

The Acceptance of Mass Customisation When Shopping Online in the US

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Table of Contents

Figures Table of Contents	4
Declaration.....	5
Acknowledgements	6
Abstract	7
Chapter 1 Introduction.....	8
1.1 Purpose of Research	10
1.2 Aims and Rationale	11
1.2 Research Question	11
1.3 Research Objectives	12
1.5 Organisation of Dissertation.....	13
1.5.1 Chapter 2 Literature Review.....	13
1.5.2 Chapter 3 Methodology	13
1.5.3 Chapter 4 Data Analysis.....	13
1.5.4 Chapter 5 Discussion.....	14
1.5.5 Chapter 6 Conclusions and Recommendations	14
1.6 Scope and Limitations.....	14
Chapter 2 Literature Review.....	15
2.1 Introduction.....	15
2.2 Consumer Preferences	15
2.2.1 Preference Fit.....	15
2.2.2 Consumer Perceived Value	16
2.2.3 Theory of Planned Behaviour	19
2.2.4 Theory of Reasoned Action.....	21
2.3 Technology	22
2.3.1 Social Technologies	22
2.3.2 The Long Tail Theory	25
2.3.3 3D Printing	26
2.3.4 Data.....	27
2.4 Personalisation	28

2.4.1 Customisation and Personalisation.....	30
Chapter 3 Methodology	31
3.1 Introduction	31
3.3 Research Philosophy.....	32
3.3 Research Approach.....	37
3.4 Research Strategy, Choices and Time Horizon.....	39
3.5 Data Collection Method.....	41
3.5.1 Data and Sources.....	41
3.5.2 Sampling.....	42
3.5.3 Instruments and Research Process.....	42
3.6 Reliability and Validity of the Instrument.....	43
3.7 Data Analysis Procedures	44
3.8 Limitations of the Methodology	44
3.9 Research Ethics	45
3.10 Summary.....	45
Chapter 4 Data Analysis.....	46
4.1 Questionnaire Research Findings.....	46
4.1.1 Demographic Questions	46
4.1.2 Shopping Habit Questions	48
4.1.3 Mass Customisation Questions	49
Chapter 5 Discussion.....	60
Chapter 6 Conclusions and Recommendations	64
6.1 Conclusions	64
6.2 Recommendations.....	67
6.3. Future Research.....	67
Chapter 7 Reflection	69
Bibliography	72
Appendices.....	80
Appendix 1 Survey Screen Shots	80
.....	81

Figures Table of Contents

<i>Figure 1: Research Onion process. Source Saunders et al., 2015, p.126.....</i>	<i>32</i>
<i>Figure 2: The four research paradigm for the analysis of social theory. Source: Saunders et al., 2015:129</i>	<i>33</i>
<i>Figure 3: Research philosophies. Adopted from Saunders et al., 2009:118.....</i>	<i>34</i>
<i>Figure 4: Differences between inductive and deductive approaches. Source: Saunders et al., 2009:127.</i>	<i>38</i>
<i>Figure 5 Gender</i>	<i>46</i>
<i>Figure 6 Age Bracket.....</i>	<i>47</i>
<i>Figure 7 Occupation.....</i>	<i>47</i>
<i>Figure 8 Monthly Spending</i>	<i>48</i>
<i>Figure 9 Have you purchased customised clothing from an online shop.....</i>	<i>49</i>
<i>Figure 10 If you answered no to the previous question explain why</i>	<i>50</i>
<i>Figure 11 Importance of being able to purchase customised clothing.....</i>	<i>51</i>
<i>Figure 12 Acceptance for perfect fit</i>	<i>51</i>
<i>Figure 13 Satisfaction of customisation in the past</i>	<i>52</i>
<i>Figure 14 Interest in customising specific items</i>	<i>53</i>
<i>Figure 15 Important customisation preferences</i>	<i>54</i>
<i>Figure 16 Time to wait willingness</i>	<i>55</i>
<i>Figure 17 Money spend willingness</i>	<i>55</i>
<i>Figure 18 Money spend willingness</i>	<i>56</i>
<i>Figure 19 Money spend willingness in categories</i>	<i>57</i>
<i>Figure 20 Importance of engaging in a personalised shopping experience.....</i>	<i>57</i>
<i>Figure 21 Likelihood of random engagement.....</i>	<i>58</i>
<i>Figure 22 Likelihood of pre-planned efforts.....</i>	<i>59</i>
<i>Figure 23 Option to customise from more retailers</i>	<i>59</i>

Declaration

Declaration: I, Caitlin Scully, declare that my research is my original work and that it has never been presented to any institution or university for the award of degree or diploma. In addition, I have referenced all literature and sources used in this work and this work is fully compliant with Dublin Business School's academic honesty policy.

Signed: Caitlin Scully

Date: 21/05/2016

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Abstract

The question to be explored in this particular dissertation is whether or not mass customisation is the future of online retail. The researcher looked at the acceptance of mass customisation in the US through literature review research, exploring concepts such as preference fit, consumer perceived value, theory of planned behaviour, theory of reasoned action, the long tail theory, social technologies and personalisation. Appropriate methodological choices are explored and implemented. The researcher explores the co-design experience and explores consumer behavioural intentions through survey. The results are then concluded that mass customisation is a successful marketing technique and that its popularity is growing. Consumers are willing to wait and spend more money on a product if it is customised specifically for them. In a generation that is seemingly digital and loves to share mass customisation will grow onto become a continuing trend in the online apparel market.

Chapter 1 Introduction

The research in this project examines the acceptance of mass customisation (MC) when shopping online. The market being sampled is in the US and the demographic being sampled is generation Y. The aim of the research is to determine whether the implementation of mass customisation is a successful marketing strategy that more retailers should partake in. Specifically, in the areas of online apparel.

Mass Customization (MC) is not a new concept but the growing demand for consumers to be involved in the co-design process is. Mass customization is the allowance of consumers to be involved in the co-design process when purchasing a product or engaging in a service online. Allowing this level of co-control creates a personalized and individual experience for the consumer. Creating a landscape, they can navigate through that is niche and personalized in every aspect. In today's Facebook age, consumers view products as another form of self-expression.

- Every customer is their own market
- Consumers are more expressive
- Customization is the new loyalty

Online mass customization (OMC) allows consumers to express their individuality and participate in the design process by selecting various combinations of the style, colour, detail and fabric of products. This project intends to explore consumer preferences in regards to choosing MC as a part of the buying process when shopping online. Specifically, the project will ask consumers of both genders whom fall under the generation Y category, also known as millennials.

The reason MC is of importance is because it is a part of the shopping process that is conducted online. Generation Y and beyond are born into the digital age, thus making a majority of their purchases online. "Part of the problem stems from the continued pervasiveness of online retail. Global e-commerce increased by 19 percent in 2013 alone, a figure that was likely equalled or bettered in 2014. With those sorts of multiples, it's entirely likely that upwards of 30 percent or more of the total retail economy will be transacted online by 2025." (BOF) If this statistic holds ground then

understanding the behavioural intentions towards the co-design process while shopping online will be pivotal because it will be a common practice that will be integrated into the online shopping experience. Knowing this information is vital, in order to plan for the future of online shopping. The problem that exists in this research area currently is the lack of information on the behavioural intentions of consumers when shopping online and MC is a part of the purchasing process.

Technology is a major influencing factor that must be explored. The impact of the internet has caused rapid change in way of digital marketing and online consumerism. An article from the New York Times stated “Millennials’ desire to co-create,” quoting ad exec John Mescall: “It’s not about getting good user-generated content. It’s about engaging to self-express. How do you get people delivering your own brand message through self-expression?” (Generation Z the Latest Branding Opportunity) Generation Z is considered those born between 1991- 1995 and onward. Although they are more connected through technology they prefer individuality which is where mass customization plays a huge role in the future of marketing to this generation. How will the future of mass customization used in the co-design process (Co-design is a product, service, or organization development process where design professionals empower, encourage, and guide users to develop solutions for themselves) influence future digital marketing techniques in regards to the online fashion industry? This generation along with generation Y is also more co-connected at an international level than ever before. This change is fast, sometimes faster than researchers could have ever imagined. We live in an era where communication reaches individuals faster than media in some instances. Therefore, a successful business that operates online should pay close attention to what their customers are saying online and incorporate it into the purchasing experience. This is where mass customization (MC) plays in. This also directly correlates to what appropriate digital marketing techniques should be implemented in the planning process as well. “According to the Cotton Incorporate Lifestyle Monitor, mass customization is the most popular digital technology among women ages 16 to 24 years” (Consumer Attitudes Toward Online Mass Customization).

Mass customization is an important co-design experience for consumers, especially in the areas of fashion. This ranges from footwear to handbags and graphic t-shirts etc. This is an important trend that needs to be researched further as it has the

potential to become a staple with how future consumers shop and order products online specifically in the fashion industry. This could change industry techniques and product experiences indefinitely. The adoption of technology especially through certain areas of the fashion industry has been slow to adopt the digital side of things, but that is changing as they are trying to keep up with the demands of today's consumers such as millennials.

“According to some business theorists, mass customization is most likely to replace mass production. This is a need and a posing problem in regards to having thorough research conducted to prepare for a growing demand in the near future.” (Journal of Business & Industrial Marketing) “Gen Yers firmly believe that both products and marketing actions should be co-created and they feel the crowd will always outsmart the individual. Peers are the most trusted source of information, which explains why user ratings are very important to them and will always be consulted before making purchase decisions. Their favourite brands are the ones that offer customization of their products and communications. Ben & Jerry's in the Netherlands, for instance, co-created their Facebook fan page with Millennials.” (ESOMAR)

1.1 Purpose of Research

The purpose of the research is to study the prospective potential of mass customisation strategies in the online apparel market, current technologies that shape the concept, the acceptance of the concept, consumer preferences in such services and the customer's willingness to wait and pay. The main study examines the overall popularity and consumer preferences to customise apparel online in generation Y over standard shopping techniques. The difference between customisation and personalisation will be explored. It is the researchers goal to elaborate on current literature through physically testing predictions from planned objectives as well as concepts noted in current literature. The study expands on present-day concepts through researched and formulated objectives that aid in answering current voids on the subject of MC. The problem in the areas of mass customisation is the lack of research that exists on the consumers and their understanding and behavioural intentions towards the concept. Many researchers and businesses recognise the concept of mass customisation as a growing trend in the fashion industry but little

research has been carried out in regards to consumers and their willingness to participate. Customisation is based on collaboration between the producer as well as the end-user through technological systems that can reveal specific product characteristics received for customer satisfaction.

1.2 Aims and Rationale

The purpose of this research is to study previous findings on mass customisation through empirical research. It is the aim of this project to explore advantages in the online market place in relation to mass customisation as well as reveal consumer attitudes towards MC. The overall aims and rationale of this dissertation are to gain a better understanding of the technical and scientific areas that form the foundation for mass customisation. As well as how accepting consumers are of mass customisation when shopping online. The research question alluding to this being the future of online retail will be kept in mind and investigated throughout the research. By conducting a survey and appropriately looking into literature on the topic the aim of this project is to be able to come to a critical analysis and unbiased answer of these issues. It is the intent of the researcher to appropriately analyse and discuss the behavioural intentions in consumers, specifically in generation y (millennials) when mass customization is involved and they are invited to participate in the co-design process. Generation Y is currently the largest population of consumers at the moment. OMC is a fast growing trend within this population so that is reason enough that behavioural intentions of consumers towards this should be researched, surveyed and analysed in order to better prepare the market place for such trends in production, buying habits and patterns. The study aims to explore the advantages of technology within the concept of MC.

1.2 Research Question

Is Mass Customization the future of online retail? An in-depth study on the concept and acceptance of mass customisation in the United States with a particular focus on generation Y.

Through current and past research, the rise in the trend of MC has been more than apparent and is predicted to grow immensely. This is the question that is to be explored in the proposed research. The problem is the lack of information that exists on the behavioural intentions of consumers shopping habits when mass customization is introduced as a part of the buying experience. The proposed question asks about the subject in a broader sense. Below are the following objectives that are to be explored and answered throughout the duration of the dissertation. Through qualitative and quantitative research, the researcher will be able to appropriately determine outcomes for the following outlined sections.

1.3 Research Objectives

The concept and idea will be analysed theoretically from a production viewpoint and then consumer preferences will be analysed from the perspective of a marketer. The study overall is not limited to a specific sector in the apparel market but rather in all sections of online apparel in the fashion industry. Specifically, the age group to be analysed falls under the category generation Y and lives in the United States. The main objectives of the project are to figure out the overall acceptance of mass customisation in the US market. Therefore, several objectives have been set. Through examination of current literature and surveys the following aims will be explored, analysed and answered. The main objectives of the dissertation are as follows.

- Analyse online consumer preferences in generation Y in the US
- Examine current consumer perceptions of mass customisation in the US
- To evaluate whether mass customisation is a successful marketing technique within the generation Y age group
- Asses generations Y willingness to engage in co-creating products
- Assess customer's willingness to wait for products
- Asses willingness to spend more for customised products
- Gauge present day popularity of mass customisation to determine future success

- Determine what preferences drive the success of mass customisation in the online apparel market
- Evaluate growth of new and upcoming technologies associated with mass customisation
- Compare the success of mass customisation as a planned and unplanned effort
- Analyse consumers' willingness to participate in mass customisation when shopping online
- Provide future recommendations for online retailers

1.5 Organisation of Dissertation

The following is split up into chapters and clearly illustrates how the dissertation is laid out, organised and what is involved within each section.

1.5.1 Chapter 2 Literature Review

The chapter on the literature looks at the scientific side of the MC concept. It forms a basis and proper foundation of the topic by laying the appropriate groundwork for the researcher to be able to test on consumer preferences. It applies directly to the dissertation working title and aids in forming the objectives discussed above.

1.5.2 Chapter 3 Methodology

The methodology chapter will follow the research onion by the 7th edition Research Methods for Business Students by Saunders et al., (2015) It will go on to discuss the approach to the research as well as the philosophies and various methods to be utilised. It also describes reasoning for the choice of using a quantitative survey.

1.5.3 Chapter 4 Data Analysis

Chapter 4 will go on to look at the data collected via survey monkey. It will present the findings in an illustrative format through charts and graphs and description of figures.

1.5.4 Chapter 5 Discussion

This chapter will go into depth about the findings illustrated in chapter 4 and will be split up by each objective. A then in-depth discussion will be applied to each. This section will compare and contrast as well as explore concluding perceptions of the answers received from the survey that was distributed to audiences.

1.5.5 Chapter 6 Conclusions and Recommendations

The final chapter will conclude the research and findings found throughout, mainly based on themes found throughout the literature. It will draw up inference in regards to the question and apply recommendations for the industry as a whole.

1.6 Scope and Limitations

The scope of the dissertation at hand is large. Much literature regarding the topic was reviewed resulting in a lengthy literature review on the topic. Mostly pulled from academic sources. Due to a small time limit which is 3 months the research is strictly quantitative with the qualitative elements being the study of literature. There was not enough time to engage in any qualitative experiments. Also if the time allotted to research was larger there would have been more responses to the questionnaire that was conducted. The reasoning for this is that a survey is easier to distribute and conduct and will reach a larger audience as opposed to if a qualitative focus group was conducted. If the researcher was given more time, then both qualitative and quantitative data would have been used in a complementing manner

Chapter 2 Literature Review

2.1 Introduction

The content in the following literature review examines classic theories as well as current trends that are shaping the market place by way of the online shopping experience. The review cross examines the sociology behind consumer intentions and what they are currently exposed to. The understanding of these concepts aids in forming appropriate objectives and hypothesis to survey on the topic. Each topic is related to the overall research objectives and questions. The first topics and subtopics go over the basic consumer preferences when shopping online. The second topics and sub topics cover present day trending technologies that play a significant role in online shopping, personalisation and marketing. It covers The Long Tail Theory which ties in synonymously with the success of online personalised shopping as well as the importance of appropriate platforms. The third and final topic examines the concepts of co-design process, where customers are a part of the design process. This chapter alludes to the basis of the overall dissertation question and ties up the section after exploring multiple elements of the topic.

2.2 Consumer Preferences

2.2.1 Preference Fit

Several authors (Franke, Schreier, and Kaiser 2010; Anwar, Gulzar and Anwar 2011) concur that preference fit refers to the “fit between consumer preference and product attributes, and their preference characteristics, such as ability to express preference, are critical variables for OMC [Online Mass Customisation] use intention” (Moon and Lee 2014, p.125). However, an earlier definition by Dellaert and Stremersch (2005) contested that preference fit speaks to the subjective assessment of a customer concerning the magnitude to which the features of the product match his or her system of preference. Since customers design the product features themselves in online mass customisation, there is a prevalent presumption that the preference fit might be easily achieved. Subsequently, this presumption implies that meeting the preference fit through customer design creates greater value. In turn, this is presumably the best approach for increasing customer satisfaction (Anwar, Gulzar and Anwar 2011; Franke

and von Hippel 2003). Indeed, Franke, Shreier and Kaiser (2010) expressed that the customer develops a sense of pride to have personally designed the product.

Franke, Keinz and Steger (2009) contended that identification of increased satisfaction is more common in the customised products. They further argued that this due to achievement of enhanced preference fit in comparison with regular products. Altogether, an earlier postulation by Bettman, Johnson and Payne (1990) showed that customers tend to be unclear concerning their preferences, which makes it common for their preferences to be subject to influence by extraneous factors. This makes customers fail to acknowledge that the customised efforts present with an advanced preference fit. Piller (2004) showed that customers are willing to pay premium prices when they have good purchasing intentions. This is particularly true when the customer expects to accrue higher benefits by ordering a customised product instead of a regular one (Franke, Keinz and Steger 2009). The understanding that preference fit might not always appeal to the preferences of the customers due to their unclear definition of their preferences warrants the need to investigate mass customisation.

2.2.2 Consumer Perceived Value

Value stands out among the principal marketing concepts (Merle et al 2010). Woodruff (1997) expressed that the approach towards creation and delivery of superior customer value is a daily concern for a marketing manager. According to Zeithaml (1988), global value denotes the overall evaluation of the customer with respect to the product utility based on views of what the customer receives and what is actually delivered. Marketing scholars (Woodruff 1997; Bolton and Drew 1991) argued for the distinction of value from satisfaction. In support of this argument, Merle et al (2010) indicated that satisfaction is principally evaluated as the trade-off between the customer's expectations and the actual product performance.

From the perspective of operations management, Tu, Vondermbse and Ragu-Nathan (2001) offered a scale of value to consumer. They indicated that this is achievable through asking managers to evaluate the satisfaction degree of a consumer concerning the products offered by the organisation. In spite of the valuable contribution offered by this scale, Merle et al (2010) criticised it for not capturing value from the viewpoint of the customer in a straightforward manner. Instead, Merle et al

(2010) indicated that customer value might be measured best directly by the customers themselves as opposed to having managers do it. The relevance of this expression to this research is that it informs the decision to measure customer value in relation to online mass customisation acceptance in the US context.

Squire et al (2004) developed the “responsive agility tool”, which they recommended for the analysis of value obtained from different customisation types from the view of the customer. This tool was founded on satisfaction and importance, as the criteria. Importance as a criterion speaks to the question of customers valuing a specification albeit without explaining why. As a result, managerial implications become constrainable the no-go/go choice. Altogether, there are no suggestions offered concerning how the value of a given customisation type can be increased. Furthermore, this measure tends to place satisfaction and value concepts at par (Merle et al 2010).

Merle et al (2010) argued for the possibility of doing more than simply decreasing the customisation costs in order to offer the customer value. They developed the Consumer-Perceived Value Tool (CPVT). Merle et al (2010) defined CPVT as “an operational measure designed to analyse value directly from the consumers” (p.505). They further expressed that CVPT underscores the second value trade-off aspect, which concerns all the benefits perceivable by the consumer during the product customisation process. This coincides with the identification of the co-design process or the mass customisation experience and the product as the two global origins of value for mass customisation (Franke and Piller 2004; Fiore, Lee and Kunz; Schreier 2006).

During and before the elicitation process in a system of mass customisation, the customer has expectations about the value s/he will derive from consuming the product. There are three perceived benefits for products that have been mass customised. These include uniqueness, self-expressiveness, and utilitarian values (Merle et al 2010). Altogether, the utilitarian value has been accorded more attention in mass customisation research. The utilitarian value relates to the magnitude to which the products that have been mass customised fit personal preferences (Dellaert and Stremersch 2005; Squire et al 2006).

In their study, Franke and Schreier (2008) established a positive relationship between willingness to pay for premiums and perceived fit in mass customisation. Altogether, Merle et al (2010) expressed that consumer value does not accrue exclusively as an outcome of the product fit. Concerning uniqueness value, the product that has been mass customised can assist consumers in playing up their individuality through exhibition of uniqueness traits. Moreover, Fiore, Lee and Kunz (2004) affirmed that the desire for obtaining a unique product is amongst the major motivations for customers engaging in mass customisation. Franke and Schreier (2008) found a positive influence of perceived uniqueness in mass customised products on the utility derived by consumers from mass customisation.

The self-expressiveness value is traceable to Sirgy's (1982) self-concept theory. Merle et al (2010) stated that the self-expressiveness value matches the benefit of product ownership. By extension, this product ownership is a reflection of an individual's own image the willingness of the desire to assert identity notwithstanding (Merle et al 2010). Holbrook (1999) offered one dimension through which self-expressiveness is distinguishable from uniqueness value. This distinction anchors on the self-oriented versus the other-oriented trait. In other words, individuals are not always attempting to display their differences. Instead, they seek to own products that fit their own self-images (Merle et al 2010).

Salvador, Piller and de Holan (2009) expressed that companies pursuing success in mass customisation must assist their consumers in identification of their own solutions. Offering customers, a configuration toolkit constitutes one of the means for achieving this (Franke and Piller 2004). The value accrued from the mass customisation value relates to the interaction between the product design based on the specific preference revelation method and the individual (Merle et al 2010). Often, this process has been portrayed as a source of extra cost related to customisation despite Piller et al (2004) stressing the economies of integration.

Dellaert and Stremersch (2005) expressed that asking consumers to identify the desired product features could trigger choice complexity. Furthermore, this could cause mass confusion, as expressed by Huffman and Kahn (1998). Altogether, Franke and Piller (2003) showed that the process of co-designing could have intrinsic values for consumers. Merle et al (2010) identified creative achievement value and hedonic

value as the two perceived benefits associated with this process. The latter refers to the entertainment and joy that consumers derive from the co-designing and customisation process. An empirical study by Fiore, Lee and Kunz (2004) sustained the connection between the desire to have exciting experiences and the willingness to mass customise.

Schreier (2006) described creative achievement value as the authorship pride. Consumers feel a sense of creativity and having created something when they have the independence of personalising their products. This creative achievement emerges despite co-design toolkit having limited potential (Merle et al 2010). In the Franke and Piller (2003) study, a manager from Dell computers expressed that perceived pride in personalisation of computers partly triggers customer satisfaction. On the other hand, literature in marketing indicates that mass customisation might not necessarily be developing customer value despite the resolution of the operational performance and customisation trade-off (Merle et al 2010). In the two subsequent subsections below, the literature reviewed pertains to the Theory of Planned Behaviour and the Theory of Reasoned Action in relation to mass customisation.

2.2.3 Theory of Planned Behaviour

Although individuals might anticipate positive outcomes from behaviours, they might engage in such behaviours only when they perceive them to be within their control (Ajzen 1991). Some studies (including Kang 2008; Dellaert and Stremersch 2005) suggested that the mass customisation process might lower the perceived control of the consumer concerning the usage of the mass customisation services due to the complex nature of the decision-making process that comprises numerous selection processes. Lee et al (2011) assessed the online mass customisation process for children wear. They found that customers that were offered more options were less likely to buy customised products compared to customers that had fewer options. Moon and Lee (2014) interpreted this as a need for application of the Theory of Planned Behaviour (TPB) to online mass customisation.

TPB extended the Theory of Reasoned Action (TRA), which was theorised by Fishbein and Ajzen (1975) with further improvements later (Ajzen and Fishbein 1980). TPB expresses the intention of the individual to execute a given behaviour. With TPB, the

assumption is that intentions encompass the motivational factors responsible for influencing a given behaviour. Intentions point towards the extent to which people work hard trying and the effort they plan to input in order to undertake a given behaviour. Generally, TPB underscores the general rule that the strength of the intention to undertake a behaviour positively relates with the likelihood of its performance. Altogether, it is noteworthy that behaviour only can express in a behavioural intention in the event that the particular behaviour is subject to volitional control. In other words, this means that the person has the capacity to decide whether to undertake the behaviour or not (Karma and Ali 2014).

Fundamentally, TPB carries five major conceptual considerations. The first one relates to intention, which is the readiness of an individual to undertake a given action. Intention is a directional precursor of behaviour that encompasses attitude towards behaviour, perceived behavioural control and the subjective norm (Ajzen 2002). The second conceptual consideration relates to behaviour, which is the evident reaction of an individual to a particular target within a specific context (Ajzen 1991).

Attitude toward behaviour is the third TPB conceptual consideration. It refers to the manner of assessing a specific behaviour whether negatively or positively. Behavioural beliefs influence attitude. Ajzen (2002) defined behavioural beliefs as “beliefs about the likely consequences or other attributes of the behaviour” (p.665). Kang (2008) indicated attitude toward behaviour comprises two components as its function. These include beliefs that undertaking a given behaviour carries some attributes and the subsequent assessment of those beliefs. Summation of the products of the two components yields overall attitude score (Ajzen 1985, 2002).

The fourth TPB conceptual consideration is the subjective norm. It refers to the perception of consumers towards social pressures exerted on them by other people (Ajzen 1985). Two determinants influence the subjective norm. These include the normative beliefs of the individual and the motivation of the individual to fulfil the referents. The normative beliefs of the individual represent the thoughts of the specific groups or individuals that the individual should perform or refrain from a given behaviour. On the other hand, the motivation of the individual to fulfil the referents demonstrates the extent to which an individual is convinced that significant others will perceive the behaviour in question negatively or positively. Significant others include

spouses, colleagues, relations and friends, media and social status. Summing up the products of both the subjective norm and the compliance motivation yielded the total subjective norm score (Ajzen 1985, 2002).

Finally, perceived behavioural control is the final conceptual consideration of the TPB. It entails the perceptions of the individuals concerning their capacity to undertake a certain behaviour within a context where restrictions to act exist (Ajzen 1985). Kang (2008) asserted that perceived behavioural control is responsible for involuntary behaviour. Moreover, perceived behavioural control has the capacity to affect actual behaviour implementation. This implicates the perception of an individual concerning the difficulty or ease of evaluating whether s/he possesses the requisite opportunities and resources for undertaking a given behaviour. As a result, perceived behavioural control draws from control beliefs and perceived power. Control beliefs concern the “beliefs about the presence of factors that may further or hinder performance of the behaviour” (Ajzen, 2002, p. 665).

In the context of online shopping, Kim and Park (2005) asserted that access to suitable resources and the Internet might be necessary for the performance of online shopping. Studies (Shim et al 2001; Johnson et al 2003) supported the positive correlation between purchase intentions and perceived behavioural control. For example, Shim et al (2001) reported that perceived behavioural control positively affected the intention to search for information online. Likewise, Kim and Park (2005) observed that perceived behaviour control through online stores has a significant positive correlation with purchase intentions through the online search and online store intention for information about the product. It is possible that similar trends will manifest in the acceptance of mass customisation when shopping online.

2.2.4 Theory of Reasoned Action

Fishbein and Ajzen (1975) suggested the Theory of Reasoned Action (TRA) and further modified it later (Ajzen and Fishbein 1980). TRA focuses on explaining the effect that attitudes have on individual behaviour. The theory comprises the attitude, behavioural intention and the subjective norm as its three constituent components during consideration of an individual’s behaviour. These components are similar to those explained in the previous section under TPB, as TRA is its precursor. Altogether,

Ajzen (1991) later acknowledged that they did not make draw clear distinctions between evaluative and affective reactions to a behaviour during the development of the TRA.

Armitage and Conner (2001) stated that TRA could be suitable in the prediction of direct voluntary behaviour. Yet, TRA behaviour is not always voluntary entirely and is not always under control (Ajzen 1991, 1985). Another major shortfall of the TRA is that external variables that encompass all other variables pertaining to personality or demographic traits, the behavioural target's characteristic and some additional variables capable of influencing the development of beliefs are inexplicitly featured in the model. These limitations might partially account for the varied nature of the findings reported by authors applying the TRA and the TPB in evaluating the contribution of subjective norms to behaviour prediction (Moon and Lee 2014).

For example, Dawson (2010) reported the absence of subjective norms' contribution to TPB was more pronounced in young people. This tendency is attributable to young people's distinguished traits such as proclivity towards formation of their own opinions in an increasingly autonomous manner. This has even led to calls for the modification of both the TRA and the TPB by authors such as Ma, Littrell and Niehm (2012). Thus, subjective norms might have between negligible and no effect at all on the behavioural intentions of young people. This is especially true when the context of usage is private and there is minimal social influence (Ma, Littrell and Niehm 2012). An example of such as scenario is the usage of online mass customisation services for purchases of apparel (Moon and Lee 2014).

2.3 Technology

2.3.1 Social Technologies

Sharing your creation is of major importance when a company provides a platform for mass customisation. According to Gandhi, Magar and Roberts (2013), crowdsourcing and social media are not new although they create the means for enhanced customisation options. This is achieved through enabling companies to evaluate the value attached to proposed or extant elements of hypothetical or current virtual products by customers. Social technologies empower the consumer to broadcast that which they create to larger networks. Essentially, this constitutes free marketing for

companies whose products such consumers promote. This approach suits customised products uniquely, as most consumers are proud to share their creations (Gandhi, Magar and Roberts 2013). The sharing of customers' own creations with their networks constitutes eWOM (electronic Word of Mouth).

Also known as user-generated content (UGC), eWOM functions in a manner that resembles the conventional Word of Mouth (WOM) (Manap and Adzharudin 2013). The only variation between the two is that eWOM spreads through online media (Bahtar and Muda 2016). Presi, Sarisakis and Hartmans (2014) defined UGC as any material created by users themselves, shared through the Internet by non-media, and has significant impact on consumption. UGC has also been defined as all negative and positive sentiments expressed by former, actual, or potential consumers concerning a company or product and availed to numerous institutions and people through the Internet (Hennig-Thurau et al 2004). Generally, users share the content on social media like Twitter, YouTube, Instagram and Facebook (Bahtar and Muda 2016).

In comparison to Producer-Generated Content (PGC), which often entailed hiring of celebrities and endorsers to share the benefits and advantages of products and services (Verhellen, Dens and Pelsmacker 2013), consumers shunned from the common practices of promotion (Hassan, Nadzim and Shiratuddin 2015). This is because consumers associate UGC with comparatively superior credibility. This is mainly because the content shared by users has its foundation on real consumption experiences (Bahtar and Muda 2016). Consequently, UGC has been found to be more useful and trustworthy, yet less biased (Verhellen, Dens and Pelsmacker 2013; Mir and Rehman 2013). In fact, potential consumers trust UGC with respect to products and brands mainly due to the perception that the users generating such content have no commercial interest or affiliation to the product (Mir and Rehman 2013). This explains why online consumers usually depend on the content that other users generate to help them make a purchase decision (Bae and Lee 2011).

For the purposes of ensuring comprehensive coverage of the role played by UGC through social technologies, the review shifts focus on perceived credibility, perceived risk, perceived usefulness and attitude toward UGC. Concerning perceived credibility, online consumers believed and perceived that contents that other users generate have

superior credibility to that offered by the sellers of the product (Jonas 2010). This is because the users engaged in UGC see one another as highly credible information sources (Bahtar and Muda 2016). Racherla and Friske (2012) indicated that credibility refers to the positive traits associated with the communicator and that are capable of influencing the acceptance of some information by the recipient and offer accurate information to other users. This hinges on the argument that it is easy to persuade consumers to purchase a product or service when they trust and support the information despite the sources of such information (Waldt, Loggerenberg and Wehmeyer 2009).

With respect to perceived risk, Dai, Forsythe and Kwon (2014) indicated that risk is about an uncertainty that tends to be inevitable unless the online consumer possesses prior experiences and knowledge to aid their decision-making. High-risk perceivers would undertake information searches always. Reviewing UGC is a common occurrence particularly in purchasing either new or expensive products owing to the apprehension implicated (Lee and Moon 2015). Featherman and Pavlou (2002) defined perceived risk as the magnitude of consumer uncertainties concerning online purchase decision outcomes. Gefen and Straub (2004) alluded to the possibility of lessening risk when online consumers access and understand information concerning the intended product to be purchased before reaching the final purchasing decision. Altogether, perceived risk in online shopping is subjective to different consumers because people individually hold perceptions concerning different matters and might have previous experiences (Bahtar and Muda 2016).

In terms of perceived usefulness, it can influence online customers into responding to the information others offer and their attitudes thereof thereby resulting in the purchasing of the product in question (Muslim et al 2014). Racherla and Friske (2012) found that users perceive information from other users as being user-friendly whereby it is easier to understand the content regardless of the information length. Perceived usefulness is the extent to which an individual believes that using a system would enhance their performance or outcome (Muslim et al 2014). Thus, the information that other users share online can help an online consumer in reducing their perceived risk in decision-making. Besides, UGC is capable of assisting online consumers in accessing product information promptly and soliciting for direct feedback from other users (Racherla and Friske 2012).

Favourable consumer attitude towards UGC is likely to trigger purchasing intention. However, consumer attitude changes rapidly due to behaviour, demographic traits, purchasing context, motivation, selling settings, reference groups, technology advancement, product innovation and satisfaction or dissatisfaction (Jun and Jaafar 2011). According to Shergill and Chen (2005), a joyful and pleasant online shopping experience can trigger a positive attitude in buyers. Today, consumers normally log on to social media for product information through UGC before deciding their purchase (Racherla and Friske 2012), which marks the commencement of their purchase decision process.

In the context of the current research, it means that UGC has the potential of influencing the acceptance of mass communication when shopping online in the US. This is likely the case based on the role of social technology used in the process of online shopping as a whole, which might trickle down to online mass customisation. Perceived credibility, perceived risk, perceived usefulness and attitude toward UGC with respect to mass customisation will then most likely become central to the acceptance of mass customisation.

2.3.2 The Long Tail Theory

Anderson (2004) came up with the long tail concept based on the 80-20 Pareto rule. Later, Anderson (2006) further developed the long tail theory. The theory provides a market overview through juxtaposition of the product popularity or volume within the count of the product variants (Theusen, Jensen and Gottlieb 2009). Based on the 80-20 Pareto principle, the Long Tail Theory supposes that about 80 percent of the variants of a product account only for 20 percent of the market (Anderson 2004). Since the society is increasingly individualised and new technologies enable distribution and production of customised products, this renders the tail part interesting (Theusen, Jensen and Gottlieb 2009). Anderson (2006) contended that the business future entails selling less of more.

Conventionally, industrial firms tended to focus on the small product amounts that were the most famous because they could deliver them based on the paradigm of mass production thereby leveraging economies of scale. The Ford Model T is the most popular of the product examples that were available in a single, standard variant.

Nonetheless, the car manufacturing development evolved considerably over the subsequent years to allow customers today to “design” their own automobiles such as the Skoda, Seat and Audi (Theusen, Jensen and Gottlieb 2009). The capacity to offer customers with tailored cars enhances their perceived value and the company retains the capacity to leverage mass production’s economies of scale (Kruschwitz et al 2000). This way, vehicle manufacturers handled the long tail through mass customisation approaches to make it bigger and longer. The individual customisation is the long tail’s last production paradigm whereby all products developed are unique to the consumer (Theusen, Jensen and Gottlieb 2009).

However, some authors have challenged and criticised the long tail theory. For example, there are questions concerning whether exploitation of the long tail leads to increased demand or simply shifts demand (Voss et al 2016). In spite of such criticisms, the Long Tail Theory remains popular and is an exemplar of the way theoretical context evolves. For example, Elberse (2008) contested that a long tail was evident in the music downloads’ sub-context. Altogether, this steered consumers more to hits.

The Long Tail Theory has a tapered core context, which is online shopping and consumption in which case there is near marginal distribution cost. The initial coverage of the theory was in the entertainment and media industry. However, it later expanded to contexts that allowed for relaxation of context assumptions like in the event of physical distribution at Amazon. With time, the requisite context for long tail has been under scrutiny. For instance, companies require considerable variety and broad range between misses and hits to exploit the long tail (Voss et al 2016).

2.3.3 3D Printing

Berman (2012) stated, “3-D printing has been both compared to and contrasted with mass customization” (p.156). Proponents of 3D printing contest that it allows companies to build custom products economically in minimal quantities like mass customisation. Both 3D printing and mass customisation processes could profitably produce lot sizes at limited quantities and share other benefits. Altogether, they differ considerably with respect to logistics requirements and manufacturing technology (Berman 2012). Mass customisation depends on application of diverse pre-assembled

modular part combinations or delayed strategies of differentiation unlike 3D printing (Berman 2002).

Conversely, 3D printing involves application of additive technologies based on manufacturing and Computer Aided Design (CAD) software to print objects through fusion of different materials with laser (Berman 2012). Whereas mass customisation's raw materials are usually component parts, resins, plastics, stainless steel, super alloys, ceramics, titanium and polymers feature in 3D printing. The component parts originate from numerous suppliers, mass customisation necessitates a high magnitude of supply chain integration to assure the availability of the appropriate parts in correct portions promptly. On the other hand, 3D printing employs supplies that are readily available from countable vendors (Berman 2012). The production process in mass customization is usually based on teams. However, the 3D process has high automation levels and does not require operator attention during the process (Alpern 2010).

Altogether, both mass customisation and 3D printing share some economic traits (Berman 2012). For instance, both processes of manufacturing reduce inventory risk. This is because products are only produced after the placing of orders and payment. In both processes, this means that manufacturers do not have to deal with finished goods inventory that are unsold. Lastly, both mass customisation and 3D printing enhance the management of working capital. This is because customers pay for goods prior to their production or even the commencement of the production process (Berman 2012).

2.3.4 Data

Von Hippel (2005) alluded to the rich empirical proof indicating that the innovation locus is considerably changing from producer companies towards users of technologies and products, which democratised innovation. Practitioners and scholars employ diverse approaches to leverage user creativity for new efforts in product development. Firm-hosted user communities (Schau, Muñiz and Arnould 2009), lead user strategy (Lüthje and Herstatt 2004), mass customisation and user design toolkits (von Hippel 2001) are examples of methods employed to tap into user creativity data. Accordingly, the principal focus of this research is mass customisation and user design

toolkits. Hienerth, Lettl and Keinz (2014) argued that the toolkit strategy involves inviting users to develop their own customised solutions.

Gassmann, Frankenberger and Csik (2013) explained that user manufacturing allows customers the opportunities to play the manufacturer and consumer roles. For example, online platforms provide consumers with the requisite support for the purposes of designing and merchandising the product. The support entails manufacturing services, software for designing the product and an online sales platform for selling the product. Therefore, the firm only offers customers support in their endeavours and subsequently benefit from the users' creativity. On the other hand, the customers benefit from the possibility of realising entrepreneurial behaviour without having to offer the requisite infrastructure. In the end, the firm also generates revenue through actual sales (Gassmann, Frankenberger and Csik 2015).

2.4 Personalisation

Product personalisation is an outcome of the providences of the ubiquitous computing and internet presence that led to the emergence of responsive systems of manufacturing like 3D printing (Hu 2013). Consumers develop innovative products and achieve value through collaboration with other consumers and manufacturers. The open product architecture enables this co-design process (Koren et al 2013). On-demand systems of manufacturing and responsive systems that are cyber-physical and involve user participation during design, manufacturing, assembly processes, supply processes and product certification/simulation gratify consumer preferences and needs (Hu 2013).

Product personalisation depends on open product platforms, which comprise different modules including integration of the user design modules (Hu 2013). Mass customisation's product family design methodologies were founded upon products, which consisted of customised modules and common modules (Simpson 2004). Personalised products will normally feature open architecture with three module types. These include common modules, customised modules and personalised modules. All these modules will have standardized informational, electrical and mechanical interfaces for allowing easy disassembly and assembly. Based on the projected value, product cost and manufacturability, certain designs might not feature all the three

module types. Instead, they might comprise the personalised and customised modules. Product architecting prescribes the module types depending on manufacturability and cost (Berry, Wang and Hu 2012).

On the other hand, customers participate in personalisation design processes at different levels (Hu 2013). Several designers are highly likely to have little experience and introduce considerable variations in their design approaches and their most important individual preferences. Visualisation tools are necessary for aiding the customer in understanding the consequences of the design choices they make without the need to offer physical prototypes. Design environments with the flexibility for accommodating both experienced and novice designers that prefer both the freedom of undertaking creative design and the capacity of visualising the personalised modules' integration within the open product architecture platform is highly preferable (Hu 2013).

To guarantee prompt response to demands by consumers, the system of manufacturing must offer flexibility to fabricate personalised product modules and features. The same flexibility needs to be extended to assemble the modules with other modules supplied by the manufacturer (Hu 2013). On the other hand, integration of computational tools with the manufacturing and physical design systems is necessary for supporting the distributed personalisation design. This implicates the need for cyber-physical systems. These are engineered systems developed from and rely on the synergy between physical and computational elements. Altogether, there will be need for methods that leverage extant cyber-social networking infrastructures for supporting users while sharing their designs and viewing the designs of others with common interests. Personalisation is also likely to lead to the advent of likeminded designers (Hu 2013).

2.4.1 Customisation and Personalisation

Freund (2009) asserted that customisation must not be confused with personalisation. Customisation is about adjustment, assemblage and modification of service or product components elements in accordance with the desires and needs of the customers. On the other hand, personalisation entails intense interaction and communication between the supplier and the customer. In general, personalisation is about filtration and selection objects for a person by utilising information concerning the profile of the customer and the eventual negotiation with the person (Piller 2005). Hitherto, the technological shifts of mass customisation strategies were put on the spotlight.

However, Piller (2000) focused on the behavioural orientation as opposed to the technological orientation. Altogether, the focus has shifted already. Piller (2005) focused on the reasons behind the failure of numerous mass customisation initiatives. This author argued that the main reason surpasses the common issues related to wrong variety scope, branding absence and incomprehensive information technology systems. The principal reason is that empowering the customers to be co-designers and co-creators shifts the value creation locus. This requires a radical management mind-set change at the least (Piller 2005). Firms have to come up with management programmes that address the transformation challenge, which is fundamentally intellectual as opposed than technological (Freund 2005).

Mass customisation commits firms and their customers to a perpetual interrelationship that changes continuously, increasingly sophisticated. This ranges from simple manufacturing and service and product delivery to open innovation and mass customisation (von Hippel 2005). Since customers are frequently dissatisfied and overwhelmed from the different decision processes, the majority of firms assess the different interactions with their customers more often. This favours the economic and technical viewpoint over an increasingly social-psychological viewpoint (Freund 2009). Whether this interaction would influence the acceptance of mass customisation when shopping online in the US, is subject to empirical investigation.

Chapter 3 Methodology

3.1 Introduction

Research methodology has been defined as the systematic practices and tactics that are employed in the process of gathering information, analysing the findings and presenting them with an aim of answering the research questions or testing the research hypotheses and making inferences (Gill and Johnson, 2010). The research methodology chapter gives researchers an opportunity to present the underlying assumptions of their study, discuss the strengths and weaknesses of their research methods and reflect on their choices. According to Bryman (2015) the successful completion of the research project heavily relies on the dependability, credibility, thoroughness and accuracy of the research methods that are used. Accordingly, Bryman (2015) insists on the significance of the research methodology arguing that it could lead to be failure or success of the research process. These arguments have been retaliated by Taylor, Bogdan and DeVault (2015:2) who contends that the role of the research methodology is to provide the researcher with a “blueprint” for describing, explaining and predicting the research issue, and as a result, should be treated with a lot of caution and diligently. This is used to describe, explain and predict a research phenomenon”, and thus, should be designed diligently and with caution. Regardless of the increased calls for precision when designing the research methods within the methodology literature, most researchers still struggle due to lack of guidance on where to begin. However, in their book, Saunders, Lewis and Thornhill (2015) have offer a sustainable solution on how to go about this rather challenging process through what they describe as “the research onion” (p.126). The research onion is defined as the processes that a researcher uses to illustrate their choices of data gathering and analysis procedures. To make the process of choosing the research methods easier for all, Saunders et al. (2015) equated it to the process of peeling an onion, and argued the researchers to always start with the outermost layer of research philosophy and move inwards to research approaches, strategies, choices, time horizons until they reach the inner most layer of research techniques and procedures as illustrated in the figure below.

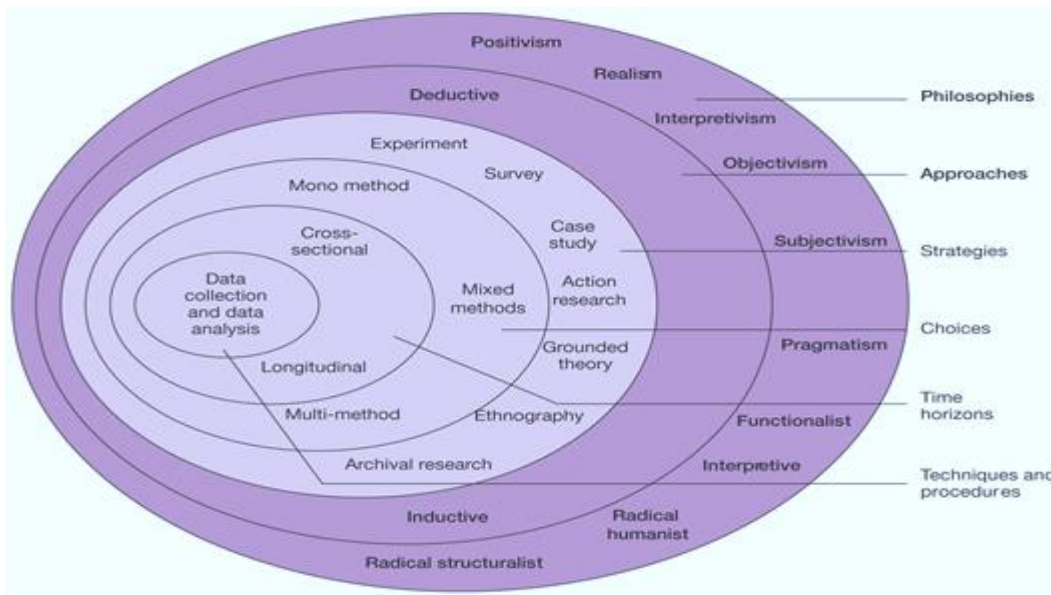


Figure 1: Research Onion process. Source Saunders et al., 2015, p.126.

Subsequently, this chapter outlines the research methods used in determining whether mass customisation is a successful marketing techniques that can be incorporated into online shopping, using Saunders et al. (2015) research onion as the guideline.

3.3 Research Philosophy

Saunders et al. (2015) regard the research philosophy as the first layer that researchers must 'peel' when designing the methods for collecting and analysing data for their study projects. The research philosophy can be defined as the system of beliefs and assumptions about the development of knowledge that deals with the "development of knowledge and the nature of the knowledge" (Saunders et al., 2015:128). The choice of the research philosophy is regarded as a reflective process, and researchers are urged to distinguish between the tree types of research assumptions, namely, ontology, epistemology and axiology, when choosing the research philosophy. Saunders et al. (2015) further elaborate on these types of assumptions based on their definitions, Ontology is defined as the assumptions pertaining the nature of reality, and are regarded as the most abstract of the three. In this classification, knowledge is regarded as either objective or subjective. Epistemology refers to the assumptions made about knowledge, based on what is regarded as valid, acceptable or/and legitimate knowledge as well as how it can be communicated to others, and it is mainly classified into realism, positivism,

interpretivism and pragmatism. Lastly, axiology is defined as the role of ethics and values with the research process.

Within the methodology literature, this section is normally divided into two: research philosophies and research paradigm. Further, the research philosophies are categorised as consisting of realism, positivism, interpretivism and pragmatism while the research paradigms mainly include radical humanism, functionalism, radical structuralism and interpretive as shown in the figure below.

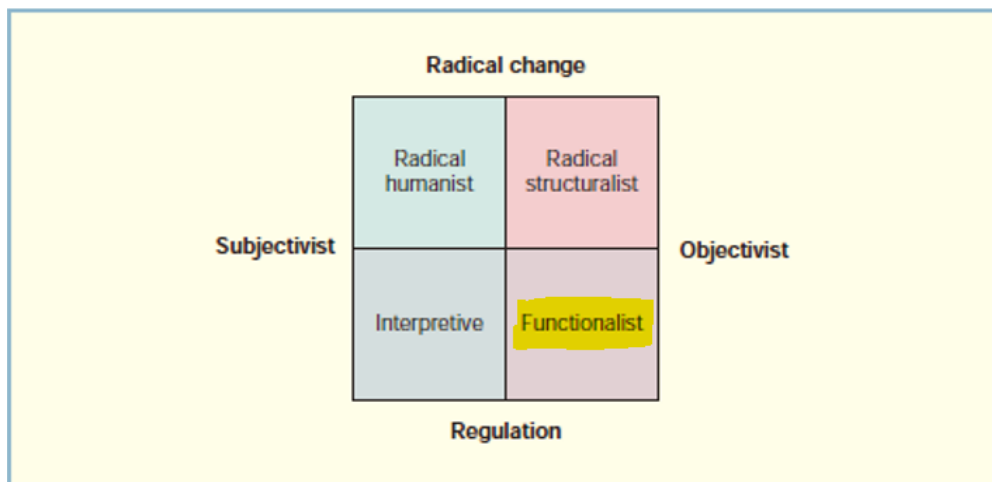


Figure 2: The four research paradigm for the analysis of social theory. Source: Saunders et al., 2015:129

Research paradigm is defined as the ways that researchers use to explain a social phenomenon. In research, these four research paradigms help in the clarification of the assumptions made with regard to how people view the society and the nature of science; to offer more effective ways of comprehending the way other researchers approach their work; and to assist researchers in developing a blueprint of their researcher, which guides them on where to go and how to go about it (Saunders et al., 2015). The functionalist paradigm is regarded as the most popular in business and management studies because it is more problem-oriented and tends to offer solutions that are practical and sustainable. In the current study, the focus of the study is to analyse the perceptions and preferences of online consumers on mass customisation with an aim of determining whether mass customisation is a successful marketing technique. Accordingly, by adopting the functionalist paradigm, this study can identify the effectiveness of mass customisation as a marketing technique, and consequently, offer recommendations on the way it can be enhanced to make it more effective.

In their earlier version of their book, Saunders, Lewis and Thornhill (2009) classified research philosophies into four, namely, realism, positivism, interpretivism and pragmatism against the three types of assumptions as shown in the figure below:

	Positivism	Realism	Interpretivism	Pragmatism
Ontology: the researcher's view of the nature of reality or being	External, objective and independent of social actors	Is objective. Exists independently of human thoughts and beliefs or knowledge of their existence (realist), but is interpreted through social conditioning (critical realist)	Socially constructed, subjective, may change, multiple	External, multiple, view chosen to best enable answering of research question
Epistemology: the researcher's view regarding what constitutes acceptable knowledge	Only observable phenomena can provide credible data, facts. Focus on causality and law like generalisations, reducing phenomena to simplest elements	Observable phenomena provide credible data, facts. Insufficient data means inaccuracies in sensations (direct realism). Alternatively, phenomena create sensations which are open to misinterpretation (critical realism). Focus on explaining within a context or contexts	Subjective meanings and social phenomena. Focus upon the details of situation, a reality behind these details, subjective meanings motivating actions	Either or both observable phenomena and subjective meanings can provide acceptable knowledge dependent upon the research question. Focus on practical applied research, integrating different perspectives to help interpret the data
Axiology: the researcher's view of the role of values in research	Research is undertaken in a value-free way, the researcher is independent of the data and maintains an objective stance	Research is value laden; the researcher is biased by world views, cultural experiences and upbringing. These will impact on the research	Research is value bound, the researcher is part of what is being researched, cannot be separated and so will be subjective	Values play a large role in interpreting results, the researcher adopting both objective and subjective points of view
Data collection techniques most often used	Highly structured, large samples, measurement, quantitative, but can use qualitative	Methods chosen must fit the subject matter, quantitative or qualitative	Small samples, in-depth investigations, qualitative	Mixed or multiple method designs, quantitative and qualitative

Figure 3: Research philosophies. Adopted from Saunders et al., 2009:118.

As shown in the figure above, the positivism philosophy views the nature of reality as researcher's view of objective, external and as independent of social actors while only the research phenomena that are observable are regarded as capable of providing facts and data that is credible. Positivism works with the postulation that only the acceptable knowledge constitutes on law and causality that leads to generalisation and reduction of the research phenomenon into simplest elements. In positivism, the research is carried out in a free-value way and the researcher is regarded as independent of the study and should only take on an objective stance. In addition, it uses data gathering

methods that are highly structured, relies on large samples and different measurements, and is mainly quantitative even though it can also use qualitative research.

Realism philosophy regards the nature of reality as objective and independent of human knowledge, thoughts and beliefs even though the reality can be interpreted using critical realism, or rather, social conditioning. Similar to positivism, the acceptable knowledge constitutes of only observable phenomena that yields facts and credible data. Accordingly, insufficient data is regarded as the source of inaccuracies because it yields incorrect sensations that can be misinterpreted. As such, it focuses on explaining acceptable knowledge within a context. Mostly, realism is associated with physical sciences, and the research methods of collecting data that are picked should be suitable to the research phenomenon, whether qualitative or quantitative.

The third philosophy is interpretivism which regards the nature of reality as subjective, flexible (can change), multiple and socially constructed (Saunders et al., 2015). The social phenomenon and subjective meanings are regarded as the only constitutes of knowledge, and argues researchers to focus on the specific details of the situation, find the realities behind the identified details and then draw subjective meanings that have motivating actions. Research in interpretivism is regarded as value bound, and the researcher is regarded as part of the research process. As such, the role of the researcher in the research cannot be separated, and so, the findings are regarded as subjective. The interpretivism philosophy works with small samples and tends to undertake in-depth investigative studies that are qualitative in nature.

Lastly, the pragmatism philosophy has external and multiple ontologies, and postulates that the view of the nature of reality chosen should be based on the research questions and its ability to answer them. The epistemology of pragmatism philosophy can either be an observable phenomenon or have subjective meanings that offer knowledge that depends on the research questions (Saunders et al., 2015). As such, acceptable knowledge should focus on the most practical applied research that is capable of integrating various perspectives that are useful in the interpretation of the results. Further, pragmatism approach accommodates the use of various methods of collecting data, as it can take a mixed-methods approach or

combine multiple methods, and can be applied in both qualitative and quantitative research.

For this study, a pragmatism approach is adopted mainly because it allows the research to adopt different approaches un answering various research questions. In pragmatism, the concepts of reality and truth, and what constitutes of each, does not hold. Rather, the researcher focuses on studying what is the most significant interest and of value by employing different methods that are deemed appropriate (Teddlie and Tashakkori, 2009). Therefore, the pragmatism approach is the most preferred for this study because of its ability to yield positive results that are within the value system of the research. Furthermore, pragmatism allows for the integration of various research methods and high flexibility that is not possible within other research philosophies that tend to be restrictive to specific methods of collecting and analysing data. More importantly, pragmatism allows for the integration of the advantages of both positivism and interpretivism approaches in the study. On one hand, positivism allows for the generation of direct observations and experiences that are then subjected to empirical testing using quantitative methods of statistical analysis, surveys and experiments that are highly valid and reliable (Dimitra, 2010) while on the other hand, interpretivism allows the researcher to measure the subjective and empirical views on deviant, unique and explicit phenomena (Nola and Putten, 2007). In addition, interpretivism, also known as social constructivism, allows the researcher to capture people's opinions and perceptions because it is interested in the way people construct perceptions of the world (Cottrell, 2014) while the positivism approach allows for highly structured and predetermined techniques of data collection that encapsulate large samples to be used (Saunders et al., 2015). Whereas the quantitative nature of this research requires the use of positivism approach, the interpretive nature of the study allows for the use of interpretivism. Consequently, pragmatism is regarded as the most suitable for this study since it is the only philosophy that allows for the integration of both epistemologies and ontologies. As such, the research philosophy for this study is pragmatism with a functionalist paradigm.

3.3 Research Approach

According to Saunders et al. (2015), the research approach is the 'second layer of the research onion' that a researcher must 'peel off' when designing the research methodology. Further, Saunders et al. (2015) argue that a study can either take an inductive or deductive approach depending on how the study uses a theory. A deductive approach is more scientific and involves developing a theory that is then subjected to a rigorous test. As such, it is commonly used in natural sciences where laws are used in presenting the basis of explanations. Mainly, deductive approach allows the researcher to anticipate the phenomenon, predict its occurrence, and thus, allows for the control of the research process (Saunders et al., 2015). Most researchers prefer to use deductive approach because of its ability to explain causal associations between different variables in an operationalised manner within a controlled environment and using highly structured designs that allow replication, which is critical in enhancing the study's reliability (Babbie, 2015).

On the other hand, inductive approaches are used as alternatives to deductive approaches as it begins with data collection to get a better understanding of the phenomenon after which the researcher tries to make sense of the data collected through analysis and then formulates a theory based on the findings (Gray, 2013). According to Gill and Johnson (2010), the inductive approach gives the researcher the feel of what is going, which enhances their understanding of the research problem and its nature. As such, inductive approach is more common in social sciences because it moves away from the cause-effect link (central tenet of the deductive approach) towards the more accommodating interpretation of social world from the human perspective (Gray, 2013:17-18). In addition, deductive approaches tend to be more rigid and do not allow for alternative explanations of the research phenomenon. The differences between these two research approaches are captured in the figure below.

Table 4.2 Major differences between deductive and inductive approaches to research

Deduction emphasises	Induction emphasises
<ul style="list-style-type: none">• scientific principles• moving from theory to data• the need to explain causal relationships between variables• the collection of quantitative data• the application of controls to ensure validity of data• the operationalisation of concepts to ensure clarity of definition• a highly structured approach• researcher independence of what is being researched• the necessity to select samples of sufficient size in order to generalise conclusions	<ul style="list-style-type: none">• gaining an understanding of the meanings humans attach to events• a close understanding of the research context• the collection of qualitative data• a more flexible structure to permit changes of research emphasis as the research progresses• a realisation that the researcher is part of the research process• less concern with the need to generalise

Figure 4: Differences between inductive and deductive approaches. Source: Saunders et al., 2009:127.

Given these strengths of inductive approach and the weaknesses of the alternative deductive approach, this study adopts the inductive approach.

Furthermore, the design, scope and nature of this study is empirical and seeks to understand the concept of mass customisation based on how the generation Y understands it. In addition, inductive approach makes an observation and seeks patterns from it unlike the deductive approach whose main focus is to test the study phenomenon against observations with the sole aim of ascertaining whether the formulated hypotheses are true or false (Babbie, 2015). Besides, the study begins from a more open-ended point and moves into specific observations in order to detect patterns and predictabilities, which allows for the formulation of the hypothesis about mass customisation and behavioural intentions towards OMC. In order to develop a general conclusion or theory about MC and consumers' behavioural intentions when shopping online, an inductive approach will be best suitable.

3.4 Research Strategy, Choices and Time Horizon

Determining the research strategy is the third step in the process of designing the research design. Saunders et al. (2015) regards the next three layers, i.e., the research strategies, research choices and the time horizon as the research processes that focus on the research design, which involves transforming the research questions into the research project. Therefore, the research question and the research purpose plays a major role in determining which research strategy to be adopted. Therefore, researchers are advised to ensure that the research question is clearly defined at this stage because it determines the outcome of the study. Further, the research objectives, which are derived from the research questions, should also specify the sources that the research relies on in collecting the data, the ethical issues as well as consider the constraints that the researcher may encounter such as finances, time, data accessibility and location amongst others.

In research method's literature, the purpose of the study can either be explanatory, exploratory or descriptive. Saunders et al. (2009) adds that in some times, the research purpose, just like the research questions, can be both explanatory and descriptive. Exploratory studies deal with "what is happening", seeking new insights, asking questions, and assessing the research phenomena in a new light (Robson, 2011:59). It is mainly used in an event where the researcher is not quite sure of the nature of the study, and thus, needs further clarification. However, in this study, the researcher does not need further clarity, hence not applicable in the study. Secondly, explanatory studies focus on establishing causal association between variables, and is also not applicable in this study because the purpose of this study is not to find links between variables. Finally, descriptive studies are described as those that portray the precise profile of an event, person or situation (Robson, 2011:59). Descriptive studies require the researcher to have a clear understanding of the research phenomenon. In this study, descriptive studies were used due to their compatibility with survey data, allow for further analysis of the findings to make inferences and regards the research process as a means instead of an end (Saunders et al., 2009:140).

According to Saunders et al. (2015), there are seven research strategies that a researcher can choose, including: action-research, case study, survey, ethnography, grounded theory, experiment and archival research. Experiments are associated with natural sciences and they focus on creating causal associations between variables

(Bryman and Bell, 2015). However, given that this project is a social study rather than natural sciences' study and that the focus area is not causal links between variables, experiment was excluded as a probable research strategy for this study. Case study is defined as a research strategy for undertaking empirical research of a specific phenomenon in its real life context (Robson, 2011:178). However, Yin (2013) argue that case study strategies work with either exploratory or explanatory studies, hence, eliminated from this study because the research purpose is descriptive. Research action is concerned about organisational processes or cycles and focuses on 'action', or rather, taking a research that would lead to organisational change (Coghlan and Brannick, 2014; Nolan and Putten, 2007) hence, not applicable for this study either. Grounded theory and ethnography are also eliminated as possible research strategies of this study because of their pure qualitative nature and focus on contexts.

Accordingly, this study employed a survey design. Zikmund et al. (2012) describe surveys as one of the most prevalent strategies for collecting wide-range of quantitative data in business research. Several factors motivated the choice of a survey as the research strategy of this study: they can be easily designed, are highly flexible, can be used to answer diverse questions and allow for the collection of highly representative data from a large sample using minimal resources (Schutt, 2011:160). In addition, surveys use structured questionnaires that are easy to administer, code, analyse and interpret. Schutt (2011) summarised the strengths of the survey as its efficiency, versatility and generalisability. On the downside, surveys limit the researcher to asking a limited number of questions and cannot be used to ask sensitive questions because respondents may be unwilling to respond to them (Zikmund et al., 2012). Also, the research participants may not provide the desired information especially if they are unconscious of the research motive. Additionally, surveys tend to use closed-ended questions which may restrict responses as they do not allow for further probing. Saunders et al. (2009) add that surveys are biased as they tend to impose the researcher's logic and language on the respondents. To enhance the reliability and validity of this study, some of these weaknesses were averted. For instance, given that majority of the weaknesses emanate from the questionnaire, the research instrument was designed with a lot of precision to avoid biasness and personal questions. In addition, the subject matter is not a sensitive topic, and the

respondent informed the respondents of the study's motive to avoid generating undesirable information.

Having identified the research strategy, the next step is identifying the research choices, which are classified into three: mono method, mixed methods and multi-method (Saunders et al., 2009). Mono-methods are used where the study uses one data gathering technique that corresponds to the analysis, while multi-methods are used where the researcher combines one two or more techniques of data collection and analysis, either qualitative (focus group and interviews) or quantitative such as questionnaires and experiments (Teddlie and Tashakkori, 2009). Mixed-methods mostly involves the combination of both qualitative and quantitative data collection techniques such as interviews and questionnaires, which are done either sequentially or parallel (Saunders et al., 2009). In this study, a mixed-methods choice was used because the study combined both primary data from questionnaires and secondary data from literature review which was analysed using quantitative procedures of analysis.

The research onion defines the time horizon as the fifth step in identifying the research methods (Saunders et al., 2015). They are longitudinal or cross-sectional, where cross-sectional refers to analysing the phenomenon at a definite point in time while longitudinal refers to undertaking a study at an extended period (Rindfleisch et al., 2008). The survey strategy is cross-sectional because the respondents are only cross-examined only once without follow-ups.

3.5 Data Collection Method

3.5.1 Data and Sources

The study relied upon primary data collected from online consumers, mainly the U.S. generation Y. Generation Y, also known as millennials, are a demographic cohort born between 1980s and 2000. Therefore, the research targets Americans aged between 20 and 35 years. However, since persons under the age of 18 are regarded as minors who are governed by different and complicated research laws, this study limited its

research age to 20 and maximum of 35. Therefore, the sources of primary data are American online shoppers aged between 20 and 35; who fit the description of 'youth'. In addition, this study collected secondary data from official data and statistics and analysis of former case studies. This combination of primary and secondary data as well as data from different sources is defined as 'triangulation' (Saunders et al., 2009:154). Triangulation is used for this study because it enhances the validity and reliability of findings given that data from different sources enhance the dependability and credibility of the inferences made. In addition, the weaknesses of one method are complemented by the other. For instance, primary data is collected for this particular research hence more objective, gives the researcher more control of the research process and addresses specific issues while secondary data is cost effective, efficient in terms of effort and time and cannot be manipulated by the researcher (Wilson, 2011).

3.5.2 Sampling

Simple random sampling techniques were employed in selecting a smaller sample from the population of the study. The main reason why a random sampling technique was chosen is its representativeness since every member of the population has an equal chance of being a respondent unless other sampling techniques that pre-select members of the population and form strata or clusters (Ritchie et al., 2013). For this reason, it is regarded as the most accurate and representative, which reduces the researcher bias and gives the findings more credibility as well as allowing for generalisation of the findings (Leary, 2011). A sample of 50 persons was identified as the most appropriate for this study. However, since online questionnaires have an estimated response rate of around 5, a higher number of sample of more than 100 participants were recruited.

3.5.3 Instruments and Research Process

In this study, an online survey using a structured questionnaire was used. The survey asked sought behavioural questions that examine intentions, attitudes and awareness of the respondents with regard to utilising the co-design process and mass customisation when shopping online. The questionnaire was organised into two parts.

The first sought demographic information such as age, gender, income, occupation and educational background among others and used open-ended questions. The second section contained questions pertaining the research subject and the questions were closed-ended. Likert-scaled (with a score of 1 to 5) and closed-ended questions were used because they simplify the data analysis process, even though they have some weaknesses such as lack of rigour since they do not probe further to generate more data (Saunders et al., 2009). The questions were designed in a manner that they do not touch on sensitive issues such as religion, and political affiliation among others. This ensured that the respondents felt comfortable undertaking the study.

The questionnaires were distributed through an online survey. An online survey program, Survey Monkey, was used to execute the survey. Participants were recruited through personal invites and social platforms, especially Facebook. The researcher kept a close monitoring of the incoming surveys completed, and when the number of full-filled online surveys reached 35, the survey was closed. The goal was to reach 50 but due to lack of time it was not met accordingly. Online surveys were used because they are less tedious and faster to undertake especially when a large sample is involved, and the costs are less as the researcher does not need to incur printing costs (Schutt, 2011). The software subscription fees are also cheaper than paying an interview to undertake the pen-and-pencil surveys.

3.6 Reliability and Validity of the Instrument

Gustafsson, Herrmann and Huber (2013) argue researchers to undertake the validation of the research instrument prior to the actual research so as to enhance its accuracy. Given that a quantitative questionnaire was used in this study, its validation was carried out by subjecting it to both face and content validity based on the research questions. The research questions that were found unnecessary were removed from the questionnaire and the missing ones that were found relevant were added. In addition, the researcher undertook a reliability test by using the Spearman-Brown formula to calculate the split-half reliability co-efficient score, which is mainly used to determine whether a research instrument is good to use. Moreover, a pilot test of the questionnaire was done using a pilot study whose findings were integrated into the final results. The researcher also employed methods that enhance the credibility of the

study as recommended by Saunders et al. (2009). Such methods include the use of a large sample and probability sampling methods, use of surveys that allows for generalisation, the triangulation methods and use of software in data analysis. These methods are normally associated with high validity and reliability.

3.7 Data Analysis Procedures

The data analysis was done in two stages. First, after the respondents completed their online surveys, the data analysis program that is integrated in the survey monkey website was used to analyse the data. The analysed results were then downloaded after which they were subjected to further analysis using statistical data analysis. The results from secondary data were coded into quantitative form and analysed concurrently with the primary data. The use of a software was preferred such as what was available through Survey Monkey because it enhances the credibility of the study as software tend to be more accurate and less susceptible to human error (Bryman and Bell, 2015). Another recompense for using software in data analysis include its efficiency since high volumes of data can be analysed in a short period, which save a lot of effort and energy that goes into qualitative data analysis methods that tend to be tedious and time consuming. The findings were presented in descriptive statistics, graphs, charts and tables among other data presentation tools as proposed by Zikmund et al. (2012).

3.8 Limitations of the Methodology

In conceptual terms, this study is limited to the analysis of mass customisation and online shopping. As such, other concepts such as traditional shopping are not included in this study. Secondly, the design, nature and scope of this study is limited to quantitative methods and the use of surveys (questionnaires) which have some methodological shortcomings such as confirmation bias. Demographically, this study's respondents consist of American youths aged between 20 and 35 only, which implies that non-Americans as well as Americans below 20 and above 35 are excluded. Further, the recruitment is done through Facebook, which implies that non-Facebook users are who may be Americans within the age bracket of 20 and 35 are excluded from the study. Geographically, this study is constrained to the U.S. The researcher

also faced other issues such as time-constraints and financial limitations, which limited the nature and scope of the choices made.

3.9 Research Ethics

Zikmund et al. (2012) outlined some of the ethical issues that business students must observe when undertaking a research that involves human subjects. The main research ethics pertains maintaining the privacy of the respondents. In this study, this was maintained by ensuring that no personal details that could be traced back to the subjects were captured. Participants were identified by a coded number. In addition, the participants signed a consent form that outlined their rights and freedoms to participate in the survey, the research aims and objectives and how the research findings will be used as well as how their privacy will be maintained. The second most critical aspect of ethics is confidentiality. The researcher maintained confidentiality of the subjects' responses by not making them accessible to others and limiting the access of the responses. As such, the responses were kept in a lock and key and the online responses were password-protected. Human respect and moral responsibilities were upheld and the respondents were informed that they have a right not to partake in the survey and to stop mid-way without any reparation.

3.10 Summary

The research methodology used in this study have been identified. The study uses a pragmatism philosophy with a functionalist paradigm and an inductive approach. The research strategy used is a cross-sectional survey using a multi-method choice. Both primary (survey questionnaire involving 35 online shoppers aged between 20 and 35 from the U.S. selected through simple random sampling strategy) and secondary (official reports, statistics and previous surveys on mass customisation and online shopping) sources of data were used. The rationale for choosing each of these methods was provided along with the strengths and weaknesses of the alternative methods. The credibility of the techniques and the questionnaire was discussed as well as the limitations and the research ethics observed during primary research.

Chapter 4 Data Analysis

4.1 Questionnaire Research Findings

The questionnaire was created on the site Survey Monkey. The researcher utilised the use of social media, e-mail and personal messages to distribute the survey. Sharing was encouraged. Overall the surveyor hoped to get at least 50 people to answer the survey. Only 34 individuals actually participated in answering the questionnaire. All individuals resided in the United States and belonged to Generation Y, the age group being 20-35. They were also frequent online shoppers. The fact of whether they have partaken in mass customisation was irrelevant as this is what the survey was striving to understand the acceptance of MC and the experience as a whole. The following section is split up by demographics and shopping habit questions. The full survey can be found in Appendix 2.

4.1.1 Demographic Questions

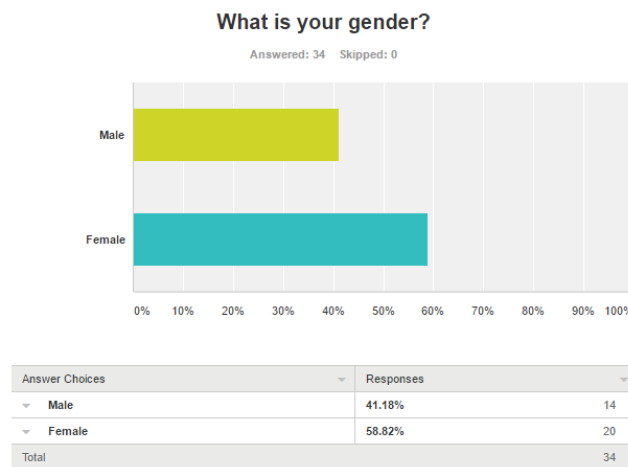


Figure 5 Gender

Out of the 34 respondents who participated in the survey 41% were males. 58% of the respondents were female. Therefore, the majority of those who partook in the survey were females.

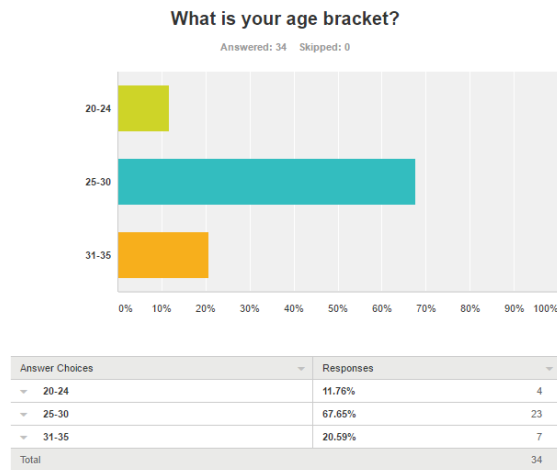


Figure 6 Age Bracket

The survey was targeted towards the generation Y age group (20-35). The majority of participants fell between the 25-30 age bracket, 67%. While 31-35 was the second most popular age group, 20% and 20-24 was the least popular age group, 11%.

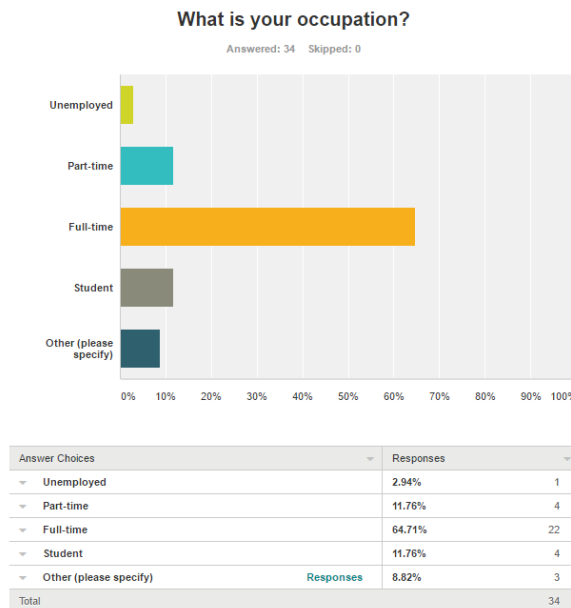


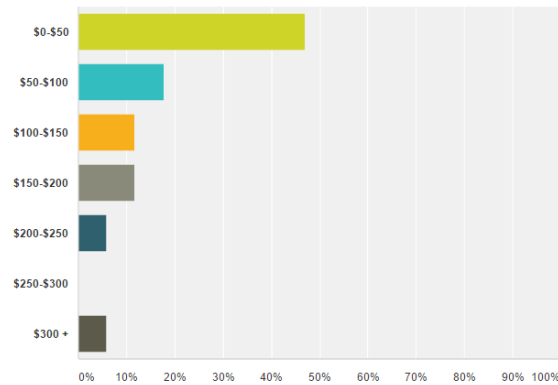
Figure 7 Occupation

The majority of individuals hold full-time employment at 64%. 2% were unemployed, 11% work part-time, 11% are students, and 8% specified other. Other answers included holding down multiple full-time and part-time jobs while being a student. And other answers included the actual name of their job description which was unneeded for the demographic questions.

4.1.2 Shopping Habit Questions

In a typical month, how much money do you spend buying clothing/footwear & accessories from online shops?

Answered: 34 Skipped: 0



Answer Choices	Responses
\$0-\$50	47.06% 16
\$50-\$100	17.65% 6
\$100-\$150	11.76% 4
\$150-\$200	11.76% 4
\$200-\$250	5.88% 2
\$250-\$300	0.00% 0
\$300+	5.88% 2
Total	34

Figure 8 Monthly Spending

Participants were asked basic shopping habit questions about how much they spent monthly on online apparel shops. Options ranged from \$0-\$300+. The majority of participants chose \$0-\$50 at 47% as their monthly spending when shopping for clothes online. 17% said \$50-\$100. 11% chose \$100-\$150. Another 11% chose \$150-\$200. While 5% chose \$200 to \$250 and another 5% chose \$300+. There were no answers for the \$250-\$300 category.

4.1.3 Mass Customisation Questions

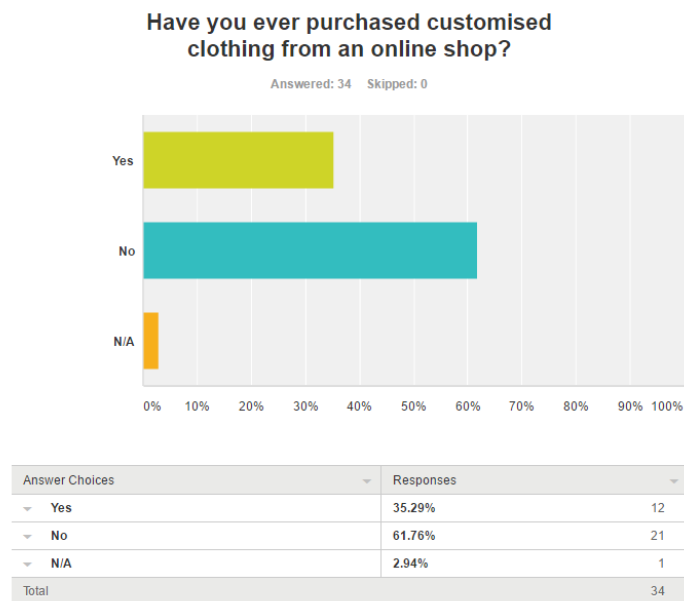
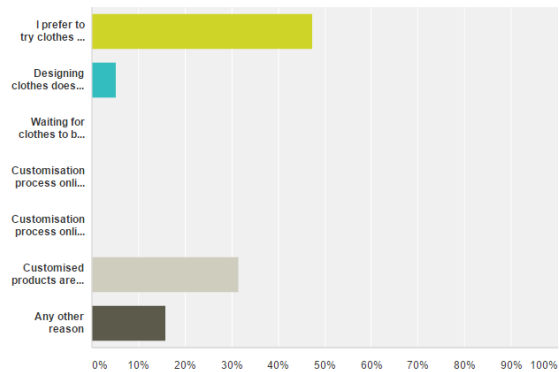


Figure 9 Have you purchased customised clothing from an online shop

Out of the 34 respondents that answered 61% have never purchased customised clothing from an online shop. 35% had and 2% chose not available.

**If you answered no to the previous question
please explain why or bypass this
question?**

Answered: 19 Skipped: 15



Answer Choices	Responses
▼ I prefer to try clothes on in the shops	47.37% 9
▼ Designing clothes doesn't appeal to me	5.26% 1
▼ Waiting for clothes to be delivered is annoying	0.00% 0
▼ Customisation process online is too complicated	0.00% 0
▼ Customisation process online is too timely	0.00% 0
▼ Customised products are too expensive	31.58% 6
▼ Any other reason	15.79% 3
Total	19

Figure 10 If you answered no to the previous question explain why

This question was aiming to explore reasons why an individual had not engaged in a mass customisable experience. If consumers had they were told to bypass this question. The most popular reason for a customer not customising a product online was due to the fact that they prefer to try their clothes on. 47% of respondents chose this as their answer. 5% had no interest in designing their own product. 31% found price to be an issue saying customisable products are too expensive. 15% chose any other reason. Delivery, complication, and time it took to design a product were not relevant factors to why an individual would not choose to customise a product online.

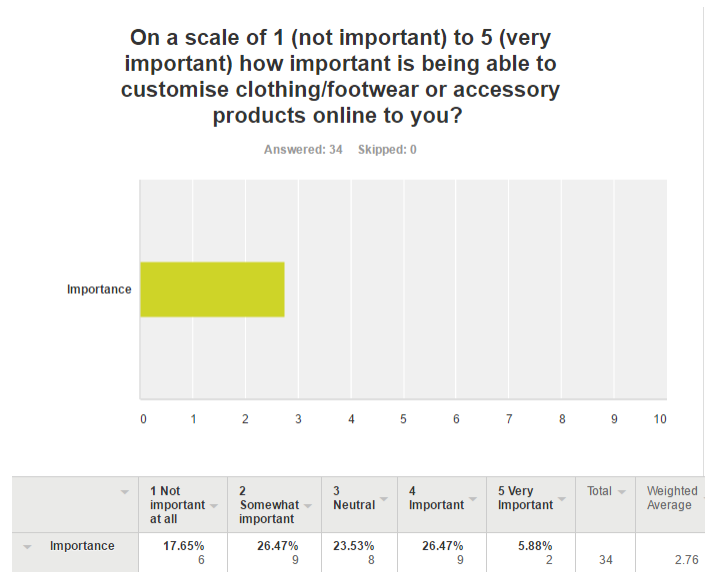


Figure 11 Importance of being able to purchase customised clothing

This question had a range of answers. It was asking how important it is to be able to customise clothing, foot wear or accessory products online. 17% found it not important at all, 26% found it somewhat important, 23% were neutral on the subject, 26% found it important and only 5% found it very important.

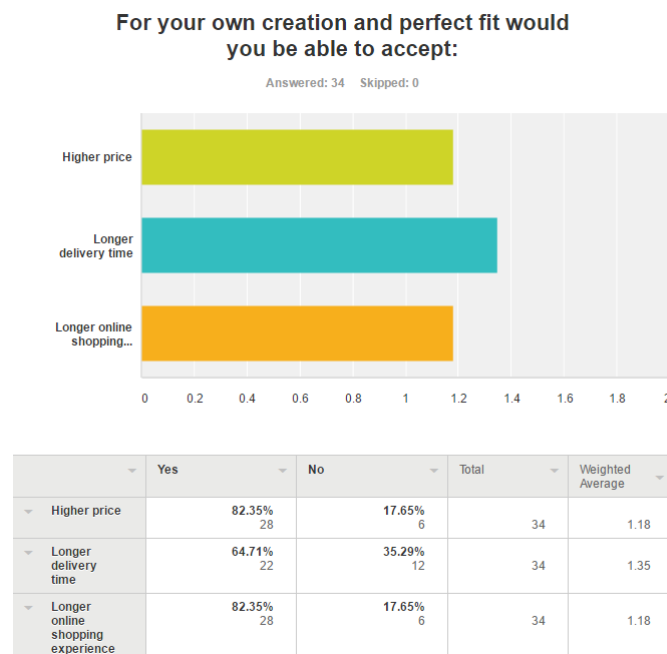


Figure 12 Acceptance for perfect fit

82% of online shoppers in the US would be willing to accept a higher price for a customisable product. 17% would not. 64% would be able to accept a longer delivery

time while 35% would not. 82% would engage in a longer online shopping experience and 17% would not.

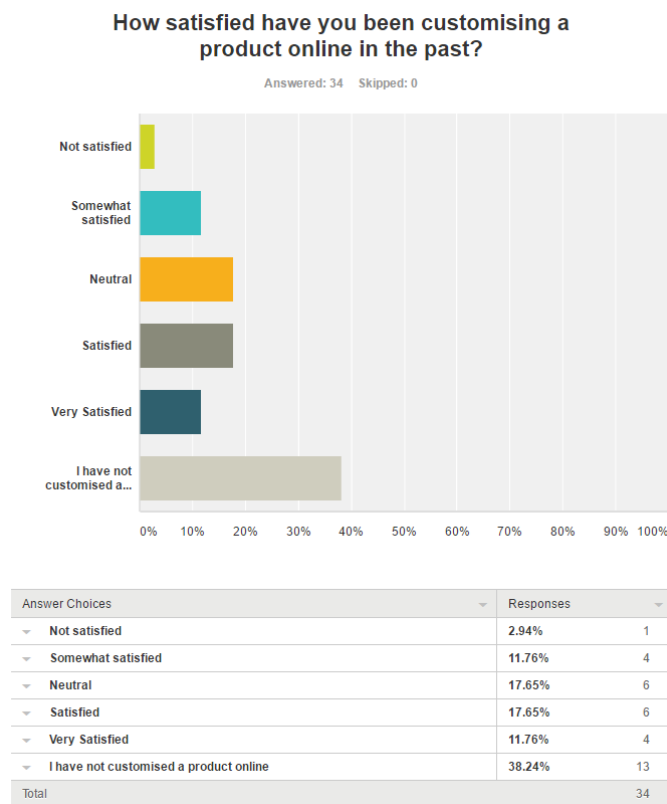
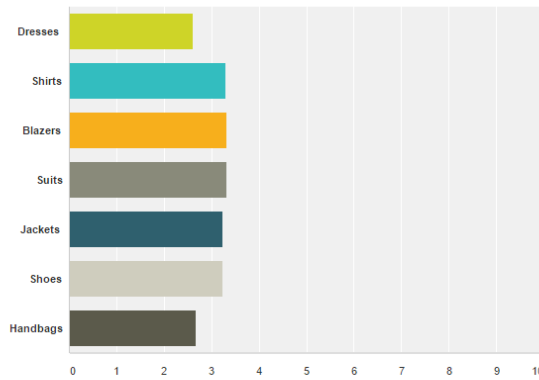


Figure 13 Satisfaction of customisation in the past

In terms of satisfaction when customising a product online in a past experience 2% of online shoppers were not satisfied, 11% were somewhat satisfied, 17% remained neutral on the subject, 17% had been satisfied, 11% have been very satisfied while 38% have never customised a product online before.

On a scale of 1 (not important) to 5 (very important) how interested would you be in customising the following items of clothing

Answered: 34 Skipped: 0



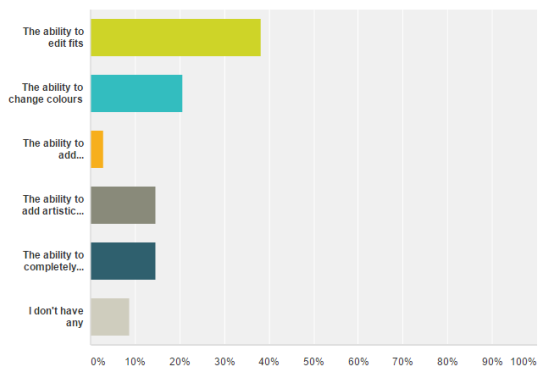
	1 Not important at all	2 Somewhat important	3 Neutral	4 Important	5 very important	Total	Weighted Average
Dresses	29.41% 10	17.65% 6	26.47% 9	14.71% 5	11.76% 4	34	2.62
Shirts	11.76% 4	17.65% 6	17.65% 6	35.29% 12	17.65% 6	34	3.29
Blazers	20.59% 7	5.88% 2	17.65% 6	32.35% 11	23.53% 8	34	3.32
Suits	23.53% 8	5.88% 2	14.71% 5	26.47% 9	29.41% 10	34	3.32
Jackets	12.12% 4	18.18% 6	21.21% 7	30.30% 10	18.18% 6	33	3.24
Shoes	17.65% 6	14.71% 5	23.53% 8	14.71% 5	29.41% 10	34	3.24
Handbags	35.29% 12	11.76% 4	23.53% 8	8.82% 3	20.59% 7	34	2.68

Figure 14 Interest in customising specific items

Next was to ask survey participants on a scale of 1 to 10 their interest in customising products in specific product categories. Above you can see it split up into a scale of not important, somewhat important, neutral, important and very important. It can be seen that the blazers and suits category are the most popular areas of interest to customise, while shirts were next, jackets and shoes followed, while dresses and handbags were the least popular.

What preferences are important to you when customising clothing online?

Answered: 34 Skipped: 0



Answer Choices	Responses
▼ The ability to edit fits	38.24% 13
▼ The ability to change colours	20.59% 7
▼ The ability to add monogramming	2.94% 1
▼ The ability to add artistic details	14.71% 5
▼ The ability to completely design items from scratch	14.71% 5
▼ I don't have any	8.82% 3
Total	34

Figure 15 Important customisation preferences

38% of US online shoppers find the ability to edit fits of upmost importance when customising a product online. The ability to change colours was the second most popular answer at 20%. Both the ability to add artistic details and the ability to design completely from scratch had identical percentage of 14%. The ability to add monogramming was the least popular at 2%. And 8% of responders did not have any preferences towards customising apparel online.

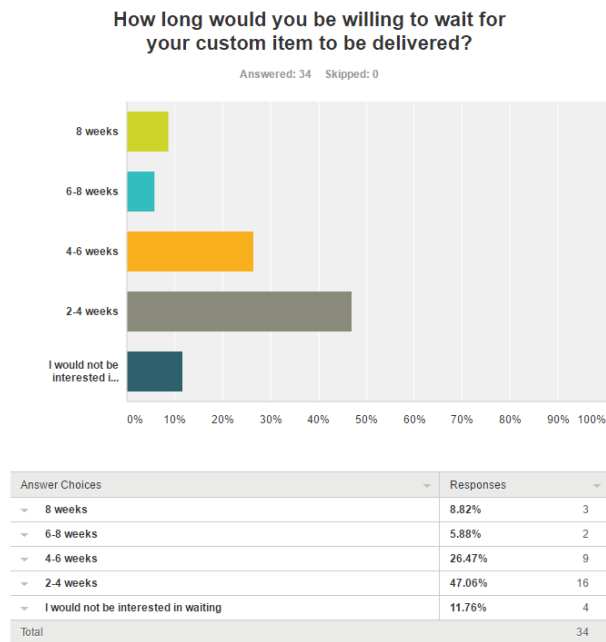


Figure 16 Time to wait willingness

Delivery is an important aspect when choosing to customise a product online. Most consumers would be willing to wait 2 to 4 weeks for a product to be shipped after personally customising it. This was 47% of the participants chosen answer. 26% would wait 4 to 6 weeks. 5% would wait 6 to 8 weeks. 8% would wait 8 weeks. And 11% would not be interested in waiting at all.

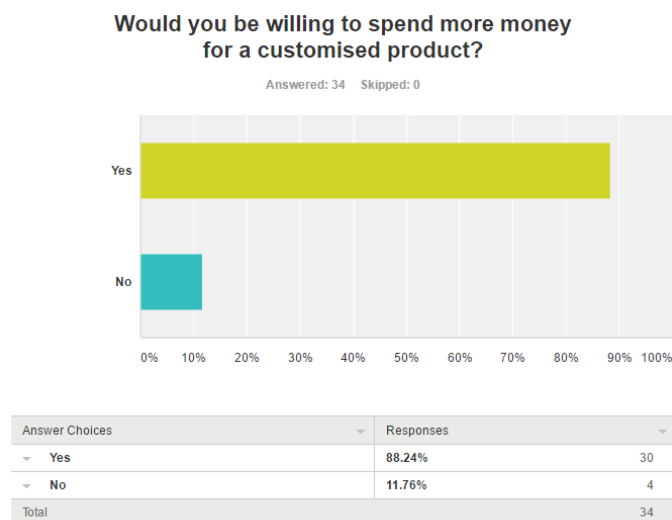


Figure 17 Money spend willingness

Price is another important factor when choosing to customise a product online. 88% of responses noted that they would be willing to spend more money while 11% would not.

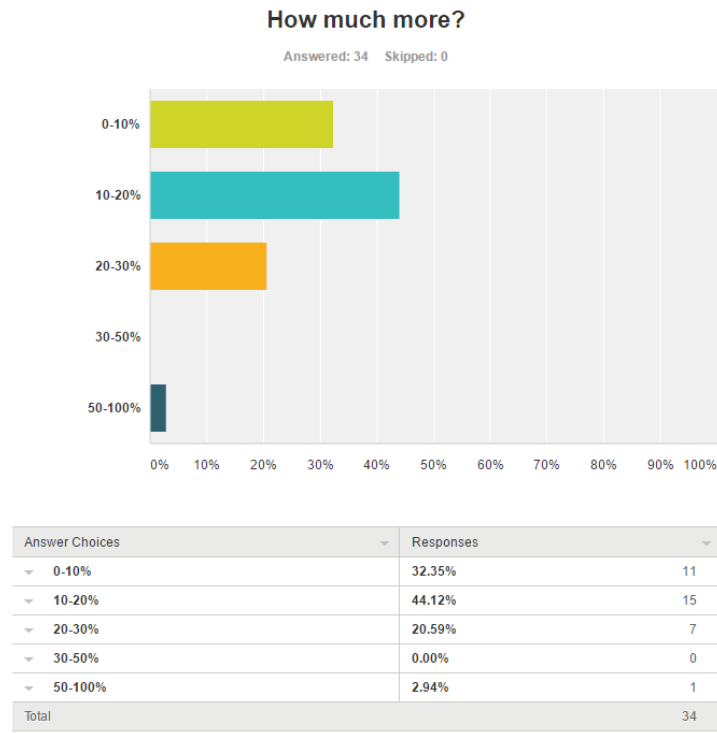
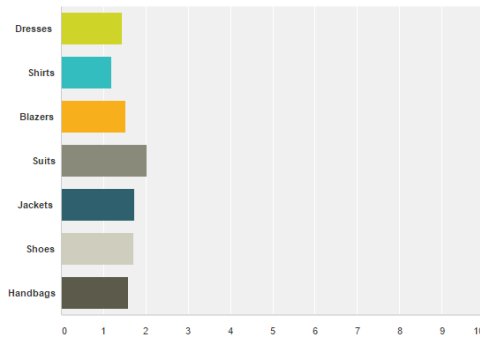


Figure 18 Money spend willingness

More specifically how much more would consumers be willing to spend? About 32% would only be willing to spend 0-10% more. 44% would be willing to spend 10-20% more. 20% would be willing to spend 20-30% more. And 2% would be willing to spend 50-100% more. The option 30-50% was not chosen.

In the following categories how much extra would you be willing to spend to customise the following items

Answered: 34 Skipped: 0



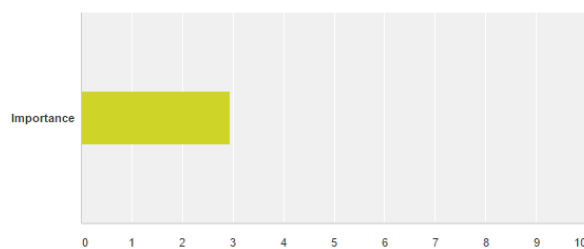
	\$0-\$50	\$50-\$100	\$100-\$150	\$150-\$200	\$200+	Total	Weighted Average
Dresses	67.65% 23	23.53% 8	5.88% 2	2.94% 1	0.00% 0	34	1.44
Shirts	81.82% 27	18.18% 6	0.00% 0	0.00% 0	0.00% 0	33	1.18
Blazers	61.76% 21	26.47% 9	8.82% 3	2.94% 1	0.00% 0	34	1.53
Suits	52.94% 18	11.76% 4	20.59% 7	8.82% 3	5.88% 2	34	2.03
Jackets	54.55% 18	24.24% 8	15.15% 5	6.06% 2	0.00% 0	33	1.73
Shoes	58.82% 20	23.53% 8	5.88% 2	11.76% 4	0.00% 0	34	1.71
Handbags	72.73% 24	12.12% 4	3.03% 1	9.09% 3	3.03% 1	33	1.58

Figure 19 Money spend willingness in categories

Survey participants were asked on a scale of 1-5 how much extra would they be willing to spend on a product in specific categories. Above you can see the answers split up in to \$0-\$50, \$50-\$100, \$100-\$150, \$150-\$200 and \$200. Most popularly customers would be willing to spend more on suits, while the rest of the categories dresses, shirts, blazers, jackets, shoes and handbags were all even with each other.

On a scale from 1 (not important) to 5 (very important) how important is it to you that you engage in a personalised shopping experience?

Answered: 34 Skipped: 0



	Not important	Somewhat important	Neutral	Important	Very Important	Total	Weighted Average
Importance	20.59% 7	17.65% 6	17.65% 6	35.29% 12	8.82% 3	34	2.94

Figure 20 Importance of engaging in a personalised shopping experience

20% of individuals found it not important at all to engage in a personalised shopping experience. 17% found it somewhat important, another 17% were neutral, 35% found it important and only 8% found it very important.

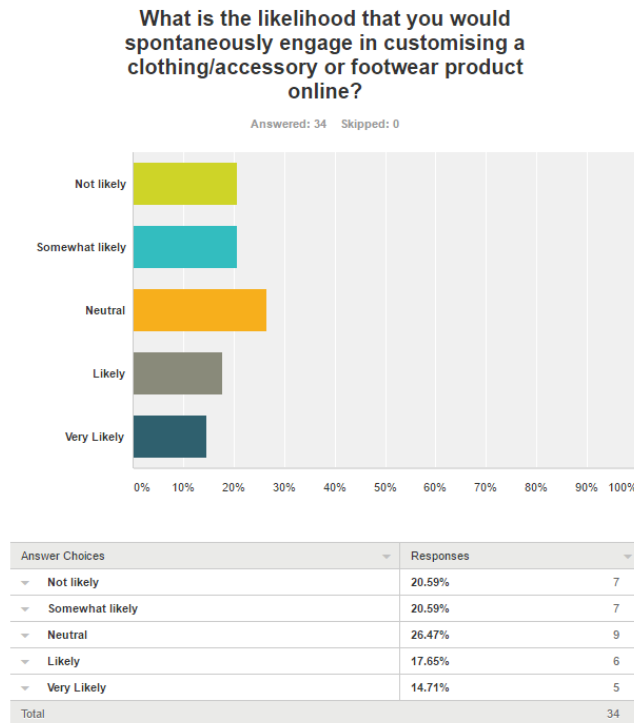


Figure 21 Likelihood of random engagement

If the option to spontaneously engage in mass customisation if it was just clearly offered on a website was of interest to the researcher. When asked participants answered as follows 20% said not likely, 20% also said somewhat likely, 26% remained neutral on the topic, 17% would be likely to and 14% would be very likely to.

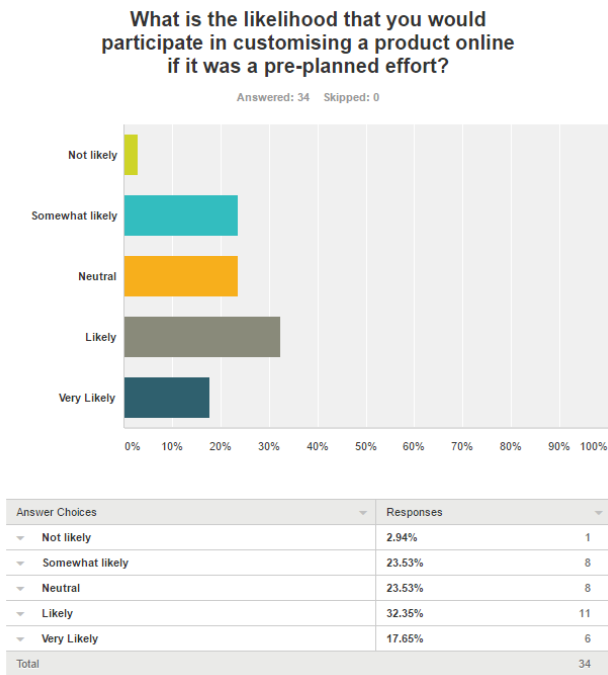


Figure 22 Likelihood of pre-planned efforts

Chances are that people would be more interested in customising a product online if they were going into it with the idea and plan to already on their minds. While only 2% said not likely, 23% said somewhat likely, another 23% remained neutral on the topic, 32% said they were likely to while 17% were very likely to.

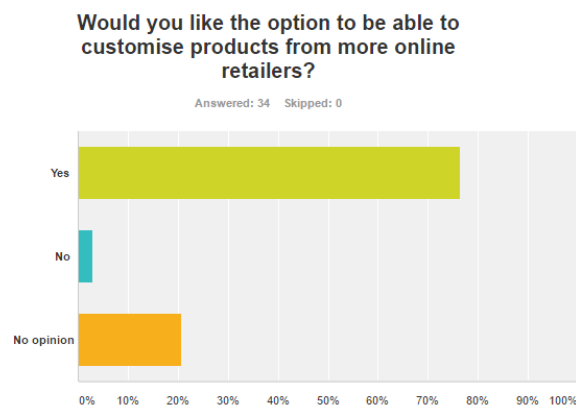


Figure 23 Option to customise from more retailers

So overall would the average US online shopper like the option to be able to customise products more from online retailers? About 75% felt like they would. Around roughly 3% said no. And 20% had no opinion on whether or not they would.

Chapter 5 Discussion

5.1 Discussion

This chapter will discuss the data that was analysed in the previous chapter, chapter 4. A total of 34 respondents participated in the survey. The targeted age group was 20 to 25. Also known as Generation Y. A goal of 50 people was intended for the original target but was not met. The most popular age group to answer was the 25-30 age group. Therefore, marketers should pay close attention to this age groups shopping needs and habits. The discussion section is set up by each objective and the examining of each based off the results of the survey and literature review. The overall research question for this dissertation is as follows. Is Mass Customization the future of online retail? An in-depth study on the concept and acceptance of mass customisation in the United States with a particular focus on generation Y. This question will now be examined through careful analysis of each objective.

1. Analyse online consumer preference in Generation Y in the US

It can be noted throughout the introduction, literature and survey that generation Y loves individuality and the chance to create and share their own ideas. In the survey question number 9 alludes to this by asking what preferences are most important to the consumer when customising their own product. The ability to edit fits proved to be the most significant answer from the entire audience. Generation Y is all about sharing and growing up digitally. They most likely go into a purchase as a pre-planned effort. So their preferences lie within individuality and intention.

2. Examine current consumer perceptions of MC in the US

Consumer perceptions of mass customisation are not as prevalent in the US as research alludes to. This is basing off of the results from the survey. When asked multiple questions regarding the willingness to participate in mass customisation most of the participants were either neutral on the subject, taken aback or not interested at all. Only a niche of the answers proved that there were consumers that participated in mass customising products or have had previous experience with it in the past. When asked if they had ever purchased customised clothing from an online shop 35% of

individuals said yes while 61% said no. Therefore, current perceptions of mass customisation may be less than predicted based off of these answers.

3. To evaluate whether mass customisation is a successful marketing technique within the generation Y age group?

Based off of the literature the answer to this question would be yes. It is a highlighted trend and has been a growing topic for years. Based off the survey though most respondents felt neutral or had no previous interest at all when mass customising. 35% of respondents said that it was important for them to engage in a personalised experience. Also when asked if they would like the option to be able to customise products from more online consumers a whopping 75% said yes. That is more than half of the audience asked. Therefore, it can be concluded based of this result that mass customisation would be a successful marketing technique within the generation Y age group. Clearly individuals are open to it and would like to see it available from more retailers.

4. Asses Generations Y willingness to engage in co-creating products

The willingness to engage in co-creating apparel online within the generation Y age group is clearly prevalent. When asked behavioural questions regarding the following such as “what is the likelihood that you would participate in customising a product online if it was a pre-planned effort” peers said they were 32% likely to and that was the most popular answer. Chances are people would be more willing to engage in co-creating products thus the willingness to create is high.

5. Gauge present day popularity of mass customisation to determine future success

The present day popularity from what the researcher has gathered is that mass customisation is a growing trend but a successfully growing one at that and although the present day popularity of the concepts seems to be niche it shows signs of popularity, branching out and therefore the researcher can positively predict that there is future success within the concept of mass customisation. Especially within the generation Y age group and future generations. As the concept of having everything personalised becomes more popular and integrates itself into the daily lives of

individuals especially in the US market place which is the market that was being analysed and surveyed in regards to the dissertation.

6. Determine what preferences drive the success of mass customisation in the online apparel market

The ability to edit fits is the most prevalent driving force in regards to the success of mass customisation in the online apparel market. The ability to change colours was the second most popular. The ability to add artistic details and the ability to completely design from scratch tied in popularity. The ability add monogramming was the least popular. The most popular item to customise had to do with higher class work wear such as suits and blazers therefore customers were also willing to spend more money to have these items customised. The preferences lie in the need to stand out and have quality items. This is worth more to customers and they are willing to compromise things such as price and time in order to satisfy their preferences and specific individual needs. The most important driving factor in regards to the success of mass customisation with in the online apparel market can be related back to “in which categories are individuals looking to customise the most”. In the survey this question is important to the researcher because it really highlights in what specific online apparel industries and categories is this needed in.

7. Evaluate growth of new and upcoming technologies associated with mass customisation

The biggest growing technology associated with mass customisation is 3D printing. Some retailers have even gone as far as adding this into their stores. There are contradictions and opposing viewpoints when associating 3d printing and mass customisation together. Similarities between the two marketing approaches are the allowance it provides companies with to build custom products with cost saving economically and in minimal quantities. This is economically beneficial. Although the two concepts go hand in hand they differ considerably. Through the research it can be understood that the two are suitable to place together as they differ in terms of what types of parts are needed to fulfil the needs of each. If companies are given the opportunity to place both together it would reduce inventory risk because production would take place after the placing of orders.

8. Compare the success of mass customisation as a planned and unplanned effort

This question provided the framework for predicting whether the success of mass customisation would be successful if it was an option offered at all times. Consumers said that they weren't likely to engage in a mass customisation shopping experience online if it wasn't a pre-planned effort. Comparing the two it is clear that mass customisation is more successful when consumers approach it with an objective, want and need. Businesses should take this into consideration by advertising when mass customisation is available as a purchasing option therefore consumers will consistently be aware of it thus planning to engage in it as the popularity of personalisation is growing, more companies should advertise this as an option.

9. Analyse consumers' willingness to participate in mass customisation when shopping online

The willingness to engage and participate in mass customisation is there. This is clearly illustrated throughout the research, literature review and survey. Through the survey it can be seen that those who participated were more likely to willingly participate in mass customisation when shopping online. For example, 26% of respondents found it very important to be able to customise their own clothing and have that option available to them. 75% would like to see this available to them from more online apparel websites. This therefore constitutes that consumers are willing and ready to participate in this If it was more readily available.

Chapter 6 Conclusions and Recommendations

The purpose of this chapter intends to draw general conclusions by summarising the researcher's findings, particularly in relation to the literature review. While reflecting on topics and theories written in chapter 2 this section will also intermix recommendations for future research work and the industry as a whole. The researcher was not able to reach all of the goals regarding the topic due to time constraints. This can be clearly highlighted in the recommendations section.

6.1 Conclusions

Consumer perceptions of mass customisation are not as prevalent in the US as research alludes to. This is basing it off of the results from the survey. When asked multiple questions regarding the willingness to participate in mass customisation most of the participants were either neutral on the subject, taken aback or not interested. Only a niche of the answers proved that there were consumers that participated in mass customising products or have had previous experience with it in the past.

The ability for expression is of major importance when it comes to individual preferences and preference fit. Preference fit is best achieved through customers designing their own products and this related directly to mass customisation. This in turn creates greater value and the customer will feel a sense of pride. Sometimes customers are unclear of their intentions when going into co-designing a product. This is clearly illustrated throughout survey responses. In the industry this is typically called mass confusion so it would be important for companies to not do this. Customers are willing to pay more and wait longer for customised items. This is also prevalent throughout the survey and research conducted by the researcher. Preference fit may not always appeal to consumers due to an unclear definition though.

The customer value is best measured from customers themselves. Measuring customer value directly related to OMC acceptance. It is better for this to be measured by consumers which is what OMC has to offer specifically. This is clearly a benefit. Uniqueness, self-expression and utilitarian value are all important frameworks in relation to the consumer perceived value. Utilitarian coincides with personal preferences. As noted in the survey and throughout the literature the consumers'

willingness to pay is increased in the relationship towards preference fit. Individuality and uniqueness is of importance. 14% of the respondents in the survey answered that this was the most important preference to them when mass customising items.

Self-expression really correlates to product ownership and the need for self-expression. Mass customisation can be a form of entertainment and in turn be an exciting experience for consumers. Choice complexity remains the major issue so it is of the utmost importance that retailers have easy to use design interfaces and current technology to incorporate ease of use and entertainment for the consumer otherwise mass customisation will lead to mass confusion in turn being an unsuccessful business strategy and marketing technique.

When dealing with TPB the decision making process is hindered. The number of options and the way product choices are laid out are very important if not the most important key element in regards to its success. While intention remains the most important pre-cursor. Most consumers research what they want beforehand and take into consideration what others have to say. In some instances, consumers trust other consumers more based on EWOM. Companies should take into account that the majority of their success relies on other consumers therefore platforms must provide consumers with ease of use as opposed to being difficult to use. Theory of reasoned action resonates more with generation Y and their desire to work autonomously.

Crowdsourcing and social media birth the grounds for enhanced customisation options. It is major that companies evaluate their value attached to the proposed elements of hypothetical or current virtual products by customers. Most consumers want to share their creations. Therefore, mass customisation also provides businesses with successful word of mouth marketing techniques. The two concepts feed each other. EWOM is also known as user generated content. And this is a very important element of mass customisation and is an important process that all marketers and businesses should pay attention to and focus on because it literally drives the success rate. It is important to note that generation Y typically has no commercial interest. They now depend on other users to provide this information to them therefore companies who implement mass customisation into their online platforms should pay attention to this when designing platforms and utilising this marketing strategy effectively. UGC tends to create shopping detectives, meaning consumers have spent much time

looking into the best way to do something from the best company before coming to a final purchasing decision. Favourable consumer attitudes towards UGC is likely to trigger purchase intention. Social media and UGC go hand in hand and should be utilised simultaneously.

Consumers would like to see the option to be able to customise their own products more readily available from retailers. In the literature it connotes that the businesses manufacturing system must readily provide modifications and features to flexibly and easily fabricate personalised material. This really drives the scientific aspect of mass customisation as it is a fashion demand that deems very successful in the online apparel market. It must be appropriately designed with all elements in mind. These elements being the allowance of an ease of use design platform, the allowance for sharing co-creations socially and an appropriate manufacturing system. The main reason for failure of mass customisation has less to do about consumers not wanting it as an option and more to do with failing technological systems. Therefore, it cannot be stressed enough that appropriate branding and comprehensive technological systems are the most important integration for this design option and marketing approach.

To conclude it can be seen from the research conducted, literature review explored, and questionnaire distributed that there is in fact a growing demand for mass customisation and its overall acceptance. Particularly in the United States with the Generation Y age group. Consumers have a desire to reflect their inner personality through fashionable self-expression. The need for having the perfect item with the perfect fit is extremely prevalent and relevant. In terms of technology an integrated technological approach would be the researcher's recommendation for businesses. Appropriate platforms that promote an ease of use for customers to avoid confusion when customising a product is very important for its success rate within a business context.

6.2 Recommendations

The showcase of the researchers works clearly highlight the successful benefit that mass customisation has to offer in the online apparel market. Not only is it economically attractive for businesses it clearly creates a strong sense of customer loyalty. The researcher has come to the conclusion that mass customisation is a successful marketing technique but more research needs to be allotted towards consumer preferences and the acceptance of the topic as there is much theoretical framework covered about the concept but not enough understanding in the marketing industry around it. Online companies should look into investing in software and products that allow consumers to add their own preferences towards it. In regards to the research question, "is mass customisation the future of online retail?". It is hard to tell whether it will take place of standard shopping techniques. It is a very successful and popular concept that should definitely be considered and implemented into online shopping experiences but at this time it is hard to tell whether or not it would be the consumers main shopping preference. Therefore, more research and time needs to go into the concept. In order for mass customisation to be successful companies must understand the conditions under which customisation is successful. What kind of customisation consumers value and what risks customisation of apparel involves. Referring back to the questions in the surveys that asked individuals in which categories of apparel would they be the most interested in customising, it was the most popular within work wear. As of now companies that participate in MC such as Nike or some designer handbag retailers, they received the lowest interest from participants in customising yet they are the most popular corporations that presently participate in offering mass customisation to the public. The researcher recommends that more companies take the time to invest in researching this and formulating whether or not it would be a successful benefit to provide to their customers based off of market wants and needs.

6.3. Future Research

Despite all useful insights yielded over the course of this study, the sample size was too small yielding in inadequate results, numerically. There was not a large enough sample size and left too large of room for general assumptions only. For future study the questionnaire should be shorter. The original one was too long and the questions

were too generalised and not specific enough to really do the topic of mass customisation justice. It would have also been beneficial to recruit individuals whom were frequent online shoppers and involved with it as opposed to such a random selection. With more themes relating directly to fashion when understanding and exploring the literature. Assumptions that were able to examine the correlation between the fashion industry and acceptance towards mass customisation could not be tested and explored in further research.

The researcher didn't have a sufficient amount of time to analyse the data from the survey. The time frame in which the survey was sent out was very late into the 3 months allotted for the dissertation process. In the future the researcher should allow more time for a variety of answers and thorough analysis.

Future researchers may also want to look into other forms of qualitative analysis. Had the researcher been given more time a focus groups study would have been conducted. This would have consisted of taking several individuals and having them mass customise a product on a site that already has that as an option. There are multiple sites that offer this options such as Nike.com, Adidas.com, Longchamp.com and Bowanddrape.com. Sites such as these could have been used for experiments. An in-depth analysis could have been done on the participant's responses to the process and their reactions. An interview would have then been conducted to gain a better perspective on how consumers interact with the process. This will allow a better understanding on the acceptance of mass customisation as a whole and the data would contribute a beneficial amount of information for the study allowing a better understanding and exploration of the objectives. Based off of the data that has actually been received, as stated before only a generalised assumption of objectives were discovered.

Overall the exploration of mass customisation should continue to be explored as stated in the above content. The reasoning of this evidence is exemplified and the need in the market place is presented. Both consumer and technological aspects should be observed and closely examined. Future research should take note of the recommendations offered in order to successfully apply it to future investigations and studies into the topic.

Chapter 7 Reflection

In the MSc program at Dublin Business School DBS it is mandatory that all graduates embark in doing a final dissertation of their choice. This project will stand as a final capstone to the student's time at the school and serve as a conclusion to their final coursework and exams. The final dissertation represents the complete and final stage at DBS before moving onto graduation and then of course embarking on a career in which the skills learned and utilised at DBS and throughout the dissertation process will be of relevance. The classes took and final dissertation researched is an example of the skillset and knowledge acquired throughout the time spent at DBS. The following reflection is a critical self-assessment where I summarise an in-depth account regarding my personal dissertation process and time spent at DBS.

The intention of my dissertation was to understand consumers behaviour intentions when shopping online and they are given the option to participate in the co-design process. It was also my intent and the working title of my project that I examine the acceptance of mass customisation in the US as a whole. This soon became the overall theme of my dissertation although it was not the title that I had started out with. In the past I had done product development projects where the main focus of the brand was the mass customisation factor. Through much research I understood that it was a growing trend but there are many elements that are associated with mass customisation. These areas range anywhere from technology to marketing to consumer preferences. All of these play a major role in understanding how consumers perceive and interact with the concept. Therefore, the aim of my project was to research the vast variety of elements involved as well as specifically focus on consumer shopping intentions. The literature for this topic proved to be more advanced than I had expected. This was an exciting challenge and opportunity to study a new area for myself. It was a lengthy process in terms of getting acquainted with the main themes and theories. Difficulties lied in trying to mesh a very scientific topic while simultaneously trying to intermix it with creativity by exploring the online apparel market and consumers shopping habits. While the concept of mass customisation is very cut and dry, the areas where its applied, such as in fashion or online apparel is a creative market place. My background is in fashion marketing and management; it was very important to me that while being at DBS I was able to gain a better understanding towards the scientific side of

marketing. I wanted my dissertation to be a mix and example of both. It was important that the dissertation provided me with challenges and room to practice my problem solving skills.

Areas I could have improved in were in the areas of time management. I did not appropriately dissect and organise my dissertation in a timely manner resulting in a chaotic work environment. This was my biggest difficulty. The size of the project was large and I did not appropriately time certain things. For example, I had initially planned to also engage in other forms of qualitative research by doing a small focus group in which participants would take the time to mass customise a product on 3 different websites. I would then analyse their reactions to each. I ran out of time and was not able to take this task on. Also I did not receive as many results for my survey that I would have liked. Therefore, I would say my biggest difficulties during the dissertation lied specifically with in time management and planning. These are also things I have taken away from the project and that I will be able to apply to my career as I move forward.

The master's program as a whole had so much to offer and I gained so much educational experience from it. Studying abroad was such an instructive experience. DBS offered such a challenging academic environment that really allowed me to develop new skills and perfect existing ones. One of the most informative elements for me personally was exploring the digital stream within marketing. Moving forward I plan to find work in the digital side of marketing in areas such as social media managing or public relations type of work. I really gained so much practice with the building of websites and developing social media plans that I feel like I will have many hireable attributes to offer an existing company.

Throughout my entire time at DBS during the time of modules and then the time thereafter working on the dissertation it can be observed that my biggest areas for room of improvement could have been better organisation and time management from the beginning to avoid much of the conflict that was encountered. The basis of Mass Customisation had me feeling out of element which was my intention from the start. I had basic knowledge of what things entailed but no prior experience of executing a project of that magnitude.

The obstacles presented have better prepared me for occurrences that will be encountered in the real world. What I acquired most from this dissertation and time at DBS was a better understanding of myself as a marketing professional. The completion of the modules and dissertation has provided me with maturity, confidence and pride. I feel more confident as a marketer having a better grasp of current digital trends. I feel like I can take this with me to the work place and apply my skills accordingly thus becoming an asset to a company and a gainful, skilful employee.

Overall writing this dissertation constituted a major turning point in my academic life and professionally. As my first time delving into something with this magnitude of challenges, it has really helped shape my confidence as I now embark on beginning my career as a marketer. This experience taught me so much about myself academically and professionally and really solidified the major capstone of my studies and time spent here in Dublin, Ireland. I hope to take what I learned here and apply it proactively to my future endeavours as I close this chapter on my challenging and fulfilling time at Dublin Business School.

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Appendices

Appendix 1 Survey Screen Shots

Acceptance of Online Customised Clothing

1. Survey

In completion of my dissertation for my Masters of Science Degree at Dublin Business School I am conducting a study on the acceptance of Mass Customisation when shopping online. To complete this study I need participants to answer the following questionnaire.

I am surveying both males and females in the US between ages 20-35. If you do not fall into this age group you do not need to participate. The survey asks questions regarding personal preferences, shopping and spending habits.

The survey should take 5 to 10 minutes to complete. All answers will remain anonymous to the researcher. There are no right or wrong answers. Thank you in advance for your time.

* questions with star are mandatory

*** 1. Please list the names of up to three online retailers you normally shop on**

Retailer 1

Retailer 2

Retailer 3

*** 2. In a typical month, how much money do spend buying clothing/footwear & accessories from online shops?**

▼

\$0-\$50

\$50-\$100

\$100-\$150

\$150-\$200

\$200-\$250

\$250-\$300

\$300 +

*** 3. Have you ever purchased customised clothing from an online shop?**

4. If you answered no to the previous question please explain why or bypass this question?

▼

*** 5. On a scale of 1 (not important) to 5 (very important) how important is being able to customise clothing/footwear or accessory products online to you?**

	1 Not important at all	2 Somewhat important	3 Neutral	4 Important	5 Very Important
Importance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

* 1. Please list the names of up to three online retailers you normally shop on

Retailer 1

Retailer 2

Retailer 3

* 2. In a typical month, how much money do spend buying clothing/footwear & accessories from online shops?

* 3. Have you ever purchased customised clothing from an online shop?

If you answered no to the previous question please explain why or bypass this question?

4. If you answered no to the previous question please explain why or bypass this question?

* 5. On a scale of 1 (not important) to 5 (very important) how important is being able to customise clothing/footwear or accessory products online to you?

1 Not important at all 2 Somewhat important 3 Neutral 4 Important 5 Very Important

* 6. For your own creation and perfect fit would you be able to accept:

	1 Not important at all	2 Somewhat important	3 Neutral	4 Important	5 Very Important
Importance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

* 7. How satisfied have you been customising a product online in the past?

	Yes	No
Higher price	<input type="radio"/>	<input type="radio"/>
Longer delivery time	<input type="radio"/>	<input type="radio"/>
Longer online shopping experience	<input type="radio"/>	<input type="radio"/>

* 7. How satisfied have you been customising a product online in the past?

Not satisfied

Somewhat satisfied

Neutral

Satisfied

Very Satisfied

I have not customised a product online

* 8. On a scale of 1 (not important) to 5 (very important) how interested would you be in customising the following items of clothing

	1 Not important at all	2 Somewhat important	3 Neutral	4 Important	5 very important
Dresses	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Shirts	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Blazers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Suits	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Jackets	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Shoes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Handbags	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

* 9. What preferences are important to you when customising clothing online?

- The ability to edit fits
- The ability to change colours
- The ability to add monogramming
- The ability to add artistic details
- The ability to completely design items from scratch
- I don't have any

* 10. How long would you be willing to wait for your custom item to be delivered?

- 8 weeks
- 6-8 weeks
- 4-6 weeks
- 2-4 weeks
- I would not be interested in waiting

* 11. Would you be willing to spend more money for a customised product?

- Yes
- No

* 12. How much more?

- 0-10%
- 10-20%
- 20-30%
- 30-50%
- 50-100%

* 13. In the following categories how much extra would you be willing to spend to customise the following items

	\$0-\$50	\$50-\$100	\$100-\$150	\$150-\$200	\$200 +
Dresses	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Shirts	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Blazers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Suits	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Jackets	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Shoes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Handbags	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

* 14. On a scale from 1 (not important) to 5 (very important) how important is it to you that you engage in a personalised shopping experience?

	Not important	Somewhat important	Neutral	Important	Very Important
Importance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

15. What is the likelihood that you would spontaneously engage in customising a clothing/accessory or footwear product online?

- Not likely
- Somewhat likely
- Neutral
- Likely
- Very Likely

16. What is the likelihood that you would participate in customising a product online if it was a pre-planned effort?

- Not likely
- Somewhat likely
- Neutral
- Likely
- Very Likely

* 17. Would you like the option to be able to customise products from more online retailers?

- Yes
- No
- No opinion

* 18. What is your gender?

- Male
- Female

* 19. What is your age bracket?

- 20-24
- 25-30
- 31-35

* 20. What is your occupation?

- Unemployed
- Part-time
- Full-time
- Student
- Other (please specify)

Done

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