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Conceptual Product Design and Online Launch for Company X

Bachelor's Thesis
Degree Programme in Design

May 2016





KYAMK

University of Applied Sciences

Author Milla Hokkanen	Degree Bachelor of Culture and Arts	Time May 2016
Thesis Title Conceptual Product Design and Online Launch for Company X		50 pages 9 pages of appendices
Commissioned by Personal project		
Supervisor Kirsi Rouhiainen, Senior Lecturer		
Abstract <p>This thesis concerns a conceptual design and online launch for designer compression stockings for women. This research was conducted as preliminary research for a conceptual company. The objective was to find out what is needed for the designing of a medical compression stocking and what are the launch and marketing requirements to sell the product online.</p> <p>Research methodology included both quantitative and qualitative research and used secondary research and image-based research. Image-based research methods included the use of photography and computer screenshots, product sketches and technical drawings as well as website mock-ups and other digital images. Together these research strategies aided in answering the research questions.</p> <p>This thesis was successful in achieving its goals by providing insight into the design and online launch process for graduated medical compression stockings. The use of the monoprint technique resulted in giving a clinical product a unique, one-of-a-kind aesthetic. In addition to appearance the design of a medical compression stocking must involve strict adherence to technical specifications to ensure that the product functions accurately. Medically oriented products are launched using the same process as all other products, however, the target market, marketing mix, and prescription needs for the product, all require a highly customised launch plan. Market research showed that there is an opening in the market for more fashionable and unique designer stockings with higher compression levels. Outcomes proved that the product design and the product launch are highly dependent on one another.</p>		
Keywords Product design, medical compression stockings, product launch, marketing, online		

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1 INTRODUCTION

A product that is high quality, aesthetically pleasing, and sells well is the result of flawless product design combined with an effective marketing plan. Both product design and product marketing need to work hand-in-hand to produce a great product that consumers love. The launch process must begin when the product is still in its developing stages and the design process must often continue until the product is ready to be launched. This continued planning of how the product will be marketed is important right from the start in helping to design and to develop a good product that will not only be unique, but also sell well.

This thesis concerns a conceptual design and online launch for designer compression stockings for women. The main areas of focus are: Product design, market launch, compression therapy and medical compression stockings, as well as an online business. The objective was to find out what is needed for the designing of a medical compression stocking, as well as the launch and marketing requirements to sell the product online. This thesis serves as preliminary research for a conceptual company to help ensure the success of the product design and actual market launch in the future.

To meet the objectives of this thesis, both quantitative and qualitative methods were used. Secondary data research and image-based research were chosen for methodologies. Data was gathered for the main areas of focus and the thesis content begins with a discussion of key background information regarding compression therapy, the industry and Company X. The overview of Company X further discusses the importance of branding, analyses e-commerce, and the current situation of the company, as well as provides insight into the consumers in Finland, competitors and the prospects of intellectual property rights.

The next section is the product information section, which offers details about the design concept, design process and product design, with specific regard to the features and techniques used. The following section discusses the conceptual product launch plan for these compression stockings with details about the marketing objectives, market segmentation and targeting, as well as the marketing mix strategies. The final section before concluding takes a look at possible areas of growth with future products and services.

Research revealed that there are many important steps involved in product design for medical compression stockings. In particular, the potential market for the product must already be considered when designing so that the stockings cater to the needs of target consumers. The use of the monoprint technique for print design resulted in a unique product appearance. The creative perspective and personal touch of the designer is what will set the product apart from all the rest. In order to function as intended, medical compression stockings must be designed and produced according to specifications. These design requirements, together with marketing concepts and strategies for the launch, influence and shape one another throughout the entire process.

2 RESEARCH FRAMEWORK

The framework for this thesis consists of three main areas: the conceptual framework, the theoretical framework and the methodological framework. The research question for this thesis formed the conceptual framework, which in turn guided the theoretical, and methodological frameworks used. The main concepts in the research question (product design, product launch, medical compression stocking, online) formed the theoretical framework, or key words and key focus areas, used to search for information for the content of this thesis. The methodology formed the framework for the strategies and methods used to gather information. (Quinlan 2011, 6.)

2.1 Research questions

The main subject areas for this thesis are the design and online market launch of medical compression stockings. This led to the main research question: "How to design a medical compression stocking and how to launch it online?" Several other questions pertinent to the subject area came up during brainstorming and background research. These sub-questions are: "How does the medical aspect of the product factor into its design and launch? How important is design aesthetic for compression wear? How much do the product and launch affect one another?"

2.2 Rationale

The subject for this thesis came from a personal desire to explore what is needed for the designing of a medical compression stocking. The product launch and marketing aspect was added because of a personal interest in starting up an online business to sell such products. The thesis combines two interdependent areas as products are designed to be sold and sales or marketing cannot exist without the product. Overall this thesis provided a chance to do preliminary research for a conceptual company and product to help minimise the risk of failure when the actual product is fully designed and launched in the future.

2.3 Research methodology

In order to answer the research questions previously mentioned both quantitative and qualitative methods were used. Secondary data research and image-based research were chosen for methodologies. Image-based research involves the use of images from photos, videos, advertising, drawings, maps or any other image as visual data that can be analysed with a quantitative or qualitative approach. Secondary research involves collecting data from existing documents and other sources such as books and the internet (Quinlan 2011, 187.)

Although secondary data is not as valuable as primary data, time constraints and, the fact that the company and product discussed in the thesis are both conceptual, led to the decision of using existing research that is readily available (Quinlan 2011, 240). Primary research will be done in the future to obtain data that is specific to this unique product. Future field research through surveys, questionnaires and interviews will provide primary data to gain insight into customer opinions about this product, which cannot be obtained in any other way.

Image-based research methods included the use of photos and computer screenshots, product sketches and technical drawings as well as website mock-ups and other digital images. Secondary data came from both primary

and secondary sources. Primary sources were mainly original research articles, web content and charts and figures. Secondary sources consisted of textbooks, art books, expert opinions, blogs and online news articles.

The secondary market research methods used are the following: Trends, segmentation, pricing information in the online market, SWOT analysis, competitor analysis/benchmarking, positioning map, product research and consumer profiling. This secondary market research gave insight into both the development of the product design, as well as the development of the online product launch requirements.

2.4 Mind map

A mind map is a useful tool to gather and to organise ideas. This mind map is a visual guide to help better understand the process of writing this thesis. Each important topic is displayed and is strategically followed by another section relating to the previous topic. This helps to clarify topics, which need to be discussed and their position within the text.

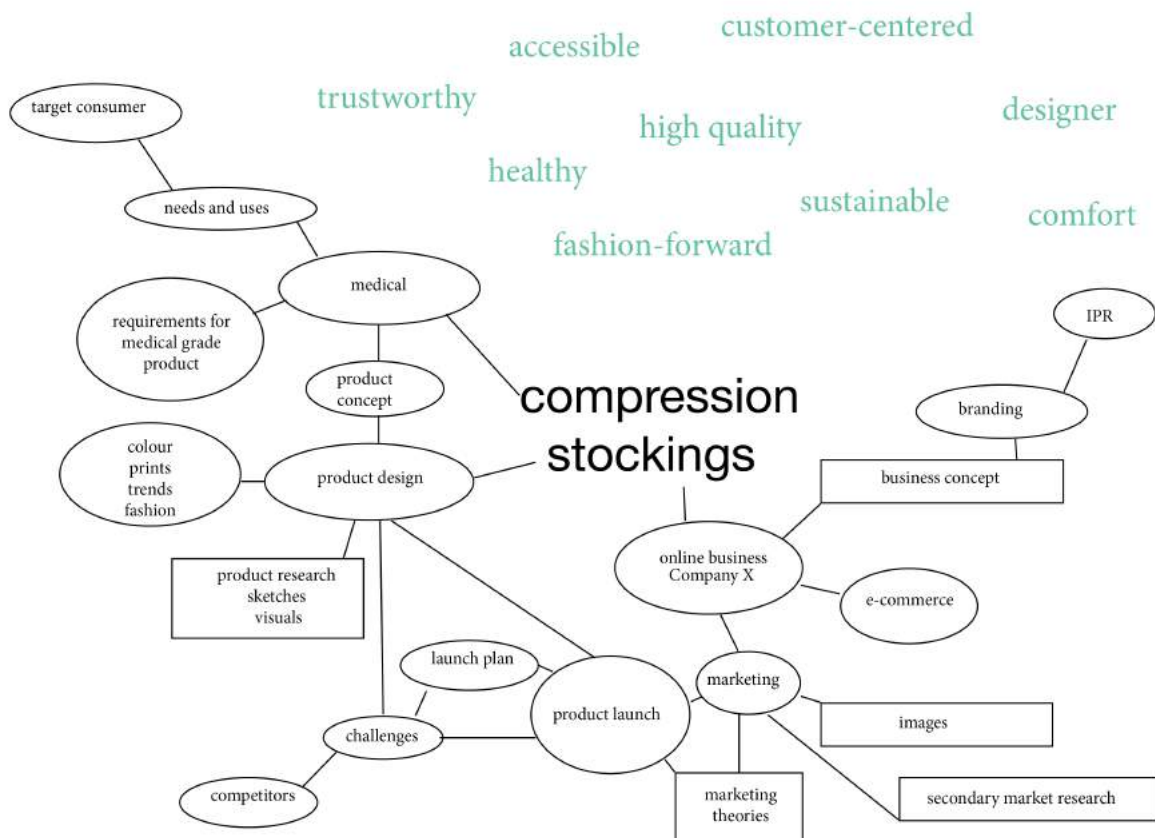


Figure 1. Mind map of the research process for this thesis (Hokkanen 2016)

As shown in Figure 1, the mind map discusses the three major points: Online business/Company X, product design and medical, which all connect to the original compression stocking idea. The text found in the boxes refers to the methods used for gathering data. The key words written in green print describe the company's ultimate goal for how the customer would feel about the product, company and online store.

3 COMPRESSION THERAPY

Compression therapy refers to the wearing of garments, bandages, boots or devices which are specially designed for vein support to increase and improve circulation (Lim & Davies 2014, E391). More specifically within this thesis, it refers to wearing garments, mainly stockings that apply a specific amount of pressure along the lower leg. This pressure helps the calf venous pump function to reduce the gathering of fluid, which happens when venous return is compromised (Mooney 2009). Figure 2 illustrates some of the results of poor venous function in the legs, including valve failure and venous stasis, which can lead to swelling, edema, ulceration, or blood clots among other issues. In comparison, the leg image to the right shows how the pressure exerted by the yellow compression stocking helps to keep blood flowing properly to avoid such problems or to treat existing ones.

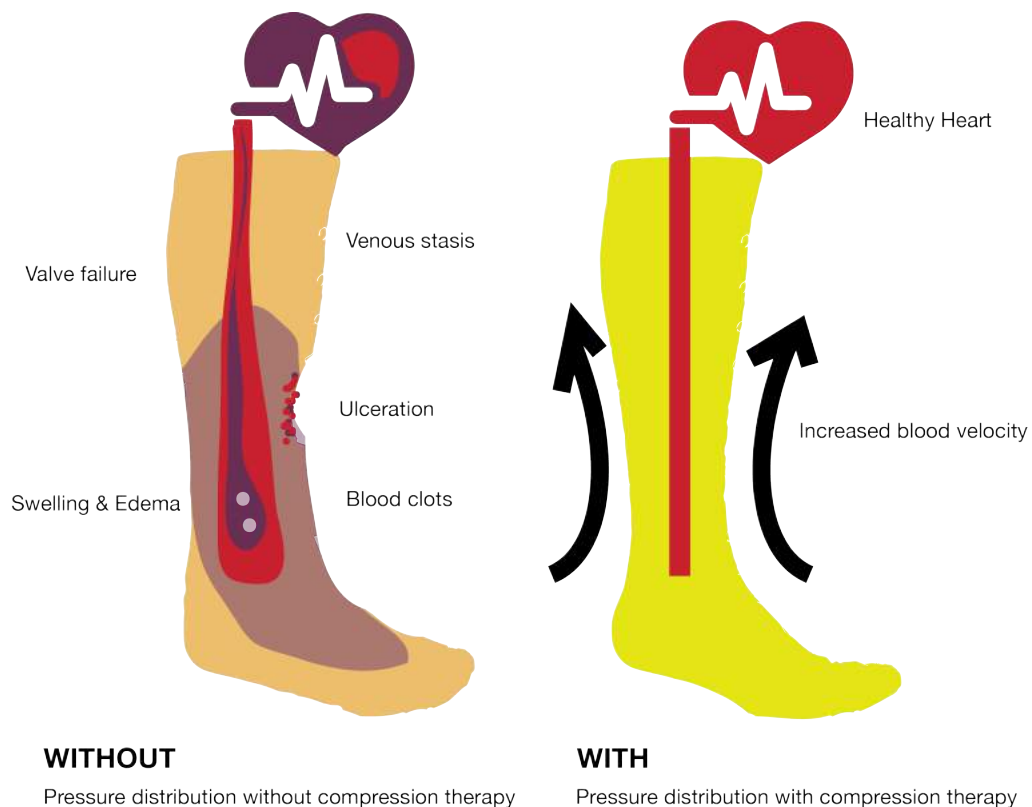


Figure 2. Venous pressure distribution comparison: Without and with compression therapy (Hokkanen 2016)

Graduated compression stockings are designed for ambulatory patients and are manufactured under strict medical and technical specifications to provide a specific level of ankle pressure and graduation of compression that is greatest at the ankle and decreased upwards towards the knee (Lim & Davies 2014, E391). The stockings are recommended to be worn in the morning and to be removed for the night. This therapy is used to treat various venous and lymphatic diseases, especially with ulcers and edema. (American Venous Forum 2016.)

It is necessary to specify that products, such as anti-embolism stockings and non-medical support hosiery, will not be discussed in this thesis. Although anti-embolism stockings are a similar product, they are specifically designed for bedridden patients to reduce the risk of deep vein thrombosis (blood clots). They cannot be used by ambulatory patients in the way that graduated compression stockings can. Similar to compression stockings, non-medical support hosiery, such as flight socks and elastic support stockings, are used to help with tired and aching legs, but are a different product category. These

non-medical products use a very low compression level that is uniform throughout and can be purchased without a prescription because they are not made using strict specifications. (Lim & Davies 2014, E392.)

Despite medical needs to wear compression stockings many people do not use them properly or as instructed. The noncompliance rate for graduated compression stockings has been reported to be as high as 30%–65% of users. Some of the main reasons for noncompliance include: unappealing cost and appearance, feeling pain and discomfort, having difficulty putting the stockings on, perceiving the product to be ineffective, and stockings feeling too hot or causing skin irritation. (Lim & Davies 2014, E392.)

Compression stockings have become increasingly popular during the past four years and their usage has been forecasted to increase amongst people who require them (Persistence Market Research 2015). The fact that compression therapy delivers pressure to help alleviate tired and swollen legs and feet, amongst many other positive benefits, gives this product a wide range of users, therefore allowing for user growth potential (Lim & Davies 2014, E391).

There is an overall trend, particularly in the northern European region, of an increasingly aging population. In addition, there is an increasing incidence of sports injuries. There is also a rise in awareness about various venous diseases in many countries. These factors, together with the advanced features of compression therapy garments and devices, are the main influences on the compression therapy market worldwide. (Persistence Market Research 2015.)

4 COMPANY X

The idea for starting an online company that sells fashionable medical compression stockings started out in 2013. At that time a lack of availability was prevalent before the big boom of sporting and gradual compression wear goods hit the market. Presently Company X is still a conceptual e-business, and therefore the product design and launch described in this thesis are also conceptual.

This idea was born through a personal experience and a personal need. Multiple leg surgeries led to reduced blood circulation and severe pain as side effects. The traditional treatment options, compression therapy and pain medicines, were introduced by an orthopaedic specialist. A non-invasive approach to dealing with a medical problem was appealing.

Research of compression stockings revealed a lack of fashionable, designer medical compression wear. A simple Google image search using the terms “compression stockings medical” resulted in images of plain and clinical looking products. Appendix 1 provides a visual of this search (Google images 2016d). Further experience through entrepreneurship courses helped to initiate and form a start-up e-business concept to fuse fashion and an interest in health care, specifically preventative and therapeutic health care products, together with design. The company aims to bring more beauty to generally plain and clinical looking products.

4.1 Branding

Branding is important because it is the process through which the company determines how it will be identified. Identifiers such as: marks, symbols and perceptions, in particular a logo, will help make Company X and the product recognisable and distinguishable within the market (Blythe 2009, 163).

Branding uses specific guidelines to help the customer associate the product with a lifestyle or specific genre. A successfully branded product name will become synonymous with the product itself (Mono 2002, 8). The branding for Company X's product will aim to make it a household name in the future.

A well-branded product is important for developing customer benefits and product value. If the perceived value is high it will help reassure the customer of the price, quality and the expected performance of the product, especially with high-end products. Marketing activities benefit from branding as it assists the marketing department with specifications on how to proceed with communications, public relations, and product development and how the product is positioned within the competition. (Blythe 2009, 163.)

Company X's mission is to create a strong brand of quality compression stockings for medical patients and people interested in preventative care and

pain management. The goal is for people to have the option of wearing high-quality compression stockings that are interesting, fashionable and exciting to wear. Through increasing user awareness and by using superior materials and design, the ultimate goal of the product is to help people be more compliant with their compression therapy and benefit from it.

The company vision is to eventually create a new design-oriented market for preventative and therapeutic care products by merging clinical products with fashion. Beginning with Finland and northern Europe, the company plans to expand to a larger global market in the future.

4.2 E-commerce advantages and challenges

E-commerce (electronic commerce) is any economic or business activity that occurs online. Technologies including mobile commerce, internet marketing, online transactions and electronic data systems are all a part of e-commerce. The advantages and challenges of e-commerce are important to discuss because this thesis involves launching a product through an online store. (Niranjanamurthy et al. 2013, 2360).

According to Niranjanamurthy et al. (2013, 2362-2364), the advantages of e-commerce are the ability to reach customers without geographical limitations, the ability to buy and sell at anytime, the low business start-up costs and operational costs including lower employee and costs, the ability to speed up the buying and selling procedure and the relative ease of starting and managing a business. There is no need for a physical store allowing for the company to grow more easily. E-commerce can also enhance the company's interactions with supply chains, logistics tracking as well as inventory management. (Nanehkaran 2013, 91.)

The challenges from a business perspective includes the possibility of mechanical and technological failures, such as website downtime, that affect any area of e-commerce, the minimal or complete lack of direct customer to company interaction, the increased need for logistics, the high cost of the e-commerce infrastructure in terms of expenses and expertise, as well as the issue of security and safety of e-commerce sites, services and payment pathways (Niranjanamurthy et al. 2013, 2362-2364).

To maintain a customer-centred focus it is also necessary to discuss the advantages and challenges of e-commerce from a customer's perspective. There are several advantages for customers: No standing in line, quick and easy price-comparison abilities, unlimited access to stores and products regardless of location and time, unlimited access to online discounts and promotions, unlimited product selection (Kacen et al. 2013, 14). Other advantages are the unlimited access to company and product information as well as the ease of online communication, the ability to purchase with credit or debit and the convenience of custom delivery options (Niranjanamurthy et al. 2013, 2364).

There are also various challenges for customers. E-commerce can lack a personal touch for customer relationships with companies. Online shopping does not allow customers to touch or feel products prior to purchase. Customers must have access to a computer or device with internet capabilities in addition to an internet connection. (Nanehkaran 2013, 92.) Security issues and credit card fraud are a major concern with online shopping. Further challenges include: Waiting for product delivery, the fear of receiving the wrong product, the vulnerability to being scammed and the possibility of additional costs and taxes with international orders. (Kacen et al. 2013, 14).

4.3 Current situation and company SWOT analysis

Analysing the current situation by looking at the strengths, weaknesses, opportunities and threats (SWOT) affecting Company X, as illustrated in Table 1, is a key step in both product development and marketing. Opportunities and threats refer to external factors affecting the company, in other words what is happening in the world and marketplace. Strengths and weaknesses assess the company itself and refer to factors affecting the company internally. This analysis allows the company to gauge the areas requiring the most work and make use of their existing strengths and opportunities to create a good product and launch it successfully. (Kotler & Armstrong 2016, 80.)

Table 1. Company X current situation and SWOT analysis (adapted from Cooper 2011, 319)

Internal Assessment	External Assessment
<p>Strengths</p> <ul style="list-style-type: none"> - customer centred & value driven - low product volume requires small storage - logistics and delivery secure - public relations handled by successful PR firm - intensive training for all staff - registered company name/logo - high motivation to create customer value - customer feedback incentives - online store available 24h - educated staff and technical support 	<p>Opportunities</p> <ul style="list-style-type: none"> - continued increase in online shopping - SOME marketing, branding - continued increase in health care product sales worldwide - interest in preventative and self-care - aging populations, increased need for compression products - good technology available to manufacture exact specifications of product - target market has high levels of education and income
<p>Weaknesses</p> <ul style="list-style-type: none"> - new company, branding & image still in progress - limited market access - low product volume, small production and storage facility - no past experience with product launch - new company with limited finances 	<p>Threats</p> <ul style="list-style-type: none"> - well-established competition - economic downturns, instability - current trend of sport compression wear - globalisation, online stores provide endless options, competition

4.4 Finnish consumer profile

The average Finnish consumers are both males and females aged 25–69. The population has a relatively high level of income and education and a high standard of living. This has resulted in a sophisticated market with increased purchasing power. Approximately 75% of the population is over the age of 25 and there is a long life expectancy. (Santander 2016.) Consumers are attracted to simple and practical products with simple and sustainable packaging. New products and concepts are welcome and well received in general. However, the product must be of good quality with high added value. (Sharp 2010.)

The Finnish consumer is interested in how safe a product is, the quality of the product and the product's origin. This is important to note when branding and marketing a new product in Finland. Branding is of particular importance because it is highly related to the quality of a product in the minds of Finnish consumers. When a Finnish person is reassured of the quality of a product, price is not a main concern in purchasing decisions. Consumers are more

interested in quality guarantees, for example conformity of European standards (CE) markings, technologically advanced products and environmentally friendly products. (Santander 2016.)

According to Santander (2016) only 2.2% of income was spent on clothing and footwear in 2011. However, health was one of the top four areas for spending (11.3%), showing that it can be considered a priority for Finnish consumers. Considering the low percentage of expenditure on clothing and footwear, it seems likely that the purchases are based more on need than want. This information coupled with the fact that spending on health is roughly five times greater suggests that a medical necessity, such as a compression stocking, would do well in this market. (Santander 2016.)

The advertising opportunities in Finland include television, radio, press, SMS and online methods. Due to the high-cost of traditional marketing channels e-marketing and online advertising have been found to be effective and are being used more. Telecommunications, biotechnology, environment technologies, machinery and scientific instruments, medical equipment and safety and security are growing sectors in Finland. (Santander 2016.)

4.5 Benchmarking and competitor analysis

The following two companies selling medical compression wear, Sigvaris and Napra Rehab, were chosen for benchmarking and for competitor analysis. Sigvaris was chosen because it is a global leader in the industry. Napra Rehab was chosen because it is the only Finnish brand selling medical compression stockings.

4.5.1 Sigvaris

Sigvaris is an important and well known, high-end manufacturer in the compression stocking industry. Sigvaris has over 150 years of experience in building a global business. During the late 1950's, in collaboration with Dr. Karl Sigg, a medical compression stocking was created to assist with venous-related conditions. In 2009 the company expanded into two other sectors for compression stockings, well-being and sports. The Well Being product line is geared toward the preventative aspect of compression therapy and the Sports

line is to give better athletic performance and to reduce recovery time. Well being and sports compression have become increasingly popular trends in compression therapy, therefore supporting that Sigvaris continues to be a leader within the industry.

Sigvaris' research and development is highly regarded. The company motto "Every day a step further" reflects this mind-set. Sigvaris' sales channels include: pharmacists, chemists, orthopaedic and medical specialists and hospitals. Sigvaris is a global market leader of medical compression garments, with a revenue of about 228 million euros in 2015. The company employs about 1500 people in several countries in Europe, in the USA and in Brazil. Distribution is in more than 70 countries with an international growth strategy for the future. Sigvaris is sold through other retailers and online stores. (Sigvaris 2015.)

This kind of experience and knowledge makes Sigvaris a key company to benchmark for compression stockings. There is no other company with this kind of repertoire in the market.

4.5.2 Napra Rehab

Napra Rehab is a company, which focuses more so on selling other medical products and assistive equipment, but is the only Finnish brand of medical compression stockings sold by a Finnish company. David Strömbäck, who is a nurse and naprapath with 20 years of experience, founded the company. The compression stockings are manufactured in Sweden by Medisox and Prosox, then sold under the name Napra Rehab.

The compression stockings available from Napra Rehab are clinical in appearance with the exception of a few solid, bright colours to choose from. They are made in medical compression levels and are also made in a comfort wide fit. In addition to their own compression products, Napra Rehab sells Juzo products.

Napra Rehab offers a 14 day exchange and return policy as well as personal customer service and phone support. Customers are also offered promotional pricing discounts, when purchasing frequently or in large quantities. Napra Rehab offers assistance for customers who require custom ordering for

compression needs. Measurement charts are available on the website to help customers order the right product.

In addition to being sold on Napra Rehab's own website, their products are sold by select retailers and in pharmacies. Company sales numbers were not available, therefore cannot be used in this analysis. (Napra Rehab, 2013.)

4.6 Intellectual property rights

The implementation plan for an intellectual property policy for Company X ® will require a proper description, illustrations and market research, as well as what distinctive qualities the product will have, the target market, and any other pertinent information required for trademark registry or copy right of design registry. The same information will be needed for the ICT domain registry.

Finding as much information as possible prior to starting the registration process and acquiring the resources needed will be beneficial. Resources such as having a sufficient amount of knowledge about the industry, possible partnerships, and having a proper business plan will also need to be in place. The international market is the ultimate goal for Company X. Obtaining an international trademark and registration will be sought with the assistance and guidance of the World Intellectual Property Organisation (WIPO), Trade-Related Aspects of Intellectual Property Rights (TRIPS), World Trade Organisation (WTO) as well as the United States Patent and Trademark Office (USPTO). Considering the risks of selling online and dealing with the international market, the registration and trademarking are necessary despite their challenges and costs.

To begin with, registration for a brand name and product name are needed to protect the appearance and functions of the company and product. The average processing time for the registration of a trademark ranges from three to four months. It is also possible to register the ICT domain and copyright of design at the same time. Once Company X is a registered trademark and the ICT domain is registered, the company can enter the online market and launch this new medical compression stocking. The registration of the

trademark will be valid for ten years beginning from the day of registration. The maximum term of protection is 25 years. (WIPO 2015.)

5 PRODUCT INFORMATION

This section will discuss the conceptual medical compression stocking as a product. The concept design is discussed first, then the product design and process. Sub-sections give further information on the unique aspects of the print design process and methods as well as the colours chosen for the product.

5.1 Concept design

Research was a key factor in developing the concept of the introductory product because it is important to know what is already available. Examining the topic revealed the large growth of the industry and this information resulted in a change of direction for the product design. According to Persistence Market Research (2015) the market for compression therapy wear should grow significantly in the near future. The original idea was to have a cost-efficient preventative care product that would have been sold to a wider target market. However, as compression stockings began to emerge in the media and in sporting stores, the idea seemed to have exhausted itself. The industry growth and increase in customer awareness changed the idea into a strictly medical product that is also fashionable, therefore making it more desirable to wear.

To begin the design process for the concept of this product, the industry was examined in detail. The research included the types of brands and the styles available, as well as innovations in regards to the possible medical properties available in compression wear. Deciding on a target demographic was necessary to specify the qualities needed and also to pinpoint the needs of the end user.

The user demographic chosen are women aged 35—55. Appendix 2 provides visuals of this group. Consequently the product must be designed as a high-quality, high-end product with a higher price point as this is an age group that

has purchasing power. The chosen demographic group also affects the materials to be used, the medical compression innovation and quality, the styles, prints, as well as colours and trends. All of these features, functions and properties of the product are equally important in the concept development and actual product design. (Kotler & Armstrong 2016, 304.)

5.2 Product design

The design process involves many stages as shown in Figure 3. These stages include the following: Ideation, research, concept development, design and sketching, printmaking, digitalising of the prints, prototype and visual design. This thesis serves as the documentation step of the design process.

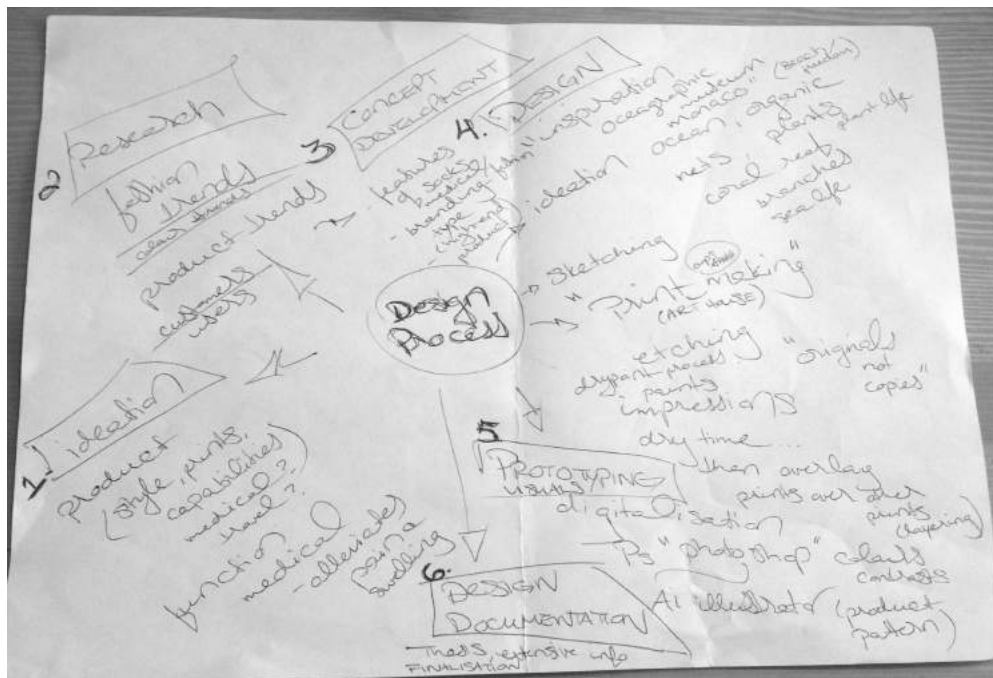


Figure 3. Design process of the product concept (Hokkanen 2016)

In addition to accurate product design, customers must be given adequate information, education and advice about proper fit, proper use and proper application. It might even be helpful to offer instructions on how to notice problems and what to do to fix them. Together with the customer, the company can easily help to solve some of these problems. Refitting stockings, changing to a different material and reducing the degree of compression can

all help to alleviate problems and in return improve customer satisfaction. The company would highly benefit from offering a satisfaction guarantee, where Company X would work together with the customer to find them the right product. (Lim & Davies 2014, E392.)

5.2.1 Compression features

The user demographic that the stockings will be designed for (Appendix 2) are women requiring this product and who are able to stand, walk, change positions or move with their own power (Oleck 2016). Medical compression stockings need to be manufactured under strict medical and technical specifications to result in the high-quality health product that consumers expect. This means that there must be consistency and durability in the material to provide a specific level of ankle pressure and graduation of compression. (Lim & Davies 2014, E391.) As illustrated in Table 2, medical compression levels range from 20—60 mmHg; this will qualify the product to work for prevention and treatment of venous disorders.

Table 2. Compression levels and uses (from Ames Walker International 2016b)

Compression Levels	Uses
8-15 mmHg Mild Graduated Compression	<ul style="list-style-type: none"> • The lightest compression. • Provides relief from tired and aching legs.
15-20 mmHg Moderate Graduated Compression	<ul style="list-style-type: none"> • Helpful for travel and for long periods of sitting or standing. • May offer relief from minor varicose veins often recommended during pregnancy.
20-30 mmHg Firm Graduated Compression	<ul style="list-style-type: none"> • The most commonly used compression level. • Provides relief from moderate to severe varicose veins. • Relieves swelling and edema. • Useful in preventing thrombosis during long flights and periods of travel.
30-40 mmHg Extra-Firm Graduated Compression	<ul style="list-style-type: none"> • Should be used under supervision of a healthcare professional. • Provides relief from edema, severe varicose veins and lymphedema. • Used to relieve chronic venous insufficiency.
40-60 mmHg Severe Graduated Compression	<ul style="list-style-type: none"> • Should only be used if advised by a physician or other healthcare provider. • Used in case of severe venous insufficiency.

Graduated compression will be used for the compression type. Graduated compression uses a degressive gradient where the pressure decreases from distal (toe/ankle) to proximal (knee/thigh) area of the leg. (Lim & Davies 2014, E391.) The change of pressure from the distal to the proximal exerted by graduated compression stockings is illustrated in Figure 4. This introductory product will use graduated compression because it is effective and has been conventionally used; therefore it is more familiar to the existing users of this type of product. However, future product lines may involve the use of newer inversely graduated or 'progressive' elastic compression (PECS). The main difference is that PECS exert higher pressure on the calf rather than the ankle region and are more effective in increasing venous ejection fraction. (Mosti & Partsch 2011, 262.)

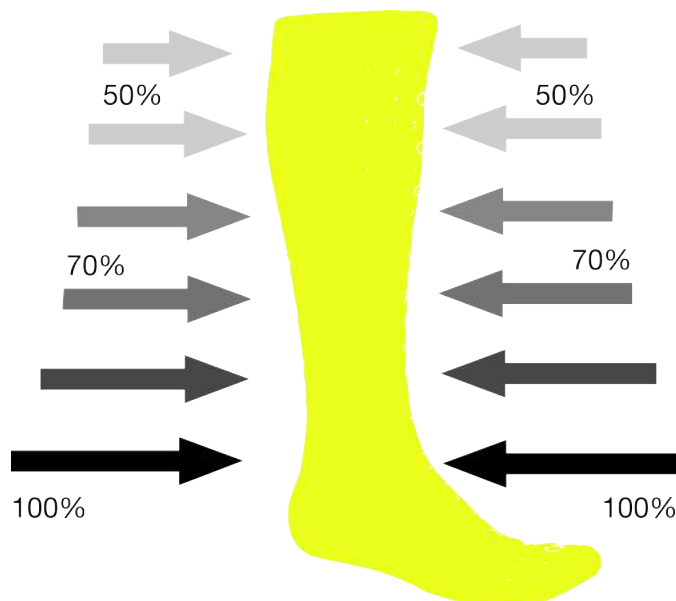


Figure 4. Graduated compression: Compression percentage along stocking (Hokkanen 2016)

5.2.2 Design features

The introductory product is a women's knee-high graduated compression stocking with a closed toe and extra soft band at the opening. The sole of the

sock will include a cushioned comfort bottom also designed with comfort width to avoid restraints. The design will be seamless (toe and overall structure) to avoid pressure points and to reduce hot spots. The product logo will be jacquard to prevent compromising compression quality. As already mentioned in the branding section of this thesis, high-end products require a strong brand identity. A logo is useful to achieve this; therefore logo placement on the product must be highly visible. The logo for this product appears on the outer side of the top of the sock for high visibility and works as part of the aesthetic. These features are illustrated in the technical drawing of the product in Figure 5.

An anatomically correct fit is vital to provide overall support and ensure a proper fit with less pressure. Larger sizing and other sizing options will also be available. A toe cage or toe box will also be part of the design to give toes freedom to move. The sock construction will also include toe cage alignment, which keeps the socks in position on the feet. Successfully integrating all of these features into the product can only be achieved by using top quality materials and quality construction. (Oleck 2016.)

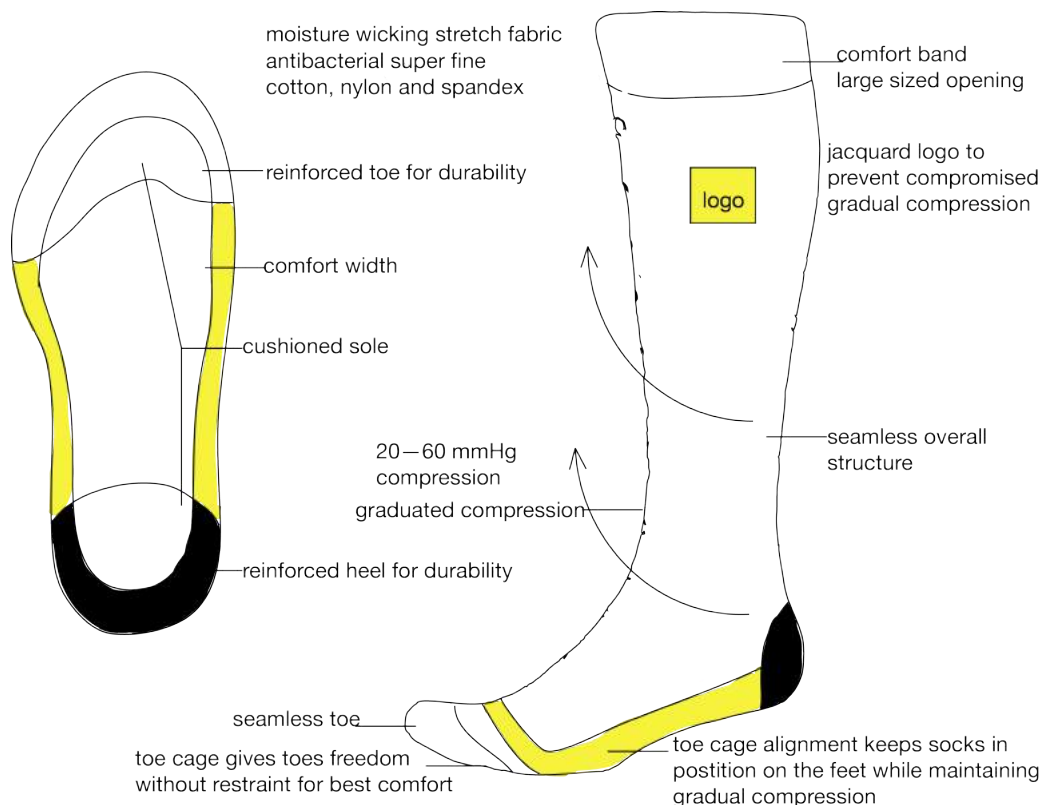


Figure 5. Technical drawing of product (Hokkanen 2016)

Appendix 3 outlines some of Sigvaris' products, which are similar to the product being launched. The majority of these Sigvaris products consist of a blend of nylon and spandex, also often together with another material such as cotton, rayon or polyester. Considering that Sigvaris is an industry leader with sales to prove it, it would be wise for a start-up company such as Company X to use similar materials. (Sigvaris 2015.)

The product material will be made from a blend of super fine soft cotton (65–80%), nylon (10–30%) and spandex (5–10%). It will include drirelease ® technology to provide moisture wicking and antibacterial odour control (Sigvaris 2015). The fabric mix will be latex-free to avoid allergic reactions. To further minimise skin reactions (skin breaks, ulcers, blisters) the textiles used need to be soft and smooth, have the proper thermo regulation and the fabric dye also needs to be hypoallergenic (Lim & Davies 2014, E392). Microfiber use will increase breathability. Furthermore, the mixed fabric will include either Lycra or spandex for stretch, elasticity and durability (Compression Stocking Site 2016). The materials must be high quality to ensure that the fabric's intended function be carried out and for it to not cause harm or discomfort, worsening of the leg health problem (Lim & Davies 2014, E392).

5.3 Print design

The print design process began with ideation and sketching. This was followed by the monoprint technique, which is discussed below in further detail. At the end of the design process photographs were taken of the prints for digitalisation. Programs such as Photoshop and Illustrator were used to further develop the photographs of the prints. Colour enhancements and alternatives of the prints were implemented using Photoshop and Illustrator. The final stage of the process included making visual prototypes.

5.3.1 Monoprint technique

The product patterns were created with the monotype printing method. Monoprinting is known as the most painterly printmaking technique since a monoprint is basically a printed painting. The special characteristic of this method is that no two prints are alike; although images can be similar, editing is not possible. This characteristic allows the print of this introductory product to be unique, which adds value and sets it apart from the competition. Since monotype printing allows considerable freedom in the approach to imagery, this is considered to be a very versatile method. (Monoprints.com 2012.) The design concept includes pattern ideation for the print collection using inspiration that came from the Oceanographic Museum of Monaco.

Sketches were part of the first stage to begin the design process. After selecting the most suitable sketches for the pattern designs, the sketches were drawn onto cardboard plates. After the completion of the sketched plates, one side was sealed with glue. After the glue dried and the surface of the cardboard plate hardened the sketch was then etched into a negative as shown in Figure 6. The glue application was done to keep the ink from sticking to the positive surfaces of the print. The artist decides to work positively or negatively; in this case, the prints were made using negative plates. (Chambers 2007, 2.)

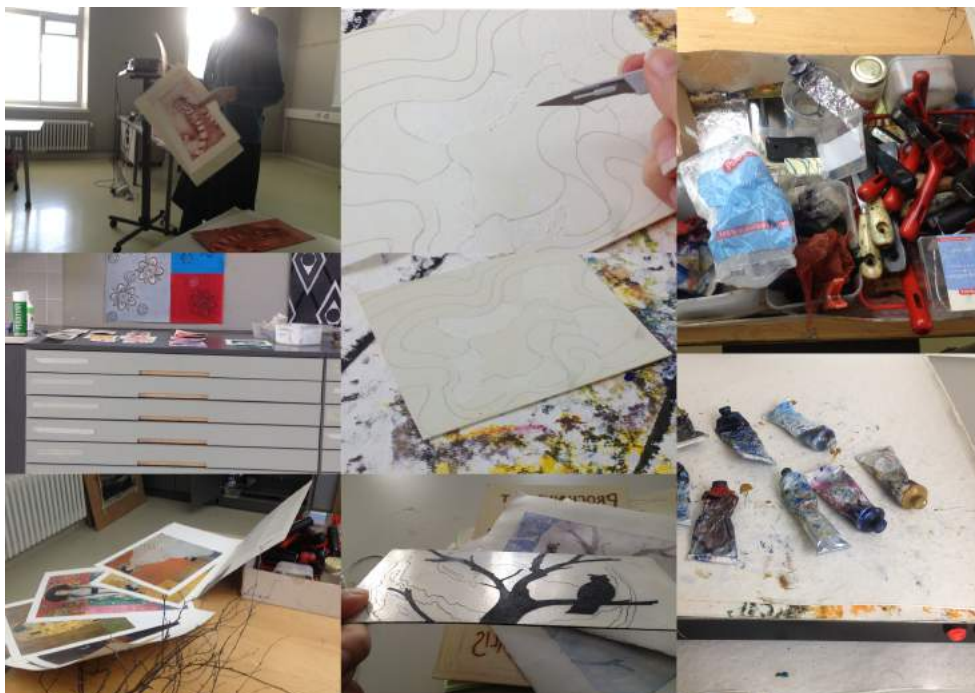


Figure 6. Monotype process stages 1 & 2 (Hokkanen 2015)

The second stage of the monotype design process was the preparation of the colour. Water-soluble high-pigment inks were used (Figure 6) for the pattern design process. Watercolour/ aquarelle paper at the suggested weight of 260 grams was used for this process. Branches, leaves, and materials such as mesh, created special effects when used while printing to provide a one-of-a-kind look to the product design (Chambers 2007, 5). Oil was used to clean the rubber roller and glass palette from stubborn ink at the end of the process. The colours were then mixed and applied to the cardboard plate with the roller. Excess ink was wiped away with a rag making the cardboard plate ready for the press. (Monoprints.com 2012.)

The third stage of the printing process involved preparation for the printing. This included setting up the press and preparing the paper for print. Firstly, the paper was soaked in water and dried by blotting with a cloth. The press was adjusted to the correct pressure according to the thickness of what was being printed. For example, when using branches, the press needed to be set at a lower pressure level to leave room for the branches to manoeuvre through the press as shown in Figure 7. Working with ink and making consecutive prints using the same press required a lot of care because the ink spread easily from the pressure of the press, and had the potential to ruin one of the other prints. (Silvola 2015.)



Figure 7. Monotyping using found objects (Chambers 2007)

The damp watercolour paper was laid on top of newspaper and the cardboard plate was then placed onto it. Both the paper and the plate were then covered with another layer of newspaper, followed by the felted cushion part of the press. The press was then rolled twice over all of the material mentioned. After this was completed, everything that was piled for printing was lifted off and the plate was then carefully removed to keep the edges of the paper tidy. Lastly, the damp print was left to dry over night on the drying racks as shown in Figure 8. (Monoprints.com 2012.)

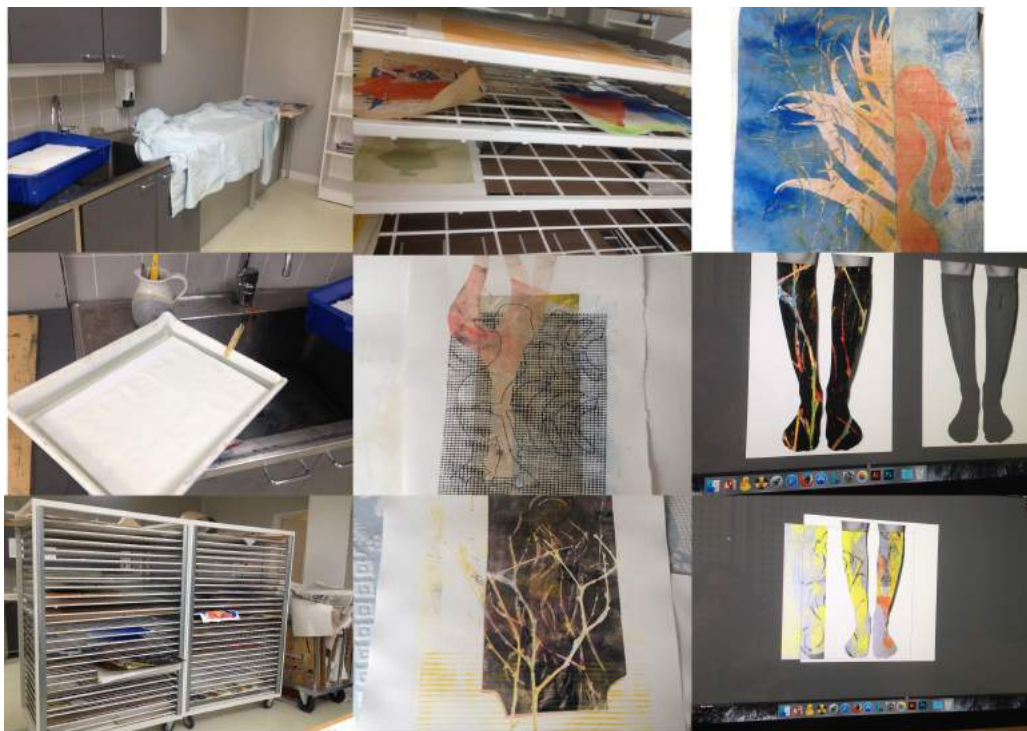


Figure 8. Monotype process stages 3 & 4 (Hokkanen 2015)

The fourth and final stage of the design process is digitalisation as shown in Figure 8. Once the prints are dry digital photographs can be taken, and enhanced with Photoshop. After editing the photographs using Photoshop, the prints are made into swatches. The swatches were placed into a photograph of a woman's legs (see Figure 6) to give a visual example of how the compression stockings would look when ready (Google images 2016).

5.3.2 Colour selection

Mood boards were created (Appendix 4/1 and 4/2) to help visualise colour and print ideas. By researching and collecting images a visual was created to show how the colours work together, and that they are in fact colours used in spring / summer 2016 and 2017. It is helpful to have a visual representation to stay focused when moving a product from a concept into an actual design.

The introductory product will be made in high-energy colours with bold and bright pigment usage (see Figure 9). The product colours would be available in bright magenta, yellow, royal blue, green, red, black, coral and turquoise. (The Huffington Post 2015.) These colours are fun yet soothing which creates a luxurious feel. The resort patterns with the bold colouring make the product fashionable and on trend. According to Pantone (2015) fashion colour forecasts spring-summer 2016 will include these types of colours with the high-end fashion brands.



Figure 9. Product colour and print variations (Hokkanen 2016)

Trending information for 2017 indicates similar colours, which are intensified. (Pantone 2015.) Therefore the use of these colours for the product launch is

keeping in line with the company's desire to stand out as a fashion-forward, designer product rather than a clinical one. As the product colours remain on trend for several seasons, this will create a higher perception of value for the customer. Although this stocking is not targeted towards athletes or sporting enthusiasts, the energetic, bright colours may also appeal to these consumers.

6 PRODUCT LAUNCH PLAN

Creating a well-devised plan for introducing a new product into the market is vital to its success. In short this plan outlines how exactly the new product will enter the market by specifying information about three main areas: marketing objectives, marketing strategies and marketing programs. There are many activities that need to be done during the planning process, or creating of a marketing plan. This planning takes place right from the beginning when the idea is first thought of and continues until the product is being launched. This continued planning of how the product will be marketed is important right from the start in helping to design and to develop a good product that will not only be unique, but also sell well. Figure 10 is a summary of the marketing planning process outlined by Cooper (2011, 317).

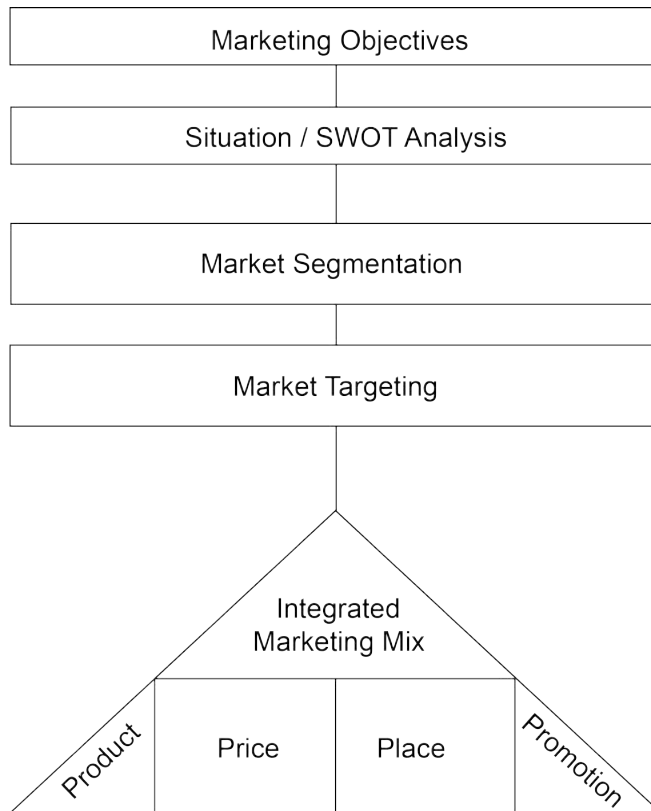


Figure 10. Marketing plan (adapted from Cooper 2011, 317)

Goals or objectives must be determined and then the existing market for that product is analysed, as well as market segmentation and realistic options in technology and production. It is necessary to understand the existing market and what customers buying similar products need and want (Kotler & Armstrong 2016, 130). When all of these issues are sorted out it is possible to develop the product concept and consider how the product will be positioned for the target market.

As the goals of marketing the product become clear, the strategies that will be used to reach these goals must be developed. These strategies include product positioning and differentiation, price, place as the online web store and promotion through marketing communications (Cooper 2011, 320). Integrated marketing programs focused on these strategies will help provide superior value for customers. This in turn leads to satisfied, happy customers and loyalty through good customer relationships. (Kotler & Armstrong 2016, 222.)

6.1 Marketing objectives

Setting marketing objectives helps create a sense of purpose – outlining why the marketing strategies and programs exist. These goals will also help motivate the business to push forward and provide some standards for measurement, benchmarks to check against to see whether the business is on track or not. According to the author of *Winning At New Products* all marketing goals must be SMART, meaning they need to be Specific, Measurable, Action oriented, Realistic and Time bound (Cooper 2011, 318).

The marketing objectives for this conceptual launch of a unisex designer medical compression stocking are: to gain market share in this specific segment of the market within one year and to create customer relationships through customer satisfaction. Creating company awareness for a new company is also vital. Company and brand awareness can be evaluated through market and consumer surveys. Since this is a conceptual launch, financial details are not being used; therefore goals relating to exact numbers are not set.

6.2 Market segmentation

The market for medical compression stockings can be segmented using several different variables. Commonly more than one segmentation base is used to be able to identify smaller, more well-defined target markets. Furthermore, intermarket or cross-market segmentation is used to identify the people with similar product needs and consumer behaviour within a group of different countries. Since the internet connects buyers regardless of their location and this conceptual product launch is for an online store, multiple segments have been used to define potential customers within a larger geographic area. (Kotler & Armstrong 2016, 231.) The following information in Table 3 presents the segmentation process used for this thesis.

Table 3. Market segmentation for medical compression stockings (adapted from Kotler & Armstrong 2016, 223)

Segmentation Variable	Segment
Geographic	Europe, Northern Europe
Demographic	men, women, aging societies, people with health problems or medical needs related to their legs, well educated, knowledgeable with internet use and online shopping, high average income
Psychographic	working class, upper class, interested in health and preventative health measures, fashion-forward, trendy
Behavioural	benefits sought: comfort, pain relief, improved circulation, wound healing, therapeutic effects, aesthetically pleasing

6.3 Market targeting

Selecting a target market from the various segments requires a thorough evaluation of segment sizes and their growth potential, competition in a segment, accessibility, as well as company goals and existing resources. Profitability is also a key factor in segment selection. (Cooper 2011, 320.) As Company X is a small, new company; it has limited resources and would begin its entry into the market by focusing on a market niche. Serving a special segment of the market, or niche, Company X can launch its product with less risk. If the product launch is successful, the company can venture confidently into more market segments. (Kotler & Armstrong 2016, 234.)

The chosen target market for the new designer medical compression stocking consists of women aged 35–55 who have existing leg health problems and require this product for medical purposes. The target market also includes business people who travel, people who like to run, people who focus on optimising their health, as well as people who are comfortable purchasing online. The consumers in this target market most likely prefer to shop through pharmaceutical-type vendors as opposed to department stores because they focus on products that are specifically designed for healthcare and used,

tested and sold by professionals within the medical field. The consumer also values products that have referrals from physicians and other professionals within the leg health sector. (Santander 2016.)

The target market's purchasing behaviour would be to spend their money on higher-end products that cost more, but that deliver results and have an upstanding reputation within their field. They feel these products retain value because of the quality of the product and its design. The targeted consumers prefer to buy the best materials and products available. In addition, these consumers would be interested in products that are more sustainable and have a lengthened product lifespan. (Santander 2016.)

The consumer behaviour would include people who are loyal customers and make repeat purchases once they find a product that meets their needs and offers high value. Loyalty often leads to customers endorsing the product. Marketing would hopefully continue through word-of-mouth as customers become so excited about the benefits and quality of the product that they want others to know about it. This would help the product branch out into other market segments in the future. (Blythe 2009, 163.)

The marketing efforts and the web store would focus on sales and marketing within northern European countries: Finland, Sweden, Norway and Denmark. There are approximately 24 million consumers in these countries altogether. Research has shown that these consumers have been quicker to adopt new products than western European consumers, with new product adoption time being shorter by about 50% in Nordic countries. (Sharp 2010.)

6.4 Integrated marketing mix

An integrated marketing mix is essential to the successful launch and future of a new product (Kotler & Armstrong 2016, 37). The four main elements of the marketing mix, product, price, place and promotion, will each be discussed separately. However, each element of the mix has to be well integrated with the other elements to achieve a clear, unified and highly focused introduction of the product into the market.

6.4.1 Product: positioning and differentiation

The positioning of any new product is important as it determines how consumers will think of the product in comparison to other similar products on the market (Kotler & Armstrong 2016, 238). New products need to stand out in the minds of consumers and have a unique selling benefit. Communicating a unique selling benefit and establishing a strong brand are equally vital to success. The Company X brand is the company's image in the marketplace, and ultimately communicates to customers why they should buy the new product. To maintain brand integrity, Company X will aim to use media options, distribution channels and messages to consumers that are consistent. (Ashe-Edmunds 2016.)

Perceptual positioning maps are an effective way to visually display how a company is positioned in comparison to competitors selling a similar product (Kotler & Armstrong 2016, 240). Figure 11 shows how Company X (yellow bubble) is positioned amongst global (red bubble) and northern European (blue bubble) brands. The map further distinguishes between traditional (bubble without circle) and non-traditional (bubble with circle) styles of compression stockings. For the purposes of this map traditional stockings styles represent products that are clinical in their aesthetic and are available in basic colours. The non-traditional stocking styles represent products that can be considered more fashionable or trendy in aesthetic and have bolder prints, colours and other details.

Companies were placed on the map according to price and quality. The map shows that Company X would be situated amongst industry leaders with high pricing and high quality products. However, Company X differentiates itself by offering non-traditional, fashion-oriented styles. Northern European brands offering non-traditional styles have a lower price point and lower quality.

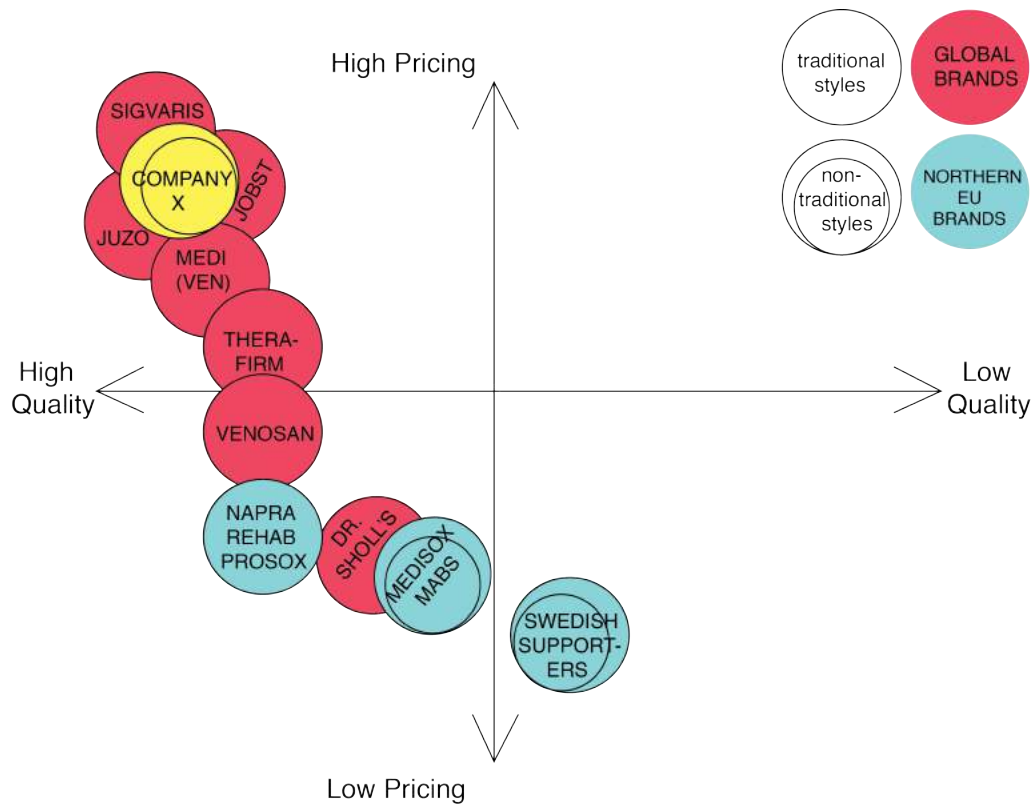


Figure 11. Product positioning perceptual map (adapted from Blythe 2009, 172)

The new medical compression stocking for women will aim to distinguish itself from the competition through its high quality and high-end fashion design. Customer loyalty programs, superior customer service and customer feedback incentives will help to differentiate the company and build strong customer relationships (Cooper 2011, 33).

6.4.2 Price

The strategy for pricing a new product is suggested to follow certain basic guidelines in order to come up with the best number for this critical element of the marketing mix. To begin with the target market and positioning of the product need to be clearly specified. (Cooper 2011, 322.) As stated previously in the product strategy section of this thesis, the medical compression stocking is aimed at a niche market to meet the specialised needs of consumers in that market. However, the product is not yet well known or differentiated from existing competitive products at this time and this factors into the pricing strategy. Another important consideration is that this target market does have competition from well-known large businesses, such as Sigvaris, among others (Blythe 2009, 170).

Again, considering the company is just starting up and this is the launch of the first medical compression product for a niche market, a skimming strategy is the best for pricing. This means that it is important to create a high value for the product in the minds of customers so that they will pay a premium price for it. (Cooper 2011, 322.) In an attempt to decrease risks during this critical beginning time lower volumes of product will mean that small production facilities will be sufficient and cut costs. If marketing is done effectively to create a large value or worth for the target market, then profit per unit should be high. Another option is to have introductory promotions to create interest in the product and increase the sales in the beginning. This price reduction or offering of additional benefits with purchases will lower the perceived risks of trying a new product in the customers' minds. (Kotler & Armstrong 2016, 355.)

In the future, early market research through customer surveys about the product, concept and pricing will help to correctly assess the new product's value before the actual launch. Once the valued worth of the product is analysed based on customer feedback and research results it is also necessary to calculate the contribution profit per unit. This refers to the selling price of the product minus the costs per unit such as direct labour, sales commissions, materials and so forth. The amount left after paying for all the costs of creating and selling the product must result in profit for the company to make it worthwhile. The business cannot grow or even continue its operations without profit. (Cooper 2011, 324.)

Taking the above mentioned factors into consideration and after researching existing medical compression stocking pricing, it seems the optimal, and competitive, price point would be within the range of 70—90 euros per pair depending on the compression level. (Ames Walker International 2016a.)

6.4.3 Place: web store design

When visiting the online store, as the first stage channel for sales, the goal would be to make the customer feel comfortable, to stay organised and to feel excited. The comfort level is derived from creating a website that is user-friendly and easy to navigate through. The layout of the web store will be simple by only displaying the key navigational menu headings. These menu headings would guide customers to links for the most pertinent information such as: products, account and shopping cart. The key initiative would be to

make the customer's experience to be fast and simple because today people tend to have less time. (Kotler & Armstrong 2016, 257.)

When the customer visits the store they would first log in as return customers or be invited to register, through an incentive for a discount on purchase via a pop-up advert when the mouse hovers over the homepage. This would make the customers' shopping experience faster during the checkout process by having all of the billing and shipping information already filled in. (Kotler & Armstrong 2016, 46.)

There would be simple headings to follow for product search, as well as size charts and helpful instructional videos on how to best measure and put on the garment. An example of a measuring guide is provided in Appendix 5. Including a proper measuring guide is essential for customer satisfaction because the correct fit is so important for this product (Therafirm 2013). Videos also tend to create a more personal touch for online purchasing. Customers can see the product live and being used by a person to help make their decision to buy. Even after purchasing the video creates a connection and a personal touch that comes from hearing a person's voice and watching them as they explain the product. The videos can also help increase customers' self-confidence in participating in their own health care by showing how to best manage leg health with compression stockings. (Kotler & Armstrong 2016, 42.)

The images on the website would be done in consistency with fashion-type photography to encourage the brand's identity, as can be seen in Figure 12. The images would have clarity to best display the true colours of the product with full zoom to create the feeling of almost touching the product and seeing the actual weave of the fabric. Special deals would be included and introduced to encourage purchasing (Kotler & Armstrong 2016, 355). Customer service would also be of importance for the web store to encompass the full spectrum of the ultimate customer experience that is highly desired. Similar to how a blogger creates a buzz on the products that they endorse, the web store would be designed to have many different outlets of personal touches to really stand out. (Kotler & Armstrong 2016, 544.)

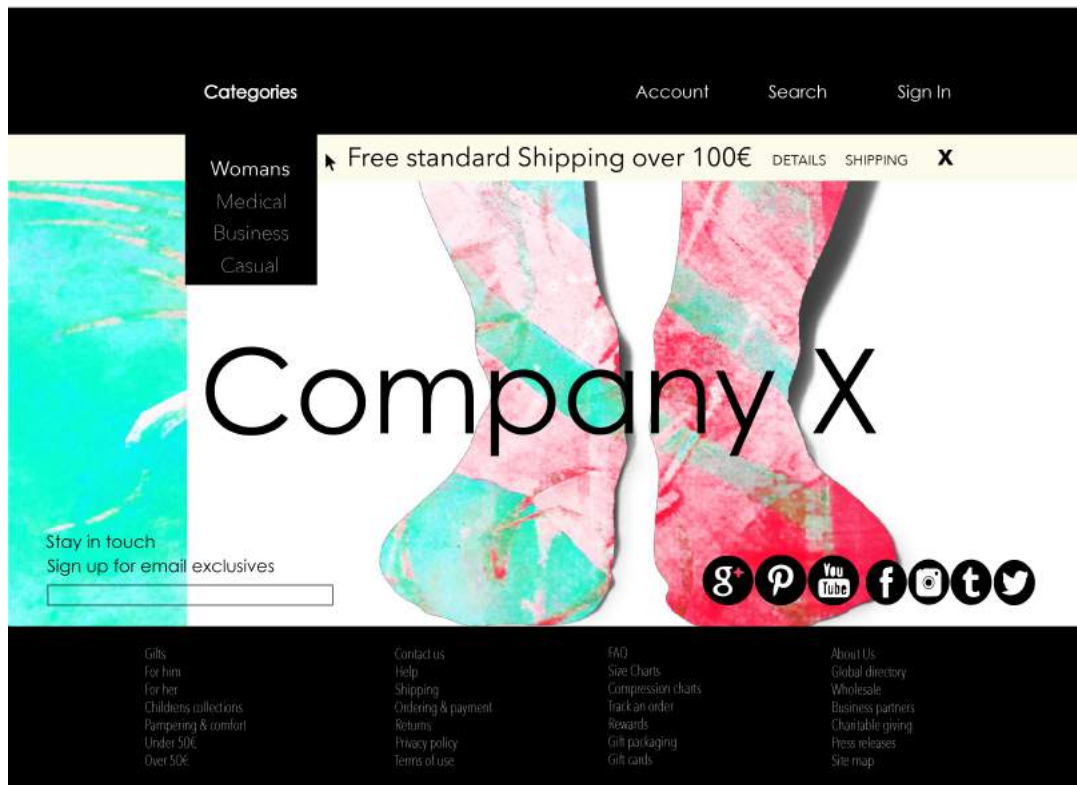


Figure 12. Company X web store homepage (Hokkanen 2016)

The features of the online store would be geared toward a functional and practical user experience with the purpose of creating a superior shopping experience. Creating a strong platform for an e-commerce business ensures a good foundation for an introductory product. As a customer-centred company, the customer must be the main focus of the Company X online store, and what it has to offer. In addition to a good product, it is necessary to focus on the customer and to make them feel comfortable and excited to shop at that distinct store. (Kotler & Armstrong 2016, 586.)

The online store includes the following features and services:

- About us
- Our promise / mission / vision
- Leg health
- Gift certificates
- Privacy
- Contact us
- Site map
- A complete guide to compression therapy
- Blog

Online business functions:

- Inventory management
- Order management
- Shipping settings
- Payment processing
- Fraud protection
- Ratings and reviews
- Product recommendations
- Social Media Integration
- Promotions engine
- Search optimization

(Amazon Services LLC © 2015)

Online customer-centred service functions:

- Product details (materials, colours, sizing, codes)
- Product lines / collections
- Images
- Shopping cart
- Wish list
- Prices / international pricing options
- Availability
- Returns policy
- Size Charts
- Compression level charts
- Product usage and informative videos
- Washing and care instructions
- Ratings and reviews
- Trustmarks (security signs, testimonials)
- Live chat or contact number / customer support

(Charlton 2015)

Specific information to be given to customers to improve product usage and experience:

- The reason why graduated compression stockings have been prescribed
- The benefits of wearing them regularly
- How to apply them correctly
- How long to wear them each day
- When to take them off
- When to replace them
- Daily hygiene

(Lim & Davies 2014, E395)

The overall concept for the web store design is to be customer centred. By providing customers with important key elements regarding product, its usage and services offered, Company X will be able to increase sales and customer satisfaction. It is important however not to overwhelm customers with too much information. Finding the right balance of information and how to display it in a visually pleasing way to customers is the goal for designing the web store. An existing company Vim&Vigr's website is a good example of this balance, therefore a few images from their website are available in Appendix 6/1, 6/2 and 6/3 for illustrative purposes (Vim & Vigr 2016).

6.4.4 Promotion

Promoting the new medical compression stocking will include several ways of communicating Company X's message. This will involve different marketing efforts such as advertising, public relations, cause marketing, social media, direct mail, sales, and promotional discounts. Participating in trade shows or events related to medical equipment, healthcare aids, medicine, health care, wellness, prevention and fashion events will help increase interest and awareness. Offering samples for display or promotion to interested medical clinics, offices, shops and pharmacies is yet another possible way of promoting the new product. While a large number of channels can be used to promote the new product, each one will be part of an integrated marketing communication concept to make sure the message is clear and consistent. (Kotler & Armstrong 2016, 449.)

A promotional offer of either a discounted or free pair of donning gloves (rubber gloves to facilitate correct dressing of compression stockings) would possibly attract more customers since many people complain of difficulties in being able to get their stockings on, especially with higher compression level stockings (Zajkowski et al. 2002, 1067). Not only would this increase sales, but it would also provide a great benefit and added value for customers because people in this target market have trouble correctly placing stockings with or without physical limitations and restricted mobility (Dilks et al. 2005).

Another popular promotion that increases value perception and sales is to offer free shipping on select orders (Kacen et al. 2013, 14).

It may be profitable in the long run to spend more of the budget to introduce the product in ways that create awareness and demand. As consumers become familiar with the product and brand, and have tried the product, maintenance promotions can be used to remind or encourage customers to make more purchases. (Blythe 2009, 185.)

It is suggested to target early adopters, meaning people who like to try new products, during the product launch because these customers will be most likely to influence other customers in terms of trying out the product. Word-of-mouth advertising can be a very successful in attracting new customers when the experience with the product and service has been positive. The people that are interested in trying new products are also more likely to pay a higher introductory price. Another launch promotion strategy might include free sampling to help break down customer loyalty barriers. (Ashe-Edmunds 2016.)

6.5 Future products and services

Once the company grows the possibility for expansion is realistic. More products for women will be developed as well as a line of products targeted for men. Youth and children will also be considered as a future market with products and services developed and designed specifically for them. As the online market grows expansion into retail stores and pharmacies may also be an option.

Another target group for the future includes people with physical limitations and other mobility issues. New products would possibly include stockings with zippers and donning or dressing aid products designed to increase compliance for people who require medical compression therapy but have problems correctly using the stockings. (Dilks et al. 2005.) Custom orders for special sizing and designs will be available as soon as manufacturing, storage and logistics are firmly set in place.

7 CONCLUSION

Product design must be developed together with product marketing ideas right from the beginning to achieve a customer-centred product. The information provided throughout the product design and product launch process sections of this thesis answer the main research question, "How to design a medical compression stocking and how to launch it online?" by demonstrating that both areas require many stages with constant quality checks to produce a well-designed product and product launch. It is very important to continue researching and seeking consumer feedback throughout the stages.

Unique product design involves a lot of time and creativity, especially when using the monoprint technique for print design. Overall the market launch for a new product is time-consuming as it involves a number of steps, including research of the target market, marketing strategies for this market and the specifics of e-business.

Both research methodologies used, secondary research and image-based research, were also useful in answering the sub-questions previously outlined in the research questions section. The answer to the first sub-question, "How does the medical aspect of the product factor into its design and launch?" is clear because, as previously stated, medical compression stockings must be designed and produced according to strict specifications. Medically oriented products are launched using the same process as all products; however, the target market, marketing mix and prescription needs all require a highly customised launch plan.

The answer to the second sub-question, "How important is design aesthetic for compression wear?" is also clear. Market research shows that although this product is being sold successfully with a very simple and clinical design, there is an opening in the market for more fashionable and unique designer stockings with higher compression levels.

Finally, the answer to the third sub-question, "How much do the product and launch affect one another?" is also evident from the research. This thesis clearly shows that the product design and the product launch are highly dependent on one another as the launch process must begin when the product is still in its developing stages. Product development goes hand-in-

hand with preparing the marketing objectives, strategies and potential programs for introducing the product onto the market once it is ready.

Even though data obtained from market research for this thesis was from secondary sources, it still provided useful information regarding current and future market and product trends and possible opportunities for positioning this product when it moves from a concept to a reality in the future. The preliminary research done for this thesis has helped to minimise risks for a future launch particularly through customer profiling, competitor analysis, benchmarking, and product positioning, pricing, and online promotion ideas.

In the future it would be highly beneficial to design and implement online and in-person consumer surveys, questionnaires and interviews to gain more insight into further product development and innovation possibilities. In particular this insight would help when more products are being designed. The data from these various types of field research would also be useful to improve marketing strategies and programs. Both product design and product marketing revolve entirely around the consumer so it is essential to continue checking that the consumer really is in the centre of the process at every stage.

REFERENCES

- Amazon Services LLC ©. 2015. All features. [online] Available at: <http://webstore.amazon.com/All-Explore/b/10990250011> [Accessed 11 March 2016].
- American Venous Forum ©. 2016. What is compression therapy? [online] Available at: <http://www.veinforum.org/patients/what-is-vein-disease/what-is-compression-therapy> [Accessed 21 March 2016].
- Ames Walker International ©. 2016a. Sigvaris designs and online prices. [online screenshot] Available at: <https://www.ameswalker.com/prodcat/sigvaris.asp?page=0> [Accessed 14 March 2016].
- Ames Walker International ©. 2016b. A complete guide to compression hosiery. [online] Available at: <https://www.ameswalker.com/content/compression-hosiery-guide.asp> [Accessed 22 February 2016].
- Ashe-Edmunds, S. 2016. Theory of product launch and promotion. AZCentral website. [online] Available at: <http://yourbusiness.azcentral.com/theory-product-launch-promotion-27175.html> [Accessed 10 February 2016].
- Blythe, J. 2009. Key Concepts in Marketing. London: Sage Publications Ltd.
- Chambers, B. 2007. What you will need and instructions. monotype_printmaking.pdf [pdf] [Accessed 14 March 2016]. Provided by Katariina Silvola, lecturer KYUAS.
- Charlton, G. 2015. 31 things I need to see on your ecommerce product page. Econsultancy.com. Econsultancy blog. [blog] 29 June 2015. Available at: <https://econsultancy.com/blog/63161-31-things-i-need-to-see-on-your-ecommerce-product-page/> [Accessed 11 March 2016].
- Compression Stocking Site ©. 2016. What are compression stockings made of? [online] Available at: <http://www.compressionstockingsite.com/what-are-compression-stockings-made-of/> [Accessed 22 March 2016].
- Cooper, R. G. 2011. Winning at New Products: Creating Value Through Innovation. 4th ed. New York: Basic Books.
- Dilks, A., Green, J. & Brown, S. 2005. The use and benefits of compression stocking aids. Nursing Times [online] 101 (21). Available at: <http://www.nursingtimes.net/roles/older-people-nurses/the-use-and-benefits-of-compression-stockings-aids/203867.fullarticle> [Accessed 10 March 2016].
- Google Images. 2016a. Google image search results for "compression stockings medical". [online image] Available at: https://www.google.fi/search?q=napra+tuotteita&biw=1062&bih=590&source=lms&tbm=isch&sa=X&ved=0ahUKEwiJlrCAjvXLAhWCipoKHRTuBtsQ_AUIBiGB#tbm=isch&q=compression+stockings+medical&imgcr=1KCGnnavrKSJNM%3A [Accessed 05 April 2016].
- Google Images. 2016b. Product design user demographic. [online images] Available at:

<http://pushfitnessstraining.com/blog/wpcontent/uploads/2015/11/traveling-woman.jpg>,
https://si.wsj.net/public/resources/images/PJBU985_NORDCE_GR_20140521_184754.jpg, <http://a.bimg.dk/node-images/111/7/620x/7111300-12mssnedslagsarajs-1.jpg.jpeg>,
<https://www.massagemag.com/wordpress/wp-content/uploads/pregnant-woman-looks-for-varicose-veins.jpg>,
https://discoverstudyabroad.files.wordpress.com/2015/07/simran_khadka.jpg,
https://legsonfire.files.wordpress.com/2010/06/100_1693.jpg,
<http://www.health.harvard.edu/media/content/images/bigstock-compression-Anthithrombotic-Stockings-62878258.jpg>,
<http://rw.runnersworld.com/selects/images/sara-corbett-01.jpg>,
<http://2.bp.blogspot.com/-WPkV8FBTEzs/VOaRwD-cwII/AAAAAAAAACWY/JEqlyFAdBkl/s1600/Lipedema-patient-Vicki-shows-how-te-disorder-has-affected-her-legs.jpg>,
http://img.thesun.co.uk/aidemillum/archive/02758/docs_main_2758265a.jpg,
<http://www.corbisimages.com/images/Corbis-42-29291063.jpg?size=67&uid=a30cc369-17bc-45cd-a526-09dd60124241>,
<http://www.lakeforestmba.edu/blog/wp-content/uploads/2014/05/Older-Workers-704x349.jpg>, <http://www.bestselling.sg/wp-content/uploads/older-women.jpg>,
<http://www.scandinavianfashionstore.com/static/media/images/c4/original/c4fd3b26a2dbd613acbf50976d85fb1c.jpg>, http://4.bp.blogspot.com/-F65u2N4RUeo/T8RNd1w8W_I/AAAAAAAAAfs/5yLsqnlgo7Y/s1600/065.JPG
 [Accessed 05 April 2016].

Google Images. 2016c. Medical Sigvaris size chart for compression socks. [online image] Available at:
https://www.google.fi/search?q=size+charts+for+women%27s+compression+socks&source=lnms&tbm=isch&sa=X&ved=0ahUKEwjRI6u07a7LAhUhEpoKHfLSBdQQ_AUIBygB&biw=1127&bih=534#q=size+charts+for+women%27s+compression+socks&tbm=isch&tbs=isz:it,isl:xga&imgrc=jBzgyhvZWYMtLM%3A
 [Accessed 14 March 2016].

Google Images. 2016d. Tropical tertiary colour forecasting. [online image] Available at:
https://www.google.fi/search?q=spring+summer+2016+fashion+trend+forecast&biw=1127&bih=561&source=lnms&tbm=isch&sa=X&ved=0ahUKEwi---OwycDLAhWkHJoKHW1sBLYQ_AUIBigB#tbm=isch&q=spring+summer+2016+color+trend+forecast&imgdii=5kaZqPz2NE62VM%3A%3B5kaZqPz2NE62VM%3A%3Bi4c0uo2MV6xkHM%3A&imgrc=5kaZqPz2NE62VM%3A [Accessed 14 March 2016].

Kacen, J. J., Hess, J. D. & Chiang, W. K. 2013. Bricks or clicks? Consumer attitudes toward traditional stores and online stores. *Global Economics and Management Review* 18 (01). 12-21.

Kotler, P. & Armstrong, G. 2016. *Principles of Marketing*. 16th ed. London: Pearson.

Lim, C. S. & Davies A. H. 2014. Graduated compression stockings. *CMAJ* [online] July 8; 186(10). E391–E398. Available at:
<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC4081237/> [Accessed 21 January 2016].

Mono. 2002. Branding: From Brief to Finished Solution. Crans-Pres-Celigny: Rotovision SA.

Monoprints.com ©. 2012. Monoprints [online] Available at: <http://www.monoprints.com/monoprints.php?PHPSESSID=45fc7f0ca70413edebb5e7ecbae1c790> [Accessed 21 March 2016].

Mooney, J. 2009. Illustrated Dictionary of Podiatry and Foot Science [online] Available at: <http://medicaldictionary.thefreedictionary.com/compression+hosiery> [Accessed 08 March 2016].

Mosti, G. & Partsch, H. 2011. Compression stockings with a negative pressure gradient have a more pronounced effect on venous pumping function than graduated elastic compression stockings. *European Journal of Vascular and Endovascular Surgery* 42 (2). 261-266.

Nanehkaran, Y.A. 2013. An introduction to electronic commerce. *International Journal of Scientific & Technology Research* 2 (4) 190-193. [online pdf] Available at: <http://www.ijstr.org/final-print/apr2013/An-Introduction-To-Electronic-Commerce.pdf> [Accessed 06 April 2016].

Napra Rehab Oy © 2013. Meistä. [online] Available at: <http://www.napra-rehab.fi/fi/content/7-meista> [Accessed 04 April 2016].

Niranjanamurthy, M., Kavyashree, N., Jagannath, S. & Chahar, D. 2013. Analysis of e-commerce and m-commerce: Advantages, limitations and security issues. *International Journal of Advanced Research in Computer and Communication Engineering* 2 (6). 2360-2370. [online pdf] Available at: <http://ijarccce.com/upload/2013/june/7-Niranjanamurthy-Analysis%20of%20E-Commerce%20and%20M-Commerce%20Advantages.pdf> [Accessed 06 April 2016].

Oleck, M. 2016. [Categories of compression, 53] Basic introduction to compression hosiery. Dr.Comfort.com [online pdf] Available at: <https://www.drcomfort.com/pdfs/BasicIntroductiontoCompressionHosieryDISTANCE.pdf> [Accessed 15 March 2016].

Pantone. 2015. Pantone fashion color report spring 2016. [online pdf] Available at: <https://www.pantone.com/downloads/support/FCR/PANTONE-Fashion-Color-Report-Spring-2016.pdf> [Accessed 22 March 2016].

Persistence Market Research. 2015. Summary of global market study on compression therapy: Asia to witness highest growth by 2020. Report Linker. [online] Available at: <http://www.reportlinker.com/p03175798-summary/Global-Market-Study-on-Compression-Therapy-Asia-to-Witness-Highest-Growth-by.html> [Accessed 17 February 2016].

Quinlan, C. 2011. *Business Research Methods*. Hampshire: Cengage Learning.

Rosenbloom, E. 2015. Trend alert! From rainbow brite to rainbow brides, life is getting colorful!. *TheHuffingtonPost.com*, The blog. [blog] 13 March 2015. Available at: http://www.huffingtonpost.com/evey-rosenbloom/trend-alert-from-rainbow-brite-to-rainbow-brides-_b_6851998.html [Accessed 14 March 2016].

Santander ©. 2016. Trade portal. Finland: Reaching the consumer. [online] Available at: <https://en.santandertrade.com/analyse-markets/finland/reaching-the-consumers> [Accessed 06 April 2016].

Sharp, S. 2010. Expanding to Europe through the Scandinavian market. Greenbook: The guide for buyers of marketing research. [online] Available at: <http://www.greenbook.org/marketing-research/expanding-to-europe-through-the-scandinavian-market-06176> [Accessed 06 April 2016].

Sigvaris ©. 2015a. About Sigvaris. [online] Available at: <http://www.sigvaris.com/global/en/about-sigvaris> [Accessed 14 March 2016].

Sigvaris ©. 2015b. Products, 602 diabetic socks for men and woman. [online] Available at: <http://www.sigvaris.com/usa/en-us/product/diabetic-socks-men-women-602> [Accessed 22 March 2016].

Silvola, K. 2015. Kartonkigrafiikka, VVVV00614_VAL14KOU Taidegrafiikka. [online via internal VLE] Kymenlaakso University of Applied Sciences Available at: <https://moodle.xamk.fi/course/view.php?id=10403> [Accessed 16 March 2015].

The Huffington Post. 2015. Bright colours and fashion colour forecasting for 2016. [online image] Available at: http://www.huffingtonpost.com/evey-rosenbloom/trend-alert-from-rainbow-brite-to-rainbow-brides-_b_6851998.html [Accessed 14 March 2016].

Therafirm ©. 2013. Women's mild support sheer knee high stockings. [online image] Available at: <http://www.therafirm.com/women-s-mild-support-sheer-knee-high-sockings.html> [Accessed 06 April 2016].

Vim & Vigr. 2016 ©. Vim & Vigr Homepage. [online] Available at: <https://vimvigr.com/> [Accessed 14 March 2016].

World Intellectual Property Organization (WIPO). 2015. Chapter 2—Fields of intellectual property protection. [online pdf] Available at: <http://www.wipo.int/export/sites/www/about-ip/en/iprm/pdf/ch2.pdf> [Accessed 15 March 2015].

Zajkowski, P. J., Proctor, M. C., Wakefield, T. W., Bloom, J., Blessing, B. & Greenfield, L. J. 2002. Compression stockings and venous function. Archives of Surgery 137. 1064-1068.

FIGURE SOURCES

Figure 1. Mind map of the research process for this thesis. Image. Hokkanen M. 12 March 2016.

Figure 2. Venous pressure distribution comparison: Without and with compression therapy. Image. Hokkanen M. 20 March 2016. Adobe Illustrator modified image. [online images] Available at: <http://www.leg-care.co.uk/Benefits-of-Compression>, https://www.iconfinder.com/icons/222820/beat_cardiac_care_health_healthcare_healthy_heart_medical_medicine_pulse_trace_icon [Accessed 20 March 2016].

Figure 3. Design process of the product concept. Photograph of drawing. Hokkanen M. 25 March 2016.

Figure 4. Graduated compression: Compression percentage along stocking. Adobe Illustrator modified image. Hokkanen M. 02 April 2016. [online image] Available at: <http://many-women.com/health/custom-made-compression-stockings.html> [Accessed 02 April 2016].

Figure 5. Technical drawing of product. Adobe Illustrator modified image. Hokkanen M. 06 February 2016. [online image] Available at: <http://txgsocks.com/qa/socks/f5/>, <http://www.bondiband.com/v/vspfiles/assets/images/compression-sock-diagram.jpg> [Accessed 02 February 2016].

Figure 6. Monotype process stages 1 & 2. Photographs. Hokkanen M. 12 April 2015.

Figure 7. Monotyping using found objects. Chambers B. 2007. *Monotype_printmaking.pdf* [image pdf] [Accessed 14 March 2016]. Provided by Katariina Silvola, Senior Lecturer Kymenlaakso UAS.

Figure 8. Monotype process stages 3 & 4. Photographs. Hokkanen M. 14 April 2015.

Figure 9. Product colour and print variations. Adobe Illustrator modified image. Hokkanen M. 12 February 2016. [online image] Available at: <http://www.dollskill.com/choupette-knee-high-socks.html> [Accessed 06 February 2016].

Figure 10. Marketing plan. Figure adapted from pp 317. Cooper R. G. 2011. *Winning at New Products: Creating Value Through Innovation*. 4th ed. New York: Basic Books.

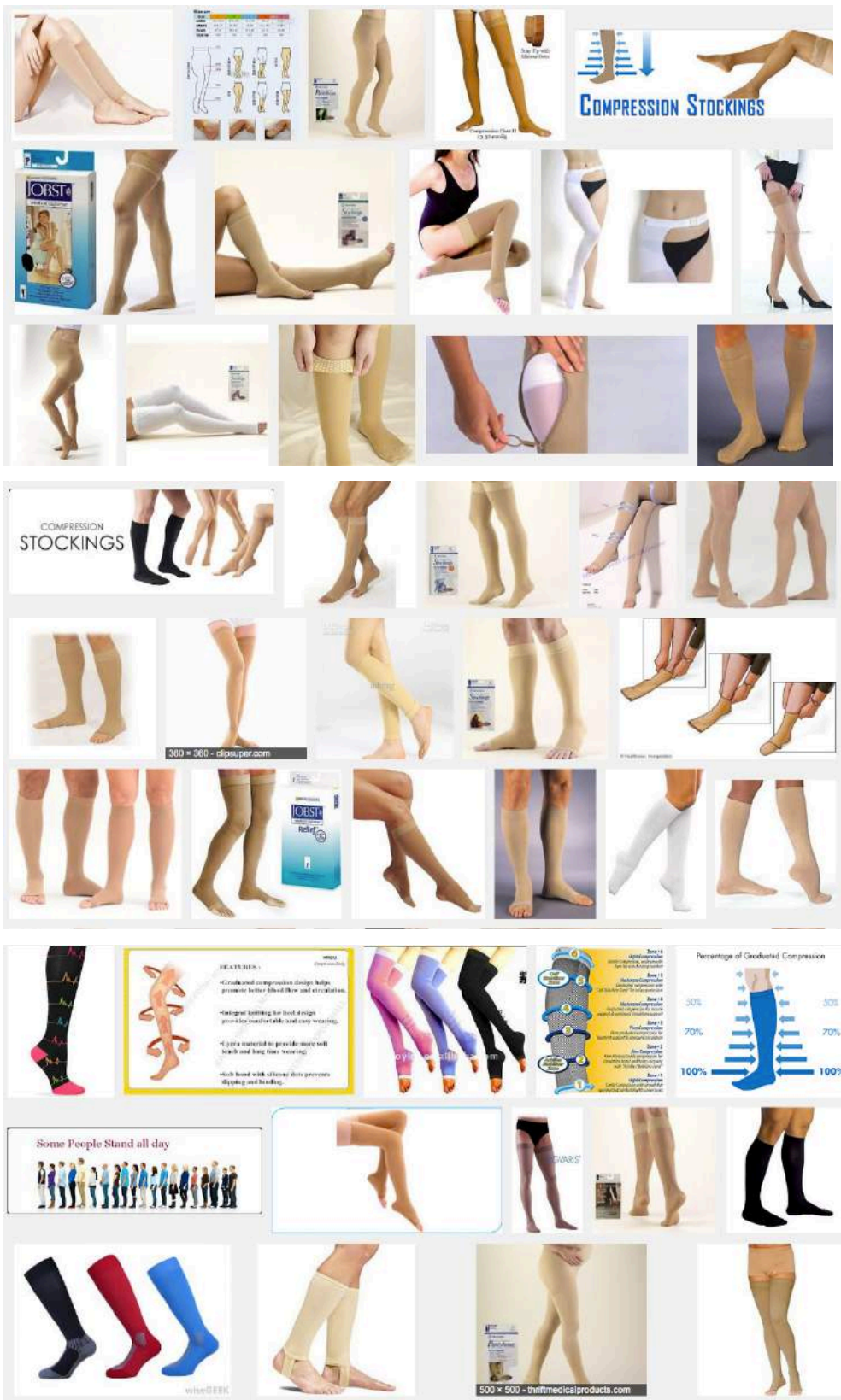
Figure 11. Product positioning perceptual map. Figure adapted from pp 172. Blythe J. 2009. *Key Concepts in Marketing*. London: Sage Publications Ltd.

Figure 12. Company X web store homepage. Modified image from Google Images. Hokkanen M. 07 March 2016. Free round social media icons. [online image] Available at:

https://www.google.fi/search?q=google+images&source=Inms&tbm=isch&sa=X&ved=0ahUKEwiU9bbcqcDLAhVpEpoKHQdvA8sQ_AUIBygB&biw=1127&bih=561#tbm=isch&q=social+media+icons&imgsrc=KI4LXWmZNR5-VM%3A

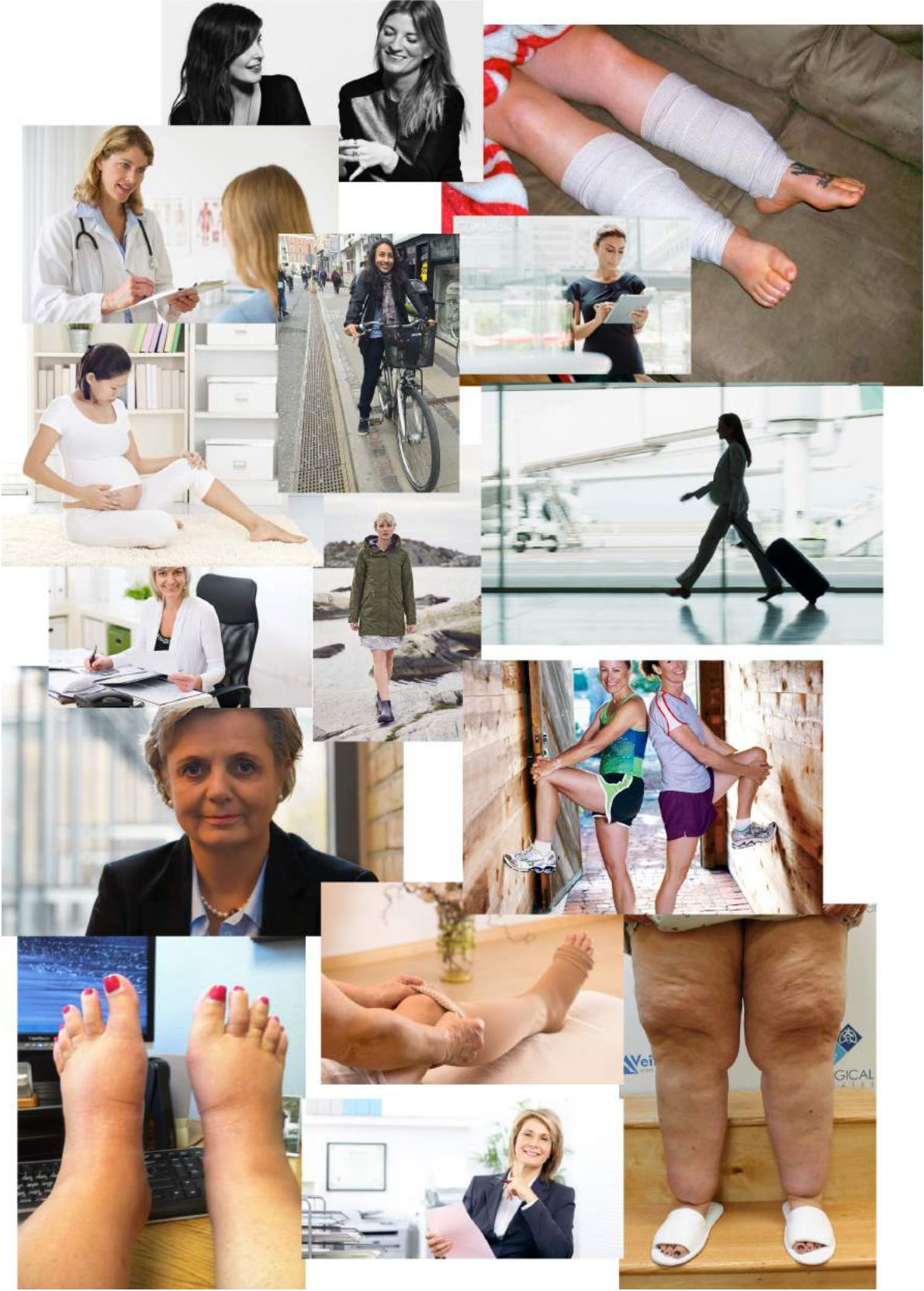
[Accessed 07 March 2016].

GOOGLE IMAGE SEARCH RESULTS FOR "COMPRESSION STOCKINGS MEDICAL"



Google images (2016a)

PRODUCT DESIGN USER DEMOGRAPHIC



Google images (2016b)

MEDICAL GRADUATED COMPRESSION PRODUCT CHART BY SIGVARIS

SIGVARIS

Graduated Compression Products at a Glance

MEDICAL

Series	Boxes	Compression Levels	Styles	Fiber Content
COTTON (230)		20–30mmHg 30–40mmHg	Closed Toe: calf, calf w/grip-top, thigh-high w/grip-top Open Toe: calf, thigh-high w/grip-top	<i>Latex Free</i> 50% Nylon, 25% Spandex, 25% Supima Cotton (content can vary slightly by style)
CUSHIONED COTTON (360)		20–30mmHg	Closed Toe: calf	<i>Latex Free</i> 64% Supima Cotton, 28% Nylon, 8% Spandex
DIABETIC COMPRESSION SOCKS (602)		18–25mmHg	Closed Toe: calf	<i>Latex Free</i> 67% drirelease Polyester, 26% Nylon, 7% Spandex
ALLURE (710)		15–20mmHg 20–30mmHg	Closed Toe: thigh-high w/grip-top and pantyhose <i>for women only</i>	<i>Latex Free</i> 64% Nylon, 36% Spandex (content can vary slightly by style)
EVERSHEER (780)		15–20mmHg 20–30mmHg 30–40mmHg	Closed & Open Toe: calf, thigh-high w/grip-top, pantyhose <i>for women only</i>	<i>Latex Free</i> 64% Nylon, 36% Spandex (content can vary slightly by style)
SOFT OPAQUE (840)		15–20mmHg 20–30mmHg 30–40mmHg	Closed Toe: calf, thigh-high w/grip-top, pantyhose, maternity pantyhose (20–30mmHg only) Open Toe: calf, thigh-high w/grip-top, pantyhose <i>for women only</i>	<i>Latex Free</i> 79% Nylon, 21% Spandex (content can vary slightly by style)
SELECT COMFORT (860)		20–30mmHg 30–40mmHg	Closed Toe: calf, petite calf, calf w/grip-top, thigh-high w/grip-top, petite thigh-high, pantyhose, petite pantyhose, plus-sized pantyhose Open Toe: calf, calf with grip-top, thigh-high w/grip-top, thigh-high w/waist attachment	<i>Latex Free</i> 64% Nylon, 36% Spandex (content can vary slightly by style)
MIDTOWN MICROFIBER (820)		15–20mmHg 20–30mmHg 30–40mmHg	Closed Toe: calf, calf with grip-top (coming 2014), thigh-high w/grip-top (coming 2014) <i>for men only</i>	<i>Latex Free</i> 87% Nylon, 13% Spandex (content can vary slightly by style)
NATURAL RUBBER (500)		30–40mmHg 40–50mmHg 50–60mmHg	Open Toe: calf, thigh-high, thigh-high w/grip-top thigh-high w/waist attachment, pantyhose	70% Nylon, 30% Natural Latex Rubber
ADVANCE ARMSLEEVE (910)		15–20mmHg 20–30mmHg 30–40mmHg	Grip-top with gauntlet Grip-top without gauntlet	<i>Latex Free</i> 50% Nylon, 28% Rayon, 22% Spandex (content can vary slightly by style)

COLOUR FORECASTING MOOD BOARD S / S 2016 & 2017



FUTURE

SS 17 Long Term Forecasting



CAROLINE CECIL TEXTILES 2016/17 TREND
POP POSITIVE



COLOUR FORECASTING MOOD BOARD S / S 2016 & 2017



COMPRESSION STOCKING MEASURING GUIDE EXAMPLE

Therafirm 15-20mmHg* Mild Support Knee-High Stockings

Size	Ankle	Calf	Length	Shoe
Small	6.25"-7.25" (16-18cm)	11"-13.5" (28-34cm)	12"-18" (31-46cm)	4-5
Medium	7.5"-9" (19-22cm)	13"-15.5" (33-39cm)	13"-19" (33-48cm)	5.5-7.5
Large	9.25"-10.75" (24-27cm)	15"-17.5" (38-44cm)	14"-20" (36-51cm)	8-10.5
X-Large	11"-11.5" (28-29cm)	17.75"-18.5" (45-47cm)	15"-22" (38-56cm)	11-12
XX-Large	11.75"-12.75" (30-32cm)	18"-19.5" (46-50cm)	15"-22" (38-56cm)	12+

*The mean compression for an average ankle size.

Proper Sizing Directions

Ankle, calf and length are required for proper fit.

- Measure the circumference of the ankle at the narrowest point directly above the ankle bone.
- Measure the circumference of the calf at the widest point.
- Measure the length of the leg from the floor to approx. 1 inch or 2 fingers below the bend of the knee.
- Shoe size provided as a reference only.

Sizing Tips

- Measurements should be taken when you first get up in the morning before swelling can occur. If measurements need to be taken after you have been on your feet for some time, try to elevate your feet for 15 minutes prior to measuring.
- Measurements should be taken while standing. Try to have someone assist you and take the measurements for you as you stand flat footed.
- Take snug measurements against the skin. Try to avoid measuring over slacks or socks.



- A. Ankle _____
 B. Calf _____
 C. Length _____
 D. Shoe _____

WEBSITE DESIGN CONCEPT IDEAS

FREE SHIPPING WITH 3 OR MORE PAIRS » REFER A FRIEND AND GET A DISCOUNT »
SIZE CHART » 20-30 MMHG » SATISFACTION GUARANTEE »


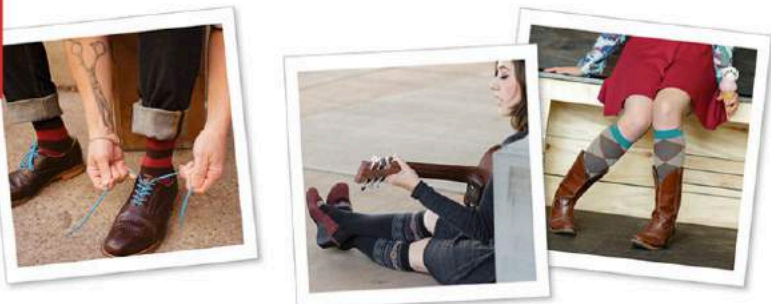
VIM & VIGR
COMPRESSION LEGWEAR

My Account Search...
Women's Socks · Men's Socks · Tights · Sleeves · Testimonials · About · Social »
Cart

ALL DAY INVIGORATION

VIM & VIGR socks energize your legs throughout the day.

★ REVIEWS



WE'RE ON YOUTUBE
Go check us out!

Leave us a Message **VIM & VIGR COMPRESSION SOCKS. ENGINEERED TO** VIM & VIGR Rewards

FREE SHIPPING WITH 3 OR MORE PAIRS » REFER A FRIEND AND GET A DISCOUNT »
SIZE CHART » 20-30 MMHG » SATISFACTION GUARANTEE »

VIM & VIGR
COMPRESSION LEGWEAR

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★ REVIEWS

SPRING FASHION-FORWARD

Get comfort and style in every pair.

SHOP NOW

Leave us a Message **VIM & VIGR COMPRESSION SOCKS. ENGINEERED TO** VIM & VIGR Rewards

WEBSITE ELEMENT IDEAS: PRODUCT INFORMATION AND USAGE

Fabric Collections:

One of the unique features of VIM & VIGR compression socks is that we offer a variety of high quality fabric options. This allows our customers to wear their compression socks all year round and based on their own fabric preference. Some of our customers gravitate toward one or two fabrics and some love them all!

**NYLON**

- 400 needle-count for flexibility and comfort
- Multi-dimensional weave allows for breathability
- Excellent for athletic use

**MOISTURE-WICK NYLON**

- 400 needle-count for flexibility and comfort
- Moisture-wicking fabric to draw sweat and moisture off of the skin
- Multi-dimensional weave allows for breathability

**COTTON**

- High-quality double covered elastic fibers and premium cotton
- 200 needle-count for flexibility and comfort
- Natural breathability

**WOOL**

- High-quality double covered elastic fibers and fine wool
- 200 needle-count for flexibility and comfort
- Natural breathability and moisture-wicking properties
- Light-cushioned sole

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**SITTING**

Sitting for 90 minutes or more can cause blood flow below the knees to decrease by 50%, significantly increasing the chance of blood clots and reducing the amount of freshly oxygenated blood to reach your legs.

**STANDING**

Being on your feet puts a 20% greater strain on the circulatory system and on the legs and feet, which can cause fatigue and varicose veins.

**EXPECTING**

Pregnancy increases blood volume and pressure, which can inhibit blood flow and lead to swelling, fatigue, and varicose veins. In fact, about 30% of all expectant mothers will experience varicose veins during their first pregnancy. After a second or subsequent pregnancy, the odds increase to 55%.

**EXERCISING**

Using compression socks after working out increases the tissue oxygen recovery rate and has been shown to reduce muscle soreness by 28%.

**TRAVELING**

According to a recent British study, 'all forms of transport involving a journey of 4+ hours led to an increase risk of blood clots forming in the veins of the legs'. Recent studies have concluded that airline passengers who wear compression stockings during flights can significantly reduce their risk of Deep Vein Thrombosis (DVT) as well as leg swelling.

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WEBSITE ELEMENT IDEAS: SOCIAL MEDIA

The screenshot displays the VIM & VIGR website with various social media and user engagement features. At the top left is the VIM & VIGR logo with the tagline 'COMPRESSION LEGWEAR'. To the right are navigation links for 'My Account', a search bar, and a list of product categories: 'Women's Socks - Men's Socks - Tights Sleeves Testimonials About - Social -'. A 'Cart' icon is also present.

The 'Community' section features an Instagram gallery for '@VIMVIGR on Instagram' with four image thumbnails. Below this are prompts to 'Like us on facebook' and 'Follow us on twitter', each with a corresponding search input field. A 'Tweets by @VIMVIGR' section shows a tweet from Sue Huse.

A 'Leave us a Message' button is located on the left side. A 'VIM & VIGR Rewards' banner is at the bottom right. A 'Watch us on YouTube' section features a video player with a thumbnail showing 'VIM & VIGR COMPRESSION SOCKS' and icons for 'SITTING', 'STANDING', 'EXERCISING', 'EXPECTING', and 'TRAVELING'. Below the video is a 'Follow us on Pinterest' section with a search input field.

Vertical 'REVIEWS' buttons are visible on the left side of the page. A 'BACK TO TOP' button is located at the bottom right.