MASS CUSTOMIZATION

IS THERE A MARKET FOR MADE-TO-MEASURE SUITS FOR WOMEN?

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2008
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Date: 6th of June, 2008

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Mass Customization; Is there a market for made-to-measure suits for women?

Preface

In the last half a year of my studies I did a short internship of 10 weeks. Through a friend I heard of a young company that make made-to-measure man suits for the lower market segment. They have great success and wanted to start with the same concept for made-to-measure suits for women. Because of their lack of knowledge of women’s fittings, clothes and the market they hired me as an intern. This is where my research for my final thesis started. I had to find out if there is a market for made-to-measure suits for women.

I want to thank my family for giving endless mental support and help. They have supported me through my years at the AMFI, and I am very grateful for that.

Moreover, I would like to thank my boyfriend Jillis and all my friends for their endless support and library study sessions. And the thousands of cups of coffee and motivation lunches. Without them it would not have been so much fun to write this report.

I also would like to thank my final thesis coach Mr Mossinkoff and my quality coach Mr Geurts. Mr Mossinkoff gave me from the beginning to the end great advice and a positive impulse. I really enjoyed all the meetings we had discussing my report.

I hope everybody enjoys reading my report.

Annemaren Kingma

June 2008
Summary

The market is changing, customers have different needs and it becomes difficult to forecast the customers’ needs. How can the clothing industry prepare for the ‘changing’ customers? This is possible by adapting mass customization. Mass customization is the ability to customize a product or service to the customers’ desire but at mass produced prices.

Six megatrends on consumers behavior describe the changing needs of the consumers; gender complexity, lifestage complexity, income complexity, individualism, sensory and comfort.

Technical development supports mass customization. With the improving CAD-CAM systems and new bodyscanning technology it becomes easier to adapt mass customization in different clothing sectors.

One clothing sector which is taking advantage of mass customization is the suit business. And in particular the made-to-measure suit business.

This is a report on my research on the question whether there is a market for made-to-measure suits for women. Many companies offer made-to-measure suits for men, but what about the women?

The number of companies producing made-to-measure suits for women is increasing since 2005. Why? One explanation is that producing made-to-measure suits for women became cheaper and more efficient because of new technical developments. Another explanation, according to research into consumer behavior trends and according to my own field research, is that women want to look individual and unique. Women are disappointed in what the retail stores have to offer. The retail suits don’t have the right fitting or don’t have the color or material women like. A third explanation is also the increasing number of women, who are high-educated and working in higher functions, who need to dress ‘suitable’ for their jobs.

Nevertheless, there are some disadvantages concerning made-to-measure suits for women but the advantages are still prominent.

And yes, there is a market for made-to-measure suits for women.
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1. Introduction

The consumer is unpredictable. I am too.

I don’t want mass products anymore. I want something exclusive and unique. I want a product that fits my personality, my style and my body. This phenomenon is called mass customization. Mass customization is known in every sector of business. Think of the car business where you can choose your own interior and features. And also the co-designing of your kitchen and clothing.

A specific section of the clothing industry which experienced changes through mass customization is suits, especially men's suits. But what about women's suits?

The definition of the problem of this final thesis is:

*Mass customization, is there a market for made-to-measure suits for women?*

To come to an answer I figure first out what mass customization exactly is. What the history is of mass customization and what the influences of different trends are for the development of mass customization.

In chapter two you can read what mass customization is and how it all began. And why mass customization began, by analyzing megatrends.

In chapter 3 is written how the fashion industry adapts mass customization. Plus how technological developments make it easier to use mass customization in the fashion industry.

To get to my main question, I have to specify the usage of mass customization towards suits. Chapter 4 analyses mass customization in the suit business. What technical developments there are going on and what trends are in suits.

To come to chapter 5, mass customization in suits for women, it is interesting to know the history of suits for women. Further it is important to know what the current market condition is. When and why do women wear suits?

This research is about made-to-measure suits for women, but it is interesting to know what happened in retail. What is the problem with retail suits for women, according to interviews, surveys and field research.

To find out if there is a market for made-to-measure suits for women I want to determine the
needs of women. What do women really want? In order to come to a proper conclusion I also describe disadvantages of the made-to-measure suits for women.

In the coming paragraph I describe 3 different suits: retail, bespoken and made-to-measure, in order to prevent misunderstandings about the different suits for women.

### 1.1 Retail, bespoken, made-to-measure

In fashion industry there is a difference in the way of making a tailored suit. The differences can be confusing for consumers. As a matter of fact, there are three different suits: retail suits, made-to-measure suits and bespoke suits. In this chapter I describe all three types in order to provide a clear overview of the possibilities.

**Retail suits**

Retail suits are the most common suit of all three. Ask any man, or women, and he/she will tell you that they own a retail suit. These suits are sold ‘of-the-rack’, which means that these suits are made in mass and sold in stores as a finished product. There is a possibility of adjusting little things of the suit by a tailor. Like the sleeve length of the jacket. But most of the times a suit is sold in the way it was produced for the store. Suits originally have two or three pieces, a matching jacket (lounge coat) and trousers, and occasionally a waistcoat. Retail suits are sold in specialist stores, but also in malls and regular clothing store.

Retail suits have advantages and disadvantages. This will be further discussed in chapter five.

Characteristics in retail suits are:
- Customer can not choose the lining, material and trimmings
- Customer can choose out of several different standard suits
- The suit can only be adjusted to a limited extend
- No delivery time, off-the-rack
- Prices between € 200,- until 3000,- and more
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This way of making retail clothes finds it’s origin in the industrial revolution. Before the opportunity to produce in mass, clothes were made just for one person. This way of making clothes is called ‘bespoke’.

In the Netherlands people call everything a tailored suit (maatpak) but there is a big difference between the quality and price. There are different qualities in tailored suits: bespoke and made-to-measure suits.

Bespoke tailoring

Bespoke is an English term for tailored clothing made for only one customer, and exactly to the customer's specification. The measurements of the customer are taken and a suit is made by a single tailor.

“The word bespoke comes from a time when you visited a tailor and chose the cloth for your suit from the bolts of cloth he or she had available on-site. Once the cloth had been chosen, it had been spoken for, i.e., was no longer available for another client.”

With bespoke tailoring the tailor measures the customer on more than 30 points to create a perfect fitting suit. The pattern is very personal and suitable for only one specific customer. The tailor measures and also cuts and trims the suit. In this way the customer can be assured that the suit will fit perfectly. Besides the measuring the customers can decide which material, trimming linings and model they prefer. To make the suit perfect the customer needs to fit the suits several times. The tailor can make adjustment, if necessary.

Characteristics of a bespoke suit are:
- The customer can choose his own material, lining and trimmings
- The customer can create the suit he wants without the being limited by a standard pattern or suit
- 100% handwork (exceptions excluded)

1 Duncan Quinn, ‘New York Fashion magazine’,
http://nymag.com/fashion/07/fall/36077/index1.html
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- The delivery time is 4 weeks and more (in The Netherlands)
- Prices from € 500,- until € 18,000 and more

Most of the tailored suits in the Netherlands are made-to-measure. This is because made-to-measure suits are comparatively easy to make and as a result, cheaper than bespoke suits.

**Made-to-measure**

Made-to-measure suits are suits that are made out of standard-size based patterns. A made-to-measure tailor first measures the clients’ body features and sizes. With these measurements the clients fits a standard sized suit from a standard-size based pattern. To make the fit of a suit perfect, a tailor decides which alterations are necessarily. These measurements and alterations are used to change the standard-size based pattern. A customized suits is made out of the altered pattern.

When the suit is made, the customer fits the suit and the tailor makes, if necessarily, the last alterations for the customized fit.

Made-to-measure use both hand and machine sewing techniques. The quality of the suit is dependent on how the suit is made and with which fabrics. Made-to-measure suits can be made within a couple of hours in Asian countries and this affects the price.

Another factor for a good fitted suit is the model of the standard sized suit. The Italian of English cut has a different look than the German cut.

The fitting and quality is dependent on the price customers want to pay for a made-to-measure suit.

Characteristics of a made-to-measure suits are:

- The customer can choose his or her own material, lining and trimmings
- The customer can choose his or her own standard sized suit (limited by the different models a company offers)
- The delivery time is 4-8 weeks
- Price between € 200,- up till € 3000,-

This research is about made-to-measure suits. Sometimes in the text I use the words ‘tailored suit’. In that case I mean a suit which is tailored according to the concept of made-to-measure.
2. **Mass-Customization**

‘*The mass market of the 20th century is giving way to a market of one: mass customization*’.  
(*Business Week 2000*)

2.1 **What is mass customization?**

Mass customization is offering products and services for the low costs of mass production with the flexibility and individual vision of the consumer. Or as Tseng and Jiao (2001 p. 685)\(^2\) describe: “The objective of mass customization is to deliver goods and services that meet individual customer’s needs with near mass production efficiency”.

Said in a different way: you first find out the customer needs and then fulfill these needs with an almost equal system as mass production.

To understand how mass customization developed you first have to understand the connection between mass production and mass customization.

2.2 **From mass production to mass customization**

Mass production started off at the beginning of the 20th century. Henry Ford (the owner of Ford Cars) was the founder of mass producing products. He streamlined the production process in order to get lower prices. The Ford car became in reach of the emerging middle class. A famous statement of Henry Ford is: ‘You can have any color car you want as long it’s black’.

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In the industrial revolution, machinery replaced craftsman’s work. This means that products could be produced faster and cheaper. Mass production became cost-efficient. With all new technology being developed, the production volume became higher and the costs of products lower. Products were offered in big quantities for low prices.

Technology nowadays is changing fast. New machinery is produced before the current machines are even used properly. Because of fast changing technologies the life-cycle of products is short. The new technologies used for a product can stop the demands for the old product. Because of the shorter life cycle of products, companies have to know on beforehand as exactly as possible what consumers’ wishes are.

A good forecast for the needs of the consumer becomes very important. But to forecast the consumers need is not that easy anymore. Consumers aren’t easily satisfied and it becomes harder to find out what consumers’ needs are.

That’s the moment where producers are beginning to think about a different system of offering their products. Mass customization is a possible answer for the mentioned disadvantages of mass production. As said before: difficulties with forecasting, shorter life cycle, and fast changing technologies. An advantage of mass customization is that there will be a better knowledge of what the consumers want. The consumer designs or develops the product or clothes exactly how he likes it. Producers can consequently see what the consumer wants and use this information for other purposes. Such a purposes may be the design of a retail clothing line with the knowledge of the consumers needs which they gained by mass customization.

Another advantage is that producers can lower the inventory which is cost efficient. In case of mass production it is difficult to know how much to produce because of the difficulties in forecasting. With mass customization you don’t need, in this case clothes, in stock. Products are developed exclusively for 1 person and not mass produced.

Joseph Pine (1993) analyzed the differences between mass production and mass customization and made the following table on his findings (table 1).
Table 1: Mass Customization Contrasted with Mass Production

<table>
<thead>
<tr>
<th></th>
<th>Mass Production</th>
<th>Mass customization</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Focus</strong></td>
<td>Efficiency through stability and control</td>
<td>Variety and customization through flexibility and quick responsiveness</td>
</tr>
<tr>
<td><strong>Goal</strong></td>
<td>Developing, producing, marketing, and delivering goods and services at prices</td>
<td>Developing, producing, marketing, and delivering affordable goods and</td>
</tr>
<tr>
<td></td>
<td>low enough that nearly everyone can afford them</td>
<td>services with enough variety and customization that nearly everyone finds</td>
</tr>
<tr>
<td></td>
<td></td>
<td>exactly what they want</td>
</tr>
<tr>
<td><strong>Key Features</strong></td>
<td>- Stable demand</td>
<td>- Fragmented demand</td>
</tr>
<tr>
<td></td>
<td>- Large, homogeneous market</td>
<td>- Heterogeneous niches</td>
</tr>
<tr>
<td></td>
<td>- Low-cost, consistent quality, standardized goods and services</td>
<td>- Low-cost, high-quality, customized goods and services</td>
</tr>
<tr>
<td></td>
<td>- Long product development cycles</td>
<td>- Short product</td>
</tr>
<tr>
<td></td>
<td>- Long product development cycles</td>
<td>- Short product life cycles</td>
</tr>
</tbody>
</table>

Source: Pine (1993 p.)

2.2.1 Joseph Pine’s Theory

Joseph Pine was one of the first to describe that mass production is no longer efficient and is outmoded (Joseph Pine, 1993).
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In his book ‘Mass Customization: The New frontier in Business Competitions’ (1993) he describes that the old paradigm of mass production was suitable for the homogeneous mass market. The new paradigm of mass customization, starting at the beginning of the 60’s, Pine explains as: ‘Due the market turbulence characterized by unstable and unpredictable demand levels; heterogeneous desires, price, quality and style consciousness; high levels of buyer power; competitive intensity; product differentiation; and market saturation the shift from mass production to mass customization became the new paradigm.3

The figures 1 and 2 are showing the turnaround of manufacturing products. Figure 1, mass production, is based on the input from the producer. Figure 2, mass customization, is based on the input of the consumer. The arrows rotate in opposite direction because mass customization is a movement towards a totally new business paradigm of mass customization You can read the figures as a reinforcing loop.

![Figure 1: The system of mass production (Pine 1993)](image)

2.3 **Megatrends on consumer behavior**

The previous chapter dealt with the new paradigm of business thinking: mass customization. These changes have to do with behavior of consumers. The world is changing and so are the consumers’ demands and needs.

The consumer behavior is very complex and hard to predict. Nevertheless, Datamonitor found 10 megatrends on consumer behavior. Datamonitor (headquartered in London) is a leading provider of online database and analysis services for different industry sectors. It is a business information company that provides analysis and forecasts for various industries, including the retail markets.
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The report from Datamonitor, ‘Evolution of Global Consumer Trends’, is a very useful source to become aware of what is happening in the world of consumer behavior. These analyses are based on an online survey of 3,200 consumers in the U.S.A., U.K., France, Germany, Italy, The Netherlands, Spain and Sweden.

Below are the 6 most notable megatrends found by Datamonitor for mass customization.

1. **Gender complexity** The survey finds gender roles less defined than ever before; with 73% of men (vs. 72% of women) stating that spending time on personal appearance is ‘important’ or ‘very important’. Similarly, it shows that men are on a par with women in terms of improving their health through diet.

2. **Lifestage complexity** The notion that the family stays together through life is changing, with more people spending more time single, and the phenomenon of ‘boomeranging’ children, who return to the family after a period of independence.

3. **Income complexity** Datamonitor says consumers with lower and mid incomes are increasingly seeking luxury on a budget, for example via accessible brands. Up market luxury is changing, too, as many higher income consumers abandon conspicuous consumption and look for more understated quality in home ware, food and beauty products.

4. **Individualism** The report points to the fact that an increased number of single people are interested in spending money on themselves. Individualism is also reflected by the fact that over half of European and US consumers feel that ‘brands that match their attitudes and outlook on life’ are important.

5. **Sensory** Consumers are seeking out more ‘intense experiences’ from products and are more willing to experiment. 71% of consumers surveyed, for example, feel that finding ‘more excitement and sensations in life’ is important, and 63% had ‘tried more food and drinks that they haven't tried before’.

6. **Comfort** This trend focuses on heightened demands for safety, simplicity and tradition, signaled by self-indulgence, nostalgic consumerism, simplifying, cocooning.

Mass customization is a reaction on the change in consumer behavior. In the trends you can see that consumers are seeking for more quality in life. They are willing to spend more money...
on quality products. On the other hand they are looking for luxury on a budget. Consumers feel more like an individual because of the changing composition of the family. More people are standing on their own and want to be recognized as an individual. They want to have their own image through products they can relate to. Products that make their personality and image stronger.

But to what extend are megatrends influential for the market of the fashion industries? What does mass customization for the fashion industry? And which technological changes made the integration of mass customization easier?
3. **Mass customization in the fashion industry**

The apparel industry is a forerunner in the application of mass customization. A reason of the early adoption is the fact that clothes have 3 dimensions of mass customization: Fit, Functionality, Design.

<table>
<thead>
<tr>
<th>Dimensions:</th>
<th>Mass customization:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Fit</td>
<td>Shape, measurements, size</td>
</tr>
<tr>
<td>2. Functionality</td>
<td>Features, Fabric</td>
</tr>
<tr>
<td>3. Design</td>
<td>fabrics, color, model</td>
</tr>
</tbody>
</table>

These three factors are easily changeable. With most mass customized apparel you can choose your own model perfectly measured to your body, your own color, material and other features. If you can change these 3 dimensions, you have a mass customized piece of cloth.

Another factor of the early adaptation of mass customization of the apparel industry is the fast changing technology. Digital technical drawing systems are developed quickly which makes it easier to offer mass-customization to the customer. Read the chapter with new technological developments to know more about this subject.

### 3.1 Examples

Levi’s was one of the first companies which adapted mass customization and Nike iD is one of the most famous companies offering mass customized products (appendix 4) Through these two examples you get a little bit of history and present information about mass customization in the current fashion industry.
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3.1.1 Mass customization and Levi’s

One of the first brands who adopted mass customization is Levi’s. They adopted mass customization to remain competitive on the market. As said before, mass production is cost-efficient and mass customization is a flexible manufacturing technique which avoids mass stock. And with the fast changing consumer demands and fast changing trends, Levi’s decided to change their strategy by offering mass customized jeans, called the ‘Personal Pair’.

The consumer could create his own jeans by choosing from six colors, three basic models, five different leg openings, and two types of zippers. Then the consumers’ waist, bottom, and inseam were measured to create the perfect fit. To make sure the consumer would like the Personal Pair they tried a plain pair of test-drive jeans before the order was send out.

Sanjay Choudhuri, Levi’s director of mass customization, wasn't in a hurry to add more choices. "It is critical to carefully pick the choices that you offer," says Choudhuri. "An unlimited amount will create inefficiencies at the plant." According to Choudhuri, mass customization isn't about endless choices but about offering a healthy number of standard parts that can be mixed and matched in many ways. That gives the customers the illusion of boundless choices while keeping the complexity of the manufacturing process manageable.

Another reason why Levi’s offered mass customization was because in this way they could see what consumers want. By letting the consumers design their own jeans, the designers of the Levi’s team could easily interpret the consumers’ idea of the perfect jeans.

Nevertheless, Levi’s stopped offering mass customization jeans in 2003 and closed the mass customization factory. Real reasons weren’t given, but at mass-customization.blogs.com one speculates about the bad business situation. Levi’s returned to their core business.

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4 Source: Schonfeld E.(1998), ‘The customized, digitized, have-it-your-way economy Mass customization will change the way products are made-forever’. Fortune Magazine
3.1.2  Mass Customization and Nike iD

In 1999 Nike started with Nike iD. “Nike iD brings us back to our roots when we designed and sold shoes one by one, out of the trunk of my old Plymouth,” said Nike’s Chairman and Chief Executive Phil Knight at the beginning phase of this project. They started with offering two models which could be customized by changing the color and emblazon them with a name or slogan. This concept became a very successful way of selling shoes and offering the customers what they want.

Nowadays, you can choose between 34 different women’s shoes and 64 different men’s shoes. All these shoes have multiple customization options. Customers can choose between different colors, leather, sole, swoosh, lining, lace, name etc. Nike iD is very popular amongst younger and older people.

The concept of Nike iD is growing rapidly and they are also offering shoulder bags, sport bags, backpacks, t-shirts, watches etc. to customize.

A big advantage of the Nike iD site is that you can directly see the end-products. The site is easy to understand without having any knowledge of clothing or shoes. This makes Nike iD accessible for a broad customer group. Nike iD is a strong concept.
3.2 Technological developments

Internet is the basis for new business and technical developments. The internet has made techniques in the apparel industry possible and easier, because technical developments are related to mass customization. With the fast changing technical developments, more and more is possible in the current market. In this chapter three systems are explained. These systems are important for the development of mass customization:

- CAD-CAM systems
- Body scanning systems
- 3-D

3.2.1 CAD-CAM

CAD-CAM is an acronym for Computer Aided Design and Computer Aided Manufacturing. Simply said, the CAD system provides tools to design on the computer and CAM provides tools to manufacture with computer systems. The use of CAD-CAM started in the late 80’s when computer systems began to integrate into apparel companies. The CAD-CAM systems replaced much paperwork and became more efficient through the internet. The use of CAD-CAM systems is crucial for over 75% of the apparel companies today.

Another advantage of Computer Aided Manufacturing is that it can be used to facilitate mass customization: the process of creating small series of products that are custom designed to please the particular client. Without CAM, and the CAD process that designs the model, customization would be a time-consuming, labor-intensive and a costly process. However, CAD software allows easy customization and fast design changes: the automatic control of the CAM system makes it possible to adjust the machinery automatically for each different order.

CAD is used for designing, developing and optimizing products in the apparel industry. Before the existence of the CAD system, all products were designed and drawn on paper. After the design on paper, producers had to make, for example, a pattern by hand to make the
end product. With the CAD systems, you can design on the computer and the computer automatically makes a pattern. Changes on the model are easily made. It’s possible to use the same digital model again but, for example, with different pockets. You can easily make changes in the design on the computer. The system will automatically make calculations on material and costs. The CAD system has a many benefits such as lower product development costs and a shorter design cycle.

Most new developments are time saving and consequently money saving. Programs are made to make patterns automatically, size tables and cutting calculations. As said before, with little adjustments in the model, the system automatically changes all the data.

The CAM is a system of computer technology to help the manufacturing process and is used to produce the design of the CAD system. The computer aided design is directly linked to the computer aided manufacturing. For example: a design is made and converted in the CAM system and the CAM system controls the manufacturing machines.

For the CAM system, there are some new developments that are useful for the mass customization.

Lectra, the leading producer of CAD-CAM systems, developed a new cutting machine. This new system, called ProSpinFashionST, cuts single layers of fabrics. This is perfect for prototypes and for cutting single pieces, which also you need for mass customized clothing. Together with the ProSpinFashionST, Lectra developed the Mosaic system. The Mosaic system has a digital camera which matches stripes, checks, prints and patterns, while cutting. This system is time saving and a solution for mass customization companies who care about quality. The ProSpinFashionST and the Mosaic systems are great inventions for producing fashion like suits and shirts. Concerning suits and shirts there is a golden rule: if the pattern doesn’t match, it’s a cheap piece of clothing. If it does match, it is made with a lot of care and is more exclusive. With the new Mosaic system, the matching of the pattern takes place automatically. It’s time saving, so cost reducing which is advantageous for the development of mass customization.

Gerber, one of the best producers of CAD-CAM systems, also developed new cutting systems called XLs50. The XLs50 can spread woven and knitted material perfectly on the cutting table. In this way, the pattern pieces can put closer to the edge of the materials. This is cost reducing because of less material waste.

In the production of mass customized clothing, waste of material is a threat. This is because every single piece of clothing is made alone and spread alone on the cutting table. With mass
production, the aim is to spread the pattern pieces on the cutting table in the most efficient way with the smallest material waste. With the XLs50, the waste of material can be reduced for both mass production and mass customization.

Gerber also developed the Taurus XM leather cutter. This leather cutting machine is specially made for cutting in small quantities. This is very useful for the mass customization for shoes and bags.

3.2.2  Bodyscanners

The bodyscanner exists since 1994 and has developed rapidly since. The bodyscanner is a machine performing measurements of the body in 3-D. With these measurements a garment can be made, exactly fitted to your body.

The Bodyscanner has 4 columns each including 2 cameras. The customer has to stand in the middle of these 4 columns to get scanned. The scanning time requires 8 seconds from top to bottom. The customer has to undress and stands in his or her undergarment. The system captures the shape of the body and will make a 3-D copy into the computer. This 3-D copy is called the ‘Digital Twin’ of the customer. With this Digital Twin it is easy to generate measurements from landmarks on the Digit Twin without the costumer being present. The information is put into CAD-CAM systems and then to the producer who makes and finishes the customer’s garment.

Telmat, the French producer of bodyscanners, developed a way of scanning people from different nations. By globalization different population groups in different countries. Every population group has different body shapes. The previous bodyscanning machines used one standard body. With the new Symcad ST system different bodies from different population groups are integrated into the system. This improves the fitting of the clothes.

In addition, there is a system which takes the dynamic sizes into account. The Italian firm CadModelling Ergonomics developed a system which is based on the sitting and bended postures. This guarantees better fitting clothes because the measurements are taken with the natural movements of people.
3.2.3 3-D

3-D visualization in the computer has made a great change. After costumers have scanned the customer’s body they can use their Digi Twin in multiple ways. I already described the bodyscanning part.

Another option is to use the Digi Twin for designing. Gerber developed, together with Adidas, the 3-D direct software. With this new software the costumer or designer (tailor) can design clothes on the model. Gerber developed various techniques to make a realistic digital prototype. With the 3-D software the customer can see how a particular material will look on their body, different trimmings can be designed in the digital model and the fitting is easily changeable. After designing the 3-D model at the computer, the software of 3-D Direct automatically makes 2-dimensional patterns. This is time and cost saving.

A beautiful new feature of the 3-D visualization of a model is de Lectra’s Virtual Prototyping. With Lectra’s 3-D Virtual Prototyping a new model can be showed on a virtual catwalk, with different lighting, music and movements. If you don’t like it you can easily change the model, material, pattern and color on the model. While showing, you can make 2-D photos of the model which can be used directly as promotion material or just as an example. This is a great advantage because with mass customization, customers want to see how the garments will look before purchasing the product. With the new program of Lectra, the customer can make a virtual design, and then see how it looks while walking, and change anything they dislike.

This virtual selection is time and money saving, because not real prototypes are made. Real prototypes are expensive and the steps of making the real prototypes are made unnecessary. The designing, patternmaking, sewing, fitting, adjusting, sewing again and sending it to the costumer are now banned. In the figures 1 and 2 of Pine you can see how the ‘long product development cycles’ changes into ‘short product development cycles’.
3.3 Consumer behavior trends on the Dutch Market

Dutch consumers rank among the most optimistic in Europe. The Dutch, together with the Finns and the Swedish are Europe’s most optimistic consumers. Unlike in the US, consumers’ confidence in Europe has grown noticeably since 2003 (CBS, 2007).

The optimistic thinking is, among other things, a reaction on the stable governing and economical growth. This will lead into higher income and a boosting consumers’ spending. The total spending on clothing grew strongly by 6.7% in 2006 after a decrease in growth in the years 2002 until 2005. Clothing is ‘back in fashion’. (Mintel, 2007) and there is a growing demand for more quality, exclusive collections and wider choice of fitting and sizes. Forecasts for women’s wear, show a higher growth in value than in volume. (CBI, 2007).

Another important demographic development is the increase of one and two person households. This is because the divorce rate increased by nearly 18% between 2000 and 2007 and more people are leaving their family homes on a younger age.

According to the CBS the private households are growing from 7.2 million in 2006 to 8 million in 2008. The average size of a household will drop from 2.3 persons per household to 2.1 person per household, See figure 3 from CBS. The person in a single or two-person household have less commitment and more leisure time. Besides that, they have rather high incomes. Both factors are stimulating the clothing consumption (CBI, 2007).

Despite the optimistic behavior and growth, consumer behavior in the Netherlands is unpredictable and unstable. The mega trends discussed in the previous chapter are all relevant for the Dutch market.

Figure 3: Composition of the households

Source: CBS
Mass Customization; Is there a market for made-to-measure suits for women?

Transparency is also a trend on the Dutch consumers’ market. Product comparison sites like kieskeurig.nl have influenced the buying behavior. Products are analyzed publicly on the websites. Nothing is secret anymore and the consumer wants to know more. This phenomenon is called ‘transparency tyranny’ by Trendwatching.com.

The Dutch consumer is looking for inspiration and exploration. The consumer is looking for new thinks together with the right feeling about it. The consumer doesn’t behave like the marketing models anymore, but wants to find his/her own way.²

4. Mass customization in suits

² article http://sync.nl/consument-van-nu-ongrijpbaar/) (Cap Gemini and TNS NIPO)
Tailored suits are seen more and more on the streets of today. This has probably to do with the technical developments and the trends of these days. In these paragraphs you can read more about how the changes in techniques and consumers’ behavior are influential on the market of tailored suits.

4.2  *Technological developments in suits*

Since mass customization, the made-to-measure suit is developed. Before having the techniques and knowledge from nowadays, a tailored suit was exclusive and expensive. This is because creating a tailored suit was very time consuming. A tailor had to create the suit with his own hands from the beginning to the end. This is called bespoke, as described in chapter 1. This was the only way to create a tailored suit before mass customization developed.

Mass customization is a reaction on the technical developments and consumers needs from nowadays. The suit business was one of the first to adapt mass customization. This business already created customized suits. By making use of the advantage of mass customization they created a modern business. Tailored suit companies are creating tailored suits for a much bigger target group and for a lower price.

This is due to the technological developments. With the CAD and CAM systems and the internet it is much easier to create, adapt and produce a tailored suit within days. This system of producing suits is called made-to-measure as also explained in chapter 1. Nevertheless, most tailored suit companies are not using the CAD design system themselves (but are willing to use it and doing research on it (CompanySuits, 2008)). Measurements of the costumer’s body are taken by a tailor. These measurements are arranged in a computer system together with other information like choice of material, buttons, seams etc. This file is send to the factory, and depending on the modernity of the factory, a CAD-CAM systems is calculation the pattern, material consumption and controls the manufacturing machines.

Bodyscanning isn’t quite popular yet. Tests expelled that the use of bodyscanning machines isn’t good enough. The measurements on the costumers aren’t always right. It depends on how the costumer stands in the machine. If the costumer bends a little, wrong measurements are taken. The suit produced through the use of this measurements will not fit. Made-to-measure suit companies prefer to use measurement tape and a standard-sized suit.
Mass Customization; Is there a market for made-to-measure suits for women?

As said before in paragraph 3.2.2, new bodyscanners are developed. These bodyscanners are capable of correcting little movements while being scanned, and are based on different postures. Maybe, with these developments, the computer will eventually replace the standard-sized suits and the process will be all digitized.

3-D visualization of the suit is a great way of showing costumers the end result. It’s not used yet in the Dutch made-to-measure suit companies. But will be in the future, according to CompanySuits.

4.3 Trends in suits

The mega trends on consumers’ behavior (paragraph 2.3) and Dutch trends on consumers’ behavior are the basis for the trends in suits.

The trend ‘Gender complexity’ is significant for the trends in suits. Gender roles are less defined and spending time on personal appearance is very important. People want to look like they have taken care of themselves. Male’s and female’s are both willing to spend more money on quality clothing, according to the trend ‘Income complexity’. They want to spend more money on one quality products. Quality versus Quantity. The costumer wants to look individual by wearing clothes that match his or her personality. A made-to-measure suit combines all these trends. A made-to-measure suit is neat, a quality product and made to the costumers personal style. The consumer wants a perfect fitting suit with service (Fokke de Jong, SuitSupply).

‘40% of the male population in the Netherlands wear suits everyday’ (Jiska van Dorssen). But what about women?

Suits and women

Mass Customization; Is there a market for made-to-measure suits for women?

Women’s buying power is increasing rapidly. This is due to the change in the composition of the population (figure 3). An increasing number of women are single and this influences their buying behavior. An other factor is that many women are starting up their own business. These two factors are influential for women’s buying behavior. They are now the one who are purchasing the car, a house, a computer etc.

All trends described in chapter 2.3, 3.3 and 4.3 are partially related to women. The trends are advantageous for the suits market. And that’s proven by the growing number of made-to-measure suits companies in The Netherlands.

With all the factors described in the previous chapter you could think that there are many companies offering made-to-measure women’s suits.

What’s going on with the made-to-measure suits for women? Is there a market for made-to-measure suits for women?
5. Mass customization in suits for women

After researching the effects of mass customization in general, in the fashion industry and in made-to-measure suits, it is now time to find out if there is a market for suits for women in The Netherlands. The paragraph of the history of women’s suits will explain how women suits developed over the years. And what the etiquette of wearing a suit is nowadays.

Companies offering women’s made-to-measure suits do exist in the Netherlands. What do these companies offer? And what are the disadvantages of made-to-measure suits?

5.1 History of the women suits

Suits are a product of emancipation. When did women start to switch dresses for suits? This paragraph is about the history of suits for women from 1800 until now.

For centuries women have always worn dresses. These dresses were very uncomfortable and ostentatious. At the end of the nineteenth century there was a change of attitude by women. They wanted more practical and functional garments which fitted more in the industrial revolution and social changes. They found the perfect garment in the tailored suit. The suit was more efficient for the new forms of leisure time like traveling and playing sports. As well in the progress of hygiene women started to more care about.

Upper-class women played a large role in the adoption of suits. Anyhow, the working middle class made the overall acceptance.

The earliest women suit was riding clothes in the 1660 for aristocratic people. A tailor made jacket with a matching short skirt was worn for horseback riding. These suits looked very much like the tailored suits in the nineteenth century.

The first suits that can truly be given the name ‘suits’ were worn by British women. They loved sports, travel and tourism and were the first to adopt the suit. In the London society, feminist were influential. The first tailored suits had jackets of which details were borrowed from the men’s suits. But the model was derived from the women’s curves of the corset. Skirts were made with a slit or pleats to make walking easier.
From 1890 to 1914 the tailored suit develops into a more comfortable outfit; with a flaired skirt and a flexible jacket. The suits were mostly worn at ordinary days when women went walking or shopping.

In the early twentieth century, the middle class was starting to wear tailored suits. Young women got jobs, like schoolteachers or office workers, and started to wear suits as a professional uniform. This was also the time of the industrial revolution, and clothes became mass produced and cheaper thus more accessible for the middle class.

Tailored suits became at the same time ‘haute couture’. Influential designers like Jacques Doucet, Jeanne Paquin and Paul Poiret made a radical change in the women’s fashion. Paul Poiret was the first one to launch the pencil skirt (1911) after he liberated women from the corset. As a result of these influences, the tailored suit became one of the most favorite garments in the Parisian couture from 1910 to 1925.

World War 1 had a major influence on the history of suits and women as well. During World War 1 many women were forced to work because many man where fighting at the frontline. For their work, they needed comfortable clothes which were better suited for their jobs and women changed their dresses into suits. Besides that, the tailored suits became a sign of patriotism.

After World War 1, in the 1920’s, the boyish look became fashionable. In this style women didn’t show there curves. This way of dressing was most popular among young American women and was called ‘flappers’. Jackets were straight with a very low waistline which didn’t show busts or a waistline. Women even wore tape around there busts to became more boyish. Skirts lost their flair and ended at the mid calf. By the 1925’s the hemline ended at the knee or just below the knee and the skirt was perfectly straight.

The biggest change at this time was the appearance of the pant suits. After a short appearance in 1890 for riding bicycles it came back in the 1920’s. The pant suits exist out of a broad trouser and a navy blue jacket. In this way the suit accentuated the masculine silhouette which was very popular in this jazz age.

By the 1930’s every middle class western women had a (tailored) suit in her wardrobe. However, the cost of the suits made it hardly accessible to the working class, and he suit became a symbol for the middle class. These women wore the suits to work or just at home. With little details like fabric and trimmings it revealed their social status.
Mass Customization; Is there a market for made-to-measure suits for women?

After the economical crisis in 1929 the suit became less manly and became more feminine. The woolen suits showed the curves of a woman again. Parisian couturiers decorated the jackets with lace, jeweled buttons and flowery linings.

This stood in contrast with Marlene Dietrich, who wore sober men’s pant suits on and off screen. She became a symbol of glamour. Besides that before and during the war, men’s suits were not really tolerated anymore.

In the post war period Dior came up with ‘The New Look’ which was very feminine and had stiff jackets and pleated skirts. This silhouette looked very familiar to the look in the eighteenth century. The New Look was a reaction on the war period when there was not much money for clothes.

From 1955 to 1965 all Parisian couturiers made tailored suits. Balenciaga was the first one to make something else then Dior’s New Look. He made single-breasted jackets in which you didn’t see any bust or waist like in the 1920’s. Chanel’s suits from colorful wool en tweed became very popular too.

In the beginning of the 1960, the tailored suits were a must-have, commemorated by Jackie Kennedy, the first lady of The United States. She always looked perfect in her suits, and a lot of women saw her as a icon.

On the other hand, young women didn’t want to wear tailored suits at that time. They were rebellious and preferred to wear, for example, leather jackets.

In the 1980’s there was a big revival of the tailored suit. At this time there was plenty of work and the suits made the women look successful. The centre piece in the closet of a successful woman was the tailored suit, or as they called it ‘The power suit’. Before the 1970’s most working women had traditional jobs like secretaries or bookkeepers. However, women became lawyers and politicians. Wearing ‘The power suits’ gave the working women the feeling of authority. They wanted to be taken seriously in a male-dominated working place. An example of a power suit is the Armani suit. The Armani’s suit was very popular among executive women and had big shoulder pats to look muscular and successful.

The history of suits is a logical development due to cultural changes, historic events and emancipation. What is happening in the world of tailored suits nowadays? What is normal to wear? Is there some kind of etiquette?
5.2 **Etiquette**

The history explains how the made-to-measure suit was adapted in the wardrobe of almost every woman in the history. Is that still the same today? When do we have to wear made-to-measure suits, what are the etiquette?

There are a few strict rules for women wearing a suit. Beside the rules it’s more a matter of taste and personality.

In the Netherlands there is some etiquette for wearing formal wear. Nevertheless, most of the times it’s the women own intuition when to dress formal and when not.

Following are the etiquette adapted from Machiavelli Suits.⁷

- **Formal wear daytime: Jacquet, Morning Coat**
  For example to wear at a wedding, promotion or funeral. Women wear a long dress, long gloves, dark shoes and a modest hat. It’s also possible to wear a dark, very often, black suit. For a wedding the hat can be bigger, depending on the amount of sun, and the clothes could be a modest dress (never white) or a casual suit.

- **Semiformal evening: Black Tie, Cravate noire, Smoking, Dinner Jacket, Tuxedo.**
  Cocktail dresses knee length with high heel pumps.

- **Semiformal daytime: Lounge suit, suit**
  Women wear a tailored suit, preferably with a skirt and jacket. Any color is accepted

- **Informal daytime: Tenue de Ville**
  Women wear a Deux pieces (a suit existing out of 2 pieces: jacket and skirt/pants). In former time a Tenue de Ville was a combination of a blue jacket with gray pants. Nowadays it’s accepted that women wears a matching pants with a jacket and a nice shirt or t-shirt.

- **Casual**
  In The Netherlands we use the word casual if we don’t wear a suit but something relaxing. However, there are different types of casual; corporate casual and free-time casual.

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⁷ [www.machiavellisuits.nl etiquette](http://www.machiavellisuits.nl)
- **Corporate casual**

The etiquette instructs a suit of a nice material and possibly with a pattern. Pants and jacket should be from the same material and a nice plain or stripped shirt is common. For woman, corporate casual exists out of a nice jacket with darker pants.

Suits are often linked to the corporate business. This is not strange because most business men and women are wearing a suit. But what is the etiquette for women in the corporate business?

Women who are wearing suits to work have to keep the KISS principle in mind. Kiss stands for Keep It Simple, Stupid. But in this case KISS stands for Keep It Simple and Sophisticated. Both principles imply that you should keep your corporate suit simple. Another fact is that dark suits suggest authority; bright colored suits suggest friendliness. Obviously the regulations in summer and winter are a little bit different.

Most corporate companies do have dress code, but for women this is often very unclear or not realizable.

The survey (appendix 2) shows that 50% of the women, who are wearing a suit, wear it to work. Around a quarter of the surveyed women are wearing a suit on family occasions, funerals and weddings. And the other 25% is wearing a suit at job interviews or presentations. These percentages tell us that women almost only wear a suit at work and official occasions and almost never in their spare time.

In my interviews (appendix 3), the made-to-measure suit companies confirm this, most of their female clients are wearing suits to work or work related activities. A small percentage is purchasing suits for family or other occasion besides their work.

To the question: ‘For what reasons do women wear a suit? All surveyed companies answered: ‘Business matters’.

We can conclude that suits for the greater part are worn to work or work related activities. Retail suits are offered by many retail-stores in The Netherlands. But how is the market for made-to-measure for women? How many companies are there and what are they offering?
5.3 Current market condition

In this paragraph only the companies who are offering made-to-measure suits for women are included. All other suit companies aren’t significant for this research. In table 2 are the companies offering made-to-measure suits. Mentioned since when they offer made-to-measure suits for women, for what price, how many different models they offer and what is the delivery time.

Table 4: Current market for made-to-measure suits for women in The Netherlands

<table>
<thead>
<tr>
<th>Company:</th>
<th>Since:</th>
<th>Price suits:</th>
<th>Different models:</th>
<th>Delivery in weeks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. CompanySuits.com</td>
<td>2006</td>
<td>€ 500,-</td>
<td>Yes</td>
<td>5</td>
</tr>
<tr>
<td>2. SheSuit.nl</td>
<td>2006</td>
<td>€ 900,-</td>
<td>Yes</td>
<td>unknown</td>
</tr>
<tr>
<td>3. Eva Suits.com</td>
<td>2006</td>
<td>€ 299,-</td>
<td>Yes</td>
<td>3</td>
</tr>
<tr>
<td>4. Donna Vestiti.nl</td>
<td></td>
<td>€ 499,-</td>
<td>Yes</td>
<td>4-6</td>
</tr>
<tr>
<td>5. Cerice Star.nl</td>
<td></td>
<td>€ 725,-</td>
<td>Yes</td>
<td>3-4</td>
</tr>
<tr>
<td>6. Possen.com</td>
<td>2001</td>
<td>€ 649,-</td>
<td>Yes</td>
<td>4-6</td>
</tr>
<tr>
<td>7. Machiavelli suits</td>
<td>2007</td>
<td>€ 349,-</td>
<td>Yes</td>
<td>4-5</td>
</tr>
<tr>
<td>8. De Oost.nl</td>
<td>2005</td>
<td>€ 1000,-</td>
<td>Yes</td>
<td>4</td>
</tr>
<tr>
<td>9. Domhoff.nl</td>
<td>1970</td>
<td>€ 1125,- € 1385,-</td>
<td>Not Clear</td>
<td>4-6</td>
</tr>
<tr>
<td>10. Suitsperfect.nl</td>
<td>2008</td>
<td>€ 489,-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. Gandr.nl *</td>
<td>-</td>
<td>€ -</td>
<td>Unknown</td>
<td>unknown</td>
</tr>
<tr>
<td>12. Dressed2kill.nl</td>
<td>2007</td>
<td>€ 699,-</td>
<td>Yes</td>
<td>4-6</td>
</tr>
<tr>
<td>13. tailorsandco.nl</td>
<td>2006</td>
<td>€ -</td>
<td>-</td>
<td>3-4</td>
</tr>
<tr>
<td>14. newtailors.nl</td>
<td></td>
<td>€ 600,-</td>
<td>Yes</td>
<td></td>
</tr>
</tbody>
</table>
It is very remarkable that most made-to-measure suit companies are founded in 2005 and later. In the years before, tailored suits for women already existed but mostly it was made by a bespoke tailor. Some of the companies mentioned in table 2 already exist for many years as a bespoke tailor but were not able to reach many costumers. Simply, because their where not able to produce suits simultaneously. A (bespoke) tailored suit takes longer to make and is more costly. Not everybody can afford such suit.

The emergence of so many new made-to-measure suit companies can be, partly, explained by the mass customization trend mentioned in the chapters before. Mass customization technologies made it easier to make suits to the measurements and wishes of the consumer for a lower price then bespoke tailoring. But these companies didn’t only start because of mass customization.

So what did happen? Why are there a growing number of made-to-measure suits companies for women since 2005?

5.4 Problems in retail

Now we know when women to wear a suit and how to wear it. The next question is what happened in retail and why are there some many made-to-measure suit companies since 2005. Through my survey and interviews I found multiple reasons. Two important reasons are the fitting and the style of the retail suits. Retail companies are using a sizing system which has to fit series of people in the target market. This sizing system is based on one size, normally a size 38. This size 38 is based on the following criteria; on the target market and the typical customers. Then they classify the typical customers by identifying demographic characteristics, such as age, income, ethnicity, and lifestyle. Then the company chooses a single person, the "fit model". The fit model has the ideal body shape for the product and market. They use the fit model for the following reasons;

After the process of designing a prototype garments is made. This prototype garment is put on the fit model and then evaluated and tailored on to her body shape. After the evaluation and tailoring the prototype on the fit model a pattern is made to use for mass production. (See appendix 5 for a demonstration of this process)

Nevertheless, not all women have the same body shape like the fit model. In the next figure of Cornell University you can see how diverse women are
Mass Customization; Is there a market for made-to-measure suits for women?

The star on this graph identifies the fit model, whose measurements are used to develop a sizing system for a company's target market. The other points on the graph display the pant fit for 140 female subjects with various body proportions. Since the pants for each subject were chosen by hip fit, the hip trend line (blue) is flattest, indicating the least variation in fit at the hip. The waist trend line (red) indicates the greatest variation in pant fit: people who have straighter proportions than the fit model will have tight pants at the waist. Those with curvy proportions are closer to the fit model's measurements and are better fitted (Source: Cornell University).

What do women think about the fitting of this size 38 based garment? In the survey (appendix 2) more than 65% is not happy with the fitting. For example: the sleeves or pants are too short. Only 3% answers that a retail suit fits perfect.

This is in agreement with what made-to-measure suits companies encounter. Most consumers come to them because they don't find a fitting suit in the stores. Women who are wearing tailored suits are most of the time highly educated and have good jobs. These women are demanding much from themselves, others and their clothes. They want to look corporate without losing their femininity. They have great difficulties finding a good suit in the store with a good fitting.

Another factor of disappointment is the variation of suits in retail. Most women don't like the material, color or model the shops offer. As said before, women who are wearing suits are very demanding. They want the suit exactly how they like it; model, material, color and
Mass Customization: Is there a market for made-to-measure suits for women?

buttons. They don’t have much time to shop and are willing to pay more for a better fitting suit after their taste.

The mega trend ‘Individuality’ is part of the process as well. Consumers want to look individual and original. Nevertheless, most women don’t want a very ‘trendy’ suit. In the survey most women wanted a ‘timeless’ suit. Most suits sold at the made-to-measure suit company CompanySuits are gray and black. The individualism you will find in the trimming or lining and not specifically in the color of the suit. Most motives when buying a tailored suit is a combination of fitting and style.

So what’s the problem? It looks like the market perfectly ready and companies are offering the suits!

5.5 What do women want?

The rapid growth of made-to-measure companies is possibly only partly explained by the women needs.

Martine Zwijnenberg, consultant for many made-to-measure suit companies in the Netherlands, gave also other explanations in my interview.

Around 5 years ago most made-to-measure suit companies didn’t want to offer women tailored suits. They thought there was no potential market and that women didn’t want to spend money on a suit.

What did these companies made change their mind? First of all, the upcoming mass customization and new technology made it a lot easier and cheaper to offer and produce women made-to-measure suits. Secondly, more made-to-measure suits companies for man arrived at the market, this in relation to mass customization and new technologies too. These companies started to look for new ways of offering services. They came up with a concept where they were going to bank offices and law firms instead of only receiving customers in their atelier to sell the suit too. This was a great opportunity to sell multiple suits in, for example, the lunch break without much effort from either side; the company or the customer.

Nowadays, more and more women are highly educated and have better jobs as managers, lawyers, bankers etc. In law firms, the number of female lawyers is growing rapidly (see Annemaren Kingma, AMFI 2008
Figure 4). The tailors who deliver their goods and services to banks and law firms are confronted with more women. These women are having problems with finding time to buy a goods suit and want the comfort and service of a made-to-measure suit.

So because of the increasing number of women in management and other good jobs, tailors and made-to-measure companies were forced to offer suits for women too. This increase has led to a higher awareness of the possibilities of made-to-measure suits amongst women.

But something changes in the retail world as well. As said before, the retail companies who are offering suits are not included in this research. Nevertheless, in my field research I found out that a growing number of retail shops are offering suits. For example:

Hennes & Mauritz is offering since 2007 at the Kalvertoren shop in Amsterdam a broad collection of women’s suits. H&M is a very trendy company with good consumer needs awareness.

Mass Customization; Is there a market for made-to-measure suits for women?

The increasing number of higher educated women in professional jobs is not only what led to more made-to-measure suit companies. The trends amongst women is changing slowly too. Wearing a suit is not only corporate anymore. Haute couture companies are offering suits and jackets in their collection. It’s become a more fashionable item. Most suits are still worn by corporate women however, but according to the trends, it’s also more fashionable.

Nevertheless, only a small group of women know about made-to-measure suits for women and they are using the service. But a bigger group of women, who are desperate for a good suit, have no clue. The consumer awareness of the possibility of made-to-measure suits isn’t very high.

5.6 Disadvantages of made-to-measure suits for women

Not one women figure is the same. In my interviews with made-to-measure women suits companies I found some disadvantage when operating in this market. These disadvantages can be for the companies offering tailored suits or for women buying tailored suits.

The first problem all interviewed companies mentioned, was the body shape of a women. Every women body is different, not one is the same. ‘Men are build in 2D women are 3D’. This means, women are curvy and men aren’t. The most difficult part of the women’s body is her bottom and breasts. Every bottom and every breast is different. Made-to-measure suits companies are working with a standard size suit (discusses in paragraph 1.2) which they alter to a perfect fitting suit. This is for most men not so difficult; a couple of alterations and a suit fit’s. For women this is a totally different story. The standard sized suit has to be altered on many more places because every women has a totally different figure. Men’s suits are, in 90% of the cases, perfect after the first fitting. Women’s suits have to be altered 2 or 3 times. Eventually women’s suits cost more because it is a time consuming process. This has to do with the various figures but also with women’s expectation of a suit. What do women expect and what goings wrong?

Women are, in general, insecure about their body. Women have the expectations that their shortcomings in appearance disappear by wearing a tailored suit, according to several

Annemaren Kingma, AMFI 2008
companies. They think they will look perfect and hopefully like a supermodel. Women have high expectations of the tailored suit, which is not realistic and can lead to disappointment.

The high expectations come from the high demand women have. They want more from their suit. Men are happy if a suit fits and feels nice. Women want the perfect fit, perfect color, perfect figure, perfect model etc. They are very high demanding and fickle.

One of the most famous suit companies in the Netherlands, Suit Supply, doesn’t have women suits or women tailored suits for all the reasons mentioned above. Suit Supply gave the following explanation:

“We don’t have women suits because the shapes of women need much more attention than those of the man. No figure is the same. Another reason is that women are more sensitive for changes in fashion. ‘Suits for women are a very specific matter’ (SuitSupply, Eva Hartog).

Trough my interviews I heard multiple ‘complains’ about their female customers. For some companies offering tailored suits for woman was a mission for others a required and unavoidable product.

What conclusion can I make out of these researches and information? Is their a market voor made-to-measure suits or are the female consumers not ready yet?
6. Conclusion

Definition of the problem:

- **Mass customization; is there a market for made-to-measure suits for women?**

Mass customization is offering products and services for the low costs of mass production with the flexibility and individual vision of the consumer. Through mass customization apparel companies can offer individual clothing without dealing with the difficulties of forecasting and clothing stocks. New trends like Individualism, Income complexity, Sensory and Comfort strengths the phenomenon of mass customization. Dutch consumers are looking for inspiration and exploration. Partly because of the changing composition of the household consumers are not easily satisfied anymore.

In 2005 there was an explosive growth with made-to-measure suit companies for women. This was partly due to the simpler way of producing but also to the demand from the working and individual women. More often women are working in the corporate industry and looking for representative clothing, which is hard to find in retail stores. Women demand for a suit that fit their personality and image.

A disadvantage might be that women are very demanding concerning their suits and have a various figures, but thanks to different technical developments this problem is becoming easier to solve.

The current made-to-measure suits market is booming because of the easiness to produce suits with the new technological developments like CAD-CAM, bodyscanning and 3D systems. It becomes simpler to manufacture mass customized products.

Considering all the advantages and disadvantages of made-to-measure suits for women, I conclude that there is a market. Made-to-measure suits for women can be a big thing when manufacturers and producers put a lot of time and effort into the concept.

**Observations:**

- Women don’t know that made-to-measure suits for women exist. A good marketing plan is a way to become a successful manufacturer of women’s suits.
Mass Customization; Is there a market for made-to-measure suits for women?

- Women think that made-to-measure suits are very expensive and only for the richest among us. But they don’t know that made-to-measure suits is a result of mass customization and not that expensive anymore. Better promotion marketing, again, is an option.

- Women need a visual image, a feeling, of the tailored suit that they will eventually wear. With having a shop or showroom with many different models, styles, colors women feel more comfortable in choosing a suit.

- On other way of ‘creating’ a market for made-to-measure suits for women is a change in the retail world. A retail suit shop who offers the possibility to give good advice and if necessary alter the suit. In this way you make the step from retail to made-to-measure smaller. It’s an in-between suit by which probably many women feel more comfortable by. This is because many women are not ready yet, emotionally, to buy a made-to-measure suit for themselves. By also offering made-to-measure in the same store you give women the option to choose themselves. Women are introduced by this store in all the options they have in suits. This will increase the customer awareness.
Mass Customization; Is there a market for made-to-measure suits for women?

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Het Stijl Bureau, Mrs Dufour

Martine Zwijnenberg Consultancy, Mrs Zwijnenberg

SuitSupply, Mrs Hartog

SuitYourself, Mr Galjart
# Appendix 1

Survey (with www.thesistools.com)

<table>
<thead>
<tr>
<th>1. Naam</th>
<th>Het is ook mogelijk om anoniem te blijven.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2. Woonplaats</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Amsterdam</td>
<td>Rotterdam</td>
</tr>
<tr>
<td>Groningen</td>
<td>Leeuwarden</td>
</tr>
<tr>
<td>Eindhoven</td>
<td>Den Bosch</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>3. Leeftijd</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>15-20</td>
<td>20-24</td>
</tr>
<tr>
<td>35-39</td>
<td>40-44</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>4. Beroep</th>
<th></th>
</tr>
</thead>
</table>
5. **Hoe vaak draagt u een pak?**

- [ ] 3-5 keer per week
- [ ] 1-2 keer per week
- [ ] paar keer per maand
- [ ] paar keer per jaar
- [ ] nooit

6. **Waar naar toe draagt u een pak? Meerdere antwoorden mogelijk.**

- [ ] Werk
- [ ] Afspraken
- [ ] Bruiloften
- [ ] familie aangelegenheden
- [ ] anders, nl
7. Wat geeft u gemiddeld uit aan een standaard pak uit de winkel?

- € 100-200
- € 200-300
- € 300-400
- € 400-500
- € 500-600
- € 600-700
- € 700 <

8. Wat vindt u van de pasvorm van de standaard pakken uit de winkels?

- Perfect!
- Ik ben tevreden.
- Ze hebben zelden de perfecte pasvorm.
- Vreselijk, ik kan nooit de juiste pasvorm vinden.
- anders, nl
- [ ] moderne stoffen
- [ ] moderne pasvorm
- [ ] aparte knoopjes
- [ ] aparte stoffen
- [ ] afwijkende voering
- [ ] meer sexy
- [ ] meer degelijk
- [ ] tijdloos
- [ ] anders, nl

### 10. Waar koopt u uw pakken? Meerdere antwoorden mogelijk.
- [ ] H&M
- [ ] Zara
- [ ] Claudia Strater
- [ ] Pauw
- [ ] Mexx
- [ ] Esprit
- [ ] Inwear/Martinique
- [ ] Bijenkorf
- [ ] Maison de Bonneterie
- [ ] We
- [ ] Vanilla
- [ ] Mango
- [ ] Anders, nl

### 11. Waarom koopt u bij deze winkel(s)? Meerdere antwoorden mogelijk.
Dit gedeelte van de enquete gaat over maatpakken. Maatpakken zijn pakken die precies op uw lichaam zijn gemaakt.

12. Heeft u een maatpak in uw bezit?
   - Ja, 1-5
   - Ja, 5<
   - Nee

13. Waarom wel/niet?

- Combinatie jasje+rok
- Combinatie jasje+broek
- Combinatie jasje+gillet+broek/rok
- Alleen een jasje
- Alleen een broek
- Alleen een rok
- Anders, nl

15. Als u een maatpak koopt, waar ben u het meest geïnteresseerd in?

- Een tijdloos pak.
- Een seizoens fashionable pak.
- Beide.
16. Wat vindt u een redelijke prijs voor een goed maatpak?

- € 200-300
- € 300-400
- € 400-500
- € 500-600
- € 600 <

17. Ben u geïnteresseerd in een maatpak en/of maatblouse van Suityourself?

- Ja
- Nee, omdat

Mass Customization; Is there a market for made-to-measure suits for women?

Appendix 2

Results and analyses survey

Analyse Enquête Maatpakken voor vrouwen.

Correspondentes: 80

Uitgevoerd via: www.thesistools.nl

Verspreid via: email, hyves, vrienden, familie en collega’s
Mass Customization; Is there a market for made-to-measure suits for women?

Ten behoeve van mijn onderzoek naar het perfecte maatpak voor vrouwen ben ik op de volgende feiten gekomen. Ik behandel de vragen stuk voor stuk met de meest opvallende uitkomsten.

De enquête is teruggestuurd door ruim 80 vrouwen in de leeftijdscategorie van 20 tot 35 jaar waarvan meer dan de helft woonachtend in Amsterdam. Daarna kwamen veel correspondenten uit Rotterdam, Den Haag, Rotterdam, Utrecht en Den Bosch.

Deze grote steden zijn dus hoogstwaarschijnlijk ook onze afzetmarkten ook omdat hier veel bedrijven zitten.

De specifieke vragen behandel ik allemaal apart door eerst de vraag op te schrijven en daarna het uitgekomen antwoord in percentages* te geven. De eerste 7 vragen gaat over het pak, vaak confectie. De resterende vragen zijn specifiek voor het maatpak.

* Soms komt er niet precies 100% uit als je alle percentages bij elkaar optelt. Dit komt omdat correspondenten soms geen antwoord invulde.

- Hoe vaak draagt u een pak?

3-5 keer per week: 6,4 %
1-2 keer per week: 15%
Paar keer per maand: 21,6%
Paar keer per jaar: 48%
Nooit: 9%

Bijna de helft van de ondervraagden dragen een paar keer per jaar een pak. Toch draagt 43 % vaker per maand of zelfs per week een pak.

- Waar naar toe draagt u een pak:

Werk: 28,3%
Afspraken: 27,3%
Bruiloften: 16 %
Familie aangelegenheden: 10,7%
Anders, nl: 10,3%

Werk en afspraken kan je als werk aangelegenheden zien. Bij elkaar is dit meer dan 50 procent. Dus onze doelgroep heeft vaak pakken aan naar het werk. Ook zie je bij

- Wat geeft u gemiddeld uit aan een standaard pak uit de winkel?

€ 100-200: 43,3 %
€ 200-300: 33,3 %
€ 300-400: 13,6 %
€ 400-500: 7,3 %
€ 500-600: 2,5 %
€ 600 < : 0,0 %

Uit deze percentages kan je zien dat iets minder dan de helft van de vrouwen vaak niet meer dan €200,- uitgeven uit pakken uit de winkel. 76,6 % geeft niet meer dan €300,- uit aan een pak. Van €400,- tot €600,- geeft nog minder dan 10 % van de ondervraagde uit aan pakken.

- Wat vindt u van de pasvorm van de standaard pakken uit de winkel

Perfect: 2,6 %
Ik ben tevreden: 31 %
Ze hebben zelden de perfecte pasvorm: 55,3 %
Vreselijk, ik kan nooit de juiste pasvorm vinden: 10,6 %
Anders, nl: nvt

Uit deze vraag kan je zien dat meer dan de helft van de vrouwen vindt dat een pak uit de winkel niet de juiste pasvorm heeft. Een kleiner percentage kan nooit het juiste pak vinden dan de 30 % die tevreden is. Perfect vindt bijna niemand het, dat is maar een luttele 2,6 procent van de ondervraagden.

- Wat zou je anders willen zien aan/ bij een pak? Meerdere antwoorden waren mogelijk.

55  Annemaren Kingma, AMFI 2008
Mass Customization; Is there a market for made-to-measure suits for women?

Moderne pasvorm 16,3 %
Aparate knoopjes: 15,0 %
Meer sexy: 14,6 %
Moderne stoffen: 13,6 %
Afwijkende voering: 13,6 %
Aparate stoffen: 12,3 %
Tijdloos: 7,6 %
Anders.nl: 1,3 %
Meer degelijk: 1 %

Antwoorden die vielen onder ‘anders.nl’ waren vooral de vrouwen aangaven dat pakken vaak te korte mouwen en broekspijpen hebben.

Je ziet ook dat de ondervraagden aangeven dat ze een modernere/meer sexy pak willen met moderne stoffen. En dat de trend van individualisatie ook erg naar voren komt door de vraag naar aparte knoopjes en voeringen.

Naar tijdloos, daarintegen, zijn de ondervraagden niet op zoek.

- Waar koopt u uw pakken? Meerdere antwoorden waren mogelijk.
Zara: 18 %
Vanilla: 12 %
Mexx: 12 %
Bijenkorf: 11,3 %
H&M: 9,3 %
Inwear/Martinique: 6 %
Esprit: 5,3 %
We: 4,7 %
Claudia Strater: 3 %
Pauw: 3 %
Anders.nl: 3 %
Mango: 1,7 %
Mass Customization; Is there a market for made-to-measure suits for women?

Maison deBonneterie: 0,6 %

Antwoorden die vielen onder ‘anders,nl’ gingen vooral naar kleine retailers.

Je ziet dat het midden segment het best verkoopt. Bij de volgende vraag kan je zien waarom.

-Waarom koopt u bij deze winkels? Meerdere antwoorden waren mogelijk.

Goedkoop: 29,3 %
Goede pasvorm: 30 %
Fijne stoffen: 3,3 %
Fashionable: 21 %
Anders,nl: 4 %

Je ziet bij deze uitslag dat veel mensen vinden dat hun pak goed zit van die bepaalde winkel. Dit is een logische uitslag want waarom koopt je bij die winkel, omdat het goed zit natuurlijk. Goedkoop is de tweede reden waarom mensen bij de Zara, Vanilla en Mexx winkelen. En fashionable komt op de derde plaats. Als je de goede pasvorm (30 %) de Goedkoop (29,3 %) en Fashionable (21%) optelt heb je 80,3 procent van het geheel. Dat betekent dat de meeste ondervraagde de pakken in hun winkel de goede pasvorm vinden hebben, goedkoop en fashionable zijn . Dit is blijkbaar erg belangrijk dus: de golden key naar het perfecte pak.

Het volgende onderdeel gaat over Maatpakken.

-Heeft u een maatpak in uw bezit:

Ja, 5 <: 0,7 %
Ja, 1-5: 22,7 %
Nee: 76,7 %

Nog minder dan een kwart van de mensen is in het bezit van een maatpak. De rede hiervoor is vaak dat mensen er niet aan denken om een pak te laten maken. Of ze denken dat het veel te duur is, of veel te corporate. Of ze willen liever hipper en meer gecombineerd naar het werk. Of ze hebben slechte ervaring in het verleden met maatpakken.

-Indien u een maatpak zou willen aanschaffen, waarin bent u het meest in geïnteresseerd?
Mass Customization; Is there a market for made-to-measure suits for women?

*Meerdere antwoorden waren mogelijk.*

<table>
<thead>
<tr>
<th>Combinatie</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jasje + rok</td>
<td>28,7%</td>
</tr>
<tr>
<td>Jasje + broek</td>
<td>49%</td>
</tr>
<tr>
<td>Jasje + gillet + broek/rok</td>
<td>7,3%</td>
</tr>
<tr>
<td>Alleen een jasje</td>
<td>7%</td>
</tr>
<tr>
<td>Alleen een broek</td>
<td>3,3%</td>
</tr>
<tr>
<td>Alleen een rok</td>
<td>0,0%</td>
</tr>
<tr>
<td>Anders, nl.</td>
<td>2,6%</td>
</tr>
</tbody>
</table>

Bijna de helft van de ondervraagde zijn geïnteresseerd in een pak met een broek en jasje. Iets meer dan een kwart is geïnteresseerd in de combinatie jasje en rok.

De artikelen los hebben niet zo veel aftrek.

- *Als u een maatpak koopt, waar bent u het meest geïnteresseerd in?*

<table>
<thead>
<tr>
<th>Paktype</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tijdloos pak</td>
<td>17%</td>
</tr>
<tr>
<td>Seizoens fashionable pak</td>
<td>12,7%</td>
</tr>
<tr>
<td>Beide</td>
<td>70,0%</td>
</tr>
</tbody>
</table>

Als je het antwoord beide niet betrekt dan zijn er meer mensen geïnteresseerd in een tijdloos pak. Dit is weer in tegenspraak met de eisen die ze hadden bij het confectie pak. Dit komt waarschijnlijk omdat veel mensen denk dat maatpakken duur zijn, dus dan beter kunnen investeren in een pak wat lang meegaat. Het antwoord ‘beide’ kan je interpreteren als dat mensen nog een beetje ontwetend zijn over een maatpak voor vrouwen, en het verschil tussen een tijdloos pak en een fashionable pak.

- *Wat vindt u een redelijke prijs voor een goed maatpak?*

<table>
<thead>
<tr>
<th>Prijsbereik</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>€ 200- 300</td>
<td>49,3%</td>
</tr>
<tr>
<td>€ 300- 400</td>
<td>40,0%</td>
</tr>
<tr>
<td>€ 400- 500</td>
<td>4,7%</td>
</tr>
<tr>
<td>€ 500- 600</td>
<td>3,3%</td>
</tr>
</tbody>
</table>
Mass Customization; Is there a market for made-to-measure suits for women?

€ 600 < : 2.7 %

Uit deze percentages kun je destilleren dat bijna 90 % van de ondervraagde niet meer dan € 400,- willen betalen aan een maatpak. De huidige markt biedt geen maatpak onder de € 500,- aan.

- Bent u geïnteresseerd in een maatpak?
Ja: 85 %
Nee: 15 %

- Welke accessoires zou je in combinatie met je pak willen kopen? Meerde antwoorden waren mogelijk:

Jas: 3,3 %

Shawl: 11,7 %

Riem: 19,7 %

Oorbellen/ketting: 7,3 %

Schoenen: 13,3 %

Bloesje: 23,7 %

T-shirt: 14 %

Handschoenen: 1,7 %

Gilletje: 3,7 %

Door de combinatie sales te doen vergroot je de afzet. Uit de vraag blijkt dat bloesjes, schoenen en riemen het meest in trek zijn in combinatie een maatpak.
Appendix 3

Interview with made-to-measure retailers:

Geachte Mevrouw/ Meneer

Hieronder staan vragen die ik u graag wil stellen. Als u het via de e-mail kan beantwoorden is dat perfect. Als u denkt dat we over meer dingen kunnen praten, of u doet het liever mondeling. Dan zal ik graag nog een afspraak met u willen maken of anders over de telefoon.

Deze vragen hebben alleen maar betrekking tot de pakken en markt voor Dames.

Wat is u functie binnen het bedrijf?:

Wanneer bent u begonnen/wat is de geschiedenis van het bedrijf?:

Hoe omschrijft u uw klanten?

Heeft u veel vaste klanten?

Hoe benadert u potentiële klanten?

Waar worden u pakken het meest voor gebruikt, privé of zakelijk?

Wat is vaak de reden voor de vrouw voor het aanschaffen van een maatpak?

Wat voor commentaar krijgt u over de prijzen?

Wat is u marketing strategie?

Waarom bent u begonnen met de maatpakken voor dames?

Waar bent u tegen aan gelopen bij het opzetten van de vrouwenlijn?

Wat had u niet verwacht in deze markt?

Is de markt groot genoeg om winstgevend in te zijn?

Wat zijn de meest voortkomende klachten?

Positionering: Waar denkt u dat u staat in deze markt?

Prijzenoorlog: In welke fase gaan volgens u de prijzen naar beneden?

Zullen u prijzen ook naar beneden gaan denkt u?

Ik merk tijdens mijn onderzoek dat er veel problemen zijn rond de pasvorm van de vrouw. Heeft u dit ook en wat is u oplossing?
Mass Customization; Is there a market for made-to-measure suits for women?

_Vrouwen zijn wispelturig, en hun kleding keuze vaak helemaal. Wat doet u om de trend bij te blijven?_ 

Als u nog meer weet over de markt hoor ik dat graag. Mijn doel is om een zo breed mogelijk verslag te schrijven en alle informatie is welkom.

U heeft de keuzen om een anonieme bron te blijven. Als u interesse heeft kan ik de uitslag van het onderzoek naar u toe sturen.

Alvast bedankt voor de moeite.

Met vriendelijke groet,

Annemaren Kingma

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Tel: 06 28232739
E-mail: marentje@hotmail.com
Levi’s

Customers are involved in the design process with Levi’s Original Spin jeans, choosing from a selection of styles, fabrics, finishes, colors, leg-opening sizes, and inseam lengths. The jeans are custom-made for each customer's specific measurements and fit requirements. (Image: ©LS&CO)

Nike iD

Nike iD customize your own sneaker on the internet. (Image: Nike iD)
Mass Customization; Is there a market for made-to-measure suits for women?

Appendix 5

Cornell University

Designing system of today:

Concept Designer -> Fit model -> Mass Production -> Shipped to retail stores -> Different women -> Misfit
Mass Customization; Is there a market for made-to-measure suits for women?

Design concept of tomorrow

Your own concept -> Bodyscanning -> your design concept -> Flexible production -> Shipped to your own home -> custom fit
Virtual fit of a pants on a women.