC. Customers are always on the lookout for the subsidy scheme/ reimbursement that are an integral part in the purchasing behaviour. The AT markets size is fixed with many players (distributors) meeting the needs of a small customer base. In larger countries, the distributor networks are decentralized and no player is dominant throughout the country. Price and availability of an AT product is influenced by the various intermediaries from the manufacturer to the end user.

Stakeholders

The HCS is a nexus of many stakeholders that are involved in getting AT to the end user. This includes

- 1) Doctors ophthalmologist
- 2) Opticians, and optical stores

- 3) Institutes for the VI
- 4) Insurance companies
- 5) Distributors of AT

Ophthalmologist

Doctors are an important touch point from the low vision market. Users with sight problems first get in touch with their local ophthalmologist with the intentions of getting their sight corrected. However, if that is not possible either the ophthalmologist will recommend these patients to the respective local institute for the VI or provide them with visual aid they deem fit to correct or support their impairment. In the latter case, the ophthalmologist would have contacts with local distributors who would get them in touch with the befitting AT devices.

Institute for the VI

There are local centers run either by government agencies or private entities. These organizations are responsible for providing support and rehabilitation for individuals and family members of people with VI. This is usually the 1st point of contact for the people with VI to seek knowledge about AT products, government schemes, and interacting with others in the community. These institutions have contact with local distributors that provide them with information about the latest products out there for the VI.

Insurance Company (IC)

An important stakeholder in many countries are the IC that provide health coverage. Central governments release tenders for products that are grouped in various categories. And ICs are required to provide coverage for these categories. The product cost for these categories are managed by the ICs. To set these prices, ICs fix rate contracts with local distributors. In order to pay for the subsidy scheme, VI people are supposed to provide a proof of their visual acuity and a letter stating the use of the product.

Distributors

One common stakeholder in all the countries researched were the distributors. They are last mile stakeholder in the AT market. Their USP lies in their contacts and networks with institutions for the VI, IC, government agencies, establishments such as schools, and the end user. The At market for the VI has a very conventional working, and distributors lie at the heart of it. They act as a bridge between OEMs and the end user. They provide services such as applying for subsidies on behalf of the end user, representing products during local exhibitions, & conferences for the VI, providing onboarding training, and after sales servicing.

Competition

The consistent competition that was encountered from all the distributors was OrCam. On grouping the initial codes together two focused codes were formed,

- 1) Market sentiment, and
- 2) Business Strategy

Market Sentiments

The MyEye & MyReader are classified as reading devices in almost all the markets. Overall, the OrCam devices receive mixed reviews about their performance, but one aspect that is disliked across the globe is its high price. High price has been such an inhibitor that state agencies in the USA and some insurance companies in Austria do not provide aid for these devices. The

heavy investment in marketing provides OrCam the initial boost in sales but in proceeding years it is known to lose steam. For example, in France, OrCam entered with a bang, and was the most talked about product in the market. However, the year or year sales have deteriorated post its launch.

Business Strategy

OrCam heavily spends on marketing by purchasing air time in many countries. It began with an exclusive dealership model with distributors but soon grew their distributor network rampantly across the countries. This has rubbed negatively among the distributors. Predominantly because the AT market for visual aid is not a big market, and there are many players competing for the same customers. This brings differentiating down to the least cost. On average the MyEye 2 sales are around 100 - 200 units/ year. Product price for the OrCam devices is different in different countries.

Healthcare System Functioning

Increasing number of aging populations and WHO's initiative of making countries inclusive has got many countries interested in AT. Central governments are responsible for defining categories for products that are financed/ subsidized by the HCS. These subsidy schemes can either be provided through social insurance or government agencies set up by the state / central government. It is observed, the functioning of the HCS is different in all the countries investigated and is riddled with its own complexity with respect to stakeholders and processes. This complexity is best understood by the ones involved in the system.

In comparing the subsidy schemes available in the investigated countries, USA had far fewer than Europe and Japan. However, the discretionary spending capacity of households in the USA is way higher than other countries. Thus, it is more common to see people purchase AT devices from their own pockets in the USA.

Market data - Country wise

The country specific market data was obtained by analysing the initial code from the interviews with the distributors. For the convenience of having these insights are combined with the desk research specific to that country, providing a comprehensive understanding of the market. To differentiate the two in every country it will be mentioned which is the data gathered from desk research and what were the insights gathered from the distributors.

Europe

In Europe there are a total of 30Mil VI individuals This can be further broken down into 23,8 Mil - Low vision people and 2,5Mil - Blind people.

Austria

Desk Research

In total Austria has 318,000 VI people National Report of Disability (2008). Austria spends 10% of their GDP on healthcare expenditure, covering 2900 Euros per capita on compulsory insurance (OECD and European Observatory on Health Systems and Policies, 2019 (e)) (data refer to 2017).

Interview Insights

In Austria there are two ways of availing reimbursements for AT products, the government and insurance companies. The government has allocated 10,000 Euros for 2 years for people with visual impairment. People who get sponsored for the AT need to have had problems with sight before the age of 65 to avail the schemes. Also, the HCS doesn't provide complete reimbursement. They only offer 80% of the cost, the remaining has to be paid by the individual. However, if the person is not financially stable and has a monthly savings of lower than 1400 euros, social security will cover the cost of the product. Orcam is sold at 5500 Euros in Austria. A big deterrent in the Austrian market is, larger social insurance companies do not pay for products that provide audio output. Nevertheless, the smaller social insurance companies pay for reading devices with audio output.

Customer Journey

Below is a customer journey for a VI person in Austria. A person can either approach a local association for the blind or a distributor for information about a product. The distributor will visit the home of the person and demonstrate the product. Post demonstration, the person is free to keep the product for a trial period of 14 days. There are foundations that help with either getting more funds if necessary or applying for the subsidy scheme on behalf of the user. This responsibility is not taken up by the distributor unlike in other countries.

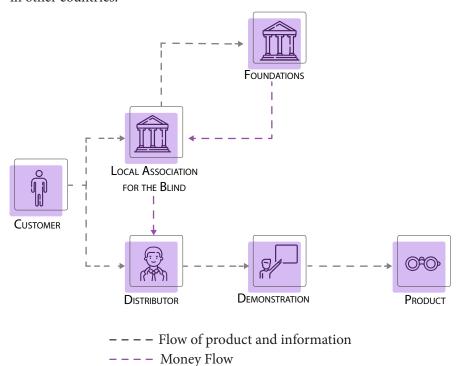


Fig 16: Customer journey map for VIC in Austria

Czechia

Desk Research

Czechia spends 7.3% of their GDP on HC, and has a per capita insurance cover of 1700 Eur. This is below the EU average on HC spend. Czech Blind United (SONS) is the national association of blind and partially sighted people in the Czech Republic. Its headquarters are located in Prague, while 80 local branches are spread over the whole country. (SONS, 2020)

Interview insights

For the procurement of AT, the government covers 90% of the cost specific to the given category and the remaining 10% is paid by the user. Products in Czechia are classified on the basis of category and the level of blindness. The EG will be classified as a reading device. Distributors help the users in applying for the reimbursement schemes. There are various associations that are developed for the VIC. Tyflo is a government organization that helps individuals and families cope with blindness through rehabilitation services. OrCam sales in Czechia is around 100 units per year. The MyEye2 is priced at 4500Euros. The price of the product is way over the category limit. In the majority of cases only 2500 Eur is reimbursed from the centre including VAT.

Customer Journey

Users who want to purchase an AT approaches their local Tyflo centre. The centres provide with the information pertaining to the products available for the respective category. Once the person has decided on the product, the Tyflo centres get the individual in contact with the distributor of the product. Post that the distributors are paid 90% of the amount through the government system and the user pays the remaining 10%.

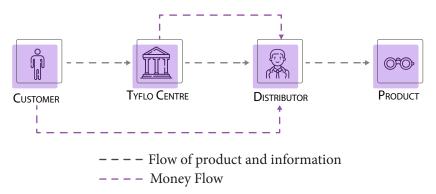


Fig 17: Customer journey map for VIC in Czechia

France

Desk Research

There are about 1.2 Mil VI people in France. It spends about 11.2% of the GDP on healthcare, and has a per capita insurance coverage of 4000 Eur (OECD and European Observatory on Health Systems and Policies, 2017).

Interview Insights

Subsidy schemes are available for AT. Products pertaining to AT are classified in categories. The EG will be classified as a reading device. 4000 Eur for 3 years or 2000 Eur for 2 reading devices is allocated per person. 70% of the users in France avails the subsidy schemes available.

OrCam sells about 100 to 200 MyEye2 a year. When it was launched in France it sold about 600 units of MyReader, but the sales of the MyReader has dropped to 200 to 300 units. It sells the MyEye2 for 4700 Eur and the MyReader2 for 3700 Eur. Also, it signed a partnership with Essilor, an optician store, to increase its reach.

Customer Journey

An individual purchasing a reading device in France can approach it from 2 routes. First, if the device is for private use, the person can approach the MDPH Departmental House of People with Disabilities. It provides upto 2000 Eur as a means of subsidy. Second, for professional use, the individual can get in touch with AGFIP. If deemed necessary, the organization pays for the entire cost of the product.

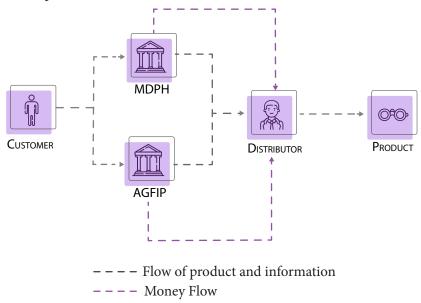


Fig 18: Customer journey map for VIC in France

Germany

Desk research

There are 600,000 visually impaired people in Germany out of which 70 % suffer from age related eye diseases. Out of the 600K VI people 155,000 are blind and 345,000 have low vision. (ABC, 2019). Germany spends 10.5% of the GDP on healthcare expenses. 3800 Euros per capita is allocated for health insurance coverage. In the EU, it is the second largest country in both insurance coverage and % of GDP spent on (OECD and European Observatory on Health Systems and Policies 2019(d)) (data refer to 2017).

Interview Insights

200 - 630 Euro/ month is provided to the blind citizens to cope with daily activities. The health insurance is the route used by the VI community to avail the subsidy schemes allocated for AT. Howere, there are funds that are allocated by the government. Germany follows a decentralised model of providing aid to its citizens. Each of the 16 provinces is responsible for catering to the needs of their area. Reimbursement can either be completely or partial depending on the category and the product. However, AT that are needed for work or studies get complete reimbursement from the government.

Customer Journey

The below image shows the customer journey for the purchase of a visual aid in Germany. The individual can get in touch with a local association for the VI or a distributor. If the person wants to get the product from the system, he/ she needs to provide a letter stating the use of the product and proof of his/her visual acuity from an ophthalmologist. This is evaluated by the social insurance companies and approval is provided. Post which the product is provided to the user and the money transfer is done to the distributor of the goods. Distributors have rate contracts with the social insurance companies. Also, the distributors have contacts with local association. The distributors provide AT to these associations.

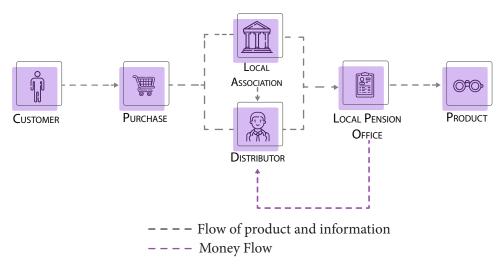


Fig 19: Customer journey map for VIC in Germany

Italy

Desk Research

The total number of people with visual impairment in Italy stands at 1,8 Mil. 362.000 are blind and 1,5Mil have low vision. With respect to market size, Italy is a big market in Europe as a stand alone. It spends about 8% of its GDP on healthcare expenses, and 1800 Euros per capita is provided as government insurance coverage. This is lesser than the average of the EU. Thus, Italy is a price sensitive market.

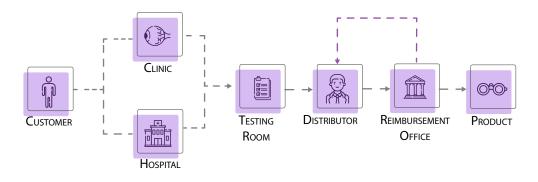
Interview Insights

The HCS in Italy classifies products as categories and assigns a max amount that can be reimbursed. If the product is not mentioned in the category, the user will get reimbursed for only the amount allocated for that category, and the excess amount will have to be paid by the end user. To get a product registered in the system's catalogue, the government will release tenders for the different categories.

OrCam has been in the Italian market for 3 years, and spent a huge amount on advertising. This sparked great curiosity among the VIC. OrCam marketed their product as "New eyes for you"; this was misleading and upset many in the VIC. They started by offering exclusive dealerships and have now moved to incorporating more distributors to their distribution network. It is an expensive product for the Italian market. To overcome this market resistance, Orcam is currently trying to lobby and get the product into the system catalogue by defining its own category.

Customer Journey

Below is the customer journey of a VI person to purchase an AT product. The person can use one of the mentioned routes going to a clinic or a hospital. These places are equipped with testing rooms where they can try the products available. This consortium of products are provided by local distributors that are in touch with such institutions. Also, the distributor can recommend products that are in the system catalogue, and persuade the users to purchase preferred products. Once, the person has approved the product he/she would like to have. The refunding office applies for the reimbursement and the individual gets the product and the distributor will be provided with the money.



– – – Flow of product and information

--- Money Flow

Fig 20: Customer journey map for VIC in Italy

Netherlands

Desk Research

Limburg, Hans & Keunen, Jan. (2009) as per the report it states that there are 367.000 visually impaired people in the Netherlands. The breakdown comprises 90.000 blind people and 277.000 low vision people. Furthermore, the Dutch HCS is one of the leading systems in the world. With good connectivity and uniformity throughout the country.

Interview Insights

In the NL you can seek the support of the HCS in two ways. First, the UVW provides assistance for the support that is needed for professional and study related tasks. The other option is the insurance company that provides assistance for products that need to be used at home. The Dutch HCS has created product categories against which these institutes are allowed to provide funds as per the maximum cap provided. Also, insurance companies can only fund those products that can be covered completely based on the category. For example: The category for reading glasses has a cap of 2200 Euros and products costing more than that will not be included. There is a stringent gate-keeping process in place. Users who want to avail these subsidies need to provide a letter stating the use case for the product along with an ophthalmologist's verification of their visual acuity.

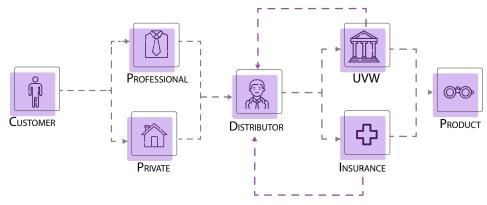
OrCam has spent a lot of money on television advertisements in the NL. They started out with few distributors in the beginning, and now have expanded their reach by signing distribution contracts with many distributors.

Distributors in the NL are connected with Visio, Bartimeus, the UVW,

doctors, hospitals, and the end users. Their business model functions on stocking products from OEMs, followed by distribution, providing demonstrations, applying for subsidy schemes, on boarding training and after sales service.

Customer Journey

As a VI customer, each individual has an option of approaching either of the two modes private or professional. In either case the user can get in touch with a distributor or a local association for the VI. These local institute also direct the users straight to the distributors. The distributors perform in home demonstration of the product followed applying for the reimbursement in either of the routes.



- – Flow of product and information
- – Money Flow

Fig 21: Customer journey map for VIC in Netherlands

Norway

Desk Research

The total number of VI people in Norway stants at 409,068 (Statistisk sentralbyra, 2020). Norway spends 10% of their GDP on healthcare expenses. 3900Euros per capita is the insurance coverage provided (OECD and European Observatory on Health Systems and Policies, 2019b) (data refer to 2017). It has the largest per capita spending in the whole of the EU. The government spends Euros 400Mil/year on AT aids, out of which Euros 8Mil is spent on visual aids.

Interview Insights

To purchase an AT product, individuals can either go through the central system NAV (Norwegian Labor and Welfare administration) or purchase the product outright. 95% of all sales are done through the NAV system. Tenders for including products in a category comes up every 4 years. Distributors compete in bids to claim the top 3 slots in each category. The EG will be classified as a reading device and the contract for this category will be renewed in the beginning of October 2020. The market potential for the EG stands between 300 to 400 glasses per year.

Customer Journey

Below is the customer journey to purchase an AT device. The person needs to get in touch with a NAV centre in their locality, The NAV attendant will understand their needs and recommend them products that are registered in the specified category. If the item appeals to the VI person, the product is provided to the user for testing by the distributor who has won the tender.

Once the product is acceptable to the VI person, the NAV system will reimburse the amount to the distributor. Also, The distributor is responsible to provide an in home demonstration of the product and the after sales service.

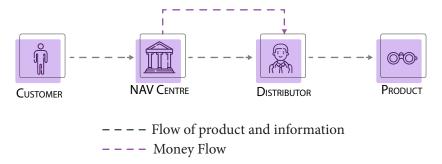


Fig 22: Customer journey map for VIC in Norway

Sweden

Desk Research

Sweden spends 10.5% of its GDP on healthcare expenditure, and has a per capita insurance coverage of 3200 Eur. Government in Sweden provides assistance to the visually impaired if they are working.

Interview Insights

There are two associations that help with the funding of AT. Försäkringskassan helps in providing aid for people who have been working for less than 12 months, and Arbetsförmedlingen helps in providing aid for people who have been working for more than 12 months.

The AT market in Sweden is a slow market and products takes time to build traction in the market. It is a challenge to reach people who are acceptive of new technologies. However, the population of people purchasing AT is quite diverse, ranging from 20 right upto 60 years. Dyslexia is one more market that makes use of reading devices. In Sweden, schools purchase such AT products for their students. The age group of students would be from 15 years to 25 years. OrCam entered the Swedish market 2 year back, but it is not supported by the government as there is no comparable product in the market and it is currently not classified in any of the categories.

Customer Journey

An individual purchasing a reading device in Sweden can approach it from 2 routes. First, the person can approach the AT. Försäkringskassan or Arbetsförmedlingen. These associations lead the customer to the distributors with whom they have contracts. And the distributor reaches out to the customer and provides them with the product that they need. These product are in rate contracts that these organizations sign with the distributors on an annual basis.

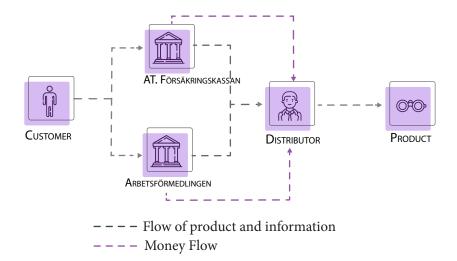


Fig 23: Customer journey map for VIC in Sweden

United Kingdom

Desk research

In the UK market the total number of people that are visually impaired are 350.000 (2017) (RNIB, 2019). Individual regions England - 290.500, Scotland - 34.500, Wales - 17.000 & North Ireland - 8.000. UK has one of the lowest prevalence of any late AMD (1.8%); 25,000 people are affected by AMD every year (Li., J. Q., Welchowski, T., Schmid, M., Letow, J., & Wolpers, A. C., 2017). It is one of the most established HC markets in Europe. In 2017, the UK spent 197 Bil ponds.

Interview Insights

In the AT market, the users have been receptive to wearable technology (WT), and the WT market is seeing a year on year increase in sales. The main services that provide grants in the UK are Local Social Service & Local Council's Welfare Assistance Scheme. Different categories are available for grants. For the old citizens, there are attendance allowance and pension credit. For the people of working age, Personal Independence Payment, Employment & Support Allowance, and universal Credit.

Customer Journey

The process flow for a person going through the healthcare system is mentioned in the figure above. A person with a VI needs to get himself/herself registered through with a hospital, clinic or the RNIB. Once registered, the person is entitled to claiming subsidies for the products. Users reach out either to local institutions or to distributors directly while purchasing AT. The HCS provides the grants; distributors help users in applying for the grants.

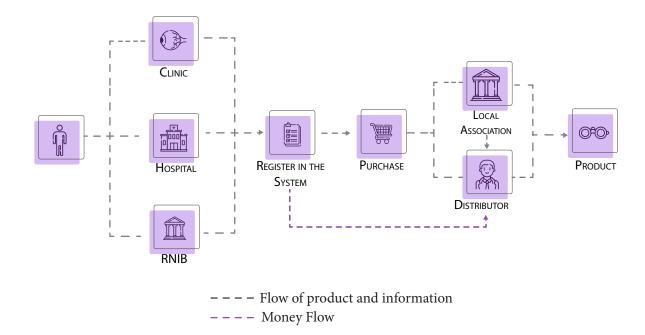


Fig 24: Customer journey map for VIC in United Kingdom

USA

Desk Research

In 2015, a total of 1.02 million people were blind, and approximately 3.22 million people in the United States had vision impairment (VI), as defined by the best-corrected visual acuity in the better-seeing eye. In addition, 8.2 million people had VI due to uncorrected refractive error (CDC, 2020).

Interview Insights

It is a decentralized market; respective states are responsible for implementing rules for AT. This is also replicated with the distributors, as there is not a single distributor throughout the country. Distributors have contacts with Veteran Association (VA) and State Agencies SA. These institutes procure AT for their respective communities.

There are very few subsidy schemes that are available with the SA. VA's provide complete reimbursement for their veterans. Furthermore, insurance companies do not provide any support for AT. Most of the customers purchased AT straight out. That is visible from the increasing sales in wearable technologies. Making it a highly lucrative market for Envision. But it is a big giant in itself and studying the market will require more intensive research.

OrCam is an interesting product. It is highly desirable and an immediate buy for people who can afford it. However, the high price is a big barrier for its seamless dispersion in the American market. Many of the users of AT are the older population, who also find it difficult to adapt to technologies such as OrCam.

Customer Journey

Below is the customer journey map for the purchase of an AT product. The user can either reach out to the local state agency or in the case of a vetran, he/she can get in touch with the VA, or directly to the distributor. The distributors get in touch with the users and provide them with a demonstration of the

product. For the subsidy, the individuals can get in touch with US department of education rehabilitation services, US department of veteran affair for blind rehabilitation services, and the assistive technologies fund for the residents of the US

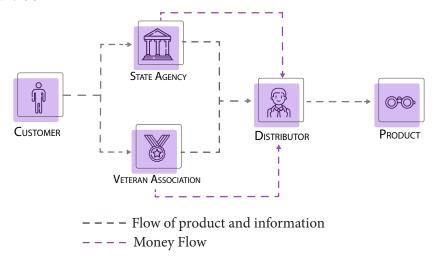


Fig 25: Customer journey map for VIC in USA

Japan

Desk research

In Japan there are 1.68Mil people that are visually impaired from which 187,800 are blind and 1.4Mil have Low Vision. Japan spends 10.94% of GDP on healthcare, and has a per capita spend of 3700 Euro in 2017 (Japan Healthcare Spending, 2017). It also has an aging population, indicating a growth in the adoption of AT. The AT market for the visual aids is approximately 17.5Mil Eur.

Interview Insights

It is a limited market with many players. The Japan AT market worked on a centralized model with the control in the hands of the central government. However, this has changed recently and it is governed at a local level.

The Japanese government provides 90% subsidy to the users for the assistive tech that is available and mentioned by law; the remaining 10% has to be paid by the user. Tax exemption can be claimed for AT in Japan. For AT for visual aid, the government provides 1700 Eur as reimbursement amount for products in the reading device category. The EG will be categorized as a reading device in Japan.

Customer Journey

The user intended to make the purchase of an AT needs to get in touch with the distributors responsible for selling the product. The distributor will provide an invoice for the product. This has to be handed in to the local agency along with the intended use of the product and the visual acuity of the individual. Once approved, the local government agency will provide a token to the user that signifies 90% of the payment or the upper limit of the category whichever is lower. At the same time a consignment note is sent to the distributor from the government end. Once the ticket is submitted to the distributor with the repairing 10% for the product, the product is handed over to the user and the money is transferred to the distributor.

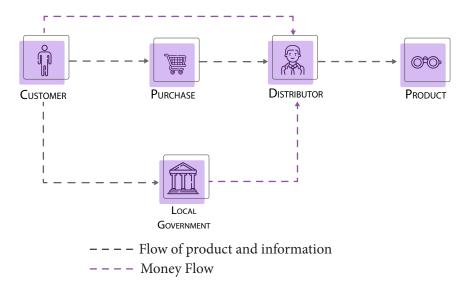


Fig 26: Customer journey map for VIC in Japan

This section helped answer the two research questions from multiple perspectives of the key stakeholders in the system.

RQ 1 - What are the parameters that the visually impaired community evaluate in making purchasing decisions?

Combining the learning from the interviews with the users and distributors of AT painted a clear set of parameters that users look for while purchasing AT products.



Price

Depending on the region of residence users can fall on a spectrum of either being price agnostic or price sensitive. Users tend to be price agnostic in countries where subsidy schemes are provided by the government. The availability of such subsidy schemes is a deal breaker for many customers in purchasing AT. These subsidy schemes are key drivers to influence customer behaviour; they are important in reducing the barrier of entry for customers. Furthermore, users are sensitive to price in places where such schemes are not available.



Channels

VIC makes use of both online and offline channels to gather information and purchase an AT product. The routes used to gather information would include product websites, social media platforms such as twitter & Facebook, Google search, YouTube, distributors, newsletters, podcast, distributors, exhibitions, institutions for the VI, and newspaper articles. To buy the products users either make use of distributors, product websites or the institutions for the VI.



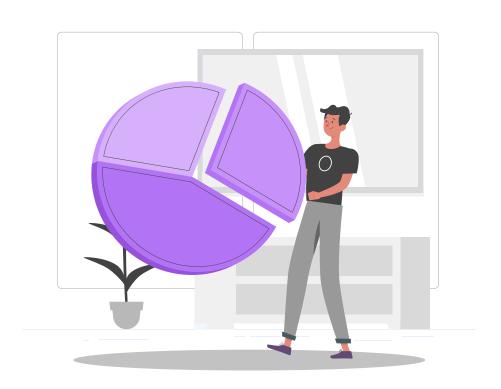
Touch-points

Users always wanted to touch and feel the product for themselves before making a purchase. An element that is embedded in their purchasing journey. For which they rely on distributors to provide in home demonstrations of the product. The other touch points that were identified are product website, distributors, newsletters, mobile application, reimbursement letter to the IC, training/ on boarding and customer support.



Reputation

Product efficacy and brand reputation are important elements that users evaluate while making a purchase. They prefer relying on their own judgement while selecting a product that fits their needs best. Products reviews are looked at but are not a deal breaker.





RQ2 - What are the market dynamics that impact the business model of an Assistive technology product?

From the insights gathered through the user and distributor research, the following factors/parameters were identified as key contributors that influence the functioning of an AT business model



Healthcare System

Countries with a large group of VI users and a well established HCS that supports the needs of this user group are good indicators for quick adoption of a new product. The HCS is a vital contributor to the working of the AT industry. The functioning of HCS is different in the different countries. This results in different rules, regulation and working of the system. These systems are best understood by local stakeholders such as distributors and institutes for the VI. It is essential to tap into their contacts and networks.



Subsidy Schemes

Governments allocate funds for the VIC that can be redeemed through the purchase of AT products. HC spending by the government and compulsory insurance coverage per capita are good macroeconomic factors to track the funds allocated for individuals in countries with subsidy schemes. Government tenders are important for market entry. Once, included in the portfolio, VI people (customers) get funded for these products.



Distributors

Distributors are at the heart of the offline channel route to reach customers. Their association with IC, government organization, institution for the VI and the end users positions themselves as an important stakeholder to collaborate with to spread the reach of the product in a country.

COVID-19

CoVID -19 has dawn uncertainty for business functioning, and has put restrictions on many activities such as exhibitions, meeting in person and travel.



Market Selection

The previous sections helped in identifying the customers purchasing behaviour and the external factors that would influence the business model for the EG. Synthesising the internal & external factors allowed to filter the top countries that would be most suitable to enter in Phase 1 for Envision. The top five countries identified were France, Germany, Netherlands, Norway and the United Kingdom.

An in depth desk research was conducted to analyse the external macroeconomic factors that are essential to be tracked and monitored from a business standpoint. The STEP method of external analysis was performed on the 5 countries. The technology part of the analysis was consolidated, as it was not different in the various countries.



France

Sociocultural

France has a population of 65 Mil people and ranks as the 22nd populous country in the world. It has a growth rate of 0.22%. The most populous cities are Paris, Marseilles, Lyon and Toulouse. 81% of the population resides in urban settlements. The median age of the population is 42.3 years (Worldometers, 2020 (a)). Life expectancy in France is 83.13 years, one of the highest in the EU. 20.5% of the population is 65 years and older (Gautier, M., 2020). This is expected to increase steadily, to reach about 25% in 2030 and nearly 30% in 2050. The sheer demographic weight of people aged 85 and older will rise even faster, increasing from about 1 million people in the mid-2000s to about 2.5 million in 2030 (Beland, D.,

& Durandal, J. V., 2012).

There are about 1.2 Mil VI people in France. The number of VI people, along with the aging population are strong indicators of increasing demand for visual aids in the future.

Economics

France is one of the more economically stable countries in the EU. In 2019, it had a GDP of 2373 Bil Eur. It has a household disposable income of 30.999 Eur/yr (OECD and European Observatory on Health Systems and Policies, 2017). However, it has been gravely impacted by the current outbreak of COVID-19. Investment and consumption has fallen sharply. If hit by the second wave of the pandemic, it is susceptible to be the state of deep recession.

France is ranked ninth among EU countries in health expenditure per capita in 2015 (EUR 3342 per capita, adjusted for purchasing power parity). However, as a proportion of GDP, health spending in France was the second highest (after Germany) with 11.1% of GDP (OECD and European Observatory on Health Systems and Policies, 2017). The French financing system is based on social insurance, with a stronger role for the state than is usually the case in such systems. The responsibility for the management of the health system is split between the state and social health insurance (SHI). Also, there are compensation/ subsidy schemes in place for people with disability. The first is the disability compensation allowance (prestation de compensation du handicap) for disabled persons who are younger than 60 years, who are residing in France and whose disability meets defined criteria. The second is the allowance for loss of autonomy (allocation personnalisée d'autonomie) for elderly persons who are older than 60 years and who are residing in France, and who suffer from a loss of autonomy.

Minus the COVID-19 situation, the French economy and its healthcare system offer users the incentive and means to spend money on purchasing AT.

Political

French President Emmanuel Macron was elected in 2017, and in July 2020, the French government was reshuffled. This will remain the same till 2022 when the next elections will be held. Broadly indicating a stable government in the coming 2 years.

Germany

Sociocultural

Germany is one of the most populous and industrialized countries in Europe. It has a good balance of wealth, health, and quality of life. The German society focuses on structure, privacy, punctuality, hard work, diligence and perfectionism in all aspects of life. The population of Germany is 83,779,137. (Worldometers, 2020(b)) It is the 19th post populous country in the world. The population density in Germany is 240 per Km2 (623 people per mi2). 76.3 % of the population resides in urban areas of the country. The population growth rate is at 0.32%. Also, the median age is 45.7 years, indicating an older population. The Life expectancy of the country is 81.88 years. 21.2% of the population

645,000
VI people

Eur 4712 per capita
Healthcare Expenditure (2018)

is over the age of 65%.

According to the German Federation of Blind and Visually Impaired People, the number of blind people in Germany is about 145,000 and the number of the partially sighted people can be estimated at approximately 500,000.

These figures are based on the legal definitions of blindness and visual impairment, which are stricter in Germany than in other countries. (Knauer C, Pfeiffer N. Erblindung, 2006). Germany was one of the early countries to work with the United Nations Convention on the Rights of Persons with Disabilities (UNCRPD) to establish rule and rights for the visually impaired community. Thus, enhancing the inclusivity of the community in society. The German Federation of the Blind and Partially Sighted (DBSV) is the national organisation of visually impaired persons and patients who suffer from a disease leading to sight loss. The members of the German Federation of Blind and Visually Impaired People are 20 regional organisations which subdivide into 300 district and local organisations.

Health Insurance is compulsory in Germany, thus offering universal health coverage. The health insurance is provided by either statutory health insurance (SHI) or private health insurance (PHI) . SHI covers 87% of the population with 109 providers and PHI covers 11% of the population with 41 providers. Main exhibition for the VIC in Germany Sightcity - exhibition centre

Economics

The total GDP of Germany in 2019 was 3600 Bil Euros. The GDP per capita of Germany is 49,930 Euros. The employment rate in Germany as of 2019 was 76.9%, indicating an increase. However, things have taken a spin with the onset of COVID - 19. Germany spends 390 Bil Euros or 4712 Euros per inhabitant, on healthcare expenditure, in 2018. This accounted for 11.7% of the GDP. Germany's healthcare administration is largely decentralised. Each District Office (Bezirksamt) has someone who handles disability matters (Behindertenbeauftragter), who can give advice about the range of financial, educational and professional support available to disabled people in their district.

Political

Germany is a democratic, federal parliamentary republic, where federal legislative power is vested in the Bundestag (the parliament of Germany) and the Bundesrat (the representative body of the Länder, Germany's regional states). While the President is the head of state of Germany, the Chancellor is the head of government and exercises executive authority through the Cabinet. Germany is the most powerful country in the EU. It is one of the largest contributors to the EU and the third largest to the UN. It is also a part of NATO, G20, OECD, and IMF. The present chancellor Angela Merkel is in her last tenure and will be replaced by a new chancellor in the coming elections in 2021.

Netherlands

Sociocultural

The total population of the Netherlands (NL) is 17,134,872, and has a growth rate of 0.22% The life expectancy of the people in the NL is 81 years. The median age in the NL is 43 years (Worldometers, 2020(c)). The number of people in the age bracket of 40 to 65 years is 34.2%, 65-80 years is 14.3%, and 80 and above is 4.5%. (CBS Statline, 2020). 92.1% of the population lives in urban parts of the country.

The number of visually impaired people in the NL is 367,000. Out of which, 90,000 are blind and 277,000 have low vision (Limburg, H. and Keunen, J., 2009). It is growing at a rate of 18%. The government provides subsidy schemes for the VIC by two routes: private (home usage) or professional

(office or education usage). Private subsidy schemes can be retrieved through the insurance companies. The amount allocated per category is decided by the healthcare providers. Professional use reimbursement is provided by UVW - Employee Insurance Agency.

Economic

In 2019, GDP of NL was 834 Bil Eur; it was on a gradual inclination from 2016 to 2019. However, due to the onset of COVID, IMF forecasts the GDP growth is expected to fall to -7.5% in 2020 and pick up to 3% in 2021 Santandertrade (2020). NL is the 16th richest country in the world. The people have a good work-life balance with a high standard of living. Annual household disposable income is 31,200 Eur (OECD and

367,000
VI people

EUR 3100 per capita
Healthcare Expenditure (2019)

European Observatory on Health Systems and Policies , 2019 (c)). The government spends about 10.3% of the GDP on healthcare expenditure and has an insurance coverage of 3100 Eur per capita.

Political

The politics of the Netherlands take place within the framework of a parliamentary representative democracy, a constitutional monarchy, and a decentralised unitary state. (Bekke, A. and Meer, F., 2000). A coalition of parties work together to run the government. There are a number of parties in Dutch politics; however, the three dominant ones are the PvdA (The Dutch Labour Party), the CDA (The Christian Democrats), and the VVD (The Dutch Liberals). The next Dutch general election to elect the members of the House of Representatives is scheduled for 17 March 2021. There is no political unrest in the country.

Norway

Sociocultural

The population of Norway is 5.27 Mil as of 2017; with a growth rate of 0.8%. 16.6% of the population is 65 years and above (OECD and European Observatory on Health Systems and Policies, 2019(b)). The life expectancy of people in Norway is 82.7 years 2 years above the EU average. The population density in the country is 15 Km2. 83% of the population resides in urban dwelling.

More broadly, Norway was one of the first countries to launch initiatives to promote people-centred



care. Nationwide studies have focused on promoting meaningful dialogue between patients and providers since the early 2000s. The Norwegian health system is semi-decentralized: the state is responsible for specialist care and municipalities for primary health care, long-term care and social services (OECD and European Observatory on Health Systems and Policies, 2019(b)). In 2020, the 18 counties will be replaced by 11 regions and the number of municipalities will be reduced from 422 to around 350.

The Norwegian health system has three main sources of revenue: general taxation revenues (accounting for 74 % of the total), insurance contributions to the national insurance scheme (11 %) and private expenditure (15 %), which in Norway consists mainly of out-of-pocket (OOP) spending by households.(OECD and European Observatory on Health Systems and Policies, 2019(b))

Economics

The GDP per capita in Norway is 43,900 Euros. The unemployment rate as of 2019 is 4.2%. The per capita spending on healthcare is 4459 Euros in 2017, 2/3 higher than the EU average. The health spending accounts for 10.4% of the GDP. Health expenditure is expected to grow rapidly in the coming years, mainly driven by growing demands for long-term care. (OECD and European Observatory on Health Systems and Policies, 2019 (b)). The NAV (the Norwegian Labour and Welfare Administration) system. NAV administers a third of the national budget through schemes such as unemployment benefit, work assessment allowance, sickness benefit, pensions, child benefit and cash-for-care benefit. It is responsible for good living conditions for the most difficult, and to make sure more people get to work over receiving grants.

Political

Norway has one of the most stable political systems. The politics of Norway take place in the framework of a parliamentary, representative democratic constitutional monarchy. Executive power is exercised by the Council of

360,000
VI people

Eur 2900 per capita
Healthcare Expenditure (2017)

State, the cabinet, led by the Prime Minister of Norway.

United Kingdom

Sociocultural

The population of the UK is 67 Mil as of 2020. (Worldometers, 2020(d)) With a fertility rate of 2.1%. The average life expectancy is 82 years. 82% of the population resides in Urban regions. The population density of the country is 279 people per Km2 (Worldometers, 2020(d)). 84% of the population resides in England, followed with Scotland, Wales, and Northern Ireland. 18% of

the population is over the age of 65 years as of 2016.

In the UK, there are almost 2 million people living with sight loss. Of these, around 360,000 are registered as blind or partially sighted. This is broken down into 290,500 - England, 34,500 - Scotland, 17,000 - Wales, & 8000

- Northern Ireland Sight Loss Data (RNIB, 2019). In order to support the visually impaired community, low vision clinics are set up in local hospitals that can provide assistance to cope with visual impairment and also provides advice on lighting, vision aid. The Royal National Institute of Blind People (RNIB) is the UK's leading charity for people with vision loss. Other associations that are available are The macular society, International glaucoma association, Retina UK, Diabetes UK, Royal Society of Blind Children, See ability.

Assistive technology devices can be obtained from a number of places including hospital low vision services, optometrists, local voluntary organisations, and the RNIB.

Economics

In 2019, UK's GDP was 2600 Bil Euros United Kingdom GDP (2019). With a per capita spending of 36,000 Eur (2018). In the last 5 years, the value of the currency has depreciated. Currently, a pond is 1.24\$. Unemployment rate has seen an all-time low of 3.9% in the last 5 years.

The health system is funded from general taxation and financial protection is good. All home nations have retained the tax-funded NHS model. Each nation has its own planning and monitoring frameworks and their own public health agencies, resulting in clear differences across some policy areas. With over 80 % of the United Kingdom's population living in England, the English NHS is the largest health service. Health spending is comparable to the EU average but budgets have not kept pace with growing demand (OECD and European Observatory on Health Systems and Policies, 2019(a)). Government healthcare spending in the year 2017 was 2900 Euro per person. The health system is funded by general taxation; 78% of total health expenditure came from public sources. Out of pocket spending is low (16%).

Political

UK has a modern parliamentary democracy and a constitutional monarchy with the monarch (Currently Queen Elizabeth II) being the Head of State. The prime minister is the head of the government. Four political parties that mostly dominate the politics of the land are Labour, Conservative, Liberal Democrats, and Scottish Nationalist Party. (BBC 2019). However, the ongoing Brexit has caused high levels of uncertainty. UK is currently in the transition

period from Brexit, which will end on 31st Dec 2020.

Overall Technology

There are many AT devices in the market that cater to the needs of reading. These devices and technologies can be grouped into software and hardware. Software - Increasing contrast, enlarged images; use of tactile and auditory materials, screen magnification software; screen reader; Hardware - books on tape; eye glasses; magnifier; large print books; low vision aids; screen magnifier; electronic magnifier Braille keyboard or note-taker; optical character readers; or reading machine.

OCR (optical character recognition) technology is a good alternative for reading text for the VI. Such devices are produced by indigenous distributors such as Reinecker - VOXbox and Optelec - ClearReader+.

The OrCam is a widely accepted wearable technology in Europe. It has been in the market for 3 to 5 years, and is a recognizable brand among the VIC. In France, it has a strategic alliance with optical retailer Essilor, the biggest optical chain, resulting in wider spread of its products in the French Market. UK is one of the most technologically advanced countries in the world. The type of assistive technologies used by the UK audience are screen magnifiers (30%), Screen Reader (29%), Speech recognition (18%), & readability (15%). The most commonly used products are ZoomText, Supernova, JAWS, VoiceOver, & Dragon Naturally Speaking (Moore, C. 2016) Wearable technology in the assistive technology space is growing at a rate of 8% on an annual basis.

Synopsis

The countries short-listed were evaluated for macro trends to see if Envision **should enter these markets.** All the countries selected have a **high percentage of annual GDP allocated to healthcare**; above the EU average. These countries have been funding devices for the reading category, which can be availed in the case of EG.

The market size of these countries for VIC is large and can be easily tapped with appropriate associations. In the case of Norway, the government tender for reading devices will be renewed in October. This gives Envision the opportunity to participate in the tender and be a part of the system catalogue for reading devices. From a political standpoint, there is no volatility in any of the countries, except the UK and its rules & regulations dealing with BREXIT. With the use of AI in helping the VIC, Envision is ahead when compared to the other dominant players.

The previous sections helped in identifying the internal and external factors that are necessary to decide on a market entry strategy. By assessing Envision's appetite to take risk, ability to carry out heavy investment and it's inherent business model, equity based entry mode was not an option for the company at this point in time.

For reasons of quick entry, low risk, low deployment of resources and low initial investment, the non-equity based market entry mode is a much suitable option for Envision. Indirect export contracts with third party organizations will allow Envision to quickly enter new markets by leveraging the expertise and networks of these partners that are an integral part of the current functioning of the respective HCS. Therefore, signing up deals with local distributors in the 5 countries would be the best mode of entry for Envision.



Market Entry Strategy

The central theme of this thesis was to develop a market entry strategy for the EG. This phase details the strategies pertaining to identity, positioning, and services.

The data gathered in the previous phases has determined indirect export contract as the optimal non-equity based entry mode for Envision. This would entail having contracts with local distributors to market and sell the products in their respective markets. With the mode of entry decided, the next phase involves developing the market entry strategy to have uniformity of identity, positioning, & price across the five countries. The 4 P's of marketing were used as a tool to decide on the place, price, product and promotion. These elements were validated using qualitative and quantitative tools. Specifics of which will be covered in each of the subsections where applicable.

Positioning

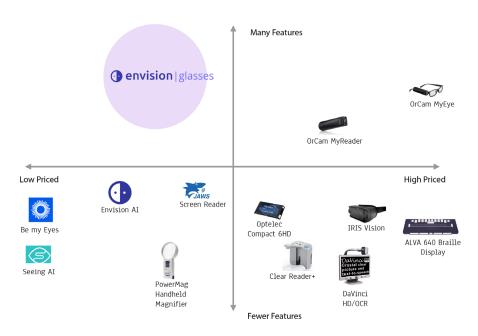


Fig 27: Positioning of the Envision Glasses in the reading devices category

The Envision glasses will have to be classified as a reading device as that is the closest category it can be grouped under. Thus, the above positioning map was developed by evaluating the various products & software available for reading text. The axis is distributed between price and features offered.

High price - High Features

This quadrant comprises the MyEye2 & the MyReader2 both these products belong to OrCam. These products are filled with features that allows it to be differentiated from its competition. (More information on the comparison of Orcam and EG is covered in the product section.)

High price - low features

This quadrant contains conventional products such as table top text readers, portable readers, Braille displays and VR headsets. This has been the playing field for many competitors for many years.

Low price - low features

This section has been disrupted by many software companies through the development of mobile applications that can help users read text with the use of the mobile phone.

Low price - high features

This part of the market is rather not tapped by any of the existing players. With the presence of Orcam in the international market for vijf years, and many users have the desire to purchase it but the product is expensive. By pricing the product lower with more features allows EG to stand out in the market.

Place

In the previous phase, indirect export contracts were decided as the marketentry mode for the EG. These contracts would have to be signed with local distributors in the countries selected. The biggest learning from the research was the dependence on local distributors for sales, after sale service, and their networks with IC, institutions for the VI, and government agencies. On the other hand, customers wanted to touch and feel the product before making a purchase and insisted for in-home demonstrations. Making the AT industry predominantly working on an offline model. Secondly, online routes are mostly used as information sources by the customers. These would include, Envision website, Facebook twitter, etc. Details about the online route will be detailed in the promotion sections.

However, to make the proposition full proof, a quantitative questionnaire (QN2) was created to validate the consumer purchasing behaviour. The questionnaire to the research can be obtained in Appendix A. The participants of this research were people from the five targeted countries. From the study, it was assessed about 76% of the users purchased products using offline routes and 23% used online routes to purchase the products. (Visiting expos were combined with offline routes). Furthermore, for users who purchased the product offline, they made the purchase through distributors (46%), institutions for the VI (31%) and IC (15%), reinstating the importance of the distributor in the whole network.

Also, after sales support is an important aspect of the online and offline experience for an end user. Through the survey it was pointed out a couple of times that poor after sales or service is a big hindrance while working with distributors and organizations. These expectations need to be set right from the very beginning.

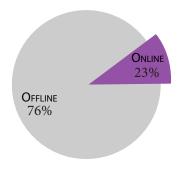


Fig 28: The different routes people use in purchasing AT devices.

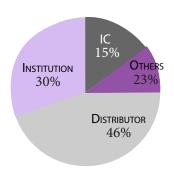


Fig 29: The different offline routes people use in purchasing AT devices.

Price

Deciding on a price for the EG needed a holistic view keeping in mind the various stakeholders who are directly and indirectly involved. Indirect contributors would include governments and ICs that decide on the subsidy limits for the various product categories. Also, the willingness of consumers to pay for the product especially in countries that do not have any subsidy scheme in place. Thus, to finalize on the pricing, two routes were considered: User perception of price in the targeted countries- quantitative survey Competitor market pricing - desk research

To protect confidentiality of sensitive information the analysis and results of this section is detailed in the Appendix D

Product

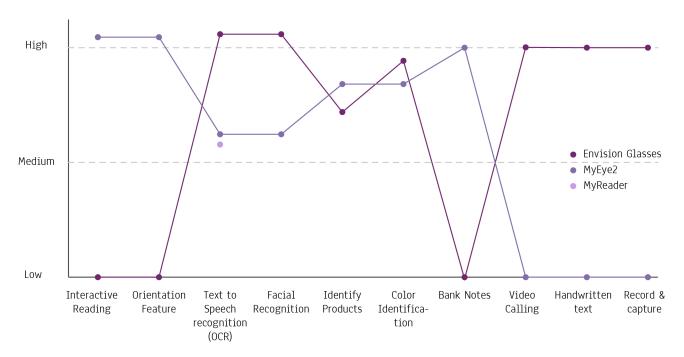


Fig 30: Features comparison of Envision and OrCam

The EG product features were compared with those of OrCam MyEye2 and MyReader2.

With respect to the features, both the MyEye2 and the EG are very closely locked together. However, the MrReader2 has the same specification as the MyEye but features are withheld in order to make it fit within the subsidy schemes available for reading devices.

The most important feature that the two products will be evaluated for is the text reading ability. This was also validated through the QN1 research covered in Market Evaluation. Currently the EG has a better text recognition ability. The biggest advantage that Envision has over OrCam, is the product will be a platform and will be able to incorporate more complementary applications and expand its features list to the users. Furthermore, both the QN1 and QN2 research showed that product quality and brand reputation are important attributes for the consumer. The assured efficacy of the Envision app is a good hook to persuade potential customers. The above comparison shown in the diagram was created by discussions with users who have used both the

devices.

When you look from a positioning and pricing perspective, the EG is priced lower than the MyReader but has features equivalent to those of the MyEye. Thus, having the ability to disrupt the market.

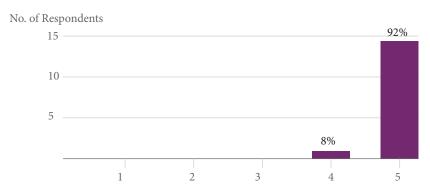


Fig 31: Product quality as a factor in purchasing AT.

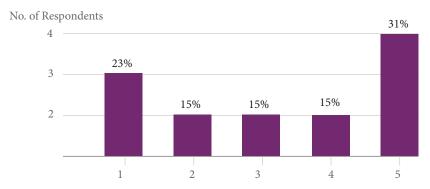


Fig 32: Brand reputation as a factor in purchasing AT.

Promotion

The business goal for Envision is to increase the sales of the EG in the different markets. This business objective needs to be broken down into specific measurable goals. For this phase the goal for Envision is to increase the awareness of the product eventually resulting in sales of the product. From the market and company analysis, it was identified the brand identity had to be enhanced for Envision to stand out from its competition. Followed with developing a launch strategy that would help in translating the desired goal into actionable tasks. The first part involved developing a persona for the target audience.

Persona

From literature review and the interviews with both end users and distributors, the market can be divided into 2 persona -

- 1) Low vision
- 2) Blind users

Low Vision Users

These are people who develop visual impairment due to aging or who have suffered an alignment that has reduced their vision. In the low vision spectrum, only individuals with a visual acuity of lower than 0.1 are entitled for reimbursements.



Tim Davis

Tim is an equity Investor and works in an investment bank in the UK. He started losing his vision at the age of 43. He still has his peripheral vision.

He is employed by the company but his roles and responsibilities have changed after the incident.

He is an avid reader and loves outdoor activities. Because of his lose of vision, Tim misses reading books and recognizing his friends and family members.

DFTAILS

Civil Status - Married & Father of 2 Blindness - Low vision for 2 years **Position** - Senior Investment Banker **Education** - MBA in Finance Age - 45

ONLINE PLATFORMS







Purchasing Behaviour





COMPANY

DISTRIBUTOR

NEEDS

- 1) Assistance in doing daily tasks
- 2) Reading books & documents.
- 3) Learning new tools that will help with the new situation
- 4) Stay focused

Fig 33: Persona of a low vision user

Age group - 45 years and above

Profession - Working professionals and retired individual. This group contains people from the baby boomer generation. This generation is considered to be more financially independent as compared to the previous generations.

Purchasing behaviour - These are people who are not well aware of the AT space. They seek for help and assistance from trusted sources. AT devices are purchased and researched offline through distributors, insurance companies, or institutions for the VI.

Need - Assistance in doing daily tasks and reading books & documents.

Blind users

People in this group comprise individuals with lack of vision either from birth.

Demographic- 25 to 45 years

Purchasing Behaviour - They have been using At devices since birth and are well aware of the working and functioning of the space. They are independent decision maker when purchasing these devices.

They make use of both online and offline routes to purchase a product. Online routes such as twitter, facebook, podcast, product websites are used to gain information about the product. However, purchase of the product is done through offline routes such as distributors or IC.

Need - Products that are functional and can add value to their daily life.

Social - Tech savvy individuals



LILLY DE JONG

Lilly is a masters student in computer science in the Netherlands. She aspires to work in a big conglomerate as a technology lead.

Lilly enjoys going for long walks with her dog, and loves basking in activities such as singing, cooking, and playing outdoor sports.

Lilly uses technology extensively in doing her daily task and is well informed about the latest in the field of assistive technologies.

DETAILS

Civil Status - Single Blindness - Since Birth Position - Master's Student Education - Compute Science Age - 25

Online Platforms









Purchasing Behaviour







INSURANCE COMPANY

NEEDS

- 1) Products that are functional and can add value to daily life.
- 2) Increasing efficiency of doing daily task
- 3) Mobility
- 4) Reading and understand the context

Fig 34: Persona of a blind user

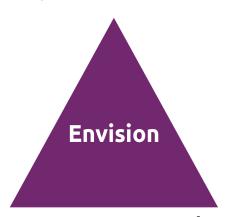
Brand Identity

The Envision brand very recently got a revamp in terms of its identity and brand manifestation with a complete new look. Through the study it was identified that the identity does set the brand apart from the competition. However, the brand meaning needed to be refined, as every player in the industry is selling independence to the users. Thus, the meaning of the brand was re-engineered by defining a new purpose, positioning and archetype for the brand.

The current market is saturated with old and conventional players who have not changed over the years. The functioning of the industry is pretty structured and mechanical because of the many external stakeholders and organizations that are involved from intent to purchasing the product. This gives Envision, backed with its technology, advantage to step in and challenge the current working of the industry. Also, from analysing the websites and content of the competitors, everyone in the industry is promoting themselves as providers of empowerment or independence. It was necessary to break away from this clutter. In order to stand out in the market, a bipolarity position for the Envision brand was created. Also, the bipolarity would differentiate Envision and make it compete with the industry as a whole.

Brand Purpose

We believe disability should not restrict a person in unlocking his/her full potential.



Positioning

For the visually impaired people, looking to power through the chaos of diabiity, Envision provides technologically advanced & intutive devices

Archetype

Innovative, efficient, ambitions, affectionate, Creator personality type. (Envision will be someone who challenges the status quo)

Fig 35: Brand DNA for Envision

Positioning

For people with visual impairment, Envision offers devices that are powered by the latest AI technology, delivering accurate recognition of one's context and let's people celebrate their individuality.

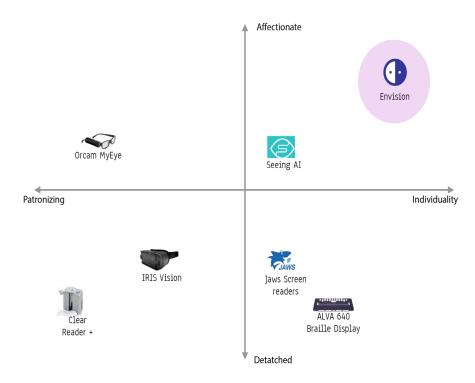


Fig 36: Positioning of the Envision Brand

Launch Strategy

Following the development of the brand Identity, it was necessary to develop a launch strategy to deploy the EG in the market. The Pre-order sales has given Envision good organic reach and coverage in the various markets. However, post the pre-order phase, a detailed plan is necessary to get the product into the hands of the customer. In order to detail this plan the AIDA model was used.

The Key Message of the launch strategy would be

Independence is patronizing/ agonizing when individuality is not celebrated.

Awareness

The QN1 & QN2 research highlighted the platforms on which users seek information to understand about assistive technology. The distributor (93%) is the biggest source of information for the user, followed with product website (69%) and Google search (53%). Time and again during the research the importance of the distributor and his/her relevance in the whole purchasing decision cannot be undermined. The other touch points that must be looked at are developing contacts with local institutions, ophthalmologists, opticians, and participating in local exhibitions. Location specific information pertaining to local institutions, distributors, and exhibitions are mentioned in the chapter Market selection.

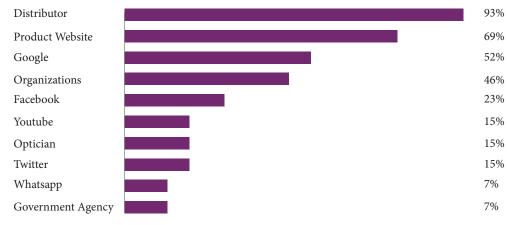


Fig 37: Platforms participants used to find information pertaining to AT

With respect to online platforms, Facebook and twitter are good locations to find the target group. Facebook particularly has many communities for the blind and visually impaired where people discuss new products and seek help and guidance of the community in daily matters. Also, the Envision Community (user of the iOS and Android application) provides access to about 30,000 users. A good place to begin creating awareness through push notifications or newsletters.

Not having deep pockets requires Envision to choose wisely on how it spends its money. Thus, precision in targeting its potential customers is crucial. The EG is a technologically advanced product and is fairly new in the market. Thus, requiring Envion to invest some time and money on developing awareness across the markets selected. The message that needs to be conveyed in the awareness would include

- 1) detailing the features of the products,
- 2) describing the use cases of the EG, &
- 3) showcasing the efficacy of the product.

As an example, 3 posters were created. However, please note the guidelines are create as a framework for the Envision, and manifestation of the same can vary depending on the medium used.

Interest

Once people are aware about the product it is necessary to get them interested. The main elements that people look for in AT are efficacy, durability, insurance cover, price (for price sensitive markets), & customer support. Speaking about these factors to the end user will increase their curiosity in knowing more about the product. For this to happen effectively, it is necessary to get more time with potential customers. Envision would need to select and use platforms that would provide them with such options. This can best be done by engaging with local and popular podcast channels that are a source of information for a lot of people in the VI community.

For the offline route, distributors will in most of the countries perform in house demonstrations of the product. The flow of interacting with these potential customers must be handled in a uniform method. This will bring about a consistency in the way the brand is perceived by the end users. The other route would be to conduct road shows in the countries selected by organizing group sessions with users interested in the product.

These communications need to cover two goals,

- 1) demonstrating the product & its features, and
- 2) discussing the intangible advantages of the product that are based on the purpose and key message mentioned above.

Desire

It is important to translate the developed interest in the last phase into a desire to purchase the product. For this phase, it is necessary to showcase content that is provoking and authentic, highlighting the impact of the product in the lives of fellow users. This would essentially entail, testimonial of users demonstrating the impact of the EG on their lives through the use of video and print media. The voice over of the videos must be done by the users. The content of this media must be in line with the key message of celebrating individuality through the product.

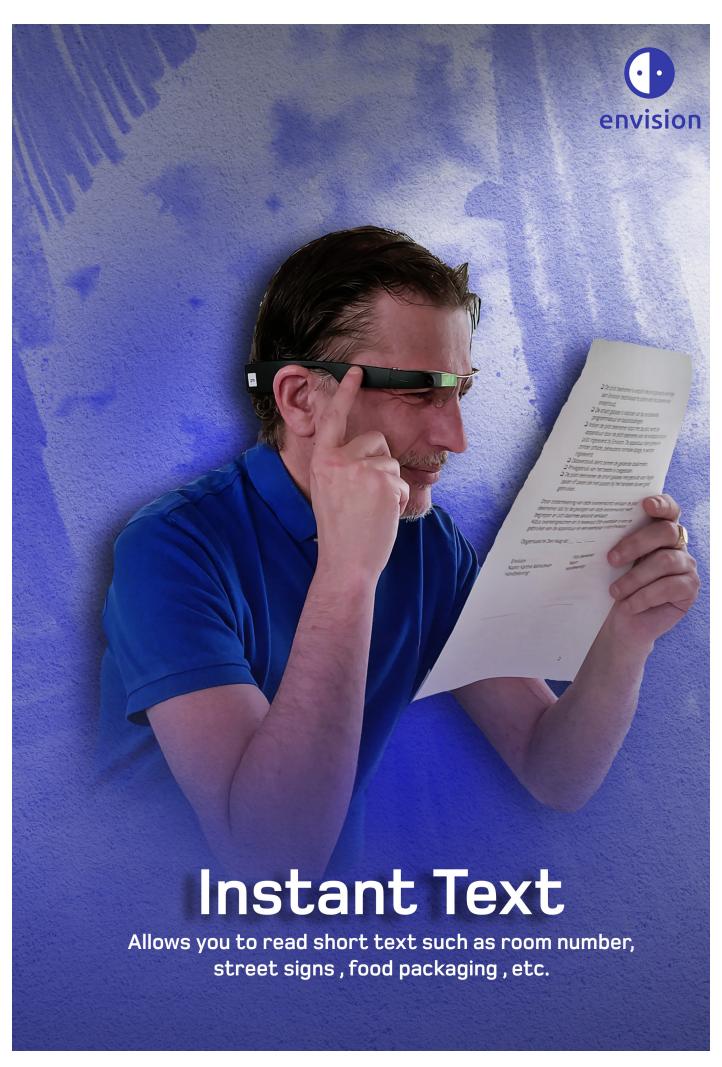
Secondly, use of targeted marketing with pay-per-click PPC, and email marketing are good ways of approaching users with the intention to purchase the EG. Further research would be required specific to the countries with respect to identifying the right PPC campaign

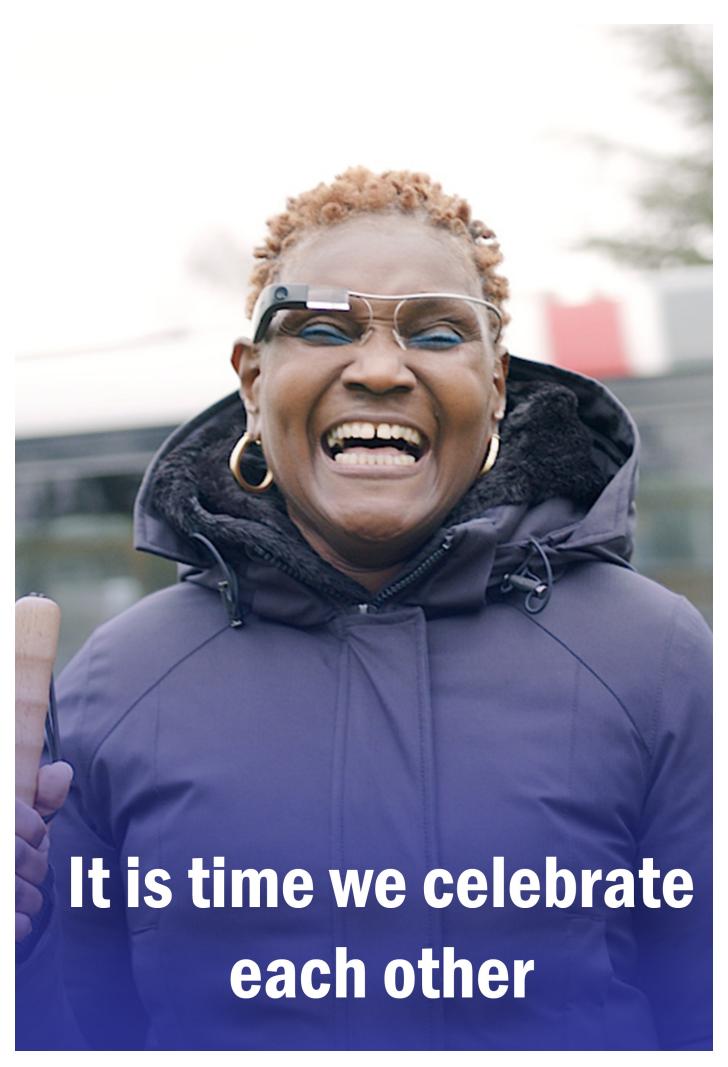
Action

Once the desire is created to purchase the product, the website should direct the end users to the right distributor in the given region. For people still hesitant to make such a big investment, downloading the Envision application and offering them to use the services of the application for 14 days of trial period will allow them to have a feel and sense of the efficacy of the product.



Envision helping break the shackles of visual impairment







Using digital platforms such as website, Envision Al app, newsletters, and podcast to generate product awareness, and create curiosity by offering the customers with a 14 days free trial of the Envision Al app

> Product D The distributors training, demo features and effi to try the produc



Local institutions **endorse** the Envision

Glasses and link customers with the local authorized distributor.

Contact Distributor •

Distributors describes the Envision Glasses detailing its features, efficacy & subsidy schemes available. Furthermore, pitch for a product demonstration

In house Visit

Envision Certified distributors will visit customers at their homes. The distributors will undergo a training program to learn the product functions, brand guidelines, selling procedures, and product servicing.

Customer Journey Map

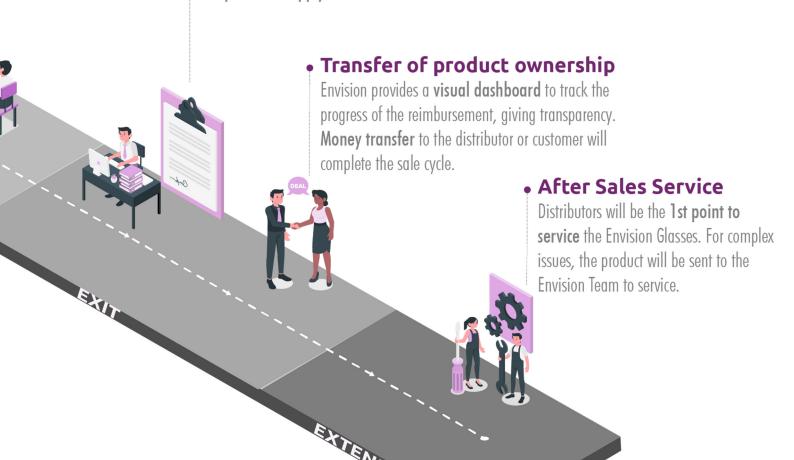
Demonstration

provides a one hour

nstrating the product
cacy. Offering the customers
t for 14 days.

Applying for subsidy

Once the customer wants to purchase the Envision Glasses, the distributor **initiates the process to apply** for reimbursements.



Customer Journey

To make sure the identified insights are gathered and consistently utilized across the entire journey a service blueprint was developed for Envision. This blueprint will provide a complete overview of the journey a customer will take from the point of awareness to making a purchase for the glasses. Allowing to maintain a consistent service offering and experience through all the touch points. Also, the blueprint will help in the on boarding of the new distributors going forward. The customer journey is broken down into four phases Enter, Engage, Exit and Extend.

Enter

In this phase, potential customers learn about the product through the various marketing initiatives mentioned in the previous section. The Enter phase begins when a customer makes contact with the website and looks for information pertaining to the EG. From the research conducted with end users of AT, it was identified that users are looking for information such as features, availability of subsidy schemes, and efficacy of the product. The website should have an easy and accessible way for customers to manoeuvre and understand information. Once, the customers are interested in learning more about the product, the website should have the option of directing the details of the customer to the local distributor.

These inquiries would be gathered by the inquiry system at the back-end that would send the information to the distributor. At the same time, provide the contact information of the local distributor to the customer. All the distributors that will represent Envision would have to participate in an on boarding workshop that will be handled by the Envision team. This on boarding process would sensitize the distributor to brand guidelines, describe the essential features, and provide basic FAQs & training to provide customer support. While speaking with the customer, the distributors must address any of the issues that arise and offer to provide an in-house demonstration of the product. While interaction with the customer, distributors are to abide by with brand guidelines of being affectionate and caring at all points in time. At the back-end, distributors will need to document two factors, the leads generated by them, the number of in house demonstrations done, and number of exhibitions participated in. This documentation must be updated on a monthly basis. For the process support, a CRM system that would allow a seamless flow on information would be necessary.

Engage

After the date of visit is scheduled, the distributors must visit the customer at his/her residence and provide the demonstration of the product. From the QN1 research conducted with the user of the pre-order sales, the following features were described as the most likeable or attractive feature provided by th EG. These features are Instant text (78%), document text (82%), bar code scanning (71%), find a person (68%), find an object (64%) . At the process end, linking the ERP and payments system is necessary to make sure to fulfil demand and supply by minimizing the delivery of the EG to the different distributors. At scale such systems would be a necessity.

On completing the trial, the distributors should provide the customer with the option of demonstrating the product for a period of 14 days. This will allow the customer to interact and understand the efficacy of the product better. Also, acting as a hook to compel the customer to purchase the product.

After the trial period, the customer will have to choose to either purchase the product. If so, the distributor will begin the process of applying for the reimbursement by collecting the necessary documents from the end users and helping to write the letter of use to either the IC or the government agency.

Exit

Once the application is sent to either the IC or the government agency, the reimbursement process varies and so does the money transfer. In some cases the money is transferred to the distributor and in some cases it is transferred to the user directly. Nevertheless, the end of the money transfer back to the distributor will complete the sales transaction and the distributor will have to enter the sales in the system.

Extend

If there are any queries that are raised by the user, the distributor will be the first point of contact to address the grievances. If the problem is bigger and needs further assessment, the product will have to be shipped to the Envision Team. At the back-end, the distributor will have to record the number and type of queries on a monthly basis.

Matrix to be measured at the distributors end	Numbers per month
Number of leads generated	
Number of home demonstrations performed	
Number of sales made	
Number of Exhibitions attended	
Number of customer calls	
Number of queries resolved	

Fig 38: Table distributors have to fill on a monthly basis

Conclusion

The graduation thesis project helped define a market entry strategy for an assistive technology product by understanding the user needs and matching it with a strategy that would be beneficial to all the stakeholders.

The AT market is a **closed knit community** of few conventional plays that have been dominating the industry for many years. However, with the increasing number of people with visual impairment, many technology startups are trying to find their feet in this market. The growing number of users has made it a lucrative industry for companies who can address the basic functional needs of the users.

The AT industry is a nexus of many **direct and indirect stakeholders** that influence the working of the business model. Direct stakeholders **leverage their networks, market intelligence, and reach** to position themselves in local markets. For an organization without big financial backing, it would be most suitable to leverage these direct stakeholder's networks during the early stages of product launch.

On the other hand, the visual impaired users are well integrated in the current system. Through their engagement with the different stakeholders, it is possible for the users to cope with the loss of sight, understand the latest AT devices, and avail subsidy schemes. These factors have become an integral part in the purchasing behaviour.

The overall market entry strategy followed by a desired service experience will act as a guide for Envision in the markets selected as well as new markets it intends to enter in the future.



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APPENDIX

Appendix A - Questionnaires

Qualitative questionnaire (QL1) with end users

1. General Demographics

Name:

Age:

Country of residence:

Currently occupation:

- Assistive Technology
 - a) What is your understanding of Assistive Tech? And when was the 1st time you heard about it?
 - b) What is your perception about assistive tech and what do you feel about it?
 - c) What is important when you use any kind of technology form a usage POV?
 - d) What are the challenges you face in using assistive technology?
 - e) How do you learn about new devices and technologies in the AT space?
 - f) How much money do you spend annually on the purchase of assistive technology?
- 3. Process
- a) What was the most recent device you purchased? And what was the process you undertook to purchasing the product?
 - b) Are there any schemes that you know of that subsidizes the purchase of Assistive technology?
 - c) Is there an insurance support that is provided to you in your country?
- 4. Associations
 - a) What associations or groups do you belong to?
 - b) What social media platforms are your present on?

Qualitative questionnaire with distributors - (QL2)

- 1. Information about the Distributor
 - a) Tell me more about the working of your organization? (What are your business model and working?)
 - b) What is your volume of business? What territories do you handle in the country?
 - c) What market segments do you work with?
 - d) What is your approach to selling AT in your country?
 - e) How many employees do you have and how many do you deploy in distribution-related activities?
 - f) Are your employees located in one location or different locations?
 - g) Do you work with sub-distributors? Who are they? (optional)
 - h) How will your profits be incorporated in the product pricing?
 - i) How long have you been in the AT market?
- j) Do you distribute a similar product currently? (if Orcam is mentioned ask more about the feedback about the product)
 - k) What is the size of the assistive tech market in your country?
 - 1) What success stories do you have wrt foreign products distributed in your country?
- m) What kind of partnerships do you work with other companies in the past? Can I contact them for a reference?

- 2. Envision Glasses
 - a) What do you like about the product?
 - b) Market Why do you see a potential market for such a product in your country?
 - c) What is the potential size of the market for this product?
 - d) If we decide to work with you, what would be your rollout strategy?
 - e) Are there any restrictions that will be levied on our product?
 - f) How will defective and unsold products be handled? (one year warranty)

Quantitative questionnaire with user who purchased the pre-order glasses - QN

Aim of the research - To understand your purchase journey

Assistive technology (A.T.) is assistive, adaptive, and rehabilitative devices that help people cope with disabilities. In this survey, we will like to understand your journey in the purchase of the Envision Glasses. Answer the questions based on your experience when you purchased the glasses. If the purchase was made for a friend or family member with visual impairment you can still participate in the survey.

Note: All the data collected in this survey is for internal use will not be shared with any outside entity. In case you want to withdraw from the study at any given time you are free to do so. This survey doesn't collect any personal data that can be traced back to an individual. You can request to delete your response anytime in the future.

- 1. Did you purchase the product for yourself or for a friend / family member? (depending on the selection the person would be directed to either of the two section yourself or Friend / family member)
 - a) Yourself
 - b) friend/ Family member
 - c) Others
- 2. Is your family member / friend a subscriber of the Envision AI App?
 - a) Yes
 - b) No
- 3. How does he / she intend to use the Envision Glasses more?
 - a) Personal Use
 - b) Professional Use
 - c) Other
- 4. What motivated you to purchase the Envision glasses for him or her?
- 5. While purchasing the Envision Glasses, what were the parameters that you evaluated? (example of parameters: Feedback, features, suggestions, recommendations, price, etc)
- 6. Please rate the Following Factors

When purchasing an Assistive Device, how important are each of the following factors for you while making a purchasing decision. Please rate on a scale of 1 to 5, with 1 being not important while making a decision and 5 being very important while making a decision.

- a) Product quality
- b) Price
- c) Product review
- d) Brand Reputation
- e) Subsidy or reimbursement
- f) Recommendation by a distributor or organization
- g) Training and customer support
- h) References from a friend or family member

- While purchasing the Envision Glasses, what were the negative aspects you faced? What feature / features of the Envision Glasses most appeals to him/her? a) Instant Text b) Document text c) Handwritten text

 - d) Describe scene
 - e) Color detection
 - f) Bar code scanning
 - g) Find a person
 - h) Find an object
 - i) Video Call
 - j) Record & Capture
- 9. Describe a feature that he/she would like to see incorporated in the Envision Glasses?
- 10. What were the platforms on which you heard about the Envision Glasses? (you can make multiple selections for this question)
 - a) Newsletter
 - b) Podcast
 - c) Twitter
 - d) Facebook
 - e) LinkedIn
 - f) Google
 - g) Envision App
 - h) Envision Website
 - i) Newspaper Articles
 - j) Exhibitions
 - k) Organisations
 - l) Other

Demographic Information

- 11. Country of Residence
- 12. Gender
 - a) Male
 - b) Female
 - c) Prefer not to say
- 13. Age in years
- 14. Highest education qualification attained
 - a)High School
 - b) Bacheors
 - c) Masters
 - d) Doctoral Qualification
- 15. Employment status
 - a) Yes
 - b) No

Quantitative questionnaire with end users - QN2

To understand purchasing behavior for Assistive Technologies

Assistive technology (A.T.) is assistive, adaptive, and rehabilitative devices that help people cope with disabilities. For this survey, I will be sticking to assistive technology pertaining to visual impairment.

In this section, I would like to understand the process you followed to purchase your last assistive technological product/ software. Answer the questions based on your purchasing experience. If the purchase was made by a friend or family member you can still participate in the survey.

Note: All the data collected in this survey is for academic use and will not be shared with any outside entity. In case you want to withdraw from the study at any given time you are free to do so. This survey doesn't collect any personal data that can be traced back to an individual. You can request to delete your response anytime in the future.

- 1. What was the most recent assistive technological product/ software that you purchased?
- 2. Was the assistive technology you purchased a physical product or a software?
 - a. Product
 - b. Software
- 3. Who made the purchase of the assistive technology?
 - a. You
 - b. Friend
 - c. Family
 - d. Distributor of Assistive Technology
 - e. An institution
 - f. Others
- 4. When did you purchase the assistive technology? (For Ex: 3 months back, 6 months back or a year back)
 - a. less than 3 months
 - b. 6 to 12 months
 - c. more than 1 year
- 5. What was the purpose of purchasing the assistive technology?
 - a. Private use (to be used at home)
 - b. Professional Use (To be used in the office or school)
 - c. Both private and professional use
- 6. Did you avail a subsidy scheme or reimbursement for the product?
 - a. Yes
 - b. No
- 7. Note This question is applicable only if you mentioned yes in the previous question. In case of claiming a subsidy, who applied for the reimbursement?
 - a. You
 - b. Friend
 - c. Family
 - d. Distributor of Assistive Technology
 - e. Insurance Company
 - f. Others
- 8. Did you buy the assistive technology from an online website or an offline route?
 - a. Online
 - b. Offline

- 9. Note: Answer this question if you selected online in the previous option, else skip this question. Which website did you use to buy the assistive technology?
 a. E-commerce website such as Amazon
 b. Product Website
 c. Others
 10. If you purchased the assistive technology offline, what was the route you used to make the purchase?
 a. Distributor
 - b. Institution (Such as: The institute for the blind & visually Impaired)
 - c. Insurance company
 - d. Ophthalmologist or Eye Doctor
 - e. Optician
 - f. Exhibitions
- 11. While purchasing the last product, what were the parameters that you evaluated? (example of parameters: demonstration of the product, online/ offline availability, comments, suggestions, recommendations, price, subsidy, etc)

In your previous purchasing journey, what were the negative aspects you face in purchasing assistive technology? Please rate the Following Factors Below are some of the factors people often use in making a purchasing decision. Please rate these factors on a 1 to 5 scale, in which 1 is not important and 5 is very important. Make use of your experience to rate the following:

- a. Product quality
- b. Price
- c. Product reviews
- d. Brand reputation
- e. Subsidy schemes
- f. Reference from a friend or family member
- 12. Did you make use of any of these platforms while searching for information regarding the Assistive Technology? (If applicable you can select multiple options)
 - a. Google
 - b. Product Websites
 - c. Podcasts
 - d. Facebook
 - e. Twitter
 - f. Instagram
 - g. Snapchat
 - h. Institutions (such as Institute for the blind & visually Impaired)
 - i. Distributor
 - j. Eye Doctor or Ophthalmologist
 - k. Optician
 - l. Government Agencies

Demographic Information

The following section asks for some demographic variables with which I can structure the data into generic and useful clusters. This is help me understand the purchasing behavior better. Please be assured all the data collected is from an academic perspective and will not be shared with any outside party. Thank you very much!

13.	Country of Residence
1.4	

- 14. Sex
 - a. Male
 - b. Female

- c. Prefer not to say
- 15. Age (in years) _____
- 16. Highest education qualification attained
 - a. High School
 - b. Bacheors
 - c. Masters
 - d. Doctoral Qualification
- 17. Employment status
 - a. Yes
 - b. No

Appendix B - Interviews

Interviews with Users

User 1

Country - Germany Visual Impairety - Blind from birth. Assistive Technology

- a. What is your understanding of Assistive Tech? And when was the 1st time you heard about it? I was first introduced to assistive devices when I was a kid.
- b. What is your perception about assistive tech and what do you feel about it?

 They must be easy to use on a daily basis and it should not be complicated. It can have a steep learning curve but it may be intuitive to use.
- c. How do you learn about new devices and technologies in the AT space?
 I'm very active on social media such as Twitter and Fb. I actively listen to podcast and engage with my peers to learn more about such technologies. Also, I make sure to be added to the mailing list and newsletter of the various brands that I either have products of or I aspire to have products of. I'm very enthusiastic about assistive technology in general. I also participate in exhibitions that regularly happen in Germany. This is a good place to learn more about AT. As it let's me touch and feel the products.
- d. How much money do you spend annually on the purchase of assistive technology? It depend on the device I need. Most of the products get sponsored by the insurance companies. So i don't need to actively pay of them.

Process

- e. What was the most recent device you purchased? And what was the process you undertook to purchasing the product?
 - Very recently I purchased a braille display. For which I had to get in touch with a couple of distributors and manufacturers of the device. Once I was clear what I wanted, I had to create an application to file for reimbursement to my hea;th care provider. This has to be supported by provisioning my requirement of such a device. This is then evaluated by the healthcare provider whether i'm eligible for the reimbursement. Once that was approved, I was provided by the product by the distributor. To add to that, i can also get the product by applying for government funds. Products associated for study and work are covered by such funds. The amount paid is either partially or complete depending on which category the product is classified under. And usually all the products that are needed for work are provided with complete subsidy by the government. This governance is done on a regional level. There are 16 regional in Germany and you have about 7 such agencies that cater to the needs of the end user.
- f. Are there any schemes that you know of that subsidizes the purchase of Assistive technology?

 As a visually impaired person you have reimbursement schemes provided by the various healt insurance companies, the government schemens that i spoke about and also the government provided 200-630 euros/month as compensation allowance for people who are completely blind. This is not provided to people with low vision. About 7000 euros are set aside per user based on basic insurance.

User 2

Country - Algeria Visual Impairment - Blind since birth

- Assistive Technology
 - a. What is your understanding of Assistive Tech? And when was the 1st time you heard about it? Any device that is used to help one in helping with some impairment. I heard about such devices very recently. I got my 1st laptop in 2011. That's when I was introduced to this concept of assistive technology. When I started learning the basics of Jaws screen reader, it felt like a new beginning for me. I could download songs. I almost felt i had my eyes back.
 - b. What is your perception about assistive tech and what do you feel about it?

It's a necessity for people like me to help me with my work. I'm a teacher in the school and such technology helps me do my daily task.

- c. How do you learn about new devices and technologies in the AT space?

 I listen to podcasts and most of my information comes from friends and family.
- d. How much money do you spend annually on the purchase of assistive technology?

 I don't spend money on any of the AT. In fact, I feel that is the biggest challenge when it comes to AT. A lot of the apps that you see are not for free. Algeria is a developing country and we cannot pay money for apps.

2. Process of purchasing an AT

- a. I look for information on different websites, listen to podcasts, and be a part of a small organization in the community. I seek information from these place before i install an app on the phone
- b. Channel you use to seek information I'm present on Fb, twitter, whatsapp, & youtube,
- c. What does independence mean to you?

 It means life, Ability to do things alone, he relies on himself, doing daily tasks, ability to go to work daily on my own, the ability to rely on myself.

User 3

Country -Sweden Visual Impairment - Blind since birth

1. Assistive Technology

- a. What is your understanding of Assistive Tech? And when was the 1st time you heard about it? I purchased my first assistive technology back in 99. It was a screen reader.
- b. What is your perception about assistive tech and what do you feel about it?

 I believe the world is a very inaccessible place to live in. You always need a sighted person around to help you. It is one thing to learn a new device or software, it's another thing to be your own support. And how can you solve the problem?
- c. Process of purchasing an AT

The swedish system is very systematic. The states are funded from the center. We don't need to pay for any of the devices. You get the product prescribed. You get in touch with the local agency that will get you in touch with the various products that are available in that category. You may not always get the product you are looking for, as you may have to select from the range of products that are categorised in the system. There are 11 companies in total.

- d. Steps of flow of getting a product
 - Step 1 Need to be registered with the region system as a blind person.
 - Step 2 Call a person at the regional office and explain to them why we need the product.
 - Step 3 The regional office will check if this product is necessary for you or is per your impairment.
 - Step 4 Then comes the decision point in the flow.
 - Step 5 You are given a list of products to decide from in the catalogue
 - Step 6 Then you are provided with the product.
- e. What are the challenges you face with AT?

A lot of user guides and manuals are not in the local language. Which I can imagine is a big hindrance in many places.

- f. Channel you use to seek information Facebook and twitter.
- g. AT application that you have used. SeeingAI and BeMyEyes.

User 4

Country -Serbia

Visual Impairment - Blind since birth

1. Assistive Technology

- a. What is your understanding of Assistive Tech? And when was the 1st time you heard about it? Help that one gets to be useful all alone. I heard about it when I was a kid of the age of 5 years old. I have used a couple of AT products such as Laptop screen readers, orientation applications, & braille displays. The AT has helped me to perform task such as fixing cell phones, braille readers, etc. Also, our school provides us with an Ipad to do our school activities. And you can have it as long as you are consistent with your grades.
- b. What are the problems you face with AT?
 I'm not too fond of the inaccessibility element for the loading screen in BiOS
- c. Where do you get your information form?

 I use Fb groups, and product websites to get information about new AT. Also I watch videos on youtube
- d. Steps of flow of getting a product

You can either go to a local organization or a distributor to get the AT you are looking for. There is a community called the Union for the blind. I do use their service when I need it.

e. What are the challenges you face with AT?

I have not purchased an AT myself so far so i'm not sure how it works beyond a point.

User 5

Country -USA Visual Impairment - Blind since birth

- 2. Assistive Technology
 - a. What are the AT products that you are using?
 I've been using a couple of products so far. Jaws for windows 10, voice over, braille display, NVD product display, I've been using this for the last 9 years. AT in general are quite expensive
 - b. Where do you get your information form?
 I use Fb groups, and product websites to get information about new AT. Also I watch videos on youtube
 - c. Steps of flow of getting a product

In the USA there are not a lot of subsidy schemes that are available for the visually impaired. However, if you are a student and you can prove the device you need is helpful to get you through your work then the local government can help you with some of the funds available. You have to go through a screening process that needs you to fill in a form that is necessary for the local authorities to decide if you really need the product. The name of the organization is TBPI. I'm a student of law and I need to mention how will the braille display be more beneficial in increasing my productivity. For the canes part there is another organization called the National Federation for the Blind.

Also, the TBPI will need options when you go to them with a proposal, they will usually go for sharing the cost between the person in need of the product. Cost is a big factor in making purchasing decisions. However, I still feel its way better in Virginia as compared to other places.

- d. Where do you look for information about new products?

 I usually look for information on google, watch podcast such as Blind abilities, TBPI counselors,
- e. The biggest challenge you face in your day to day life?

 During lectures, it is very annoying to switch between the braille display and the Jaws reader. Because the screen readers are loud and I cannot use it in the classroom when there are others around me. And it is difficult to then focus on both what the professor is saying and what is happening on the screen.

User 6

Country -Belgium Visual Impairment - Blind since birth

3. Assistive Technology

a. What are the AT products that you are using?

I'm blind myself, I have purchased a lot of assistive tech myself. But I get most of the product's subsidies by either the government of the insurance company. I've now got really good at writing those recommendation letters that you need to get the product subsidized. The big companies don't really help out with the process of writing these letters. Then you need to get in touch with distributors or family members who can do that for you. You need to give information as to why you need the product and how it will help you in your daily life? And usually its a very long process to get the product subsidized by the government.

- b. What is the process you follow?
 - Step 1 Quote form the distributor or the manufacturing
 - Step 2 Reach out to the distributor
 - Step 3 Either reach out to a hospital or a health insurance company.
 - Step 4 This will then be submitted to the government. The whole process can take upto a year as well to get completed. And in the beginning you need to pay for the product, then later the amount is transferred to you. This is better if the product is a common one and has been added to the list of the products that can be reimbursed by the government. However, if the products are not listed it can be an awfully long process. In the payback process, the government makes a notification that the amount will be paid back that is then transferred from the user to the distributor and further to the manufacturer and then the product is delivered to the end user.

Anything else that one should know about the process in Belgium?

Hospitals are an interesting place to get the product as well. They usually have a showroom or a display area that gives information about new products and services. Also, the hospitals help with the hassle of handling the paperwork and the motivation as well.

User 7

Country -Netherlands Visual Impairment - Blind since birth

4. Assistive Technology

a. What does AT mean to you and what are the AT products that you have used?

AT for me is software or hardware that helps you enhance your efficiency and working. I was introduced to At when i was 3 or 4 years old by my parents who got me some toys that would enhance my tactile understanding. My parents learnt about this when they were trying to gather information about how to help kids with blindness to cope with their surroundings. Visio, a local institution, was very helpful in giving them the basic knowledge that they needed. Soon, my parents realised that i would need to learn the braille display to learn things on the computer, so they got me the braille display when I was 10 -12 years old. Now, I work with Vision to help them understand the new products that are out there in the market. Similarly, the NL also has Bartimeus. The healthcare system in the NL is way better. I know that the healthcare system is not that great in the USA. Furthermore, the AT helps to build a layer over the physical product to deem it more useful. Something like a braille display is a necessity, there is no way around it. I'm a part of a lot of the beta trials of products that are developed for the VI.

b. What is the process you follow?

Most recently I purchased a vector track that lets one navigate more accurately as compared to google maps.

- Step 1 -I got the information about the product online.
- Step 2 Got in touch with the local distributor selling that product.
- Step 3 Then in the NL you have 2 options you either go through UVW or teh insurance route. The UVW helps with getting products for study and work related tasks. And the healthcare insurance company helps with providing products for private use.
- Step 4 -If you select either of the routes the distributor will apply for the reimbursement scheme.
- Step 5 once that is approved you receive the product and the money is given to the distributor. So I don't need to get involved in the money part.

From experience i know it is different in different countries, I know for a fact in Germany the government provides an allowance for the blind users.

c. Are you a part of any local organizations or groups?

Yes, I'm a part of Vision in the Nl. Also, I'm a part of many communities on whatsapp and Facebook. I also help out with Dedicon - that gives me access to school or university literature. Other than this , I indulge myself in fairs that happen in the NL. Ziezo.org will organize a fair usually in march that will attract about 8000 VI people.

d. What is it that you like about the EG?

I like the part that it will be a platform that will unlock a lot more possibilities. The video calling feature is a good have. The text reader if it is as good as the app then it will be really nice. The best part is, that you don't have to use your hands, Pointing the phone can be very difficult at times. But moving the head it a lot more easier to orient yourself.



Developing a Go-To-Market (GTM) strategy for assistive technology based product

Please state the title of your graduation project (above) and the start date and end date (below). Keep the title compact and simple. Do not use abbreviations. The remainder of this document allows you to define and clarify your graduation project.

start date

27-03-2020

31-08-2020

end date

INTRODUCTION **

Please describe, the context of your project, and address the main stakeholders (interests) within this context in a concise yet complete manner. Who are involved, what do they value and how do they currently operate within the given context? What are the main opportunities and limitations you are currently aware of (cultural- and social norms, resources (time, money,...), technology, ...)

Envision is a start-up, based in Den Haag, that empowers the visually impaired to be independent by developing products that assist them in their daily lives. Envision focuses entirely on people with a visual impairment. This group consists of approximately 285 million people worldwide, of which 30 million in Europe. With Envision, visually impaired users can shop in supermarkets, use public transport, read menu cards in restaurants, recognize their friends, find their belongings and so much more, all on their own. The platform is currently available as an app on iOS and Android, which processes the images taken by a user to intelligently extract useful information. It can read texts in multiple languages, recognize faces and objects and describe scenes around a person. Their context-based approach always ensures that users get the right information that they are anticipating from an image. The app currently has around 30,000 users in countless countries, a number expected to climb to 50,000 in the coming months.

The U.S. Department of Health and Human Services defines assistive technology as any device and other solution that assists people with deficits in physical, mental or emotional functioning. It can be low tech (such as an object, a marker, a slate and stylus) or high tech, such as electronic devices, computer software, or switch-activated materials. The assistive technology market size will grow by \$8.39 billion during 2020-2024. The market's growth momentum will accelerate throughout the forecast period because of the steady increase in year-over-year growth [1].

Recently, Envision launched a product called the Envision Glasses. These glasses help people to understand their environment, turns text to speech, and helps recognize faces in a non intrusive manner. These glasses are available for pre orders currently and will be shipped out in August 2020. Thus, Envision wants to understand the industry context with respect to the channels used, stakeholders involved, and customer presence to reach their potential users. This graduation thesis would provide a comprehensive understanding of the assistive technology industry with respect to the visually impaired. Followed with a go to market strategic plan for the Envision Glasses.

Reference

1) Assistive Technology Market by Device and Geography - Forecast and Analysis 2020-2024. (n.d.). Retrieved from https://www.technovio.com/report/assistive-technology-market-industry-analysis

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Initials & Name J.E. Passanha

Student number 4918096



introduction (continued): space for images

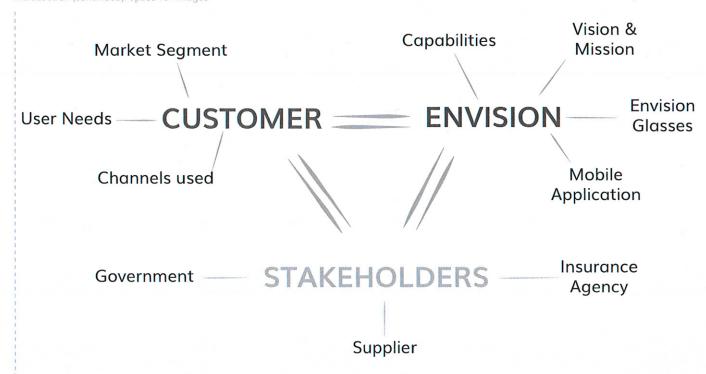
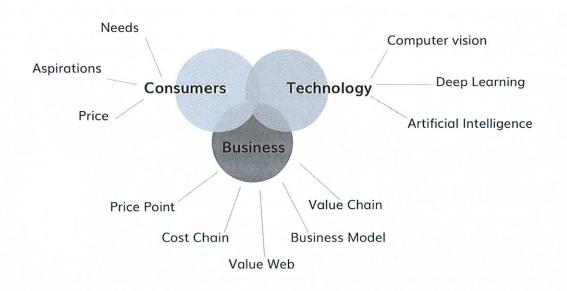


image / figure 1: Breaking down the major components of the assignment



The approach to understand the current context with respect to image / figure 2: Assistive Technology

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Student number 4918096



PROBLEM DEFINITION **

Limit and define the scope and solution space of your project to one that is manageable within one Master Graduation Project of 30 EC (= 20 full time weeks or 100 working days) and clearly indicate what issue(s) should be addressed in this project.

With the launch of the Envision Glasses, Envision has marked its onset of developing physical products for its users. However, it is a drastic shift from the digital product space, which has been their forte. The new challenge that lies for the company is

'what is the most innovative strategy to get assistive technology based products to the visually impaired'

and

'how can one decimate the strategy throughout the organization.'

ASSIGNMENT **

State in 2 or 3 sentences what you are going to research, design, create and / or generate, that will solve (part of) the issue(s) pointed out in "problem definition". Then illustrate this assignment by indicating what kind of solution you expect and / or aim to deliver, for instance, a product, a product-service combination, a strategy illustrated through product or product-service combination ideas, In case of a Specialisation and/or Annotation, make sure the assignment reflects this/these.

The graduation project will entail developing a go-to-market (GTM) strategy for assistive technology based products for the visually impaired. This would include following a customer centric approach to understand and meet the needs of the user. It would begin by developing a comprehensive understanding of the assistive technology industry; who are the stakeholders involved, what are the working models of the stakeholders, etc. Secondly, understanding the various customer segment that Envision caters to and understanding their needs with respect to assistive technology. Finally, understanding the current and future channels that would be used by the users & stakeholders in the assistive technology landscape. However, such strategic tools can be less effective if not communicated well to the entire team. Thus, the last part of the project would involve creating a visual representation of the strategy.

The end result will be a holistic understanding of the assistive technology industry with respect to the various stakeholders and channels used. Followed by presenting a visual representation of the tactical go to market strategy that Envision can deploy for the Envision Glasses.

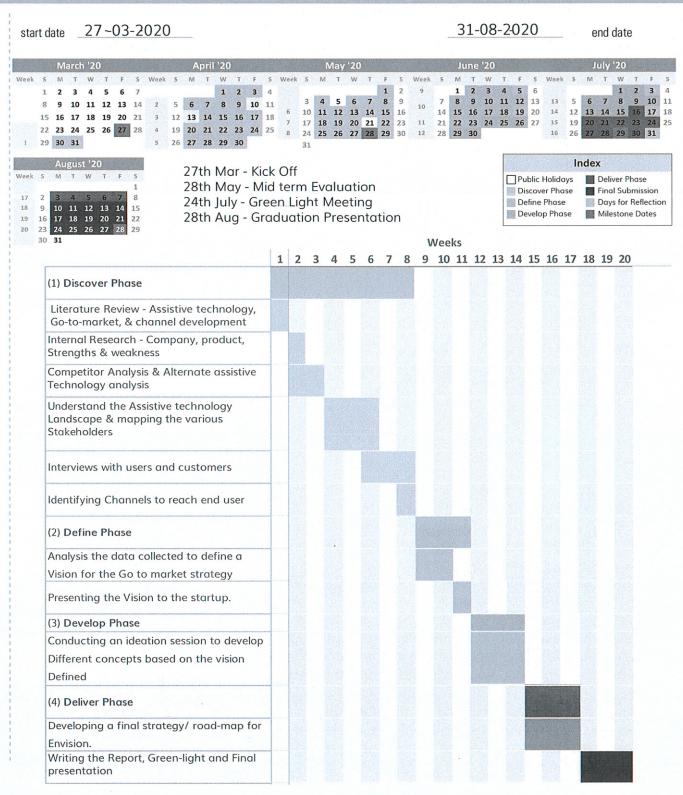
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MOTIVATION AND PERSONAL AMBITIONS

Explain why you set up this project, what competences you want to prove and learn. For example: acquired competences from your MSc programme, the elective semester, extra-curricular activities (etc.) and point out the competences you have yet developed. Optionally, describe which personal learning ambitions you explicitly want to address in this project, on top of the learning objectives of the Graduation Project, such as: in depth knowledge a on specific subject, broadening your competences or experimenting with a specific tool and/or methodology, ... Stick to no more than five ambitions.

This project is interesting to me, as it gives me the opportunity to understand the Assistive Technology (AT) industry in a nuanced manner. I personally believe being a part of the world's community it is essential to give back to society and future generation. And working with such organization to make an impact to human life is paramount to my personal purpose. This project gives me the opportunity to understand an industry that I've never really looked at in my life. And most importantly work with the visually impaired to help them enjoy a much more independent life.

On a professional front, this project gives me the liberty to run a project independently, something that I want to accomplish at this point of time in my career. Be responsible for a project right till the end. I would like to put my skills to test by using methodologies and structured processes to conduct a detailed research to layout the nuances of a business context. Allowing organizations to find the right opportunity that can enable them to propel their business. Also, I would like to have a better understanding of the processes and methods that need to be used depending on different context.

Another aspect that particularly interests me is developing an entire strategy for a product that needs to hit the market. Right from understanding the various stakeholders, their means of operations, the market needs, technological adaptation, market segmentation, & identifying user needs. Combining them to develop a strategy is a daunting but challenging task I believe. And having the responsibility to run it myself is definitely going to put me in an uncomfortable situation, but I know the end result will be more rewarding.

Developing these skills in the next 5 months, will most certainly prepare me appropriately, for my future endeavor in which I would like to use my creative and analytical skills to work as a marketing professional.

FINAL COMMENTS

In case your project brief needs final comments, please add any information you think is relevant