Designing a marketing campaign for a breathing wearable

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Abstract

The long term sustainability of healthcare systems are being questioned due to current unsustainable monetary spending on issues such as mental health diagnosis. Spending is also predicted to surge even further with increasing life-expectancy all over Europe, hence requiring preventative measures to be developed and enacted. The Airleviate breathing wearable was hence created as a tool for people to re-establish their abdominal breathing focus, while simultaneously maintaining or improving their physiological and mental health. Following several development phases, the Airleviate wearable will soon be available for the general public. Therefore, the goal of this project was to develop a marketing campaign video for the device. The target audience for this video were baby boomers - individuals in the age range of 55 - 73 in 2019. A literature review was performed in order to determine the main issues facing baby boomers and also to determine what marketing techniques should be used when approaching this age cohort. Furthermore, research was also conducted to determine existing breathing wearable, while also searching for marketing campaigns which targeted baby boomers for preventative healthcare. Three campaign option ideas were created as a result of idea generation from several sources. Individual and group brainstorms were conducted to gather large amounts of differing ideas, while stakeholder interviews were used to determine which of those initial ideas would be most appropriate for implementation. After discussions were held with the clients and supervisors, it was determined that an awareness campaign focusing on health was the best option. As a result, a question and answer style campaign video was filmed. The aim of the video was to make the viewer think about health in a different perspective - to understand the interdependence of physical and mental health. Questions used in the video were also designed to allow the interviewee to share as much or as little as they desired thus giving them freedom to express. Moreover, as the aim of the video campaign was to bring about awareness rather than achieve sales, the device does not appear in the campaign video and is not discussed. After completion, the campaign video was tested with a number of individuals fitting to the baby boomer age range. The results showed that the majority of evaluation participants could relate to the video, and thought about their health once the video had ended. The results hence showing that the aim of the campaign video was achieved. Nonetheless, there were some issues. For example, clarity issues relating to text layout in the video meant that important elements were not identified by the viewers. Additionally, the likelihood of the video being shared with others was low. For future work, the full marketing campaign and all of its elements could be finalised, including: logo for the device, website and the implementation of cause-related marketing. Additionally, research should also be performed to determine factors which influence the likelihood of digital content being shared and how that may be optimised to reach a greater audience.

Acknowledgements

1. Introduction

The initial part of the report will discuss the current situation of healthcare systems in terms of sustainability. It will then introduce the current state of different breathing patterns. This will be followed up by the description of frequently used terminology and concepts which will be continued with noting the research question that the thesis aims to answer. Finally, in the last part of this section, a brief description will be provided regarding the structure for the remainder of the report.

1.1 Sustainable Health

When sustainability is mentioned in the current political climate, it most often associated with the environment and the species living within it. Yet it is important to understand that sustainability should be all-encompassing and present within every field of society. That means that sustainable healthcare should also be a topic which is widely discussed. It should be noted that sustainability of healthcare could be approached from a number of perspectives. However, for the scope of this report, monetary healthcare spending relating to mental and physical disabilities will be discussed. The aim for this section is to address the way in which currently healthcare spending is not sustainable and how the spending may end up increasing in the near future due to prolonged life expectancy.

Currently the healthcare industry is severely struggling with mental health disorder diagnosis and the associated spending on treatment. It is said that half of all mental health disorders develop by the age of 14, yet remain undetected and therefore untreated until much later in life, if at all (Erskine et al., 2014). However, the youth are not the only ones who suffer from mental ailments. Studies show that globally around 7% of people over the age of 60 suffer from varying levels of depression and 3.8% suffer from anxiety (WHO, 2017). In a similar case to the youth, depression and anxiety is often not diagnosed in the more mature individuals. This because these mental ailments tend to co-occur with issues relating to old age (WHO, 2017) hence leading to the belief that people are feeling more down due to the physical illness rather as a result of mental issues. It should also be understood that when such significant numbers of individuals are getting ill and require treatment, national healthcare systems get strained. In 2011, for example, the Netherlands spend 21% of its total healthcare budget on mental and behavioural disorders - that equated to a 14 billion euro spending (Centraal Bureau voor de Statistiek, 2015). When looking at whole of the European Union (EU), the picture is not great either. In 2015, a conservative estimate regarding mental health spending was estimated to be at 4% of the total EU GDP, or more than 600 billion euros (OECD, 2018). Even though Europe and its members are spending significant amounts of money of the issue of mental health treatment, one must also acknowledge that there are still less developed countries where mental health gets little to no attention (Votruba, 2016). In these countries people with mental health do not have the option for treatment and are instead faced with isolation, discrimination and violation of their human rights (Votruba, 2016). In order for healthcare to do its duty to every living individual,

it needs to be able to detect when people are struggling, to be accessible to everyone and has to be effective so that it does not overly draw on national healthcare budgets.

Increasing life expectancy in Europe brings healthcare related challenges. From 2003 to 2013, life expectancy in Europe rose by 3.2 years for men and 2.5 for women (Brennan, Perola, Ommen, & Riboli, 2017). Furthermore, the number of people aged 60 and over will almost double in the following 30 years (WHO, 2017). All of this means that there will be more people with physical health issues and that they will have those issues for longer. Also, a longer life expectancy brings with it a higher chance of chronic pain. Understanding this, it is clear that our current healthcare systems will be strained to the breaking point unless change occurs. It is being discussed that in order to reduce the strain on health institutions, alternative treatment methods need to be established which allow for patient empowerment and independence. Furthermore, the concept of healthy ageing should also be used in more policy developments as it would allow for longer years of quality life which would also mean less visits to the doctor and less healthcare spending. Sweden's minister of health, Gabriel Wikstrom, put it into words superbly when he said: "The healthcare system has to stop treating one disease at a time and be more integrated (...)" (Paun, 2016).

In conclusion, the current healthcare system is not ready for the increase of individuals who will need treatment of both mental and physical ailments. In order to prepare for the future, changes need to be done which would ensure that the systems run efficiently, meaning that individuals are diagnosed as soon as they have an ailment and that the same individual has access to treatment regardless of their own demographic situation. Furthermore, a more broad shift has to occur in the health field where the patient is given more power to take preventative action which in the long term could significantly improve the quality of life for the individual while also drastically reducing the strain on healthcare systems.

As seen from the previous text, preventative care and healthy ageing policies may play a major role in reducing future strains on healthcare systems and as a result increasing their sustainability for future generations. However, due to the limited scope of this report, the focus will be set on discussing how preventative care devices may be marketed and hence implemented in broad reaching societal cohorts.

1.2 Problem description

Nowadays people live increasingly fast paced lives which often result in people feeling overwhelmingly stressed. As a result, more people are turning to meditation to relieve their stress (Kachan et al., 2017). This shift towards preventative care has prompted tools - both digital and physical - to become more available on the market. These may include apps for smartphones, fitness trackers with special functions for breath tracking or devices specifically designed to detect incorrect breathing patterns and aid the user in recovery.

For many breathing is a subconscious process which is performed without much thought. However, often times this type of subconscious breathing may be performed poorly resulting in the gradual decrease in wellbeing. Characteristic signs of prolonged poor breathing

practices may include hyperventilation, periodic deep sighing and predominantly thoracic (upper chest) breathing (Boulding, Stacey, Niven, & Fowler, 2016). The lack of correct breathing may be an especially worrisome stressor when looking at population cohorts which are more prone to other illnesses. One such cohort are the baby boomers. They are defined as those individuals, who are born between 1946 and 1964. For example, baby boomers in Western societies have been shown to be more prone to depression and alcohol abuse (Whitbourne & Willis, 2014) thus efforts should be made in reducing the potential stressors in their lives.

The clients for this project are Ben Bulsink and Parviz Sassanian. Ben Bulsink is an entrepreneur and product developer based in Enschede, while Parviz Sassanian runs a chiropractic center in Enschede. The clients have previously worked with students from the University of Twente and Saxion University of Applied Sciences in developing the various parts of the wearable device called "Airleviate". Previously done work on the breathing wearable includes: designing the outer shell of the device, creating algorithms which aid in habit formation and developing a graphical user interface to show the user their breathing data. Now the clients wish to develop a marketing campaign which will serve as a means of product testing with early adopters and will hopefully provide an influx of interested testers for further development of the "Airleviate" wearable.

1.3 Context analysis

The topic of this research project is to develop a marketing campaign which will serve as a means for the early adopters to test the product and allow for further development of the "Airleviate" breathing wearable.

1.3.1 Baby boomers

Adults in the age range of 55 to 73 in 2019 (born between 1946 and 1964) are often referred to as the baby boomers or simply boomers. This age cohort makes up the largest segment of the population in numerous countries, including the United States, where there are an estimated 78 million Americans who fall into the age range (Lerouge, et al., 2014). Meanwhile in Europe, baby boomers make up 19.5% of the total EU population (Eurostat, 2019) which equates to 99.6 million individuals. Understanding that there are so many people in this age group and seeing as they are transitioning into the later years of life, it can be assumed that they are either already or will soon start to suffer from age related ailments. This gives reason to believe that boomers would be an important target base in the creation of a marketing campaign.

1.3.2 Abdominal breathing

Abdominal breathing which can also be referred to as "diaphragmatic breathing" or even "deep breathing" and is said to be an efficient method for dealing with stress or psychosomatic disorders. During abdominal breathing, the diaphragm is contracted, the belly is expanded, inhalation and exhalation are deepened just like shown in the Figure 1 below. All of which result in a reduced respiration frequency and the maximisation of blood gases (Ma, et al., 2017). Alongside the reduction of respiration frequency, abdominal breathing also has numerous health related benefits, both in terms of physiological and mental health. These benefits will be discussed in-depth in Section 2.1.2 of Chapter 2.
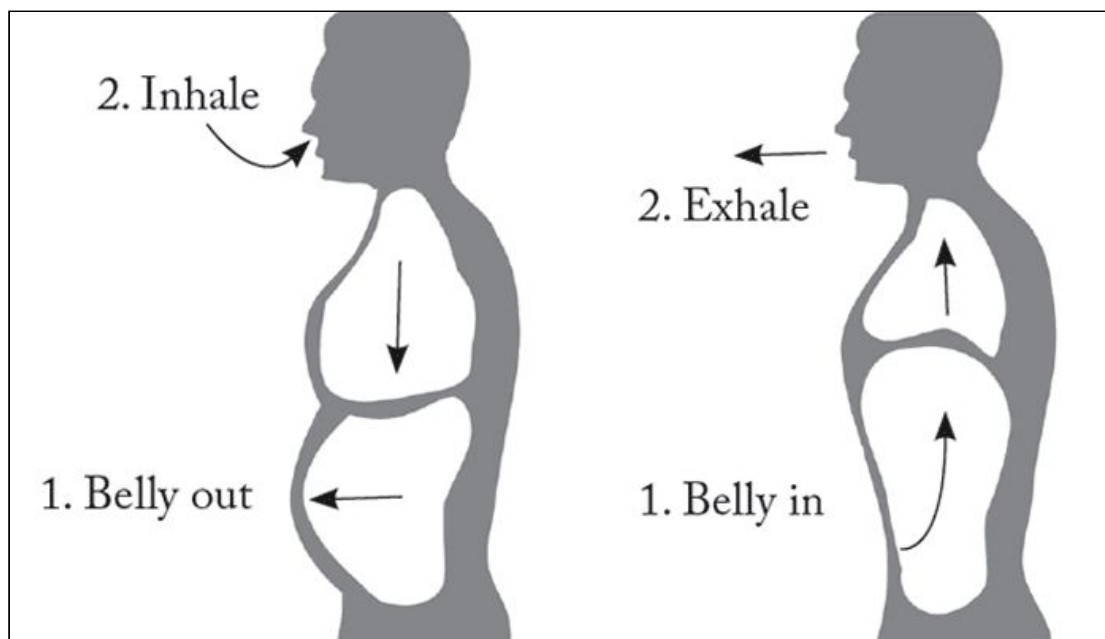
Figure 1. Diagram explanation of abdominal breathing

1.3.3 The Airleviate breathing wearable

The Airleviate breathing wearable is a wearable device which measures and reports information about the user's breathing. It does so by processing measurements from a band which is put around the users abdomen. The signal from the band gets sent to the central processing unit. The data is then recorded and sent to an app on the user's phone for them to observe and analyse. The aim of teaching the user about the benefits of diaphragmatic breathing via the breathing wearable is that hopefully they create the habit of abdominal breathing and can later reap the benefits without utilising the device. Currently, a working prototype of the breathing wearable is available for use and further development.

1.4 Research questions

After numerous discussions and iterations the central research question was determined:

"How to design a marketing campaign for a breathing wearable targeted at the baby boomer generation?"

A further set of sub-questions were developed to answer questions relating to the specific physiological and mental issues faced by baby boomers, the health benefits of abdominal breathing, tactics which need to be employed when targeting baby boomers, boomers' willingness to participate in crowdfunding campaigns and, finally, the underlying device functionality which should be deployed to appeal to boomers.

The sub-questions are as follows:

"What are the main physiological and mental issues facing boomers?"

"What health benefits are brought about when utilising diaphragmatic breathing?"

"How should baby boomers be targeted in marketing campaigns?"

1.5 Report outline

The report will begin with an introduction of sustainable healthcare and its implications for future monetary spending after which it will move onto introducing abdominal breathing. Following the aforementioned topics, the Background Research will be discussed. This is then followed by Methodology and Techniques section, which describes design and analysis frameworks which will be used in later Specification and Realisation phases of the report. Next is the Ideation phase, where ideas relating to the campaign video are generated and initial requirements for the product are set up. The requirements which were determined in the Ideation phase are then evaluated in the Specification phase after which a prototype is developed and realised in the Realisation phase of the report. After the Realisation phase, the prototype is tested in the Evaluation phase were it gets shown to a group of individuals fitting the target age group. The results of the Evaluation are then presented and the report is finalised with the Conclusion, followed by Recommendations for further research.

2. Background research

This section aims to discuss research regarding key baby boomer age cohort insights. This will then be followed up by discussing the physiological effects of abdominal breathing and the background research part will be finalised by describing key marketing tactics which should be used when targeting baby boomers. This is then followed by a market research section which shows the existing breathing wearable devices and marketing campaigns which have targeted baby boomers. Descriptions of both the devices and the campaigns are also included.

2.1 Literature review

2.1.1 Baby boomers

Baby boomers are defined as individuals who were born between the years of 1946 and 1964, and therefore are aged between 55 and 73 in 2019. In many countries they make up the largest population cohorts (Lerouge, et al., 2014) and are reported to be the richest generation in history (Turits, 2018). However, as they are a more mature generation, stereotypes relating to their older age have formed. These may include being afraid of using technology or even being too old and tired to pursue their goals. However, this is often not the case and is just the result of a societal misconception. Niemelä-Nyrhinen (2007) found that the Finnish baby boomer age cohort does not conform to the pre-existing stereotypes. Niemelä-Nyrhinen (2007) reports that baby boomers actually have low levels of technology anxiousness and have a high amount of experience with SMS text messages and internet use, while LeRouge, Slyke, Seale, and Wright (2014) argue that boomers have the interest in technology which is comparable to the age range of 18-45 . One thing worth noting, however, is that the study by Niemelä-Nyrhinen (2007) only looked at boomers from Finland. This may be an issue as Finland might not be a representative sample of baby boomer technology use. This is because Finland was ranked as the 2nd most tech-savvy country in the world (Baller, Dutta, Lanvin, & Editors, 2016) and hence the results may not indicate true values for technology use amongst the elderly population.

It is reasonable to assume that older people may have a decreased level of mobility or mental ability as a result of older age. Yet Kahana and Kahana (2014) postulate that for boomers retaining control both physically and mentally is of utmost importance. Therefore, if they need to adopt technology to do so, they are willing and able (Kahana et al., 2014). Williams, Page, Petrosky, and Hernandez (2010) also found that boomers have different goals compared to the previous generation - boomers tend to value health, energy and wellness a lot more than the Silent generation (born between 1925 - 1945). One of the reasons why boomers may desire to remain in control of themselves is to be able to continue to work. Williams et al. (2010) assert that boomers can often be ascribed the title of being workaholics. For boomers work is often associated to means of self-fulfillment, and status hence their desire to retain physical control can be justified and should be encouraged.

The health of baby boomers should also be discussed. Boomers are expected to live longer than the generations before them and have shown to be less likely to smoke cigarettes and have lower rates of myocardial infarction than the generations before them (King et al., 2013). However, the overall view of boomers' health is poor. King et al. (2013) reveals that boomers have lower levels of physical exercise and live a more sedentary lifestyle. The researchers (King et al., 2013) (Zantinge E. M. van der Wilk E. A. van Wieren S. Schoemaker C. G., 2011) further assert that boomers were more likely to be obese, and moderate drinking was more common amongst that age cohort as well. In a similar case, Whitbourne et al. (2014) further argue that boomers in Western countries are more prone to substance abuse and depression. However, it must be noted that the causes and reasons for substance abuse are not clearly defined thus making it a difficult problem to tackle. Patterson and Jeste (1999) postulate that some of the underlying causes for substance abuse may be stress, isolation, various losses, loneliness, and onset of illness.

Even though it is often times assumed that older people should retire and leave the workforce, the opposite might be the better way to proceed. Researchers have found that baby boomers are highly educated and are very interested in entrepreneurship (Williams, Page, Petrosky, & Hernandez, 2010) (Topiwala, Patel, & Ebmeier, 2014). This could mean that boomers who are getting close to or are beyond the retirement age could shift their working profile to work less or occupy themselves in a charitable organisation. Topiwala, Patel, & Ebmeier (2014) propose the concept of an encore career - where individuals continue to work in their second half of life, yet usually work in fields of social importance such as environment, health and education. An encore career, however, in most cases would not be undertaken for financial reasons, as boomers are the wealthiest of any age strata in a population (Topiwala, Patel, & Ebmeier, 2014). Instead, an encore career could be used for its health benefits. Often times the workplace is the dominant area of social interaction that older people have, and without it may feel isolated or depressed (George, Blazer, Hughes, & Fowler, 1989). Research has also found that individuals with less social interaction had higher incidence of depression (Kim et al., 1993). Additionally, Crooks, Lubben, Petitti, Little, & Chiu (2008) found that among older women, large social networks may have a protective influence on cognitive function. The aforementioned statements give strong evidence to show that an encore career may potentially be very useful for boomers in sustaining mental capacity. However, it may also prevent early death amongst boomers. It has been shown that retirement (Qin, Agerbo, Westergård-Nielsen, Eriksson, & Mortensen, 2018), unemployment (Voss, Nylén, Floderus, Diderichsen, & Terry, 2004) and a restricted social network (Beautrais, 2002) are risk factors for suicides amongst the elderly. These risks could be mitigated via encore careers amongst baby boomers.

In conclusion, even though boomers are societally viewed as stagnated individuals, the reality is very different. Most boomers are technically versed, are motivated to live life and pursue their goals, even if they are statistically viewed as a generation which is more likely suffer from a variety of ailments. Therefore it should be acknowledged that the stereotypes of boomers which are currently being held by society need to be drastically adjusted in order to represent the current image of boomers. Furthermore, the concept of retirement should also be revisited as boomers have been shown to be negatively affected both mentally and physically once they enter retirement. Instead, the concept of an encore career could be propagated which has the potential to greatly improve boomers' quality of life.

2.1.2 Physiological effects of diaphragmatic breathing

Various studies state that diaphragmatic breathing has many physiological benefits. Manikonda et al. (2007) argues that deep breathing can on average reduce blood pressure by 18 mm Hg which is comparable to pharmacotherapeutic testing (Law, 2003). The blood pressure reduction potential is furthermore significant, as an approximately 20 mm Hg increase in blood pressure relates to a doubling of the likelihood of cardiovascular mortality in middle-aged people (Lewington, Clarke, Qizilbash, Peto, & Collins, 2002). This gives a strong reason as to why abdominal breathing should be utilised daily by those suffering from high blood pressure, but also by individuals who want to preventatively maintain good blood pressure.

Another relevant benefit of diaphragmatic breathing is that it has been shown to increase heart rate variability (HRV) (Kulur, Haleagrahara, Adhikary, & Jeganathan, 2009). Kulur et al. (2009) define heart rate variability as the natural rise and fall of heart rate in response to various physiological mechanisms and can be measured by calculating the time between R-R phases of a heart rate (Figure 2).
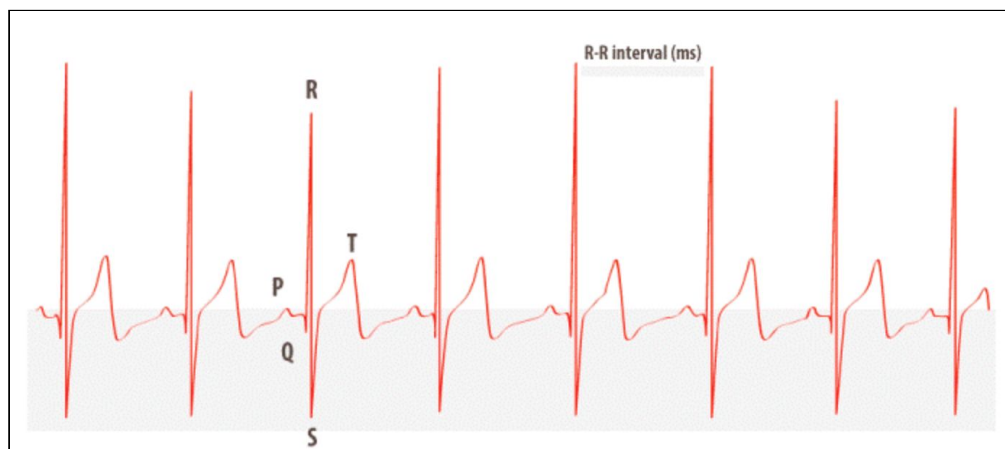
Figure 2. Diagram explaining the concept of heart rate variability (HRV)

Tsuji et al. (1996) believe that reduced HRV is an indicator for potential cardiovascular issues, thus Kulur et al. (2009) emphasise that HRV should be increased via physical activity or with abdominal breathing techniques . An additional point of interest is that it has been shown that HRV is lower in patients with Diabetes Mellitus (Takase, et al.,1992). This is especially problematic as studies show that baby boomers in the United States are more prone of getting diabetes than the previous generation at the same age (King, Matheson, Chirina, Shankar, & Broman-Fulks, 2013). In addition to increasing HRV, the study also found that abdominal breathing can help increase blood glucose homeostasis via prolonged diaphragmatic breathing practices (Kulur et al., 2009) thus helping these patients control their blood sugar levels.

A further benefit of utilising deep breathing is the reduction of traumatic mental symptoms. Kim et al. (2013) asserts that diaphragmatic breathing can reduce post traumatic stress disorder-like symptoms. Post traumatic stress disorder (also referred to as PTSD) is an anxiety disorder which can develop in individuals who have been exposed to traumatic events (Diagnostic and Statistical Manual of Mental Disorders, 2013). Lancaster, Teeters, Gros, and Back (2016) explain that PTSD symptoms may include traumatic nightmares, flashbacks, avoidance of trauma-related people or places and irritability. Whereas Brewin, Andrews, and Valentine (2000) further clarify that the development of such symptoms has been shown to be more dominant amongst women, in socially, educationally and intellectually disadvantaged environments. It has also been shown that the chances of developing PTSD increase with repeated exposure to traumatic experiences (Kilpatrick, et al., 2013). Similar results were also achieved when looking at the prevalence of PTSD among baby boomers. Ogle, Rubin, and Siegler (2013) describe that repeated exposure to traumatic events throughout life was the biggest predictor of PTSD. It is thus reasonable to assume that boomers have a higher chance of developing PTSD or PTSD-like symptoms due to their increased chances of having been exposed to a traumatic experience.

In the end, a strong case can be made for promoting abdominal breathing practices amongst the more mature populations as its positive physiological and mental effects have the potential to greatly increase the quality of life of the person employing the breathing practice.

2.1.3 Marketing tactics towards boomers

It has been stated that the boomer generation has been the most marketing-friendly consumers in the history of the United States (Brady, 2012). It would hence be fair to assume that this generation is more willing to be advertised to and, therefore, are more likely to buy the products from brands which target this age cohort. However, in order to create a marketing campaign which will appeal to the boomers, the right approach needs to be implemented by looking at a number of key marketing tactics.

The wording of the marketing campaign is a strong determinant of whether the campaign will be successful. Holtzman (2013) found that boomers do not like to be labeled with the status quo characterisations of growing old or being told that the best days are already behind them. Kahana et al. (2014) argues that instead boomers prefer to retain control and have the notion that they are living, rather than aging (Holtzman, 2013). Even if boomers are close to or potentially already in retirement, it is not productive to remind them of this fact. Gans (2016) emphasises that using words like "senior", "elderly", and "aged" is not effective, as they portray the target user as someone who is past their prime.

Furthermore, Lipschultz, Hilt, and Reilly (2007) propose a five point strategy on how to successfully approach older people. The first step discusses how the name baby boomer covers a wide age gap, thus it is necessary to segment the message with the intention of making the marketing message more appropriate for the particular targeted subgroup of boomers. However, Reisenwitz and Iyer (2007) argue that there are no significant

differences between the boomer subgroups thus showing that advertisers are being too cautious and could instead develop a single message.

The second step encourages the effective use of time factor. Since boomers have more free time, the marketing campaign should seek to create interaction with baby boomers thus leading to stronger brand relationships. This may include setting up branded stands in locations where boomers are known to gather. As a result, boomers may be more inclined to interact with the company representatives and thus form a better image of the company and its product.

The third step emphasises the need for detailed information in a campaign designed to appeal to boomers. Lipschultz et al. (2007) claim that unlike millennials, boomers are more willing to read labels, do comparative shopping and analyse the product or service. As a result, the campaign material should contain an ample amount of detail which would allow the boomer audience to make an informed decision about the product.

The second last step encourages the campaign to make use of boomers' willingness to join groups. Marketers should find organisations which appeal to boomers and try to agree upon a deal where the product being sold may be seen or purchased at the group's headquarters.

The last step of the five step plan proposed by Lipschultz, Hilt, and Reilly (2007) states that the campaign should provide some form of added value to the customer. It may be a discount which is received alongside the purchase of the marketed item, having a contact number for easy reachability or even offering post-sale services.

When dealing with the contents of a page designed to appeal to baby boomers, there are certain elements that should be included. Initially, it should be easy for boomers to find out more about the company and to contact the author of the campaign or the person responsible. Schiff (2014) maintains that it is essential for any piece of digital marketing to have a 'About us' button or link, using which the audience can find out more and get in contact if needed.

When discussing the type of media that best suits advertising to boomers, video is a clear winner. Nickalls (2018) explains that more than half of boomers use their smartphones and that over 50% of boomers watch video online (Google & Ipsos, 2013). This means that the marketing potential by utilising video is immense. However, some of the specific aspects of the video also need to be determined. Coleman, Hladikova, and Savelyeva (2006) argue that since boomers have grown up in an environment where they have had the chance to analyse the product before taking action, the video content should not be shorter than 5 minutes and should preferably be in the range between 5 to 30 minutes. Coleman et al. (2006) argues that the longer time frame gives the boomers enough time to gather enough information needed to make a decision and hence increases the likelihood of a sale. Olenski (2018) on the other hand counters that argument, claiming that successful results have also been achieved by using video content which ranges in length from 6 to 15 seconds. Therefore putting into question whether a lengthy video is really needed.

In the end, it can be seen that in order to appeal to boomers via a marketing campaign there are a number of key elements that need to be utilised. These include avoiding the use of status quo names when referring to the target group, creating more brand interaction possibilities with boomers, including key pieces of content in campaigns, and choosing the right format for the marketing campaign. If used correctly, the combination of these tactics are likely to yield a successful marketing campaign aimed at baby boomers.

2.1.3.1 Cause-related marketing (CRM)

Reports show that baby boomers are not willing to participate in crowdfunding campaigns (Rovner, 2013). Therefore an alternative marketing strategy needs to be utilised. A strategy that is commonly employed in the marketing of products which aims to make the consumer feel good about their purchase is cause-related marketing (CRM). It is a strategy which is designed to achieve marketing objectives via company support of social causes (Barone, Miyazaki, and Taylor, 2000). In addition to achieving marketing objectives, this marketing technique can also be used as a differentiator from other competing brands (Murphy, 1997) and thus may be a potentially useful marketing technique in markets which lack differentiation. Additionally, it has been shown that CRM promotes favourable brand attitudes and purchase intentions (Barone et al., 2000). However, in order to ensure positive brand attitudes, a correct brand/cause fit must be implemented (Pracejus & Olsen, 2004). Without a correct fit, the company's corporate motivation for participating in social activities may be questioned resulting in negative perceptions of that particular company (Barone et al., 2000). Furthermore, before CRM is used it is important to determine how the donations relating to product sales may influence product price and its performance. Pracejus and Olsen (2004) found that consumers were not willing to purchase products which they perceived to have lower performance or were increased in price due to CRM. It is therefore important to set out targets during the development phase to ensure performance and to limit donation percentages to an extent which would not cause the price of the product to increase.

2.2 Market research

This section briefly shows existing breathing wearables, and marketing campaigns which were used to target baby boomers. Descriptions and basic analyses are provided for both the devices and the campaigns.

2.2.1 Devices and wearables

2.2.1.1 Prana Health
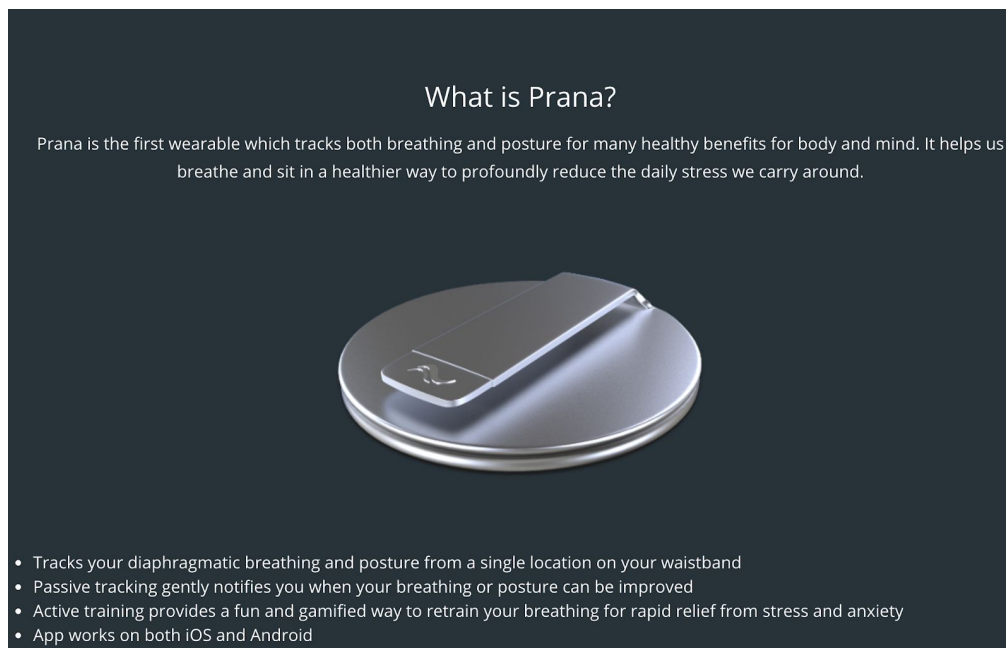
Figure 3. Description of Prana wearable and its functionality

As can be seen from Figure 3, Prana is a clip-on wearable which aims to reduce stress in its users by tracking their posture and breathing patterns. The device is marketed as having two main functioning modes. The first mode is referred to as the passive mode where the device tracks breathing and posture data and notifies the user via an app when either the posture or breathing values deviate from the optimal settings. The second function is referred to as the active training mode. This mode is a gamified breathing training course an image of which can be seen below in Figure 4 .
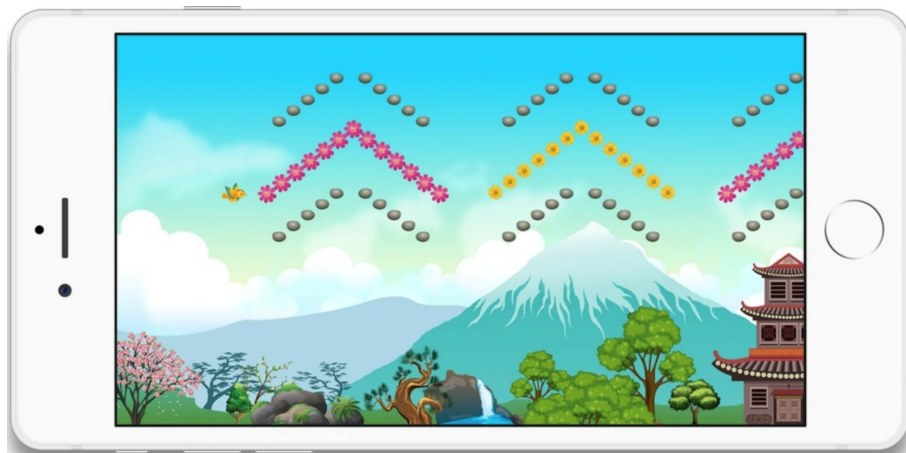
Figure 4. Screenshot of Prana gamified breathing training

The aim of the game is to collect as many points as possible while controlling a bird with the depth and frequency of breathing. The game is designed in a way which encourages prolonged diaphragmatic breathing in order to win and hence the designers hope that the user will feel more relaxed after the game.

Observing the overall functionality of the website and the marketing material relating to wearable a few conclusions can be drawn. Firstly, the website is slow to load and in some cases shows poor functionality. Furthermore, the information regarding being featured on certain news networks is around five years old, leading to the assumption that the product has not been featured on any news site for the past 5 years. The two previously mentioned observations give an overall sense that the company does not care about its online presence which may potentially be due to poor sales or lack of funding.

Secondly, the photographic marketing material and the descriptions relating to the device show people sitting in their office chairs at work and how they often feel stressed. This gives the impression that the main target audience for the Prana wearable is a middle-aged office worker who wants to reduce the presence of stress in their life.

In conclusion, it can be said that based on the state of the website and the information contained within it, Prana is either in financial struggle or may have trouble selling their device. Furthermore, having analysed the marketing material, the main selling points and the target audience for the device were identified to be middle-aged office workers.

2.2.1.2 Spire Stone

Spire Helps End Stress
Spire Stone monitors your breathing all-day and guides you to calm.
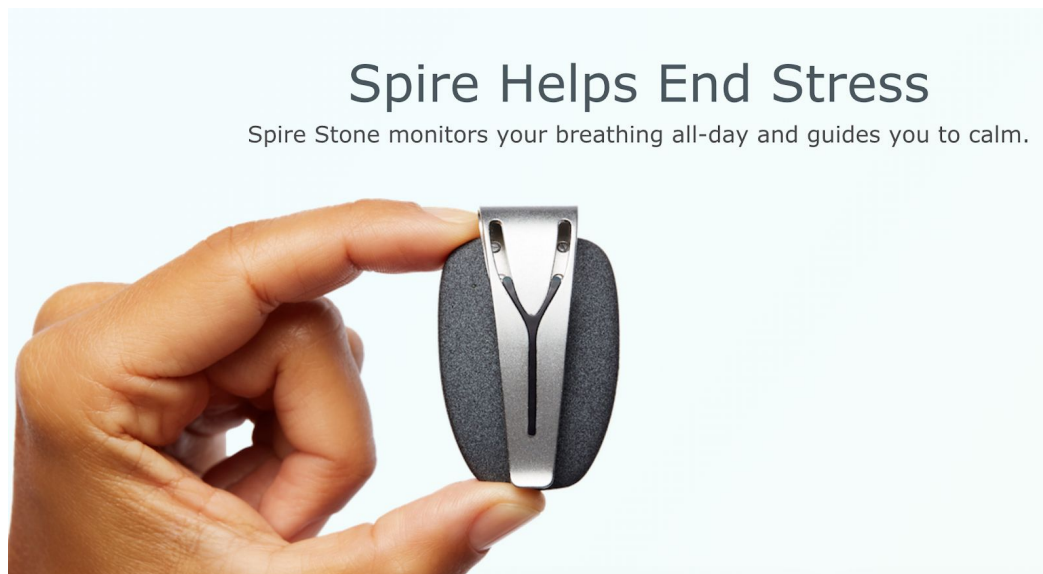
Figure 5. Screenshot of Spire Stone wearable

Similar to the Prana, the Spire stone, seen in Figure 5, is also a clip-on device which tracks the users' breathing patterns and their posture. An additional feature of the Spire is that it can recognise when the user is having a stressful moment and can prompt them to take deep breaths or use meditation to calm down.

Unlike Prana's dysfunctional website and content, the Spirehealth's website is clearly being looked after and time is being put into it to ensure that the studies which use the device and other materials are up to date. Furthermore, when looking at the intended target audience, it can be seen that the device is intended for a wider variety of individuals. For example, there are images of yoga teachers, people seemingly going about their days, and even people on what seems to be their morning run. This indicates that Spirehealth is targeting the health conscious individual who wants to maintain their health rather than just stressed office workers like in the case with Prana.

2.2.1.3 3M Respiratory tracker

It's time to take control of your respiratory health.

Introducing the 3M™ Respiratory Tracker - the only wearable that seamlessly tracks your breathing, activity, weather, and air quality to empower you with the insights you need to finally take control of your respiratory health.

Thoughtfully designed and developed at 3M to help you manage your asthma and allergies as part of a healthy lifestyle.

Figure 6. Screenshot of 3M's marketing material for wearable

3M is currently developing what they call the "respiratory tracker" which is similar in its functionality to the Prana and Spire Stone. Again, it is a clip on device, as seen in Figure 6, which tracks both the user's breathing and their posture and reports back to them if there is a deviation from the norm. However, one key selling point of the 3M device is that it tries to link the user's breathing performance to location-based factors. One example that 3M uses in their marketing material to illustrate this feature is an app warning about higher pollen count in the air. The app which is linked to the device may warn the user that due to expected showers, the presence of pollen in the air may be higher and therefore could result in poorer breathing quality due to potential allergies. Such location cues may help the user to better understand what is preventing optimal breathing practices and help avoid them in the future.

It should also be noted that no comments can be made regarding the device's website as it is currently still under development and Indiegogo was used as a means of gathering suggestions from the potential early adopters (3M, 2018). Furthermore, the Indiegogo campaign does not seem to target a very specific age group, instead choosing to focus on individuals who may have various breathing related illnesses such as asthma. Furthermore, the mental or physiological benefits of correct breathing practices are not mentioned in the campaign, leading to the assumption that the device's main purpose is in preventing or minimising allergy related breathing difficulties.

2.2.1.4 Sweetzpot Flow

Figure 7. Screenshot of Sweetzpot Flow wearable

The Flow wearable, pictured above in Figure 7, is similar to the previously mentioned devices in that it tracks breathing patterns and allows the user to review the data which was collected. This device, however, seems to have a different use case than the previous devices. Flow's intended use seems to be amongst athletes and mindfulness workshop coordinators. This assumption is based on the marketing material which is made available on the Sweetzpot website. The photographical media shows reviews and pictures of athletes while also including imagery of yoga classes. This leads to the assumption that the Flow is not intended for prolonged daily wearing, but should instead be used for training or meditative sessions. As a result, the intended target audience can also be identified as individuals which are conscious about their health and perhaps are interested in gaining data-backed insights into their breathing performance.

2.2.2 Marketing campaigns targeting boomers

2.2.2.1 T-Mobile
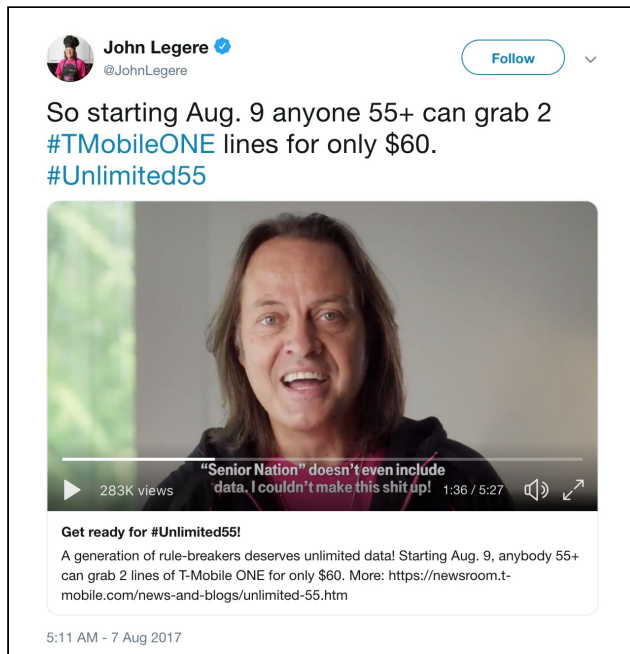
Figure 8a. T-mobile advertisement

Figure 8b. T-mobile advertisement

A telecom company, T-Mobile, launched a marketing campaign in the US aiming to show how Boomers are being mistreated by other network providers and as a result hopefully sign new customers. The primary advertisement was published on Twitter where the Chief Executive Officer (CEO) of the company addresses the various ways the boomers are being mistreated regarding telecom services (Figure 8a). A few things that need to be brought to attention are the platform used to spread the advertisement, the use of television marketing templates, and the length of the video. Firstly, the advertisement was dominantly spread through Twitter. This shows that the marketing team is aware that the stereotypes of boomers lacking technological prowess are false and hence target them via a medium which is rarely used in boomer advertising. Furthermore, the use of TV-sales templates (Figure 8b) within the advertisement mocks the current ways of advertising to boomers and shows a drastic contrast when the advertisement cuts back to the sincerely talking CEO. Lastly, the length of the video is over 5 minutes hence giving sufficient time to provide a lot of information about the new T-Mobile plan and the shortcomings of the competitor's plans. This is likely to be something that appeals to Boomers as they like to compare and analyse before purchasing a product or service as was mentioned in section 2.1.2 .

2.2.2.2 Mercedes Benz
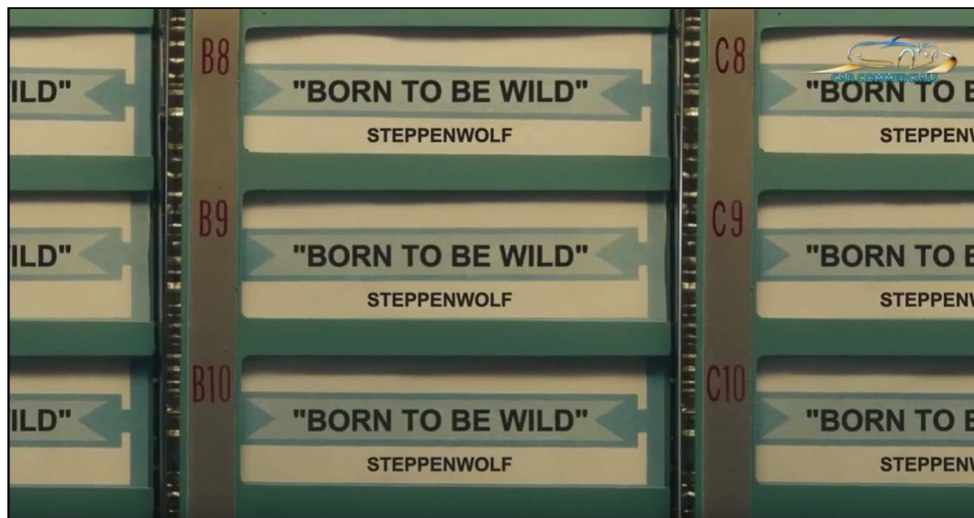
Figure 9a. Mercedes advertisement

Figure 9b. Mercedes advertisement

This advertisement shows a boomer-aged man drive his Mercedes car (Figure 9b) to rural bar which is filled with aggressive looking bikers and park his car in front of their motorcycles thus preventing them from leaving. Once they realise this and confront him with it, the man simply gets into his car and drives off in a coolness-evoking manner (Figure 9a). It could be argued that the advertisement aims to show boomers as those who are not afraid of adventure, having the means to purchase a nice vehicle and not being afraid of standing up for themselves when confronted.

2.2.2.3 Levis

Figure 10a. Levis advertisement

Figure 10b. Levis advertisement

The jean clothing company, Levis, released an advertisement where its products are worn by all genders of all races of varying ages throughout different cultures as can be seen in Figure 10a and Figure 10b. The intent of the advertisement is to show that Levis clothing can be worn by anyone anywhere. The target audience in this case also includes Baby Boomers. The brand has been associated with the Boomer generation for a long time and hence the brand also includes them in their advertisement.

2.3 Decisions for ideation

After much literature and example analysis, a set of key elements and tactics have been decided upon which will be included in the final marketing campaign.

Firstly, based on the findings of Nickalls (2018), video is the best medium through which the campaign should aim to gather funds from the baby boomer population. The fact that more than 50% of boomers in the Western countries have been shown to use video for both recreational and research purposes, means that video based marketing campaigns have real potential for success. Additionally, the length of video will most likely be around the 5 minute mark as to allow for sufficient details to be shown in the video to allow the potential boomer customer to make an informed purchasing decision.

Secondly, the use of cause-related marketing (CRM) techniques will be essential as boomers are not willing to participate in crowdfunding campaigns (Rovner, 2013). This means that interviews will be held with the client to determine what direction they wish to take the product in order to be able to find organisations which would be used in the CRM campaigns.

Finally, Lipschultz, Hilt, and elements from Reilly (2007) five point strategy will be employed in the creation of the video. This will ensure that the campaign's looks and language are designed in a way that is tailored to boomer preferences.

3. Methodology and Techniques

This chapter will introduce the various methodologies which will be used in the thesis for product design and evaluation. These will include various brainstorming techniques, different interview types and a number of evaluation methodologies.

3.1 Creative Technology Design Process

This subsection will serve as an introduction and explanation of the Creative Technology design process as it will be the underlying framework into which all other methodologies will fit into. The design process was introduced by Mader & Eggink (2014) and a diagram of which can be seen in Figure 11. The four phases of the design process are the following:
- Ideation;
- Specification;
- Realisation;
- Evaluation;

Ideation:
Ideation is the first step in the design process and is also the point at which ideas are generated from various sources. These ideas may arise from inspiration from tinkering with a certain technology or performing an in-depth analysis of a larger system. Further relevant information about the initial idea may be gathered via interviews, brainstorms or a stakeholder analysis, all of which serve to create specifications which will be later used in the realisation phase.

Specification:
In this phase, the use of prototypes and various feedback loops alongside evaluations, allows for further refinement of specifications of the final prototype. Methods such as MoSCoW (Must, Should, Could, Won't have) are used to prioritise or even alter requirements to better fit the intended purpose of the prototype. More information about the MoSCow method can be found in Section 3.5.

Realisation:
Once an updated version of the specifications are gathered, the realisation of the prototype may begin. The prototyping of the product is done in an iterative cycle, where each version of the prototype gets tested with users, after which it gets evaluated and the necessary changes are implemented before the next iteration cycle is begun.

Evaluation:

There are a number of ways to evaluate a prototype, however, in this specific case questionnaire testing will be the main forms used. It will give insight into how the user perceives the prototype and will also allow for deeper probing.
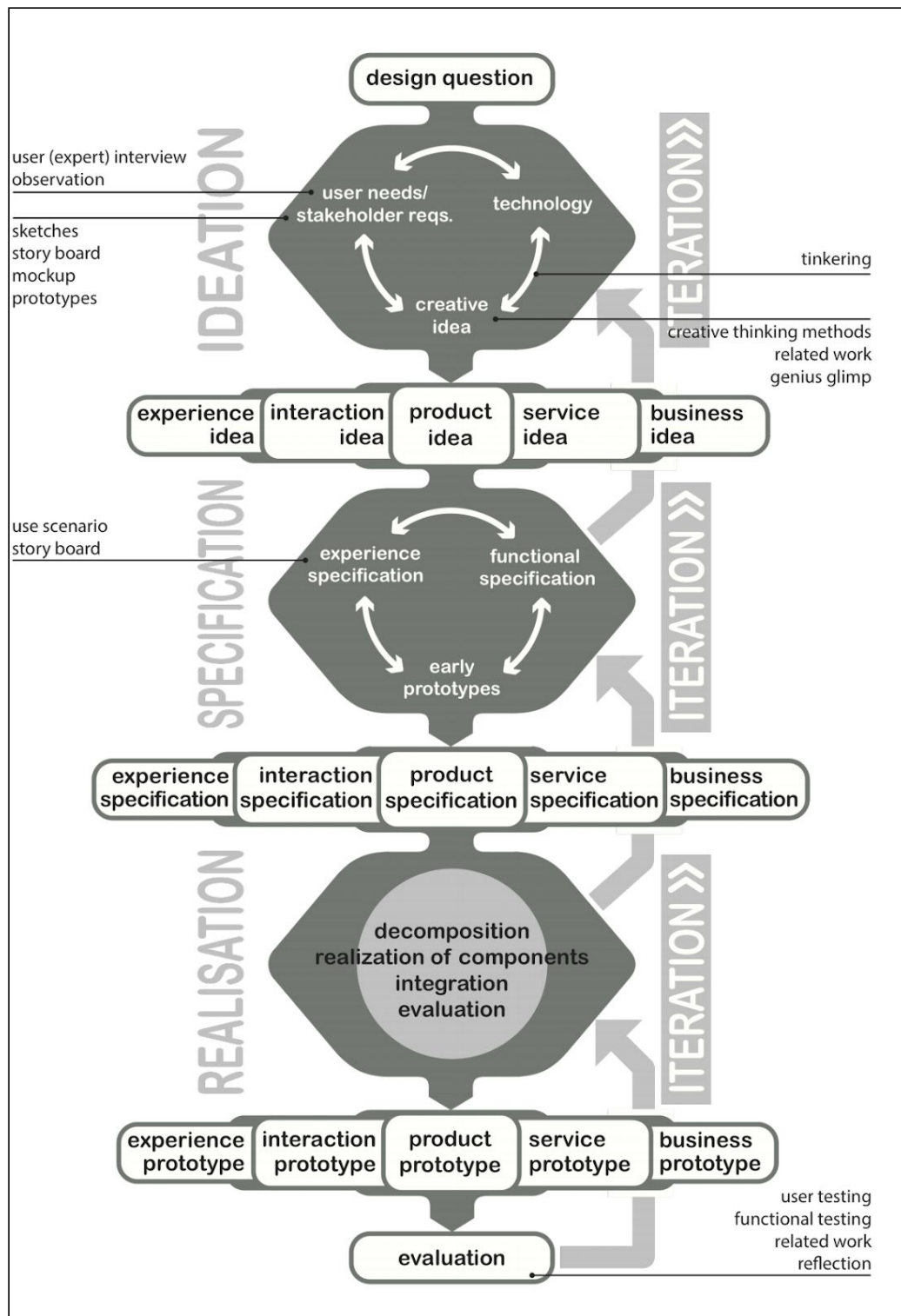

Figure 11. The design framework for Creative Technology

3.2 Brainstorms

Speedstorming
A group of people are given a prompt relating to a certain topic and have to come up with 3 ideas within 5 minutes. After the time has passed, they pass on their ideas so that the person to the right of them can continue working on the initial ideas for a further 5 minutes. After 30 minutes 18 in-depth ideas are developed (Dan, 2017).

Trigger storming
Before the session begins, a trigger is given to the participants to give a direction for idea generation. Then the participants have a set amount of time to write down as many ideas as they can. Once the time is up, every participant tells their ideas, but no one is allowed to criticise or offer improvements until everyone has told their idea (Rudy, 2016).

Freeform
The participants are made aware of the central issue after which they start writing down their ideas and collaborating with other participants to come up with the most appropriate list of generated ideas.

The project will use the speedstorming method for collecting ideas from a group brainstorm. This will be done due to limited available time from the participants and also due to the fact that the method provides a good idea yield for the needed time investment.

3.3 Interviews

Unstructured
In unstructured interviews the interviewer does not prepare questions, but instead allows the conversation to flow freely. The interviewer also does not try to guide or probe the interviewee (Bhat, 2018).

Semi-structured
During a semi-structured interview, the interviewer may focus on certain topics of interest relating to the overarching subject. Unlike in an unstructured interview, the interviewer may probe deeper into certain comments given by interviewee in order to clarify their statement or get a more in-depth opinion. Furthermore, in this type of interview, the interviewee is free to discuss the topics that they find relevant, while the interviewer acts predominantly as a guide for the conversation (Bhat, 2018).

Structured
Before the structured interview takes place, the interviewer prepares the questions beforehand and limits the questions to only those which have been prepared. The interviewer also strictly guides the interview making sure that nothing is discussed which is beyond the scope of the prepared topic list (Bhat, 2018).

The project will use semi-structured interviews when needed. This is to ensure that the topic that needs further input from the interviewee gets discussed in-depth. However, this style of interview also does not limit the interviewee from adding information, which in their eyes, would be relevant or important in regards to the discussed topic.

3.4 Stakeholder analysis

In order to understand the benefits of the stakeholder analysis and how it works, the term itself should be defined. Brugha & Varvasovszky (2000) define a stakeholder as "actors who have an interest in the issue under consideration, who are affected by the issue, or who - because of their position - have or could have an active or passive influence on the decision-making and implementation process". Thus a stakeholder may be any person or a group of people who may be affected or could have an effect on the issue or product in discussion. On top of this, Sharp, Finkelstein & Galal (1999) further propose that stakeholders can be separated into 4 main categories which are as follows:

- **Users:** people who use the product on a daily basis (primary users), those who interact with the product infrequently (secondary users) and those who never interact with the product, yet are effected by its introduction (tertiary);

- **Developers:** those individuals who are responsible for developing the product. It is worth noting that the interests of the developers may differ from the final users.

- **Legislators:** any person or governing body which provides guidelines for the usage of the product and may affect the development or operation of the product.

- **Decision makers:** a single person or group of people who are involved in the development of the product and have the power to make decisive actions regarding the future of the product. Examples may include managers or financial controllers.

Once the stakeholders have been sorted into the groups, they are then ranked on "Interest in project" and "Influence on project" on a scale of low, medium or high. Stakeholders are ranked in this manner to better understand who has an interest in the project and who has the power to influence the project.

3.5 Requirement analysis

Scenarios of use

Scenarios may be useful in determining how a product will be used and hence may aid in predicting what could be the potential issues (BoK, n.d.). In this case, the product being developed will not require any physical interaction, however, scenarios may still be an important tool in the development process. Scenarios may be useful in this project as they will allow the developer to see how the final user may use the product and what the issues with it may be, hence allowing the marketing video to address these facts which will hopefully prevent most inconveniences.

MoSCoW analysis

MoSCow is a prioritisation technique which helps to manage priorities during development of a product. MoSCoW corresponds to Must have, Should have, Could have, Won't have and lets the developer prioritise functionality or features (Agile Business Consortium, 2017). This method will be especially useful once a lot of information is gathered from the stakeholders and other ideas are developed. Furthermore, the requirements which will be prioritised in this method will be further broken down into functional and non-functional requirements to have a better overall image of what needs to be implemented in the final prototype.

3.6 Evaluation

Formative evaluation

Unlike summative evaluation where the evaluation is performed once the majority of the development of the product is already completed, formative evaluation aims to help "form" the product. Formative evaluation is performed during the development of the device often in an iterative manner, with the goal of identifying and eliminating problems in the product (BoK, n.d.). This will be especially important in the development of the video as no prior examples could be identified and hence a significant amount of testing will have to be performed.

Think aloud testing

In this testing method, users are asked to think out loud about what they are thinking and how they are feeling as they perform a desired task or as the case with this project - watch a marketing video (BoK, n.d.). This method is especially useful in combination with formative evaluation as the combination of methods allows for identification of problems early on meaning that those same problems can be dealt with quickly. This type of testing will be used in conjunction with an online questionnaire to collect verbal and emotional opinions regarding the campaign video which cannot be reliably gathered from a questionnaire.

4. Ideation

In this chapter a number of methods used for idea generation will be implemented and the outcomes from idea generation will be presented. The stakeholder analysis will be used to identify potentially influential and important users of the marketing campaign. Once the stakeholder analysis is complete, an individual brainstorm will be performed to gather initial marketing campaign video ideas. Hereafter, a group brainstorm session will be organised and enacted to further progress the previously developed campaign ideas or come up with a wider variety of potentially implementable concepts. Interviews will also be held with previously determined stakeholders in order to get a more thorough insight into their opinions of what a marketing campaign video should contain. Furthermore, personas will be used in the ideation phase to better understand the potential effects of the marketing campaign on the user and by what means the campaign's message can reach the user. Lastly, a preliminary list of requirements will be formulated for use in the Specification phase of the project.

4.1 Stakeholder analysis

Users

The users or receivers of the marketing campaign are all the individuals who see the campaign video and the supplemental material via the shared channels. Even though the campaign will be made to predominantly appeal to the baby boomer generation, it is possible that members of other generations may still come into contact with the video. Since the audience cannot be controlled due to the wide-reaching audiences of social media, these secondary users will also be included in the stakeholder analysis. Secondary users may include: children, students and working adults as these people may end up seeing the advertisement on television or on social media websites. Furthermore, secondary users may also be healthcare institutions and doctors. It is possible that health institutions, such as hospitals and insurance companies, may utilise the campaign video to bring awareness regarding preventative healthcare, while doctors may use the video and the supplemental material to inform the patients about possible alternative treatments.

Developers

The author is the only developer responsible for the development of the campaign video. His role is to ensure that the product in development takes into account all the determined requirements and to ensure that the product appeals to the target population and hence is able to perform its function of informing about abdominal breathing.

Legislators

As the device for which the marketing campaign is being developed is a consumer device and not a medical device, the number of legislators is reduced significantly. The legislators predominantly depend on where the campaign will be shown and hence in a lot of the cases that platform will become the legislator. Some legislator examples include: Facebook, Twitter, Youtube, Instagram, national and international television channels, and local or international newspapers. However, it is also important to note that the Netherlands has a Dutch Media authority ("Commissariaat voor de media"), whose role it is to oversee audiovisual content being broadcasted within the Netherlands (CvdM, 2019). It is important to note, that the Dutch media authority does not censor or regulate, but instead seeks to ensure a level playing field amongst Dutch broadcasters.

Decision makers

The two clients of this project, Ben Bulsink and Parviz Sassasian, both are decision makers regarding this product. This is because the product should match their goals and visions as much as possible in order to yield the best results. Furthermore, the supervisor and critical observer, Kasia Zalewska Kurek and Erik Faber, are also decision makers. They impose a time limit on the project while also overseeing the progress of the project and aiding in certain areas when needed. Finally, the author is also a decision maker in this project. He makes the decisions on how the underlying message of the campaign will be portrayed and what the esthetics of the campaign will look like. All of these decision makers are noted in Table 1 below. Letter P stands for "Primary" user while S stands for "Secondary" user.

Stakeholder	Category	Interest	Influence
Working adults / baby boomers	User (P)	Medium	High
Children	User (S)	Low	Low
Students	User (S)	Medium	Low
Doctors	User (S)	High	Low
Insurance company	User (S)	High	Low
CvdM	Legislator	Low	Low
Media and social media platforms	Legislator	Low	Medium
Ben Bulsink	Developer/Decision maker	High	High
Parviz Sassasian	Developer/Decision maker	High	High

Paulius Barakauskas	Developer/Decision maker	High	High
Kasia Zalewska Kurek	Decision maker	High	High
Erik Faber	Decision maker	High	High

Table 1. Table containing the list of stakeholders which have been sorted by category, interest and influence as was described in Section 3.4.

The figure below (Figure 12) is a graphical representation of the stakeholders plotted on a influence vs interest graph. The stakeholders in the top right-hand corner (blue) have the most power and most influence.
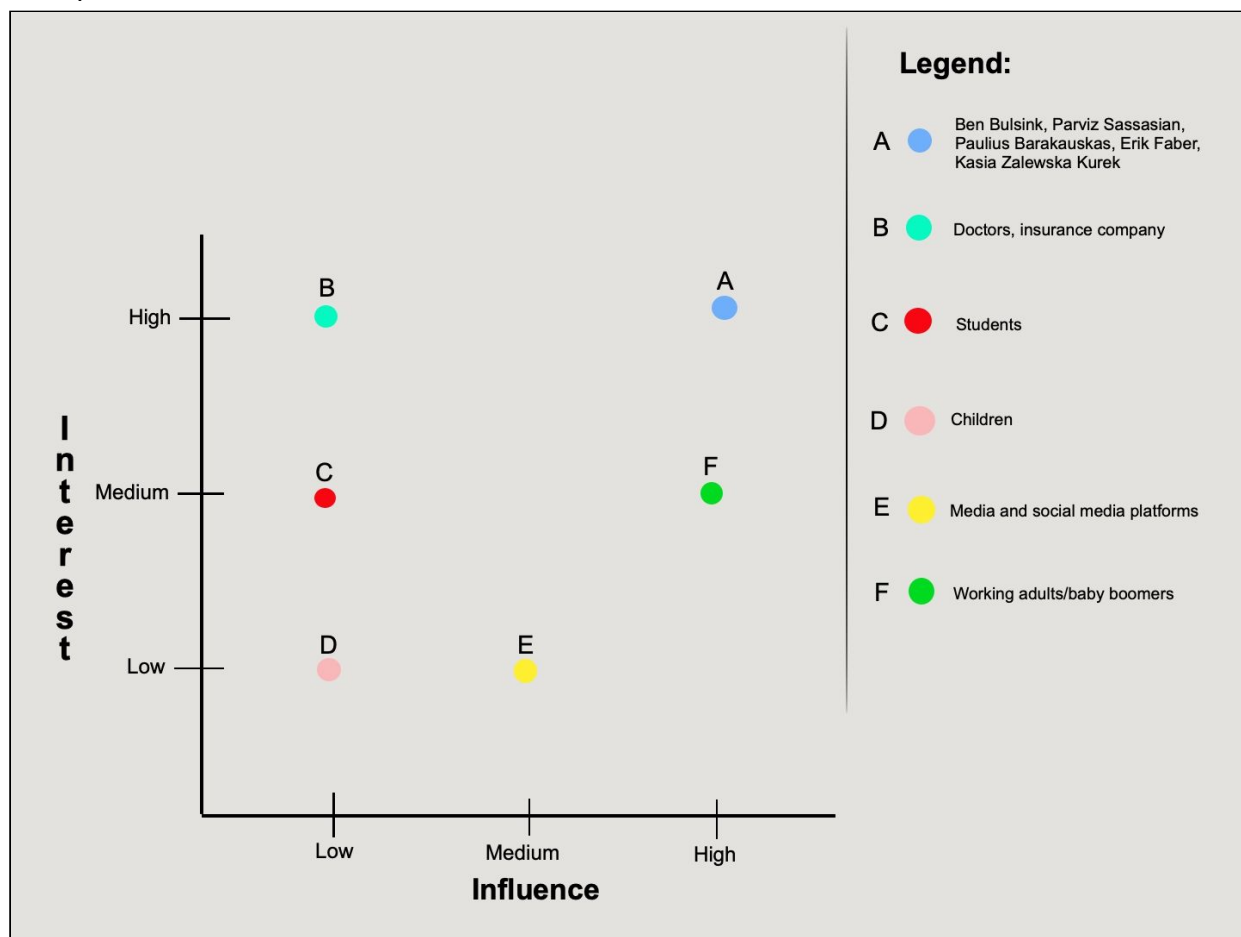
Figure 12. Stakeholder analysis chart

To sum up, the findings of the stakeholder analysis show that the clients, Ben Bulsink, Parviz Sassasian, the supervisor and the critical observer, Kasia Zalewska Kurek and Erik Faber, and the author are the most significant stakeholders. Even though there are plenty of stakeholders with interest ranging from low to high, their influence is generally low. The exceptions were that media and social media platforms scored medium, while working adults/baby boomers scored high on the influence scale.

Understanding the above information, baby boomers are second most influential group. Therefore significant efforts will be made to interview them in order to understand how they perceive themselves and what kind of marketing appeals to them the most. Finally, due to an abundance of students, a representative will also be interviewed to get their opinion on the essential elements which should be contained in the marketing campaign. It is further useful to interview students, as there is a high likelihood of these students being family members of baby boomers.

4.2 Individual brainstorm session

The marketing campaign will contain a marketing video and may potentially have supplemental reading material which may be presented on a stand-alone website mock-up. The individual brainstorm was conducted to gather initial ideas which could be presented to the client for initial feedback and hence gauge vision compatibility. Furthermore, the individual brainstorm served as a initial idea generation phase and a useful step prior to conducting the larger group brainstorm activity. The ideas which were generated, where mapped onto a digital mind-map which can be seen in Appendix 10.1.

4.2.1 Information based campaign

Having understood from Section 2 that baby boomers are interested in and need of plentiful information about the service or product that they buy, this idea aims to fulfil that need. A campaign based on this concept would present as much information as possible to answer any potential questions. This approach would require addressing the biological pathways with the help of which ailments are reduced, the statistical figures of the various illnesses, the philosophical background on breathing and the underlying technological mechanisms which enable the Airleviate device to track the user's breathing. This concept would be based on the idea that the baby boomer get interested in the fact that breathing is able to have such a measurable effect and then will need the data and information before they are fully convinced.

4.2.2 Advertisement-like campaign

This version of the campaign would be most similar to what is seen on the television and internet in terms of modern advertisements. It would contain relatively fast paced cuts, upbeat music and would show the Airleviate device being used in a number of different scenarios. It would also be important to include that the baby boomers using the device are utilising the device in an active setting, meaning that it is both non-obtrusive but also that the baby boomers are still physically active, unlike the stereotypical view that is imposed towards the baby boomers. The campaign video may also contain notions that the device may be used universally, disregarding age completely. This could be achieved by presenting a family having a picnic and the grandfather or grandmother taking off their Airleviate and giving it to a younger member of the family, for example, a student. This action could then be followed by a light hearted conversation about how students are really struggling with their mental health at universities.

4.2.3 Emotional campaign

In this version of the campaign, the emotional message would take priority and the device itself may potentially may not even be shown. Instead a link would be presented at the end of the movie with which the viewer could be able to find out more and potentially purchase the device. The reasoning behind this type of campaign is that emotional campaigns are more memorable as consumers nowadays tend to seek emotional relationships with brands (Kim & Sullivan, 2019). Furthermore, this campaign idea approaches marketing the device differently. Instead of trying to persuade the viewer into buying the product, the campaign aims to inform the viewer about potential health benefits associated with abdominal breathing and suggests that the viewer attempt to implement it into their life. If this tactic does not lead to a sale, it would not be a problem as the campaign may have still helped someone to discover the benefits of abdominal breathing. It could be argued that this type of approach may be altruistic in nature and in itself have great appeal to the baby boomers.

4.2.4 Evaluative remarks for individual brainstorm ideas

Even though all three ideas may potentially lead to a successful marketing campaign, it is important to evaluate each idea to determine its strengths and weaknesses. This is done in order to see which idea best fits the intended goal of the campaign.

The information based campaign has a strong foundation in data and functionality information which is what baby boomers seek. It would present a significant amount of information thus answering the large majority of potential questions which the viewer may have. Furthermore, the ample data which would be presented may have a few positive effects. It may cause the baby boomer to realise that they need to start taking preventative action in order to prevent significant health deterioration later on in their years. What may also happen is that the viewer may get curious to try out the device as some of the potential benefits can be felt in the short-term. This would lead them towards purchasing the device with the superficial goal of trying it, yet the use of the device could potentially lead to the formation of interest in abdominal breathing and hence the meaningful use of the device moving forward. Having looked at the positive aspects of this idea, the potential downsides will be addressed next. The fact that a lot of information will presented in the campaign may mean that it will not stand out from the other campaigns which have a similar approach. This would then mean that the impact of informing the user is minimal. Furthermore, this version of the video campaign does not attempt to make any sort of emotional connection with the viewer. Hence it is likely that the campaign would be forgotten soon after the initial exposure to it.

When evaluating the campaign idea which is most similar to a traditional advertisements, it is difficult to find any real benefits for its use. This style of campaign may be able to sufficiently inform the viewer about what is being advertised and give some superficial hints at the philosophy behind breathing. However, it is very likely that this type of campaign video would not gather a legitimate amount of viewer traffic as it fails to differentiate from the large number of other similar advertising campaigns.

Lastly, the emotional campaign version will be evaluated. The main benefit of this type of campaign style is that is likely to be memorable, relatively unique and makes an attempt to connect with the viewer on an emotional level. Unlike the style that is similar to common advertisements, this version aims to stand out by focusing on the emotional and philosophical message, potentially not even including the product in the video. The goal with this version of the video would be to capture the viewer's interest to such an extent that they start performing their own research after which they hopefully get interested in abdominal breathing and purchase the device. When analysing the potential downsides of this campaign version, a few potential issues arise. Firstly, depending on how the emotional and philosophical message is formulated, it might lead to viewer misunderstanding as they may not understand what is expected of them. Secondly, it is also possible that some viewers may find the non-traditional campaign video too different and may be put off from it.

In conclusion, the majority of the ideas which were evaluated have the potential to be turned into an effective marketing video. However, some common issues arise which relate to the formulation of the message towards the consumer or the method in which the campaign aims to stand out from the other campaigns. In the end, a strict conclusion on which idea should be implemented cannot be drawn. Further interviews and brainstorm sessions need to be performed in order to identify which idea has the closest alignment to the goals of the client and therefore may be iterated upon using the ideas from stakeholder interviews and the group brainstorm.

4.3 Group brainstorm

The following ideas were generated during a group brainstorm which consisted of six people. The ideas vary from specific implementations of scenes or audible cues to more generalised ideas which may be visualised in the video campaign. The following section will be split into two parts: the broader topics which may be further expanded upon and the minor details of the video campaign.

4.3.1 Broader topics

The gift of health

This idea would deal with the device as being something that is given as a gift of health. This would have both a direct and philosophical meaning in the video. An example of a scene were this could be used would be where the baby boomer is talking about their struggles and how they have been affected by them. After that a friend or a family member would give the Airleviate device as a means of treatment for the present and a means of preventative care for the future.

Interactive video series

In this idea the full-length video would be split up into smaller pieces of video where the user has the ability to choose a question which will be asked next. Another option could be that the campaign video asks the viewer to try to predict what the answer would be and once a choice was made, the actual answer would be played. This type of idea would be used to potentially show people who feel seemingly fine on the surface, are struggling within. It could also be a step-by-step guide of abdominal breathing where each video would explain a part of the technique to perform the breathing practices in the correct manner, but could also be used to slowly explain the philosophy of breathing as a sudden outpour of information may cause the viewer to lose interest.

Less technology - more functionality

The proposition here is that the video campaign should not try to sell the user on the technology of the device, but instead should focus on how easy to use it is and how you cannot see it on a day to day basis. The idea is based on an assumption that even though baby boomers are interested in technology, they would probably prefer the device to be less cumbersome to use rather than have many technologically advanced features.

Product which creates social interaction

The idea proposes that the video campaign should include how the device has the potential to create social interactions. This may be done by the baby boomer who wears the device showing it to other individuals and engaging in a conversation about health and preventative care at a later age in life. The social interaction could also be portrayed in terms two individuals discussing the how the device actually works in which case it portrays the device in a social setting but also informs the viewer about the functionality of the Airleviate device.

Same age - different demographic

The aim with this idea is to portray people from different demographics and different levels of affluence to show how they all have struggles regardless of their income level. The goal with this type of video would be to create empathy amongst the socially divided. This idea also proposes that at the end of the campaign movie, all the people from the different demographics come together in one scene and have a big group hug.

4.3.2 Details of campaign video

Emphasis on technique

It is important that the campaign indicates to the user what is the correct breathing technique with and without the breathing wearable. This is important as it is possible that the user may want to take off the wearable for the night, but may still want to benefit from abdominal breathing before falling asleep. Hence, either the instructional part should be contained in the main video or in a separate medium. Either way it should be easily accessible.

Strong slogan and hashtag

In order for the campaign to be memorable it should have a meaningful and memorable slogan. If the campaign will be published online on social media platforms, it should employ a short but effective hashtag which would allow the campaign video to be shared and to be spread.

Careful wording

The campaign should be careful not to tell people that their way of breathing is wrong or incorrect. This type of language may be seen as condescending and therefore push people away. Instead it should use carefully worded sentences to guide the viewer towards the correct implementation of abdominal breathing.

4.4 Stakeholder interviews

Stakeholder interviews were held to better understand the potential users of the Airleviate device. Three of the four stakeholders in this case were in the baby boomer age group, while one individual was a young adult, currently at university. The questions posed to the stakeholders aim to determine their digital activities and their awareness of mindfulness practices. These interviews aim to give a better understanding of how to appeal to baby boomers and how they should be approached with a campaign video. Questions for the stakeholder interview can be found in Appendix 10.2.

4.4.1 Baby boomer 1

- Individual states that he spends around 45min - 1 hour per day reading digital news. He does not participate on social media, except for YouTube on occasion when he needs to watch a tutorial for a tasks that needs to be done.
- Interviewee states that he seldom gets any links which are shared with him.
- Participant also says that he sometimes shares articles. However, does not share videos. Sharing is predominantly done via "Share" buttons on websites or by email. This predominantly depends on the type of relationship that the sender and the receiver have.
- When discussing preferred media sources, the interviewee mentions that he prefers teletext and topics.nl. He likes teletext as it provides concise summaries of the main news - something that he says is convenient. Furthermore, both sources, according to the interviewee, are trustworthy in the sense that they check their sources and also avoid trendy topics, instead sticking to the most important news.
- Interviewee mentioned that he does not watch a lot of television. Even if he does, it is predominantly news channels that he believes he can trust.
- Person could not recall any advertisement that stuck with him, however, does mention that in order for the advertisement to appeal to him, it should be about a topic that he is already thinking about and that real useable information is presented. He explicitly states that he does not appreciate when advertisements try to give a glamourous image of a device. Instead, he says, its much better to just give the real facts of the device.
- When asked about how participant deals with stress, he says that he tries to solve the underlying reason for the stress. However, if that is not possible, he then tries to go for walks in the surrounding nature and get away from the environment which is causing the stress.
- Participant believes that leaving the environment which is causing this stress is an effective way of dealing with stress.
- When asked about breathing or mindfulness exercises, he says that he does not perform anything. However, in the past due to a chronic illness, he did perform some breathing exercises to allow himself to breath better.
- He also says that he has not heard any of his colleagues using meditation or breathing exercises.

- A thing that the interviewee agrees on is that he would be more likely to try out the device if someone who he trusts or is close to was to recommend it to him. It is also important for him that the recommendation does not have any alternative motive other than to help you with whatever it is that you are struggling with.
- Participant has also heard of abdominal breathing and the fact that it is said to be the better way of breathing. However, he could not strictly identify ways in which it is better.

4.4.2 Baby boomer 2

- Estimates that he spends around 1 - 1.5 hours a day watching news broadcasts on television and reading physical newspapers which are delivered two times a day.
- Boomer does not receive many links to online media. Estimates that he receives them on average two times a week relating to work. Links relate to online media being sent by past students from past lectures.
- Prefers television as the main source of news and information. Furthermore, newspapers remain a dominant source of information for this individual. The boomer prefers newspaper as it is more convenient to read while doing other activities such as having breakfast. He also admits that it could also be related to old habits formed from the past. However, the main reason why he does not read the newspaper online or does not gather information online is the distractions which come with visiting websites. These may include: auto-play videos, flashy advertisements or other media which is used to catch attention. Additionally, they trust that the newspaper who publishes the articles, have done the review work and hence are portraying the full story, unlike many digital news networks which try to post as fast as possible without performing the full investigation.
- Boomer also mentions that he tends to get triggered by advertisements which are related to already existing interests such as tv-shows or books, however, this rarely happens.
- The stakeholder is not immediately able to come up with an answer as to how he handles daily stress. After some thought, he mentions that he always tries to make time for breakfast and dinner. Whereas in winter, he allocates specific times during the week for ice skating as it is something he finds passion in doing.
- Stakeholder does not perform any mindfulness or breathing exercises on a daily basis (does not perform them at all).
- Boomer has heard a number of colleagues who utilise breathing and meditative practices for their stress relief practices. However, also notes that it is not something people share freely.
- Individual does not belief that he would perform mindfulness/breathing practices unless they would bring about some legitimate benefits regardless of who recommends it.

4.4.3 Baby boomer 3

- Participant spends around 2 hours on a daily basis on various media sites, predominantly social media. This is as a result of work, but also educational purposes as the interviewee feels like she learns quite a bit browsing around.
- Traditional television and newspapers do not get a lot of time. Instead emails and social media get more attention.
- Interviewee also says that she receives a lot of article and video recommendations on a daily basis. This is predominantly from social media.
- Interviewee also says that she opens links she receives from people she trusts more willingly as she appreciates their opinion and is interested in why they sent her the article and how she can use it in her life.
- When asked about whether the interviewee shares links herself, she says that she does that sometimes. This most commonly done on social media website or news websites which have an option for easy sharing of information. Most likely via a "Share" button or the ability to send the article as a message through various social media websites.
- When asked about media networks which the interviewee prefers, her answers were that she prefers the NOS and for social media she prefers instagram and Twitter.
- Interviewee also does not feel like there are any advertisements with which she can connect. On the contrary, she is most of the time annoyed by their presence.
- She mentions that in order for an advertisement to appeal to her, it should connect with her on more than just gender and age parameters. This may include interests or work related topics.
- The method of dealing with stress for the interviewee is to be outdoors and doing physical activity or taking pictures.
- She also strongly believes that this method of coping with stress is highly effective.
- Interviewee also shares that she is herself a lot more relaxed, more approachable and easier to connect to after she has been out in nature for some exercise.
- Interviewee also says that she performs abdominal breathing when she is unable to fall asleep. She says that she learned it a long time ago and has been using it since. However, the breathing exercise is only used before sleeping and not during the day for calming down.
- When asked about colleagues which perhaps do meditation or breathing practices, she could recall a few people who actively do either breathing or meditation and could also recall some names of colleagues who, according to her, definitely know about the subject. However, the topic is not often discussed in the family and hence she could not say whether anyone from the family circles would have anything to say about this.
- She believes that if someone from the closer circles was to recommend breathing practices, they would be more likely to try it. Furthermore, she states that it should be portrayed in more practical terms rather than just relating it to mindfulness which is sometimes quite vague.

4.4.3 Student

- The student states that if she were to add up all the time that she spends during the day being on various kinds of social media, it would most likely add up to 5 hours a day. This time is predominantly spent on Instagram.
- She also mentions that on a day to day basis, she receives a lot of links from friends and university colleagues to watch various types of videos on YouTube.
- She also says that she quite frequently shares videos with other people, be it family or friends. However, the video which she shares then either has to be humorous or has to have an educational undertone and should potentially benefit the receiver who watches the video. Otherwise she would not share the video.
- The interviewee says that she prefers Instagram and Facebook because that is were she is able to interact with most people. Whereas she likes YouTube since it is a place where she can learn about topics which interest her.
- Regarding the topic of advertisements which she is able to connect with, the interviewee states that she tries her best to avoid them by utilising ad blocker, skipping ads or muting them. In general, she is not able to connect to any advertisements as most of the time they are trying to sell things to you which you did research on recently. However, in the rare instance that an advertisement is related to a positive message and is done in a creative way, then she is willing to watch it and often times is able to connect to it.
- When asked about specific examples, the interviewee could not provide concrete examples. However, she did mention that most of the advertisements that she saw online and caught her interest were related to sci-fi, politics or giving a new perspective on everyday topics.
- When asked about ways in which the student handles stress, she mentioned that when she feels uneasy, she usually performs breathing exercises. She did not expand on the methodology which she uses. However, she did mention that she starts to take deep breaths and tries to think positive thoughts.
- She also thinks that the methods of breathing that she currently uses, are quite effective in reducing her stress levels when they heighten.
- When asked about whether the student partakes in any sort of breathing or mindfulness practices on a daily basis, she says that she does not follow one particular track of breathing or mindfulness practices. Instead she adapts a combination of the two into something that effectively calms her down when she is stressed.
- The student also says that she knows quite a few people who are active with the idea of mindfulness and perform various kinds of meditation. However, she also says that these people are generally young. When we think about her parents or older relatives it becomes a lot more difficult to come up with people who would be willing to partake in such activities.
- She says that she would be more willing to try something that she usually does not do if someone from the close circles was to recommend it to her. This is because she usually values their opinion and is generally curious about trying out new activities.

- In regards to abdominal breathing, the student seemed to be the most knowledgeable from all of the participants of the stakeholder interviews. She says that she has heard of abdominal breathing, practices it herself to some extent and could mention some of the physiological benefits which are brought about by using it. These benefits that she mentioned include: higher blood oxygen levels, slower and more controlled breathing, slower heart rate and potentially weight loss. She also talked about how abdominal breathing is also a form of conscious or aware breathing rather than automatic breathing.

4.5 Preliminary concept

After analysis the background research, talking to the main stakeholders and performing various brainstorms, the following ideas have come together to form the preliminary concept for the marketing campaign.

Type of campaign video

The campaign video will be filmed in the style of an interview with characters answering questions and discussing what health means to them in front of the camera. The reasoning for this choice was two-fold. Firstly, a campaign video which is more focused on awareness and spreading the message is more closely aligned with the goals of the client. Secondly, it has been shown that emotionally charged videos stand out better from the cliche videos while also staying in the memory of the viewer for longer (Kim & Sullivan, 2019).

Message

The message of the campaign video will be predominantly focused on understanding what role health has in people's life and how it can be improved by utilising abdominal breathing. However, the message will be delivered without preaching or forcing it upon the viewer. It is intended that the message comes across to the user when they start reflecting on what was said in the video thus making them feel like they have found the underlying message of the campaign video themselves.

Aesthetic

The look of the campaign video will be minimalist with the video itself containing the subject who is talking and a lit studio background. In some instances, in order to give the video campaign a more genuine feel, scene shots will include some behind-the-scenes-elements such as parts of a light stand or the studio background. This will be done to further differentiate the video from mainstream advertisements.

On screen person count

The video will most likely contain no more than 5 people in the campaign video. This will be done to ensure that the viewer has the ability to remember their faces and connect to their story. Furthermore, limiting the number of people in the video ensures that the length of the video is not too long, yet the stories of the people have enough time to be developed so that the viewer can connect with them.

4.6 Personas

Two personas will be used to better understand the lives of potential users and how certain ailments are preventing them from living in comfort. These will be Mirel van der Giessen (Figure 13) and Elias Olson (Figure 14). Understanding their difficulties and potential uses of Airleviate in treatment of those difficulties, allows to create a marketing video which addresses the most important points and hence has a higher likelihood of being seen.

4.6.1 Mirel van der Giessen

Figure 13. First persona mock-up

4.6.2 Elias Olsson

Elias Olsson, 64

Good listener   Joyful   Spontaneous   Calm

Age: 64
Work: School teacher
Family: Married, 3 kids
Location: Gothenburg, Sweden

Personality

Introvert — Extrovert

Thinking — Feeling

Sensing — Intuition

Judging — Perceiving

Goals

- Make sure every child has the knowledge to achieve whatever they seek
- Build a log cabin in the Swedish forest
- Sustain his family's nutrition from their family garden

Frustrations

- The amount of work that is given by his school
- Poor sleep quality
- Gradually increasing stress levels

Bio

Elias is secondary school teacher in Sweden. He has lived most of his life in rural parts of Sweden, but has moved into Gothenburg in the last 15 years. Even though he loves his job and working with young adults, he finds it harder and harder to cope with the amount of work that the school expects him to do. In some occasions he is unable to rest properly due to the stress that he feels relating to the accumulated work. He has also noticed that since he has been sleeping poorly, some of the relationships with members of the school staff are feeling a bit tense. Lately he has been feeling that his work is draining his energy and has started to think that it may be time to quit being a teacher and retreat into a more rural part of Sweden again for a calmer lifestyle.
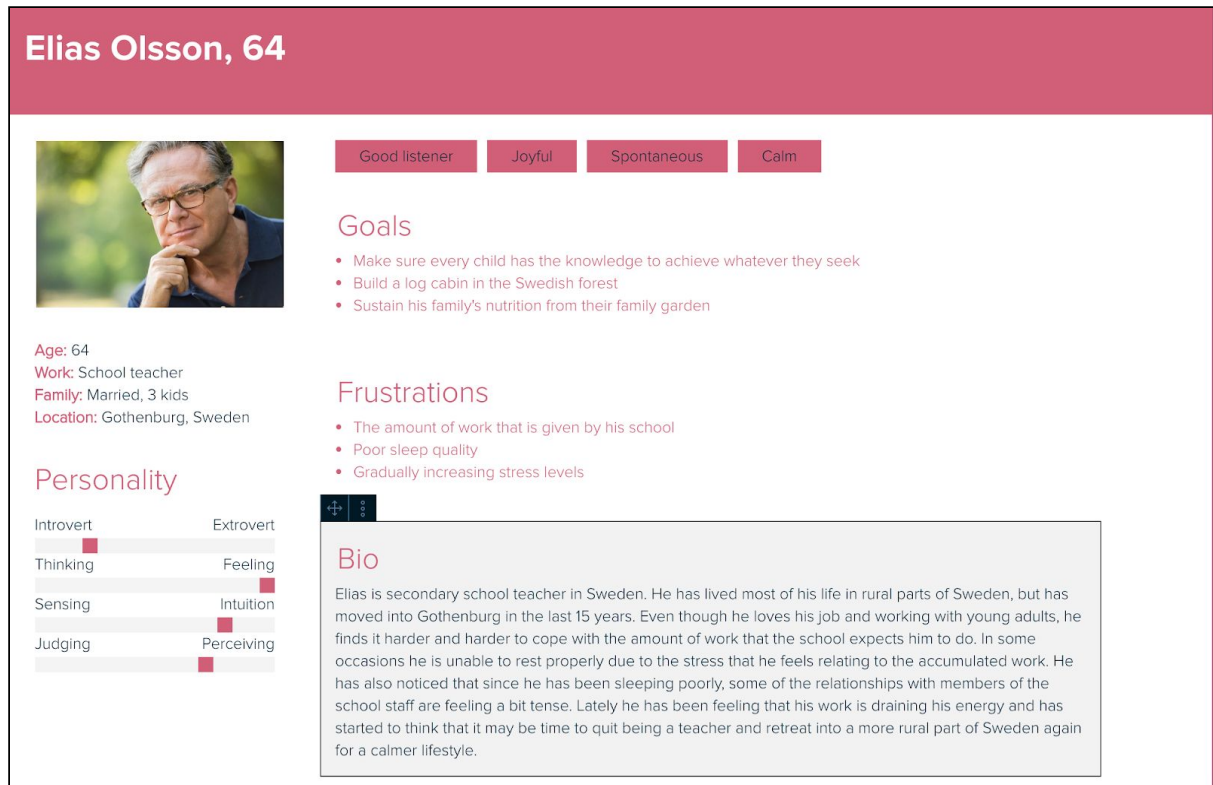
Figure 14. Second persona mock-up

4.7 Usage scenarios

4.7.1 First usage scenario

Mirel van der Giessen is an active baby boomer who spends a large part of her time living actively. It may be work related travel, where she has to hike through various terrains to reach villages with which she works, or her daily afternoon jog in the local park. However, over the past few years she has gradually developed a worsening case of back pain. This has eventually lead to Mirel having to take pain medication before she goes on a run or having to carry an ample supply of medication if she is out on work related travel. Recently, she went to a physiotherapist who tried to relieve Mirel's back pain. Unfortunately, they were not successful, even after prolonged efforts, which meant that Mirel was in bad mood as she returned home. Mirel has come to a point now where she feels quite hopeless as it seems to her that the doctors are unable to treat her ailment and traditional pain relief and inflammation medication has become almost non-functional at this point. She returns home upset. Later that evening while Mirel is browsing through Twitter, a recommended video in her timeline catches her attention. The video's title is "Breathe - the key to calmness and achievement". She clicks on the video and starts to watch it. Initially, Mirel does not entirely understand what the overarching theme of the video is, yet is still intrigued by the personal feel of the video. Once the characters in the video start discussing more serious topics, Mirel starts to feel slightly emotional, understanding that the individual in the video is also suffering on a similar level. She also feels slight relief in knowing that there are other individuals who are in a similar position as her in terms of physical ailment and as a result gets more concentrated on the video. As the video progresses and the character starts discussing abdominal breathing and what may be its potential benefits, Mirel finds herself in complete awe. However, quickly becomes critical towards all the mentioned benefits, but nonetheless continues to watch the video until the end. Once the video comes to a close and the link to an external website for more information appears, Mirel swiftly clicks on the link to find out whether the information which was talked about in the video has any scientific basis. When she comes to the linked page, Mirel quickly finds that the website is simple to navigate and also has clear sections for those who want to do further reading on abdominal breathing. Within the sources section of the website, Mirel finds a long list of peer-reviewed studies discussing the various benefits of abdominal breathing. One study in particular catches her eye which discusses how abdominal breathing may alleviate chronic pains. She quickly opens the study and starts reading it. Mirel is surprised to find out that such a relatively simple task may have such significant impact. Having glanced over the scientific paper, Mirel finds herself feeling slightly relieved and in a better mood, knowing that there is another option for her to try. Feeling inspired, Mirel starts to investigate the website itself in order to see what kind of tutorials or other means she may potentially find on the website. She comes across a "Abdominal breathing" section of the website where all the benefits have been carefully described. Once she reaches the bottom of the page, Mirel is surprised to find that there is a device that she can buy which has the function of teaching her to use abdominal breathing. Without thinking twice, she orders the device. She feels a rush of relief and excitement course through her knowing that she will be able to take this frustrating matter of back pain into her own hands.

4.7.2 Second usage scenario

Since Elias Olsson is a school teacher, he has plenty of interaction with school students. At one point the students noticed that their teacher was not acting like himself anymore. So one day, a few more outspoken students asked whether the teacher was feeling ok. Rather surprised by the answer, Elias shortly summarised that the workload has been too much for him which has lead to poor sleep at night and lack of clarity during the day. Some time later one of the students comes up to Elias and says that they saw an advertisement which talked about how breathing can help with better sleep and reduced anxiety levels. The student also says that he does not really remember the title of the video, but says that he saw the use of "#breath4Life" at the end of the video. Elias, now feeling quite curious about the video, opens the Twitter app on his phone and types in "#breath4Life". A video which has been liked by numerous people, including one of his peers, shows up in the search field. Elias starts watching the video but pauses halfway as he feels himself getting emotional. Later that evening, while Elias is working on the immense amount of work that he has to finish for the next day, he remembers the video he watched during the day. He opens up the Twitter app and restarts the video. This time, however, he looks at the video and the things being talked about there with more scepticism and negative emotion. This is most likely due to the associated stress of his late evening work. He finishes the video but this time he does not feel the initial emotional strength. Instead he seems a bit aggravated that some campaign video tried to connect to his emotions. After some more work, Elias decides that it is time to go to bed and goes off to prepare for bed. Once he bed, he is unable to fall asleep as is the regular case for him nowadays. He tries for calm himself and fall asleep, but is not successful. His mind then stumbles upon the topic of abdominal breathing which was mentioned in the video. He decides that there is nothing much to lose and so starts breathing deeply and slowing. After some time he feels himself getting relaxed and his mind coming to rest. The next thing he knows is that he is waking up to the sound of his alarm. He looks slightly perplexed as for the first time in a long time, he actually feels rested. He goes off to do his regular morning routine before heading off to work. While having breakfast, he is surprised once more, that he is able to enjoy breakfast and its subtleties unlike the usual act of consuming food matter for the sake of energy. Elias opens up the campaign video once more, skips towards the end and clicks on the link which redirects him to the website for the breathing wearable. He starts glancing over the facts of how abdominal breathing is able to help, but that is not what he is after. Then finally he finds the section about the breathing wearable. He looks at the price and its functions and rather quickly decides to purchase the device, knowing that the long-term effects of knowing how to perform abdominal breathing may really have immense influence on his personal and professional life.

4.8 Preliminary requirements

Following the findings from brainstorms, interviews with stakeholders and usage scenarios alongside personas, a list of preliminary requirements can be determined. The preliminary requirements for the campaign video are listed below and may be subject to change during the Specification and Realisation phases. The preliminary requirements are split into functional and non-functional for clarity.

Functional
1. Utilises a hashtag at the end of the video;
2. Links to an external website for further reading;
3. Uses real-life humans (no animated characters);
4. Utilises slow classical background music;
5. Produced in a shareable medium and format (.mp4 format);
6. No longer than 10 minutes;
7. Uses no more than 4 people of target audience in the movie;

Non-functional
8. Has minimalist colours and style;
9. Uses non-judgemental language;
10. Understandable for an English speaker;

Some of the requirements will be given a further explanation below:

Requirement 5 discusses that the campaign video should be produced in a shareable medium and format. This means that the end product should be produced in a digital format. Furthermore, the length, the language and the digital media attributes such as hashtags should encourage and enable the video to be shared in the digital media space.

The emphasis of requirement 9 is that the campaign video is careful with its language use. This means that the language used in the video should not portray actions in absolute terms of good or bad. Instead it should aim to create a balanced opinion thus allowing the viewer to be open to the option of changing their opinion and trying a new method of calming themselves. Furthermore, being careful with language also means not referring to the baby boomers with terms which would make them feel uncomfortable or would make them feel bad about their age.

Requirement 10 dictates that the final video should be understandable by an English speaking individual, however, does not impose the need for the video itself to be in English. This is done to ensure that if the characters of the movie are more comfortable speaking their mother tongue, they have the option to do so. Nonetheless, in order to satisfy requirement 10, the video would have overlaid English translations in sections of the video where the characters are speaking in their mother tongue.

4.9 MoSCoW analysis for preliminary requirements

Having determined the preliminary requirements, it is important to prioritise those requirements for later use in the Specification and Realisation phases. This will be done using the MoSCoW analysis method described in Section 3.5. The end result of the initial prioritisation can be seen in Table 2 below.

	Must	Should	Could	Won't
Functional	Link to an external website for further reading	Utilise a hashtag at the end of the video	Utilise slow classical background music	
	Use real-life humans	Use no more than 4 people of target audience in the movie	No longer than 10 minutes	
	Produced in a shareable medium (.mp4 format)			
Non-functional	Uses non-judgemental language	Minimalist colours and style		
	Understandable for an English speaker			

Table 2. MoSCoW analysis table of initial requirements

5. Specification

This chapter aims to build upon the ideas developed in the previous chapters in order to further specify them in preparation for the realisation phase. In order to do this, the content and structure of the campaign video is discussed in more detail. Also, the intended style and aesthetics of the video are further developed and example shots provided. Finally, the requirements of the product are re-evaluated and refined using the MoSCoW analysis to provide a second iteration of product requirements.

5.1 Content and structure

Content

The content of the campaign video will be focused on the questions which will be posed to the interviewees and their responses. This is done to ensure that the viewer has fewer items to focus on and can spend more mental effort on understanding and connecting to the individuals in front of the camera. The first version of the questions was created by the author, after which feedback was requested from the clients and the supervisors. After updating the questions, they are the following:

1. Is health something you think about?

2. Would you say health is the same as a complaint free body or is it something else?

3. What measures do you take to keep yourself healthy?

4. Has your understanding of health changed over time and if so, what was the cause?

5. Do you see a relationship between mental, emotional issues and your physical health?

6. Are there any health related insights that you would have wanted to know earlier?

7. Have you experienced family, social or economical impacts related to your health?

8. What would be your message to people who are struggling with their health?

The questions and hence the discussion that will be filmed will not include any mention of the breathing device. This is done intentionally for two main reasons. Firstly, the viewer may feel a higher affinity to the campaign as it is not trying to sell them anything. Instead it tries to inform them about the importance of health. Secondly, any mention of the technical specifications of the device may lead to people getting distracted from the deeper message of the campaign thus making it less effective.

5.2 Focus of the campaign

The underlying aim of the campaign is to make the viewer more reflective and as a result more aware of their own health. After discussing with the client and performing stakeholder interviews, it was clear that health is not a topic which gets a lot of thought time dedicated to it and hence would need to be addressed first before trying to sell the Airleviate device.

5.3 Style and aesthetics

5.3.1 Colours and lighting

The style of the campaign video will be minimalist in terms of colours and elements present on screen. A white studio background will be used alongside white studio lighting (5600K). The lighting set-up for the interview will follow a similar arrangement to the figure below, however, will be subject to change depending on the properties of the particular studio in which the interview will be recorded.
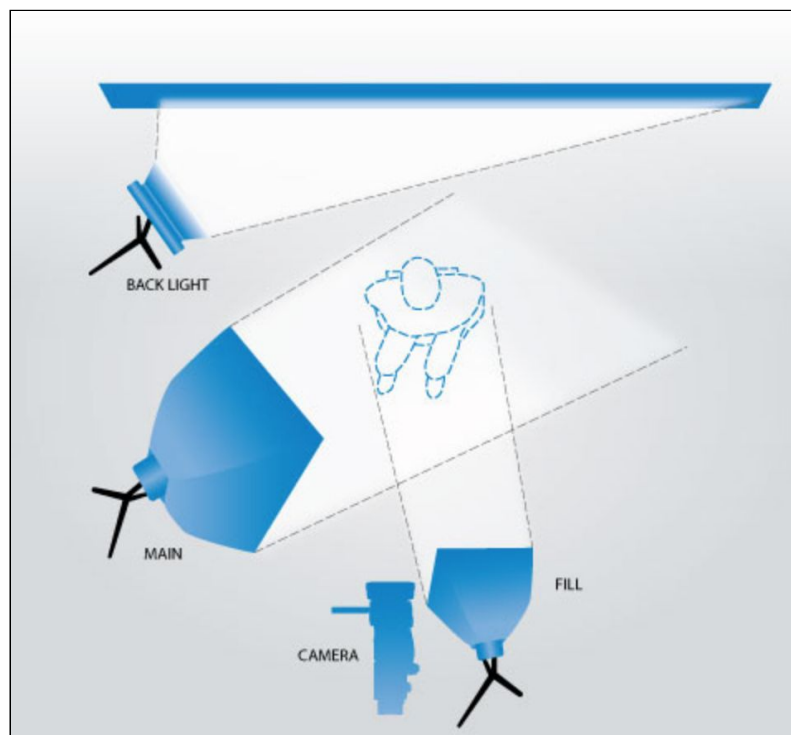

Figure 15. Camera and light setup diagram

5.3.2 Microphone set-up

An external microphone should be set-up around 2m directly in front of the interviewee at a distance approximately 1m off the ground in order to capture their answers. An external capture source will allow for more freedom with audio quality, enhancement, and editing.

5.3.3 Stylistic elements

Conscious effort will also be put into giving the campaign video an honest and genuine feel. This will be done by having certain shots of the interview contain blurred out pieces of behind the scenes equipment such as lighting stands or the studio background. Furthermore, the starting shot of the video will have an empty stool onto which the interviewee will sit down onto once the camera has already started rolling. Additionally, shots of people prior to the start of interview will be used in the movie. This may include them looking around or checking their glasses, if they wear them. All of these elements will give the movie a less refined feeling and hence will hopefully be more trustworthy. Examples of types of elements which will be included on purpose can be seen below.
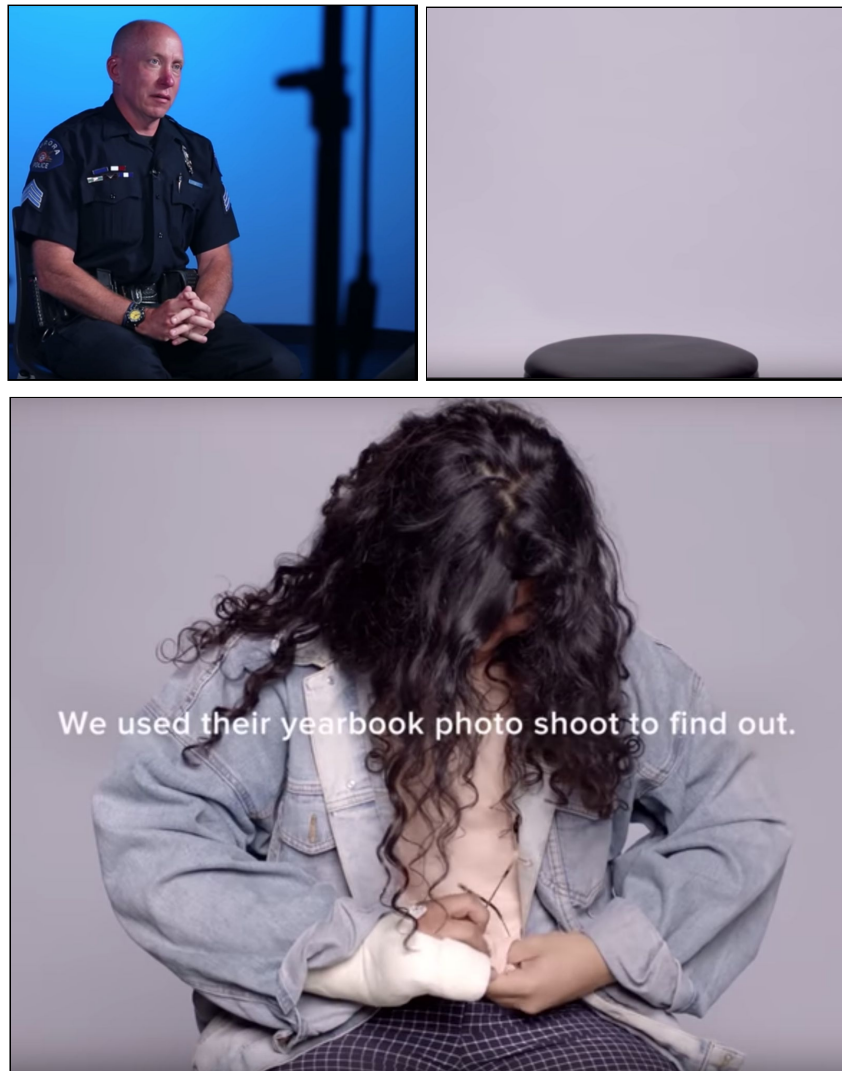
Figures 16a, 16b, 16c. Top left (16a) - behind the scenes equipment used in the final production of interview, to create a more genuine and honest feeling; Top-right (16b) - an empty stool onto which the interviewee will sit on; Bottom (16c) - interviewee's preparation for the interview is used in the final production as a means to humanise the interviewee, instead of only showing them correctly answering all the questions and sitting still.

5.3.4 Types of shots

The video will contain three distinct types of shots. The complexity of the cinematography will be limited. This will be done to achieve a calmer feel and prevent the user from getting distracted by a high large number of different shots or intricate cinematography. The types of shots which will be used in the movie are listed below alongside examples.

5.3.4.1 Front shot

Figure 17. Example image of front shot

The goal of the front shot, an example of which is shown in Figure 17, is to give the viewer a good look at the interviewee and their body language. Thus it is a good shot to use when introducing the person to the audience or when a shot is needed which shows how the question affects body language. This shot will be taken using a 50mm Canon lens at a 50mm focal length.

5.3.4.2 Close up

Figure 18a (top), 18b (bottom). Examples of close up shot

The side or front close up shot (seen in Figure 18a and 18b) will be used during the video to show the intricacies of the human thought process in action. Once a question is asked, a close up shot of the individual will hopefully show their facial expression shift towards a more serious demeanour as they are trying to come up with an answer. This type of shot may also be used when trying to portray a serious message or statement. If one of the interviewees was to share an emotional message which is intended for the audience, then a close up shot may be very effective in delivering the message. This shot will be taken at 100mm focal on a 18-105mm Nikon lens.

5.3.4.3 Side shot

Figure 19. Example picture of a side shot

The side shot, seen in Figure 19, similar for the front shot, is a good way of introducing the individual and also gives a different perspective on them. This shot can also be implemented when people naturally look to one side once they start thinking. Hence the side shot can provide with a powerful shot of the human thought process in action. This shot will be taken at 16mm focal length on a Sony 16-50mm lens.

5.4 Storyboard

An early stage storyboard was created to test the concept of the interview marketing campaign. The full early stage storyboard can be found below. During stakeholder meetings, it was decided that the concept had potential. However, the initial ideas would also need additional information regarding preventable disease. This was implemented to appeal to the baby boomers' desire for in-depth information when analysing a topic. The adjusted storyboard exerts for this additional piece can also be found below.
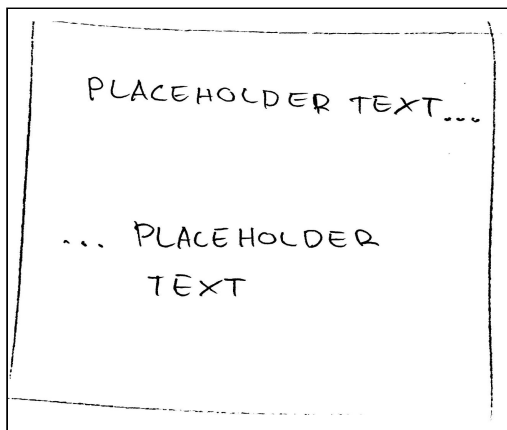

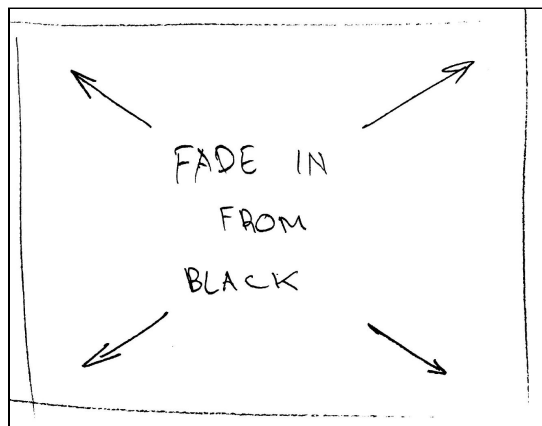Figure 20a. The initial scene will fade-in from black to the video footage

Figure 20b. Introductory sentences will be shown to briefly describe movie
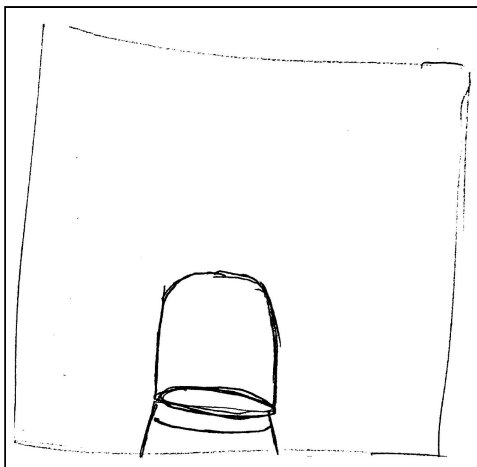

Figure 20c. An empty stool is the opening shot. No interviewee is sitting on it initially
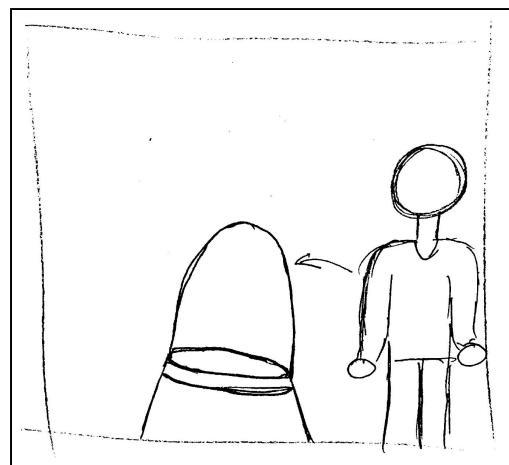

Figure 20d. Interviewee walks onto the set and settles down, while camera is already recording
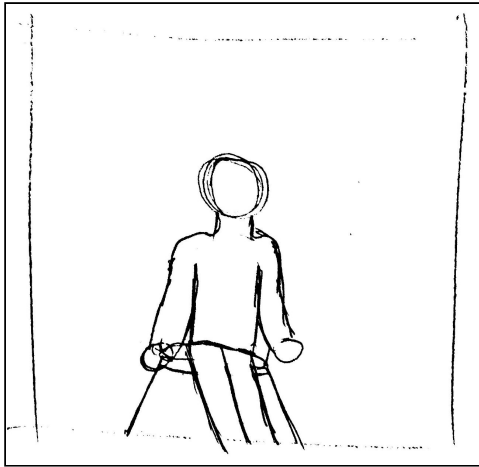
Figure 20e. Interviewee settles down onto the chair placed before the camera. Author checks all camera, meanwhile the interviewee is captured looking around and acting naturally
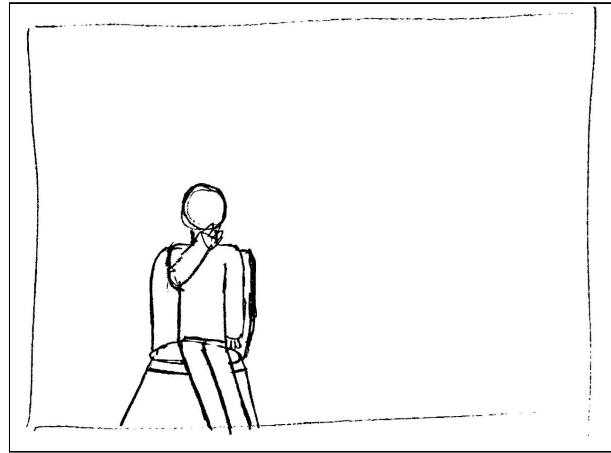

Figure 20f. Once the participant has settled down, they are asked whether they feel ready to start and the first question is asked. The shot shows the interviewee coming up with an answer
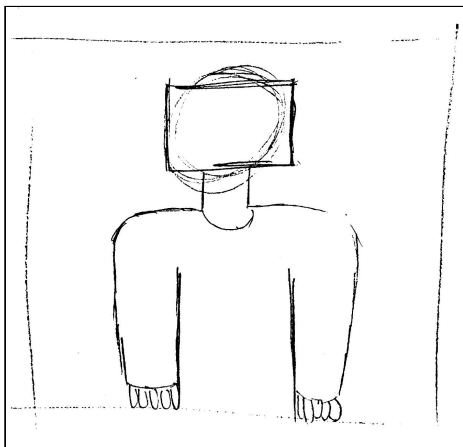

Figure 20g. Using a zoom lens, the shot is focused on the interviewees eyes
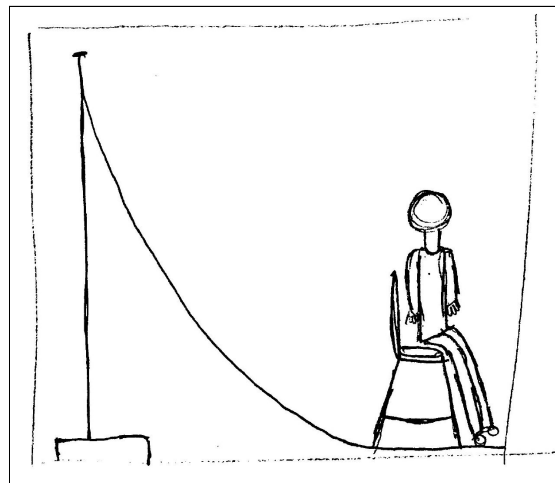

Figure 20h. A side shot showing the filming equipment is used to give an honest feel to the video
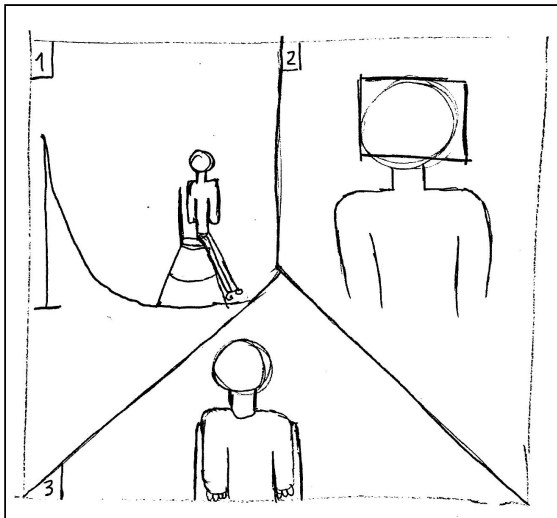
Figure 20i. During the main section of the video, three types of shots will be used to make the video less complicated and so easier to watch
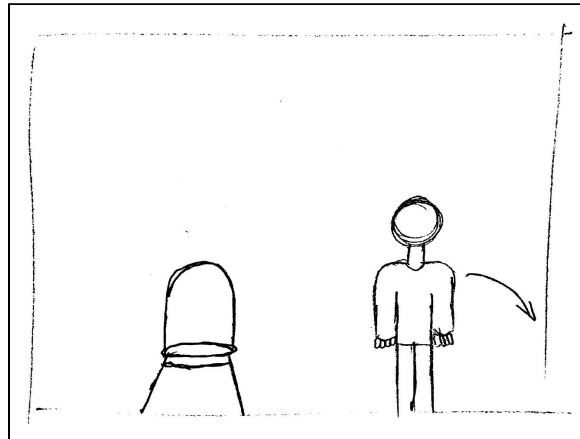
Figure 20j. At the end of the video, the interviewee is instructed to walk off the set while the cameras are still recording. This provides a clear ending narrative
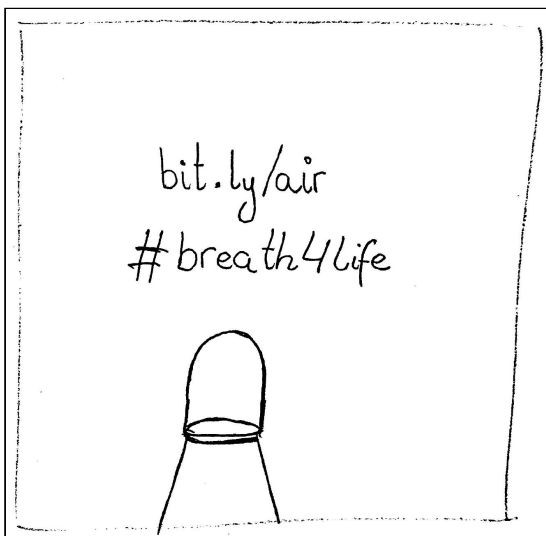
Figure 20k. At the end of the video, a screen is shown which directs the viewer to an external website and the hashtag is also presented
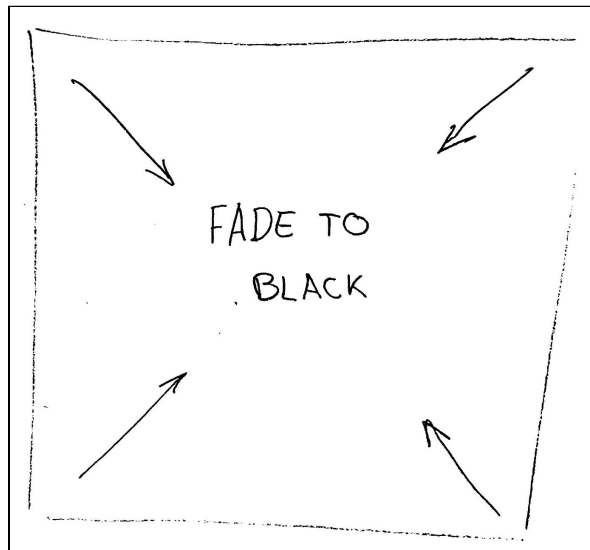
Figure 20l. In the end the video fades to black

It is also important to note that the main body of the interview and hence the campaign video, is represented by Figure 20i. This means that the campaign video was recorded and edited as a question and answer (Q&A) session. Each successive answer by the interviewee is edited to be shown from one of the three different angles (Figure 20f, 20g, and 20h) and therefore is represented in Figure 20i as a combination of three different shot angles.

5.5 Second iteration requirements

Having specified the campaign video elements in more detail further requirements for the product were developed. They are listed below.

Non-functional:
1. Has to use the front, side and up close shots;
2. Has to include honesty improving elements (see Section 5.3.3);
3. Has to have a three light setup (see Section 5.3.1);
4. Audio has to be recorded on an external stereo microphone;
5. Video has to contain 8 questions (see Section 5.1);

5.5.1 Final requirement MoSCoW analysis

Table 3 (below) contains the prioritised list of final function and non-functional requirements for the prototype. These will be used in the Evaluation phase of the report to check whether the campaign video was successful in achieving the predetermined requirements and hence whether the campaign video was successful.

	Must	**Should**	**Could**	**Won't**
Functional	Link to an external website for further reading	Utilise a hashtag at the end of the video	Utilise slow classical background music	
	Use real-life humans	Use no more than 4 people of target audience in the movie	Video is no longer than 10 minutes	
	Produced in a shareable medium (.mp4 format)			
	Uses non-judgemental language			
Non-functional	Understandable for an English speaker	Minimalist colours and style		
	Use front, side and up close shots;	Video has to contain 8 questions;		
	Use honesty improving elements	Audio is recorded on an external stereo microphone		
		Video is lit with a 3 light set-up		

Table 3. MoSCoW analysis table of final requirements

6. Realisation

This chapter aims to determine and describe the tools which were used in order to develop and produce the final prototype of the marketing campaign video. Furthermore, the filming and editing process will be described. This will then be followed by a description of tools (both physical and digital) which were needed to film and edit the campaign. Finally, a decomposition of the final campaign video will be performed in order to facilitate the realisation process of the campaign video.

6.1 Tools

In order to develop the marketing campaign, a set of both physical and digital tools will be used in the process. Hence it is important to determine what tools the author has experience with, whether the tools being considered have the functionality to enable the creation of the marketing video which would satisfy the requirements, and finally whether the author has access to such tools.

6.1.1 Physical tools

6.1.1.1 Cameras and microphones

Canon 7D

The Canon 7D camera is a cropped sensor digital camera capable of recording high-definition (HD) video and taking pictures of 18 megapixel resolution. It was first introduced to the market in 2009 by the Canon corporation. This camera was used with a Canon 50mm f/1.8 in order to achieve the front shots used in the marketing campaign.

Nikon D800

The Nikon D800 is a full-frame digital camera capable of capturing HD video and images of 36.2 megapixel resolution. It was released to the market in 2014 by the Nikon corporation. This camera was used alongside a Nikon 18-105mm f/3.5-5.6 IS lens to capture the up close shots used in the marketing campaign video.

Sony a6300

The Sony A6300 is a mirrorless digital camera capable of capturing 4K video and images of 24.2 megapixel resolution. It was released to the market in 2019 by the Sony corporation. This camera was used with a Sony 16-50mm f/3.5-5.6 IS lens to achieve the side shot used in the movie.

Tascam DR70D Mark II

The Tascam DR70D is a line of film microphones which are capable of capturing high quality stereo audio from an built-in or plug-in microphone. This device was used as a stand-alone microphone to capture audio for the marketing campaign video.

6.1.2 Digital tools

6.1.2.1 Editing

Adobe Premiere Pro (2017 Edition)
Adobe Premiere Pro is a timeline based video editing software program. It allows the user to build movies from clips, edit audio and video and perform simple animations. The program was used to cut-down the raw footage and extract the best moments from the various interviews. Furthermore, the clips' colour and sharpness was also adjusted using Premiere Pro and its "Adjustment Layer" property.

6.1.2.2 Sound

Adobe Audition (2017 Edition)
Adobe Audition is a toolset which is designed to help users record, edit and manipulate the recorded audio in numerous forms to enhance its quality. Audition was used in the making of the marketing campaign video when the background noise from the photo studio, where the interviews were recorded, needed to be minimised.

6.1.2.3 Digital resources

Audionetwork.com
Audionetwork is a paid music repository which is predominantly used by TV networks and movie makers when looking for audio resources for their projects. The website allows the user to filter the music they get offered by: mood, type of instrument, genre and length of music track. This website was the source of the background music which plays during the marketing campaign video. The title of the song is: Of Hope by Bryce Jacobs.

Flaticon.com
Flaticon is a icon and digital picture repository site where users can search through a variety of digital material which they can use for free as long as they credit the author. A PNG file of the letter "A" was used in the video to take the place of the Airleviate logo, which currently does not exist. The icon is called "Letter A in a black circle free icon" by Dave Gandy.

6.2 Description of filming

This subsection aims to briefly describe the steps of the interview process.

6.2.1 Interview process

The interview process was split into three distinct sections: the introduction, the interview and the debrief. Each of the sections will be described next.

Introduction

Since the interviewees did not receive the interview questions prior to their arrival and had little information about what the goal of the marketing campaign video would be, the aim of the first few minutes of discussion were to tell them about the project, while also ensuring that they did not feel stressed. These discussions would take place in the photo studio with the whole filming set-up already in place - this allowed the interviewee to acclimate to the environment and therefore feel less intimidated by sitting in front of the camera and lighting equipment. Once the consent form was signed, the interviewee would be prompted to take a seat on a chair placed in the studio. Once the interviewee had sat down, the author would initiate the recording of the video and would check whether all three cameras were operating as required. This brief gap between sitting down and starting the interview allowed to capture the interviewee acting naturally, which could be used in the final marketing video as a means of portraying honesty.

Interview

Before starting the interview, the interviewee would be asked whether they feel alright to begin, and once a positive confirmation was received, the first question would be asked. The author tried to connect with every interviewee on a more personal level by actively listening to their answers and asking follow-up questions when appropriate. This lead to the interviewees sharing personal stories and deeper opinions about health and their relationship with the subject. Once the answer was given to the last question, the interviewee would be thanked and prompted to walk off the set. This allowed to capture shots of the individuals walking away and hence added to the honesty feel of the final marketing campaign video.

Debrief

Once the interviewee would walk of the set, the author would ask how they felt and how they found the interview itself. This was done to ensure that the interviewees felt good after the interview had finished as the questions were in some cases quite personal thus requiring answers which were emotionally charged. In the end, all of the interviewees left the filming set with a positive outlook and in a reflective mood.

6.3 Decomposition

In order to simplify the workflow of the final marketing campaign video, individual components of the final product are identified and broken down as shown in Figure 21. This enables a clearer view of how the captured interviews should be processed in preparation for the final campaign and how the various digital and physical tools are interlinked.
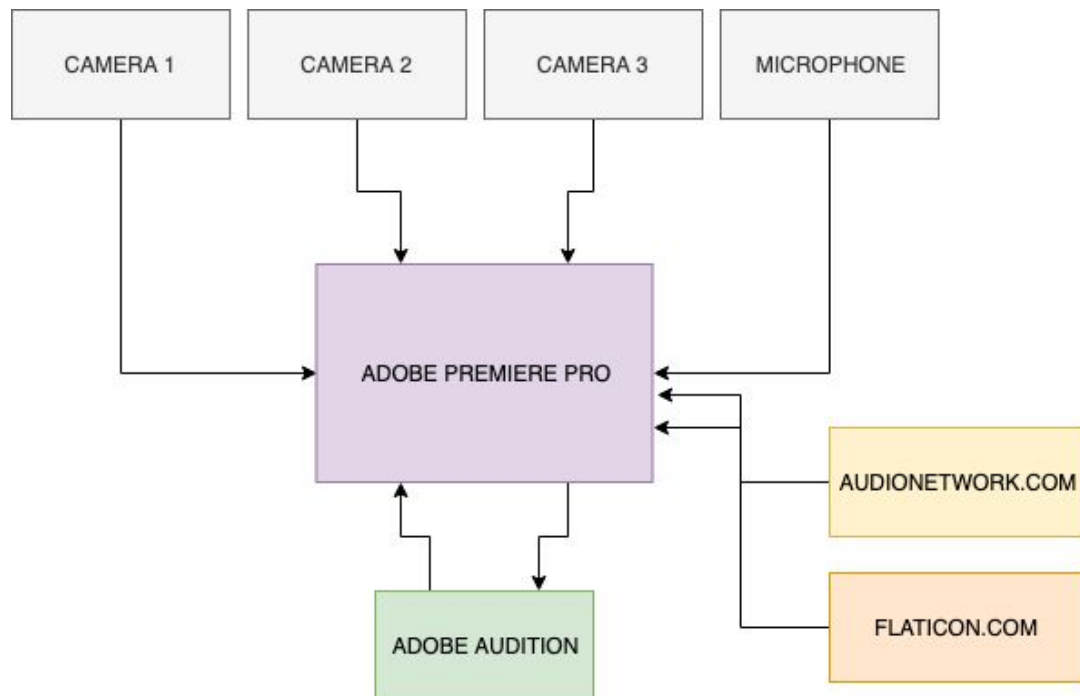

Figure 21. Decomposition chart

6.3.1 Raw data capture

Following the proposed structure and shot types described in the specification function, the interview was filmed simultaneously on three different cameras, each with a different camera angle at 1080p resolution. The questions were also asked according to the proposed question list as described in Section 5.1. Overall, the filming of the interviews was successful, however, there were issues related to lack of experience in filming. Firstly, one of the interviewees came to the interview dressed in a striped shirt. This resulted in a strong moire pattern showing up on the interviewee's shirt, which meant that one angle, equating to a third of the footage for that particular interview, could not be used. The author should have made brief instructions so that the interviewees could have known as to how to dress. Secondly, the photo studio which was used for filming of the interviews had a relatively loud hum coming from the surrounding machine room. This meant that the interview audio had to be severely manipulated in order to reduce the distracting noise. This heavy audio manipulation resulted in relatively poor audio quality which could not be fixed without rerecording the interviews.

6.3.2 Editing

Editing was performed with Adobe Premiere according to the adjusted storyboard and the scenario which was discussed with the main stakeholders. Initially the raw footage from the three cameras was imported into Adobe Premiere. Then the external audio was synchronised with the imported video footage from each of the interviews. Once the audio and video were synchronised, the author started reviewing each interview (Figure 22a), cutting out the imperfections of each interview. Imperfections included filler words, points which did not come across clearly or the author giving loud verbal feedback to the interviewee. Once the best parts of each of the interviews had been selected, the author started building up a story from all of the answers given by the interviewees, ensuring that a balanced view was presented and that no one particular interviewee was given more time than the other. When the initial story was laid out, adjustment layers were added which sharpened slightly out of focus shots and made the dark shots more visible. After completing the esthetical changes to the video, the audio needed to be manipulated to reduce the background hum of the photography studio. The audio manipulation was done via Adobe Audition (Figure 22b). Firstly, a noise print was taken to tell the program what is the sound that should be removed, after which the noise processing effect was applied to each noise clip of the video to reduce hum of the studio. In the majority of instances, the noise reduction had minor effects on the sound of the interviewee's voice, yet in some clips, the sound manipulation was more prominent.

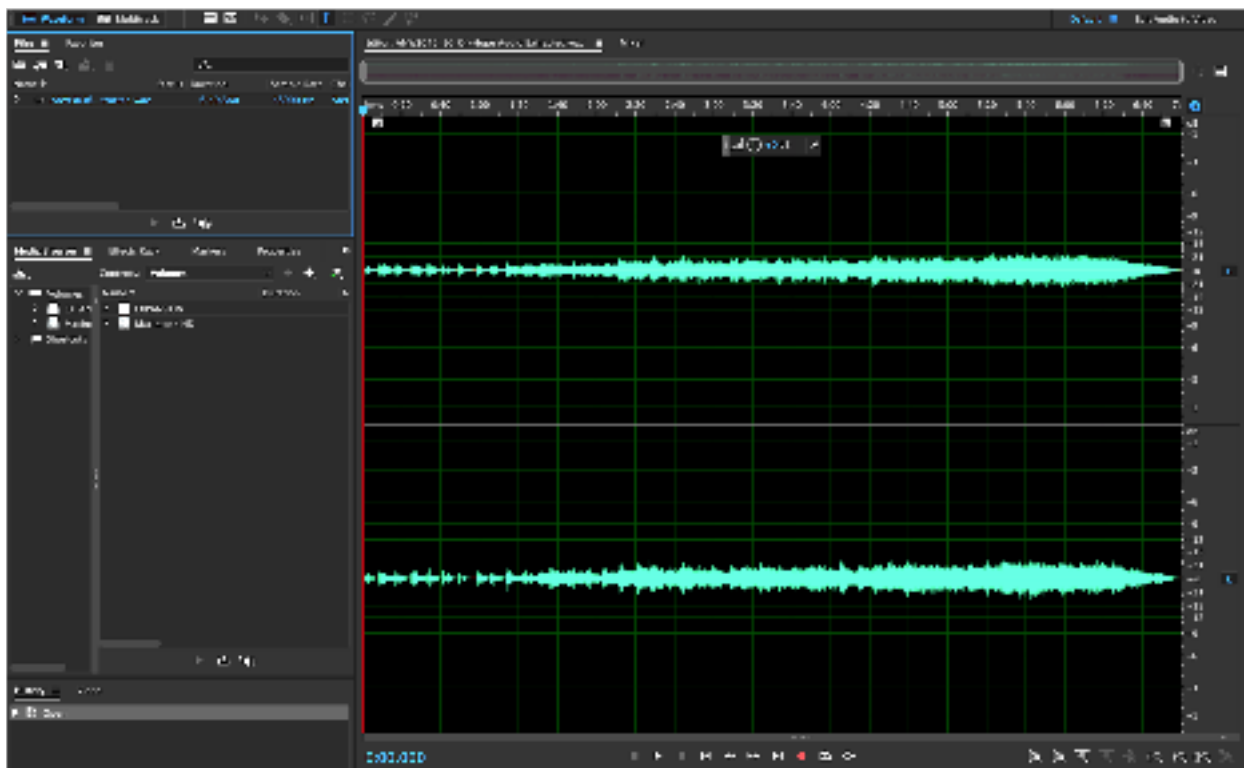Figure 22a. Screenshot of editing process in Adobe Premiere Pro

Figure 22b. Screenshot of editing an audio file in Adobe Audition

6.3.3 Visual and audio resources

Once the main editing of the story was complete, the author started looking for music which would fit the intended reflective mood of the campaign video. Attempts were made to look at environmental documentary musical scores, however, a good musical fit was not found. After more research, audionetwork.com was identified. A trial account was created and filters on the platform were set to show reflective violin or classical music. "Of hope" which ended up being the soundtrack of choice for the campaign was the first track to be suggested by the platform. After listening to other musical scores, no track seemed to fit as well as "Of hope" and hence it was implemented in the campaign video.

The end of the video also was supposed to contain the logo of the company designing the device. As this logo could not be identified, a placeholder letter "A" in a black circle was used. This was chosen as the breathing wearable device is called "Airleviate". The logo icon was downloaded from flaticon.com.

6.4 Conclusion for realisation

Using the aforementioned physical and digital tools while following the broken down workflow diagram, the marketing campaign video was finalised. Even though there were no serious setbacks regarding hardware or software failures, the lack of experience regarding the use of Adobe Premiere Pro software resulted in a very slow editing process. Online resources were used to help remove knowledge-gaps, however, in some instances, the author had to ask for help from various colleagues and friends as the issues were very specific and online tutorials on solving those issues were not available.

The set-up of lights and cameras went smoothly. This was likely because the author has had previous experience with digital photography which shares a large portion of concepts with digital filmmaking. Furthermore, the photography studio which was used for filming the interviews, had been in previous cases used by the author both for personal projects but also for other university related work. This meant that the equipment available at the studio was already tested and its functionality was already known. This reduced the chances of incorrect set-up or malfunction.

Having finalised the integration of all individual components into the final marketing campaign video, the realisation phase is complete. Consequently, the final step of the Creative Technology design process will follow. The evaluation phase will entail testing the developed marketing campaign video with the main stakeholders against the previously determined aims of the campaign and the requirements which were set out for the product. This will be done to test how well the campaign performs in that regard and hence its success will be measured.

7. Evaluation

This chapter discusses the steps which were taken to evaluate the marketing campaign video. The goal is to describe how the product was evaluated after which the results of the user testing will be discussed. Initially, the questionnaire results will be discussed relating to the final requirements set in Chapter 5. After these results have been discussed, an in-depth discussion will follow regarding the verbal feedback which was received during the user tests.

7.1 Campaign video evaluation

User tests were performed on the author's personal computer. This was done to enable a faster data collection process due to the busy nature of the available participants. Performing the user tests with the author's own device enabled him to go to the participant's offices or homes without the need to arrange for them to accommodate the author's schedule.

The individuals who were tested were the main stakeholders meaning that they were one of the following: potential future users, clients or project supervisors. Potential users were further selected to fit the baby boomer age cohort. A total of 9 individuals participated in the user testing.

The questionnaire which was presented to the users tested both functional and non-functional requirements. It consisted of multiple choice questions, short answer questions and questions were the user had to select their agreement or disagreement with presented statements on a six point Likert scale. The six point scale was chosen as it forces the user to choose, thus avoiding neutral answer, which leads to more insightful results.

The testing was performed with the computer brightness and sound set to maximum. Initially the background story of the campaign was briefly described, after which the video was shown. A number of participants requested whether they could pause the video to share their opinions during the video watching phase. However, they were requested to watch the video without pausing. This was done intentionally to allow the viewer to be drawn into the story and hence increase the chances that the campaign video succeeds in the goals for which it was created. Once the viewing of the video was finished, the participants were immediately asked to fill out a questionnaire designed to test whether the campaign video has succeeded in achieving the final requirements which were set in Chapter 5. After the completion of the questionnaire, the user was asked what they thought about the video. The responses were noted down to allow for reflection and analysis in the later parts of the evaluation part of the project.

7.1.1 User testing interview questions

The following questions were asked after the campaign video was watched and questionnaire was filled out. The aim of the questions was to gauge opinions which could not be reliably recorded in the questionnaire. The questions were:

1. In general terms, what do you think about the video?

2. In your opinion, were you truthfully represented in the video? (applicable to participants of user tests who were also interviewees for campaign video)

3. In your opinion, what could have been better accomplished in the video? What were the main shortcomings?

4. Do you think this is a convincing concept?

7.2 Evaluation results

Table 4 (below) contains each of the finalised requirements which were set out in the Specification chapter. They will be used to determine whether the prototype was successfully implemented. Comments relating to each of the requirements are also added for deeper insight and clarity. Boxes in green indicate a requirement that was successfully implemented, while a yellow/orange box indicates that the requirement was partially implemented.

Number	Requirement	Check
Must have		
1	Link to an external website for further reading (FR)	X
Comments	Even though the video contains a shortened link to an external website for further reading, a significant portion of the users could not recall what it was and some even did not recall seeing it. This may be due to the fact that the link was shortened (bit.ly/air) and not the traditional www.airleviate.com/air.	
2	Use real humans (FR)	X
Comments	Four individuals were interviewed for the movie. From all the user tests, it was shown that everyone could recall all four of the interviewees.	
3	Produced in a shareable medium (.mp4 format) (FR)	X
Comments	The video was exported using a H256 codec which allows to have high definition video which does not require too much space. Furthermore, the video has .mp4 format which is accepted in most platforms which allow to upload video.	

4	Use non-judgemental language (FR)	X
Comments	Conscious effort was put in during the creation of the interview questions and the interview itself to avoid labelling the individuals as old or alternative works with the same negative connotations.	
5	Understandable to an English speaker (NFR)	X
Comments	The interviewees gave their answers in clear English. Some of the interviewees had an accent, however, it did not hinder comprehension.	
6	Use front, side, and up-close shots (NFR)	X
Comments	All three shots were used. Most of the users who were tested noted that the shots were something they did not initially expect and were pleasantly surprised.	
7	Use honesty improving elements (NFR)	X
Comments	All three honesty improving elements, which were chosen in Chapter 5, were used in the video. When the users were asked to classify the video using preselected words, the top two words to describe the campaign were "honest" and "personal".	
Should have		
8	Utilise a hashtag at the end of the video (FR)	X
Comments	Even though a "#breath4life" hashtag was shown at the end of the video, the majority of the individuals who were tested, could not recall that it was present, therefore this requirement was not fully implemented.	
9	Use no more than 4 people of target audience in the movie (FR)	X
Comments	The final video contained 4 individuals who fit the age range associated with baby boomers. As described in Chapter 5, this was done with the intention of preventing too many faces being shown and hence creating distraction. The questionnaire results showed that 100% of the users could recall the interviewees and were able to verbally describe their clothing or facial features.	
10	Use minimalist colour and style (NFR)	X
Comments	A number of user test participants explicitly stated that they could concentrate on what was being said more easily due to the fact that the overall look of the video was so simple and there were little to no distractions.	
11	Video has to contain 8 questions (NFR)	X
Comments	During the interviews, all of the 8 questions were asked. However, during	

	the editing process, the 6th question was removed as the interviewees did not provide answers which in the author's opinion add anything substantial to the campaign video.	
12	Audio is recorded on an external stereo microphone (NFR)	X
Comments	Even though the intention was to record the audio on a separate microphone in order to have more choice in editing it later, the sound ended up being low quality regardless. This was also mentioned by 4 participants, as it made it hard for them to understand what was being said.	
13	Video is lit with a 3-light set up (NFR)	X
Comments	The intention for using a 3-light setup was that it would allow for a simple yet dramatic lighting scene. During the first interview, however, the fill light (See Section 5.3.1) was too far away from the subject resulting in a strong shadow appearing on the subject's face. This misplacement was addressed by 3 participants of the user test.	
Could have		
14	Utilise slow classical background music	X
Comments	The music was successfully chosen as every individual from the user test made a comment regarding how well the music fit to the video.	
15	Video is no longer than 10 minutes	X
Comments	The final video is 06:43 in length, hence it satisfies the requirement. Furthermore, the majority of users were in various levels of agreement that the length of the video was adequate.	

Table 4. Final requirement evaluation table with comments and implementation success

7.3 Evaluation discussion

Even though most of the essential functional and non-functional requirements were successfully looked into and fulfilled, there were a number of critical remarks which were outside of the boundaries set by the user-testing questionnaire. These verbal comments will be discussed next.

Sound

The main comments regarding sound were that it was of a low quality. When asked to describe why they thought that the sound was of poor quality, the user test subjects often said that the echo made it difficult to comprehend what was being said. When asked if subtitles would have helped, the answers were mixed. Some users said that subtitles would

be too distracting for the minimalist look of the campaign video, while others said that they could aid in comprehension.

Another interesting comment which was given by one of the users was that it would have been a much better option to use a Lavalier microphone (often also called a clip-on microphone). This type of microphone would not have picked up as much background sound from the studio, but more importantly would have given the impression of the voice being closer to the user hence facilitating better connection.

Lighting

Some of the testers also mentioned that the strong shadow on one of the interviewee's faces was at times distracting as it was a lot different to the other interviewees. However, once it was explained that that particular interview was the first one which was filmed and the issue was recognised and resolved after that, they testers became a lot more understanding and admired the fact that changes were taken to prevent further lighting mistakes.

Question screen

A few of the users also mentioned that the time for which the question is shown on screen should be increased. They reason that when one sees the question, they start to think how they would answer the question themselves. However, due to the short period for which the question is shown, they are not able to come up with an answer themselves hence slightly reducing the impact of the campaign video.

Missing link to breathing

There were a number of user test participants who were slightly confused about the lack of a strong link to breathing. They understood the fact that the campaign was related to health, however, they oftentimes felt that a question about health could have made a stronger link to the device for which the marketing campaign was being developed. Another suggestion which was brought up regarding this issue was that most of the video could stay the same, however, towards the end a question regarding breathing could have narrowed down the theme of health towards breathing, almost like a funnel, and as a result create a stronger link to the device and also act as a stronger marketing campaign.

7.4 Further result discussion

Emotions felt after the campaign video

Looking at the results, it could be said that the goal of the campaign - to make people think about their own health - was achieved. The results from the questionnaire show that 88.9% (8 out of 9) participants thought about their health after watching the movie. Furthermore, the most common word used to describe the feelings felt after the campaign were "reflective" at 44.4% (4 out of 9) and "curious" at 22.2% (2 out of 9).

Baby boomers relating to interviewees

The large majority of the participants of the user tests were in agreement that they could relate to the stories being shared in the marketing campaign. The degree to which they agreed, however, differed. Figure 23 showing the results for this question may be seen below.
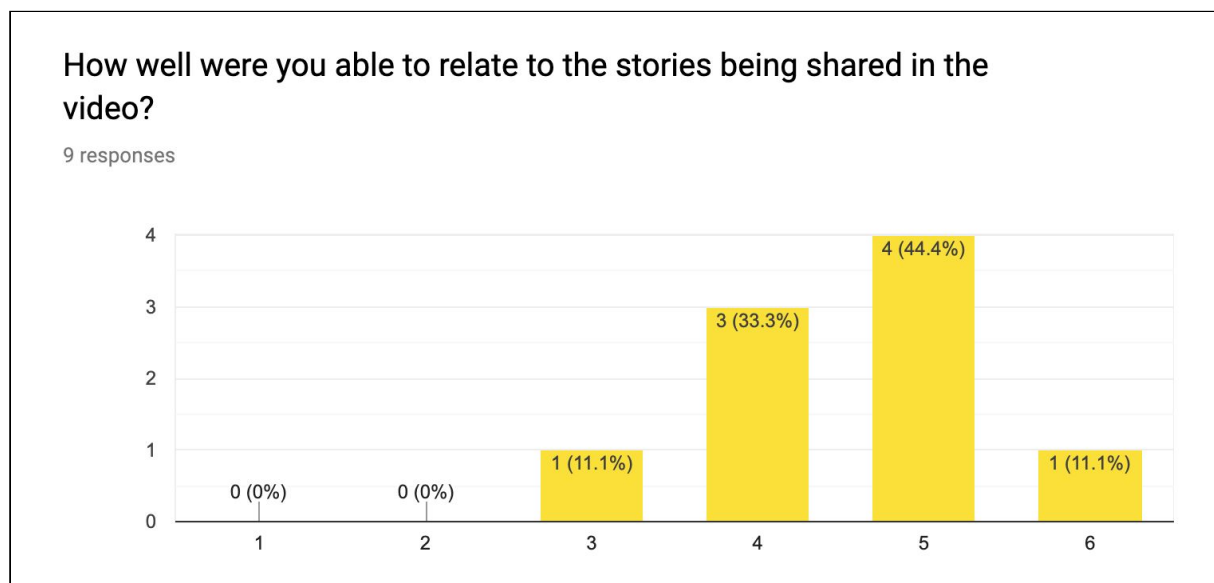

Figure 23. Graph showing data relating to the relatability of the video

Likelihood of campaign being watched

77.8% of respondents (7 out of 9) said that they would be more likely to watch this type of advertisement campaign compared to a regular campaign which is made to try to sell them a product of a service. This is positive news, as it indicates that the likelihood of the video being watched and hence the message reaching the people is greater. It furthermore, gives support to the idea that people are more trusting and are more likely to watch those campaigns which do not immediately try to sell the audience some product or service. This should be kept in mind for potential future research or development.

Likelihood of video being shared or shown

The collected data shows that there would be a low likelihood of the video being shared or shown to other individuals. In both cases 55.5% (5 out of 9) people chose points on the Likert scale which indicate that they would not share and would not show the video to others. The degree to which they would not share or would not show the video differs. However, this finding is unfortunate and should be analysed in more depth. One idea is that the individuals who performed the user test do not generally share or show things they read or watch online, hence this video is no different. On the other hand, the campaign should aim to leave a big enough impact that it would trigger them to have discussions around this topic and share the video to others. At the current moment, the campaign video fails to achieve that.

8. Conclusion and recommendations

As the steps of the Creative Technology design process have been implemented and the final campaign video has been completed, this chapter aims to provide conclusions based on the work conducted in the previous chapters. The chapter further aims to determine whether the research question has been successfully answered and whether the goal of the campaign video has been achieved. Potential points for improvement along with recommendations and needed future work are also discussed.

8.1 Conclusion regarding aims of the campaign

Aims of the campaign

The aim of the campaign video was to make the viewer think about their own health thus making them more aware. This awareness would hopefully manifest itself in the form of curiosity about health which would eventually lead to the purchase of the Airleviate wearable. This approach was decided upon after discussions were held with the main stakeholders (potential users, supervisors, and clients) and it was found that the members of the target population had little knowledge regarding how breathing could influence mental and physiological factors.

Achieving the campaign aim

In general, it can be noted that the campaign video has achieved the aims for which it was created. As noted in the Section 7.4, almost every participant of the user test thought about their health, while also feeling reflective or curious. Furthermore, verbal statements from the author's colleagues during initial testing of the campaign video constantly referred to the fact that after the video they started wondering whether they are doing enough about their health and whether they should take more care regarding this issue.

8.2 Conclusion regarding research question

The research question for the thesis was: *"How to design a marketing campaign for a breathing wearable targeted at the baby boomer generation?"*. In order to sufficiently answer the research question a number of steps had to be undertaken. Firstly, the target population had to be understood. Therefore, extensive research was conducted into what were the troubles which cause them most distress. Once that was understood, it was important to determine how baby boomers should be approached in regards to marketing campaigns. It was determined that baby boomers need sufficient information before they are

willing to commit to a purchase of a product or service. Similar to the need for information, it was also found that the campaign video should not be too short, as time is needed to draw in baby boomers and provide them sufficient information. Finally, in-depth research was performed to determine the ways in which abdominal breathing can improve physiological and mental factors. It was especially important to find overlap between the illnesses which were lowering the quality of life for baby boomers and the potential ailments which could be prevented or eliminated by abdominal breathing. These overlapping illnesses and cures were used in the campaign video as examples of what types of illnesses could be prevented via implementation of abdominal breathing.

The campaign development was necessitated by the fact that the developers Ben Bulsink, Erik Faber and Parviz Sassasian have a working prototype of the Airleviate wearable which according to them will soon go into small-scale production. Hence they require a campaign video which would bring about awareness of health and will eventually lead to purchases of the breathing wearable.

The final campaign video was presented to a variety of stakeholders which included potential users, project supervisors and the project clients. Concluding, the overall agreement from the main stakeholders was that the campaign video forms a good basis for a marketing campaign aiming to sell a breathing wearable to the baby boomer generation - hence the research question can be said to have been successfully answered. The stakeholders also suggested that more effort should be given to elements of the video which relate to its shareability. These include making the hashtag more prominent and making the link more recognizable, while also more inviting to share. A suggestion was also posed that using a blueprint of the existing campaign video, a companion video could be created which would predominantly focus on the topic of breathing rather than health.

8.3 Future research

This subsection serves to describe topics which fell outside of the scope of this report, yet still need to be mentioned for potential further research purposes.

8.3.1 Completing the marketing campaign

As the video is just a part of the marketing campaign for the Airleviate wearable, effort should be allocated to determine the remaining elements needed to create a fully fledged marketing campaign aimed at baby boomers. This may potentially include creating a website which is linked at the end of campaign video instead of the current placeholder link. The website would likely have to contain a lot of information, both scientific and anecdotal, to illustrate the effects of abdominal breathing. This could be implemented in terms of scientific papers and personal stories from those who have felt the positive effects of abdominal breathing. Regardless of the campaign is designed, it has to bring about awareness of health to the baby boomer population. This is because during stakeholder interviews and user testing it was determined that this age cohort does not possess an in-depth understanding of all of the important meanings of health and hence do not address their health in a legitimate manner.

8.3.2 Video orientated on breathing

Taking information from the user tests, potentially a similar video the current one could be created, however, one which would solely focus on the effects of breathing rather than overall health. A number of people, who have in-depth understanding of the benefits of health, could give targeted messages to appeal to boomers. This would be important as it is likely not enough to only make the viewer think about their health (which was the goal of the current campaign video), but a solution should also be presented. The solution in this case being abdominal breathing, which can be further enhanced via the Airleviate device.

8.3.3 Factors influencing shareability

Finally, it is important to investigate factors which influence the likelihood of videos, articles and websites being shared. Results from the user tests indicate that the current campaign video does not effectively succeed in this regard, as most individuals stated that they would not share the video. This hence limits the spread of the video and therefore the potential influence it may have is reduced. Were these factors to be determined, they would allow the future marketing campaigns of Airleviate to have a significantly greater impact on their target population, regardless of the age cohort which is chosen.

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10. Appendix

10.1 Individual brainstorm mindmap
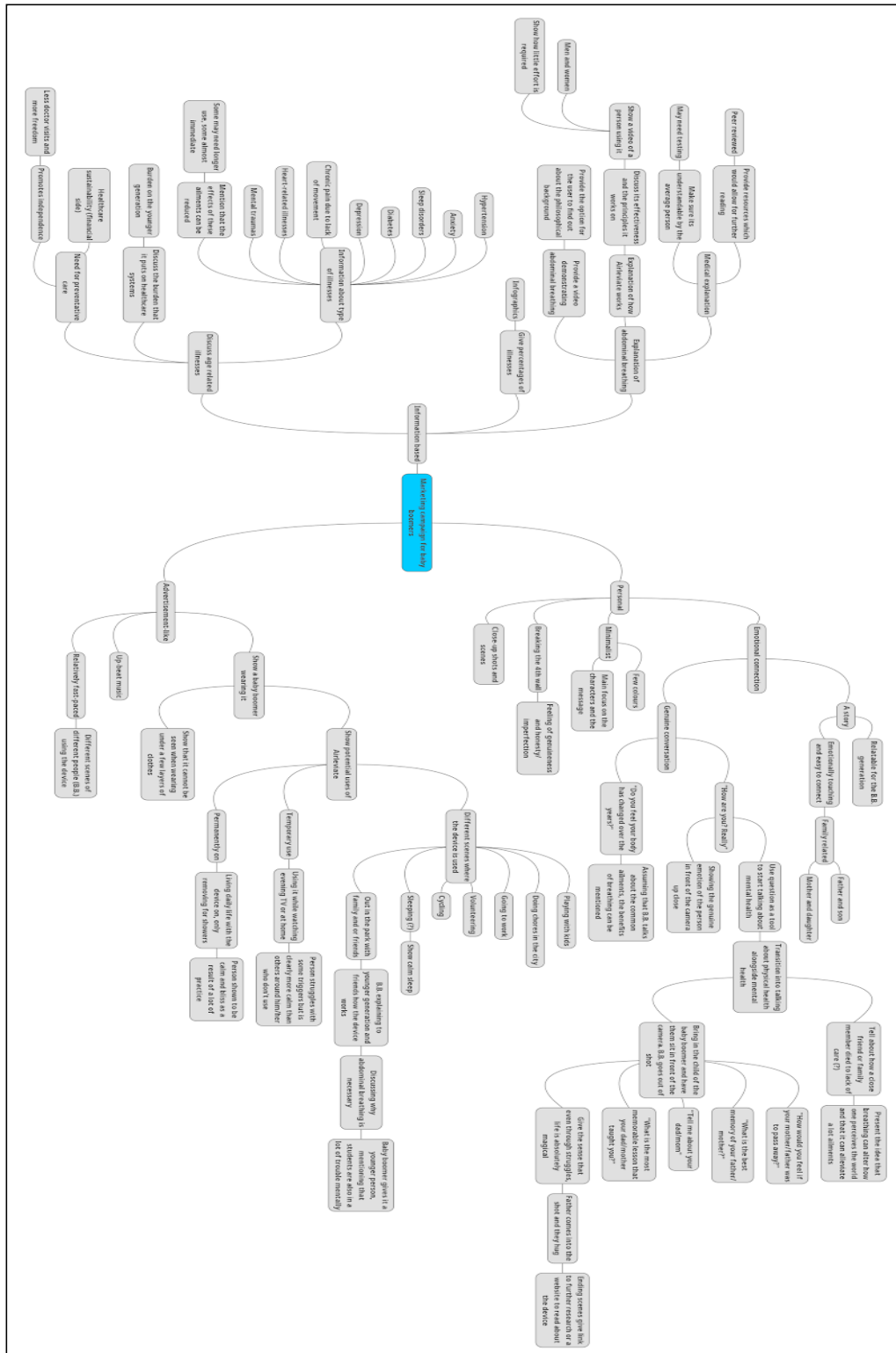
10.2 Stakeholder interview questions

Media questions
1. How much time do you usually spend looking at various media (news, social media platforms like Youtube, Twitter, Facebook etc.) per day?

2. Do you receive links or recommendations from friends/family/colleagues to watch certain videos? How often?

3. Do you share video recommendations with friends/family/colleagues? Why? Why not?

4. Is there a media platform that you prefer? Why?

5. What kind of advertisements do you feel most connected to? Why?

6. How often do you see advertisements which appeal to you? Could you give an example?

Mindfulness questions
1. Do you have a certain way of handling stress?

2. Is that particular way of handling stress effective, in your opinion?

3. Do you perform any mindfulness/meditation/breathing exercises as part of your regular routine? Why? Why not?

4. Have you heard of the friends/relatives/colleagues try mindfulness/meditation/breathing exercises?

5. Would you be more willing to try mindfulness/meditation/breathing exercises if a person you know recommended it to you?

10.3 Filming consent form

Informed Consent for standard research

'I hereby declare that I have been informed in a manner which is clear to me about the nature and method of the research'. My questions have been answered to my satisfaction. I agree of my own free will to participate in this research. I reserve the right to withdraw this consent without the need to give any reason and I am aware that I may withdraw from the experiment at any time. If my research results are to be used in scientific publications or made public in any other manner, then they will be made completely anonymous. My personal data will not be disclosed to third parties without my express permission. If I request further information about the research, now or in the future, I may contact p.barakauskas@student.utwente.nl

If you have any complaints about this research, please direct them to the secretary of the Ethics Committee of the Faculty of Behavioural, Management and Social Sciences at the University of Twente, Drs. L. Kamphuis-Blikman P.O. Box 217, 7500 AE Enschede (NL), telephone: +31 (0)53 489 3399; email: l.j.m.blikman@utwente.nl).

Signed in duplicate:

………………………… …………………………
Name subject   Signature

I have provided explanatory notes about the research. I declare myself willing to answer to the best of my ability any questions which may still arise about the research.'

………………………… …………………………
Name researcher   Signature

10.4 User test consent form

User testing consent form

Session host: **Paulius Barakauskas**

Participant name: _____

This is a graduation project intended to create an awareness campaign regarding health.

In this session you will be watching a 7 minute video after which you will have to fill in a short anonymous questionnaire. The host of the session can help you if you are stuck or have questions.

All information collected in the session belongs to the the University of Twente and will be used for internal purposes and evaluation. We are not testing you. You may take breaks as needed and stop your participation in the study at any time.

Statement of Informed Consent

I have read the description of the study and of my rights as a participant. I voluntarily agree to participate in the user test.

Signature: _____

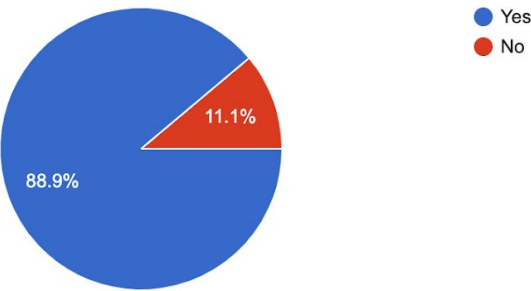**Date:**   _____

10.5 Raw answer data from questionnaire

What would be the most accurate description of how you felt after the video?

9 responses

Legend:
- Reflective
- Intrigued
- Sad
- Curious
- Concerned
- wandering
- ambiguous: comforted as well as slightly annoyed

Pie chart values: 44.4%, 22.2%, 11.1%, 11.1%, 11.1%, 11.1%
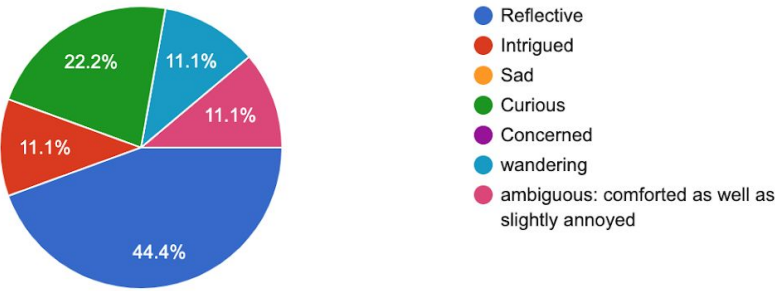
Did the video make you think about your own health?

9 responses

Legend:
- Yes
- No

Pie chart values: 88.9%, 11.1%

Did the video make you think about health in a different perspective? If so, how?

7 responses

no, already in to health and what it means to me

Not really, but found confirmation of my current thinking about it

no, because I did think, read and spoke [with others] a lot about it.

normally health is not a thing to think about. Only if you are ill .

not different

the personal stories show me many different perspectives on health, like: 'a healthy body makes a healthy mind'

lot of speak about mind-body integration, but differently how I would think about it.

How would you classify this type of marketing campaign video?

9 responses

Category	Count
Classic	0 (0%)
Modern	2 (22.2%)
Personal	6 (66.7%)
Plain	0 (0%)
Interesting	1 (11.1%)
Non-traditional	2 (22.2%)
Boring	0 (0%)
Captivating	1 (11.1%)
Minimalist	2 (22.2%)
Honest	6 (66.7%)
Depressing	1 (11.1%)
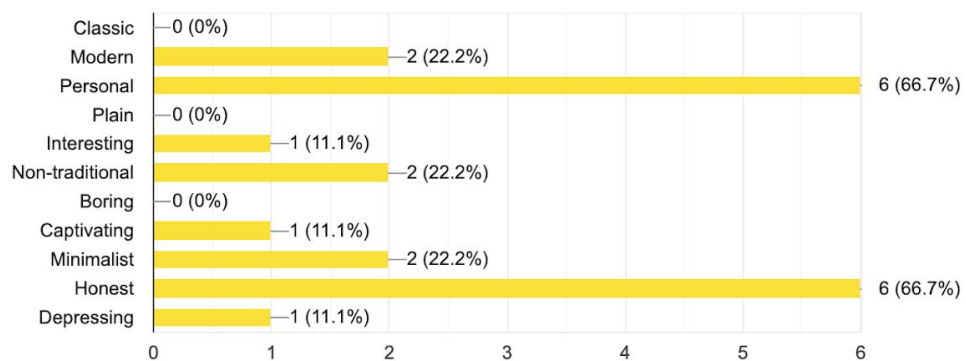
How well were you able to relate to the stories being shared in the video?
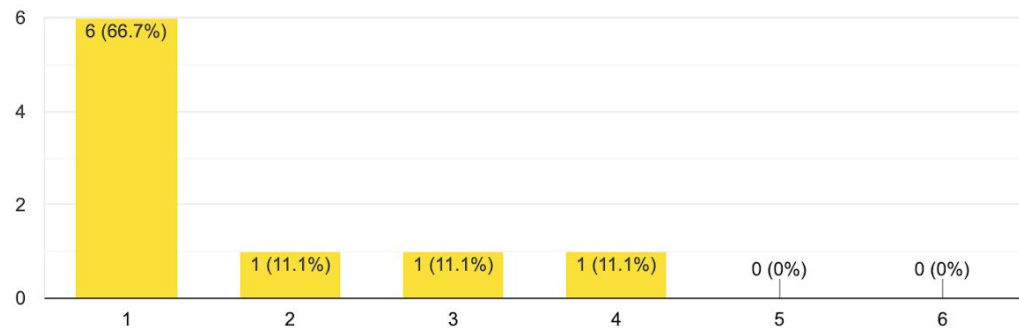
9 responses
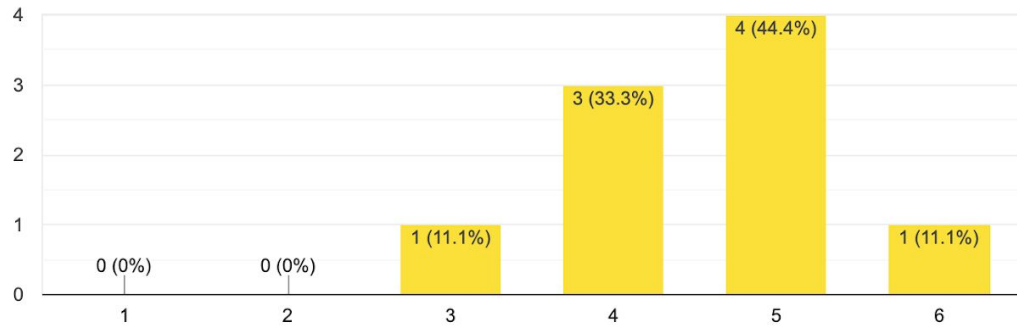
Do you agree with the statement: "I was able to remember all of the people in the video" (the number of people).
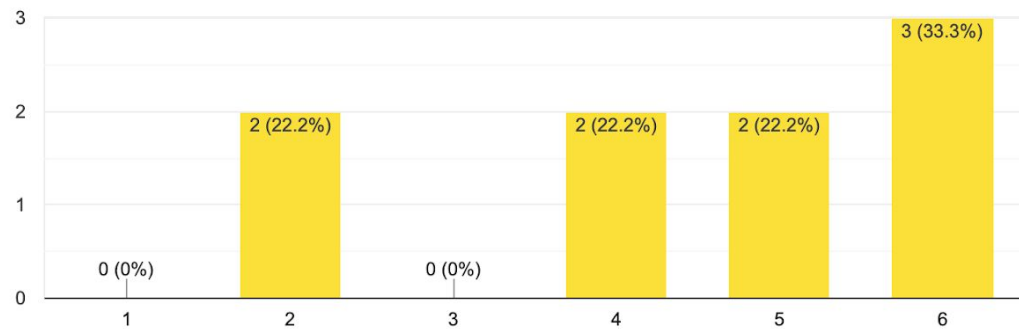
9 responses
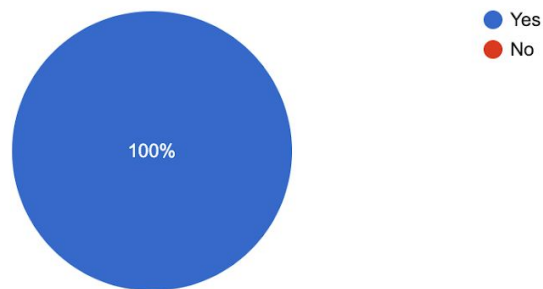
To what extent do you agree with the following statement: "The hashtag at the end of the video was clear and easy to remember"?
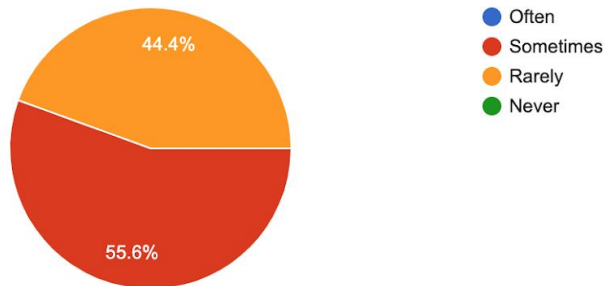
9 responses

To what extent do you agree with the following statement: "I think the length of the video was appropriate"?
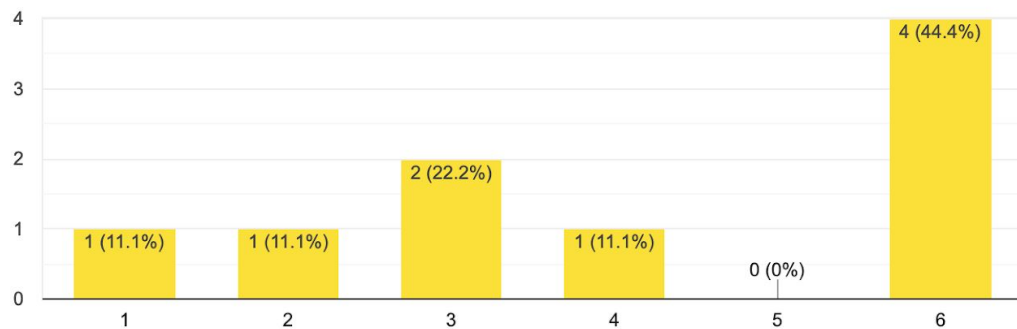
9 responses

How often do you open links which are included in articles or are shown in videos?

9 responses

- Often
- Sometimes
- Rarely
- Never

44.4%

55.6%

To what extent do you agree with the following statement: "I would be interested in visiting the link at the end of the video"?
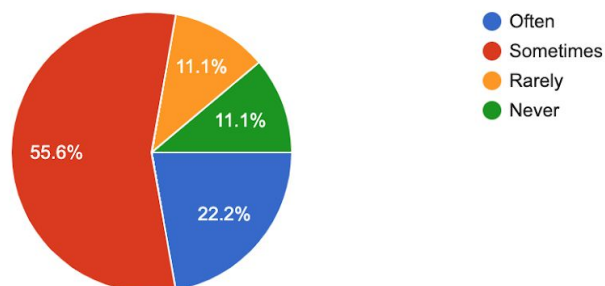
9 responses

Do you think you would be more likely to watch this type of marketing campaign compared to regular campaigns which advertise their product?
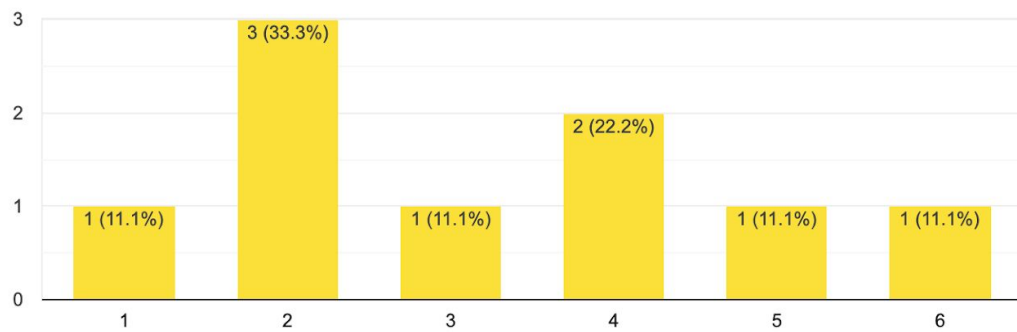
9 responses

- Yes
- No
- Yes, but the personal stories –of other people– should be edited better.

22.2%
11.1%
66.7%
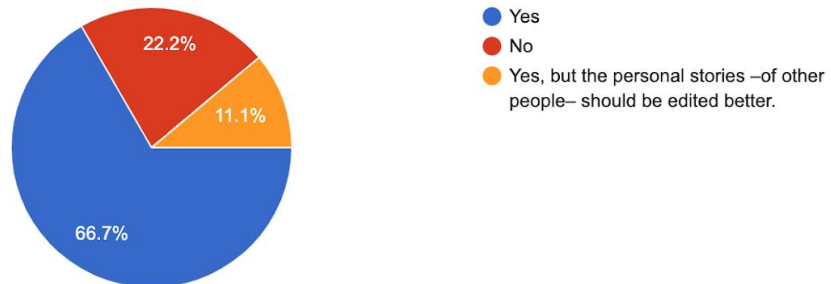
How often do you show videos you have seen to to others (friends/family/colleagues)? Not necessarily sharing them online.

9 responses

- Often
- Sometimes
- Rarely
- Never
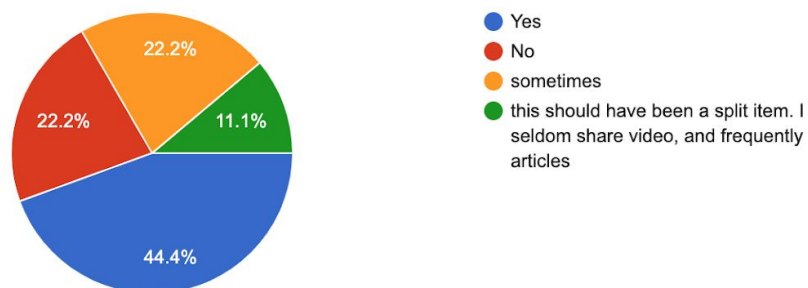
11.1%
11.1%
55.6%
22.2%

How likely would you show this video to others (friends/family/colleagues)? Not necessarily sharing it with them online.

9 responses

Do you generally share videos/articles which you see online?

9 responses

- Yes
- No
- sometimes
- this should have been a split item. I seldom share video, and frequently articles

How likely is it that you would share this video with a friend/relative/co-worker?

9 responses