


Fashion or Function: Examining Consumers' Perceived Values of Mass-Customized Menswear via a Content Mining Approach

Yuli Liang, Texas State University, USA *

 <https://orcid.org/0000-0002-5697-2234>

Snigdha Rangineni, Texas State University, USA

Chuanlan Liu, Louisiana State University, USA

ABSTRACT

Mass customization has been used in various clothing products including T-shirts, dress shirts, jeans, sports shoes, accessories, etc. However, even though the concept of mass customization has been accepted among scholars and business practitioners, and the application of mass customization has been practiced in the fashion industry for more than two decades, the acceptance among ultimate consumers and the market of MC in the apparel industry has not taken off yet. To this end, this study intends to fill the identified gap through a content mining exploratory qualitative study using customer value theory to evaluate individual consumers' actual customization experiences. Results identified that functional value, self-expressive value, and aesthetic value were derived from menswear customization experiences. Among them, functional value (e.g., quality, fit) is the dominant dimension of value derived from menswear customization experiences, and it determined consumers' overall attitudes toward mass customization of menswear.

KEYWORDS

Content Mining, Fashion, Value, Fit, Function, Mass Customization, Menswear, Quality

INTRODUCTION

Since the introduction of Mass Customization (MC) by Davis (1987), the application has kept on expanding. MC has been used in various clothing products including T-shirts, dress shirts, jeans, sports shoes, accessories, etc. When it was first introduced, it had been expected to be the next level of manufacturing and the future of consumption, due to the values of personalized products and the co-design experiential value delivered to customers. In the early studies of MC in the fashion industry, researchers explained how MC can fulfill consumers' needs and wants for utilitarian purposes, uniqueness, self-expressiveness, hedonic desires, and creative achievement (e.g., Merle et al., 2010). Also, by offering online MC programs, companies can

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*Corresponding Author

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sell their customized products directly to consumers, establish effective communication, and increase their online presence (Flynn & Vencat, 2012).

As initially predicted, customization would have been the dominant format of consumption and could have been more permeated in the fashion business. However, MC has not gained as much popularity in the fashion industry as expected. Fashion retailers such as Levi Strauss, Brook Brothers, and Secondly Skin Swimwear, which adopted MC in their physical stores in the early 2000s were not able to sustain and grow MC's market share. Levi Strauss even failed twice when introducing its MC programs. The in-store "Original Spin" program was stopped in 2004 (Piller & Müller, 2004) and their online MC program Levi's "Curve ID" launched in 2010 (Treehouselogic, 2010) didn't get popular or last till now. Even though the concept of MC had been accepted among scholars and business practitioners, and the application of MC has been practiced in the fashion industry for more than two decades, the acceptance among ultimate consumers and the market of MC in the apparel industry has not taken off yet.

Moreover, extant research on consumer acceptance of MC fashion products mainly focuses on the female market (e.g., Cho & Fiorito, 2009). MC practice in the fashion industry also focuses on womenswear more than menswear. For instance, retailers which adopted MC, in the beginning, applied it to womenswear (Treehouselogic, 2010). Compared with menswear, womenswear has to offer more varieties and deeper assortments which make MC operation more complex to accommodate various style combinations demanded by ever-demanding consumers. Also, womenswear normally needs to take more measurement points to offer sizes and silhouettes to meet the needs and wants of customers with different sizes and body shapes, making MC on womenswear even more challenging to manage. Comparatively, menswear has fewer measurement dimensions and relatively fewer varieties to accommodate. For instance, menswear products do not need to fit a curvy body shape and offer too many style options in the collar, lapels, pockets, or sleeve cuffs. Meanwhile, given the increasing fashion sense among male consumers (Berlinger, 2018), they have a growing need for expressing their status and identities through clothing consumption (Kang et al., 2011), and are willing to pay a premium for men's mass-customized apparel (Chen-Yu & Yang, 2020). Therefore, it seems that menswear can be a promising opportunity for fashion retailers to adopt the MC platform and grow their market share. However, as above mentioned, there is a lack of study and understanding of male consumers' acceptance or experience of MC clothing shopping and consumption. Furthermore, most previous studies used traditional research methods (e.g., surveys) and measured participants' perceptions rather than evaluations of real experiences obtained from buying and wearing mass-customized apparel.

The online platforms provide an abundance of user-generated content (UGC) about consumers' experiences of customization and consumption. One of the approaches to make use of UGC for research is through content mining (Bharanipriya & Prasad, 2011), which automatically extracts useful information from the content of web documents, such as text, image, audio, video, and more. Content mining also enables researchers to capture a large number of web resources (e.g., consumer reviews and comments) efficiently and the text resources are from real consumers. From previous studies, this method was used in the manufacturing sector to facilitate mass customization (e.g., Zhou & Ji, 2015) and in exploring individual customers' probability of responding to a campaign (e.g., Ramsey & Bapna, 2016). However, to date, this effective approach has not been used to excavate and examine comments from consumers who have had real experiences in menswear customization.

To this end, this study intends to fill the identified gap through a content mining exploratory, qualitative study using customer value theory to evaluate individual consumers' actual customization experiences. The authors specifically focused on online creation, purchasing, and consumption of menswear to find out how consumers care about fashion style and functional fit from mass-customized menswear consumption. To be more specific, the objectives of this study included:

1. To identify customer value derived from menswear customization experiences.

2. To identify the dominating dimensions of value derived from menswear customization experiences.
3. To identify the change of value derived from menswear customization experiences over the past two years.

BACKGROUND

Apparel Mass Customization

MC was conceptualized as a combination of mass production and customization, providing personalized changes according to buyers' needs at an affordable price (Davis, 1987). The development of MC in the fashion field enables consumers to buy various mass-customized apparel products, including sports shoes (Lang et al., 2020), t-shirts (Liang & Liu, 2019), and men's dress shirts (Chen-Yu & Yang, 2020). Research on MC has mainly focused on operation and consumer acceptance. Operation-oriented research has focused on the platform and how it can be optimized for use by manufacturers and retailers. In their study on types of apparel MC, Yang et al. (2015) discussed the level of modularity and variety in design and fit for different types of MC and provided a matrix for fashion companies to visualize their position on balancing their offerings when implementing MC programs. Consumer acceptance-oriented research focused on understanding consumers' preferences and purchase intention of mass-customized apparel. Liang and Liu (2019) compared consumers' use of online MC channels (websites vs apps) and indicated that consumers slightly prefer websites to retailer apps when shopping for mass-customized T-shirts online. Zhang et al. (2021) studied the website design features for online MC apparel websites and suggested that website visual design, information quality, entertainment, aesthetic, and educational experiences had a positive effect on consumer patronage intention.

More recent studies have focused on how MC can be used for enhancing the relationship between company and consumers (Jost & Süsner, 2020), and how MC is more sustainable in reducing waste in manufacturing (Fathi & Ghobakhloo, 2020) and has pushed consumers to keep their MC apparel products longer because they were involved in the co-design process (Franke et al., 2010). On the other hand, previous researchers also indicated the risks of online apparel MC. In addition to financial risks (such as waste of money), product performance risks, psychological risks, and social risks, Lee and Moon (2015) also indicated consumers' concerns about customer service on delivery, return policies, and whether the system involves additional efforts. However, the majority of consumer and relationship-oriented research focuses on women's wear or accessories. There is a lack of research on the acceptance of MC in menswear categories.

Customer Values of Apparel Mass Customization

Value is the consumer's overall evaluation of a product or service based on perceptions of what has been received and what has been given (Zeithaml, 1988). It refers to consumers' perceived preference for and evaluation of product attributes, performances, and consequences that arise from using the product or service (Woodruff, 1997). Previous research proposed that customer value is multi-dimensional and complex, thus requesting explaining it from various dimensions (Yoo & Park, 2016; Zeithaml, 1988). From an understanding of consumers' shopping intention for MC products perspective, previous studies examined consumer perceived values of apparel MC and the influence on consumer satisfaction (Yoo & Park, 2016) and consumer acceptance (Lang et al., 2020; Merle et al., 2010). As suggested by previous studies, emotional values, functional values, self-expressiveness values, and the influence of their family and friends were found to be major factors influencing consumers' attitudes and intention to use MC (Lang et al., 2020; Liang et al., 2017; Merle et al., 2010).

Generated from consuming products, emotional value refers to the benefit obtained from the feelings or affective states, such as enjoyment or pleasure (Sweeney & Soutar, 2001). Uniqueness and pleasure were found to be the two prospects of emotional value when consumers are consuming

mass-customized apparel online (Lang et al., 2020). Consumers are excited to get a unique garment that was tailored for them during the online customization process and after receiving the products. Further, functional value, which was considered one of the irreplaceable factors in online shopping content, was also found in consuming mass-customized apparel online. Sweeney and Soutar (2001) defined functional value as “the utility derived from the perceived quality and expected performance of the product” (p. 211). Fit and utilitarianism were found as the two prospects of emotional value (Lang et al., 2020; Merle et al., 2010). Consumers use mass customization systems to get the garment they prefer that satisfies their aesthetic needs and a tailored fit for their body shapes. Moreover, the self-expressiveness value of consuming mass-customized products was also identified from the previous studies (Liang et al., 2017; Merle et al., 2010). Merle et al. (2010) defined the self-expressiveness value as: “Value derived from the opportunity to possess a product that is a reflection of personality” (p. 506). Using a mass-customization program, consumers can create garments to represent their self-images and personalities.

Investigating customer values of apparel mass customization is critical for understanding consumers’ satisfaction and loyalty toward retailers. It also benefits retailers with suggestions for improving the offering and functions in mass customization programs. Customers’ perceived values of various types of mass-customized apparel products (including T-shirts, shoes, trench coats, etc.) have been studied (Lang et al., 2020; Liang & Liu, 2019; Yoo & Park, 2016). However, there is a deficit in researching customers’ perceived values of mass-customized menswear. Therefore, it is critical to fill the gap and understand customers’ values for consuming mass-customized menswear so that retailers can further improve the program to meet consumers’ needs.

Menswear and Men’s Fashion Needs

Women’s fashion needs, want, and preferences have been widely studied. Comparatively, there’s only limited research emphasizing menswear and men’s fashion needs. Similar to women, men use apparel to communicate their preferences and identities (Kang et al., 2011; Noh et al., 2015; Rahman & Navarro, 2017), however, research has not paid an equal amount of attention to men’s fashion needs, wants, or preferences. The global men’s wear market size has been expanding. It was reported that the annual growth rate is 6.3% and the market will reach USD 740 billion in 2025 (Grand View Research, 2019). One of the factors significantly contributing to the growth of the market is the increasing fashion consciousness among young male consumers. Another significant growth contributor is the boosted exposure to the Internet and e-commerce, which has improved not only male consumers’ fashion consciousness, but also the availability of high-end brands and unique products. According to Bain (2015), from 2010 to 2015, the online sales of menswear posted an annual sales growth of 17.4%. Men’s clothing is even surging faster than womenswear, outgrowing womenswear by 0.2% over the past 10 years. As with the emergence of the men’s section in New York Fashion Week in 2015, male fashion consumers started receiving more attention. It is a signal for retailers that men started to have increasing needs for fashion. Consequently, retailers which originally specialized in womenswear extended their business scope to offer menswear (e.g., Shopbop, Madewell). Retailers would like to catch men’s attention and win their loyalties because men are more likely to stick to one brand than women (Cotton Lifestyle Monitor, 2017) and their patronage intention is higher once they have shopped with a retailer which can satisfy their needs. It is imperative to fill the gap in understanding male consumers’ needs, wants, and desires for fashion so that fashion brands can grasp the opportunity to win male consumers’ heads, hearts, and wallets.

Mass Customization of Menswear

MC on menswear also emerged as made-to-measure in the 1980s but has not received a long-term development and been systematically studied since then (Oliver et al., 1993). Extant research on consumers’ acceptance or experiences with MC products has mainly used womenswear or neutral products (such as T-shirts) as stimuli, rather than menswear. One exception is the study conducted

by Chen-Yu and Yang (2020). However, their study focused on exploring what types of consumers would intend to pay a premium for men's mass-customized apparel, rather than the underlying factors which would influence consumers purchasing intention for this type of apparel. Overall, there is a lack of understanding of male consumers' acceptance of and experiences with MC apparel products.

Moreover, the COVID-19 Pandemic has provided a chance for fashion retailers who specialized in menswear a chance to better serve their target customers. During the pandemic, people have shifted to Working from Home (WFH) and doing remote meetings via virtual platforms (e.g., Zoom, Microsoft Teams), which makes men pay more attention to their looks from the waist up (Johns et al., 2021). As the pandemic keeps going and people have adapted to WFH for a long enough time, they may have formed new consumption habits and changed their preferences for fashion clothing, even keeping the new changes after returning to in-person work (Sheth, 2020). Therefore, it is critical to find out what values mean to consumers as they establish new clothing consumption routines. This will help menswear MC retailers to navigate the crisis and locate growth opportunities by better satisfying consumers' changing needs, wants, and lifestyles. Further, as consumers' previous apparel MC experience positively influenced their purchase intention of mass customized apparel (Chen-Yu & Yang, 2020), the evaluations and feedback from consumers' real MC shopping experience is valuable to study to learn the consumers' actual needs.

METHOD

The content mining approach was employed in this study to evaluate consumers' actual MC experience on menswear. The methodology of this project included four phases: data collection, data preprocessing, data analysis, and data virtualization. In the process of data analysis, different algorithms were utilized to process data automatically and to generate valuable insights that provide a better understanding of consumers who shared their actual MC experience. The procedures are displayed in Figure 1. The following section provides descriptions and explanations for each phase and step.

Data Collection

After a comprehensive Google search, the top eight popular US-based MC retailers which specialized in menswear were identified, including Tailor Store, iTailor, mTailor, Indochino, Hockerty, Woodies clothing, Paper cloth, and Apposta. The authors used Trustpilot.com as the platform for data collection. It is a public online review platform where consumers freely share their comments about any brands and shopping experience (Sandulescu & Ester, 2015). The Selenium tool (Zhao, 2017) was used by the researchers to collect consumers' comments on their purchased MC products and experience from each brand's Trustpilot.com accounts. Comments which were posted in the past two years (from November 2019 to November 2021) were collected. A total of 2927 comments across the identified eight brands were collected for the empirical study.

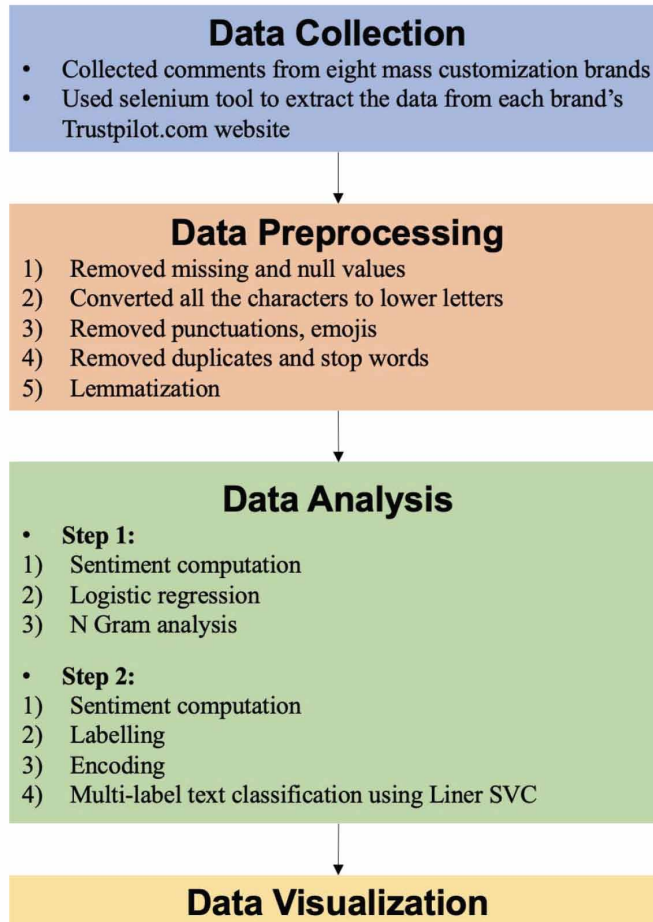
Data Preprocessing

The raw data were first cleaned by removing missing and null comments (e.g., consumers' reviews only come with 1-5 rating scores but without any text comments). After this step, 2711 comments were kept for further processing. Then all the words were converted to lowercase formats and punctuations, emojis, duplicates, and stop words were removed before transforming all words to their base format (lemmatization).

Data Analysis

Step 1: The Step 1 analysis started with sentiment computation, followed by Logistic Regression and N-grams. Sentiment analysis was first conducted. It is an interpretation and classification of emotions (positive, negative, and neutral) of the text contents (Bell et al., 2018). By using

Figure 1. Flowchart of data processing and analysis procedures



Textblob API (Loria, 2021), the polarity score for each comment was calculated. The polarity score is a float value in the range [-1.0, 1.0]. A polarity score greater than 0 means that the comment is in positive altitude, while a polarity scores less than 0 means that the comment is in negative altitude (Lang et al., 2020).

The overall comments were labeled and grouped based on the positive and negative values. Vectorization was processed to transform our documents into vector representations before performing machine learning algorithms. The process of transforming text into vector representations is called vectorization. The bag of trigrams is clustered together for those that have similar semantics. Then Logistic regression and N-grams were conducted.

By importing the sklearn library (Pedregosa et al., 2011), the authors used the CountVectorizer estimator to identify and store the frequency of each word. Then the labeled comments were fit into CountVectorizer to calculate the frequencies of n-grams with a range of (3,3) trigrams and then were transformed into vectors using Vectorizer. Then these vectors were split into training and testing data, with a target value of polarity scores respectively, and sent to the Multinomial Logistic Regression model, which is widely used in machine learning for sentiment analysis (Ramadhan et al., 2017).

After generating more accurate results, the trigrams were again analyzed using the Multinomial Logistic Regression model and then the most frequent positive and most frequent negative trigrams were calculated. The logistic regression coefficients were calculated from frequency and the polarity score of comments. To further visualize the analysis results, the co-occurrence graphs on both the positive and negative comments were then generated by Gephi (<https://gephi.org/>).

Step 2: The Step 2 analysis started with sentiment computation, followed by labeling, encoding, and multi-label text classification. Similar to Step 1, sentiment analysis was first conducted. Based on the results from Step 1 and a review of previous literature, the authors classified the comments into different classes based on fit, expressiveness, style, price, quality, customization, service, and overall attitude. The overall class was also recorded to measure consumers' comments on overall attitude. Detailed keywords and classes are included in Table 1.

By using a multi-label binarizer library (Pedregosa et al., 2011), the labels on each comment were converted to a matrix of eight values of 0 or 1. A value of 0 in the matrix concerning class indicates that the comment does not belong to that class and a value of 1 indicates that the comment belongs to the class. Similar to Step 1, the words are converted to feature vectors, which helps with the classification algorithms.

These vectors were sent to Linear Support Vector Classifier (Liner SVC), which is a method that applies a linear kernel function to perform classification, and this is used to identify accurate results for a large number of samples (Samal et al., 2017). Then the multi-label text classification was conducted and comments on each class were classified. After that, the authors separated the comments into their respective classes and then calculated the polarity score means concerning each month (from November 2019 to November 2021).

Table 1. A list of keywords which were assigned to each class

Class	List of keywords
Fit	"fit," "waist," "chest," "move," "comfort," "loose," "tight," "small," "large," "precise," "size," "flexible," "short," "long," "shoulder," "measur," "padding," "adjust," "arm hole," "match"
Quality	"workmanship," "quality," "cloth," "material," "textile," "fabric," "stitch," "prime," "seam," "sew," "tailored," "selection," "trim," "flaw"
Price	"price," "cost," "expensive," "cheap," "dollar," "\$," "spend," "term," "damage," "toll," "save," "paid," "free," "value"
Style	"elegant," "rich," "appear," "design," "style," "fashion," "nice," "luxury," "trendy," "bow tie," "pattern," "button," "color," "tone," "stripe," "symbol," "fancy," "unique style," "look"
Expressive	"In person," "desire," "my style," "want," "own," "self," "express," "shows my," "show my," "unique," "I looked," "I look," "effect," "safe," "status," "skill"
Customization	"user interface," "easy to use," "made to measure," "base," "imperson," "individual," "revise," "modif," "alter," "adapt," "change," "basic style," "accommodate," "experience," "personal," "custom," "choice," "options," "website," "online," "ordered," "maker," "bespoke," "co-design," "tailor"
Service	"in time," "speed," "seamless delivery," "satisf," "care," "reach," "differ," "arriv," "reply," "chat," "service," "call," "rude," "claim," "deliver," "friendly," "ship," "order," "rat," "contact," "email," "assist," "agent," "hear," "assure," "return," "payment," "customer," "process," "measuring," "avail," "time," "week," "slow," "refund," "support," "guide," "cover," "wait," "coummun"
Overall	"horrible," "exceptional," "impress," "product," "suit," "shirt," "recommend," "like," "again," "pleased," "amaze," "best," "regret," "definite"

RESULTS

Objective 1: To Identify Customer Value Derived From Menswear Customization Experiences

The review of related literature identified customer value derived from clothing customization experience including functional value, self-expressive value, and aesthetic value. The authors, therefore, applied these identified value dimensions to the data analysis. From the results, the value for fit and quality were identified to represent functional value. In the study, the fit class includes keywords about whether the measurements are good, fit perfectly, or any other cases that are related to fit. The quality class was added to determine the quality of fabric, workmanship, stitches, seam, and flaws.

Expressiveness class includes keywords representing consumers' identity, status, individuality, uniqueness, etc. To capture the aesthetic value, the authors mainly focused on style since style customization was considered aesthetic customization (Zeithaml, 1988). The theme of style includes all the elements of pattern, design, color, style, and fashion sense.

In addition, a service class was added to record comments on customer service (assistance of MC process, order processing, shipping, and returning service). Price class was added to capture any complaints or compliments on the price of the product. Customization class was used to record comments on consumers' online customization experience and the MC platform.

To explore customer value derived from menswear customization, the authors first generated a word cloud after data preprocessing showing all words based on their base format (Figure 2). Based on these words, the authors were able to connect them back to the values they fit. The words observed with high frequencies included shirt, product, order, service, fit, and quality, indicating that shirts might have been the most frequently ordered MC product and functional value in terms of fit and quality were cared for most by customers.

To further identify the connections of the words, Table 2 was generated to show the top 10 most frequent combinations of positive and negative words respectively. In the results, the authors also calculated the logistic regression coefficient, which was obtained based on the frequency and positivity/negativity of trigrams in comments. The higher positive coefficients represent high frequency and are more positively talked about in the comments. The lower negative coefficients represent high frequency

Figure 2. Word cloud of the comments after data preprocessing. Note: The thickness of the word represents the higher frequency of the word in the entire document.



Table 2. The 10 most frequent combinations of positive and negative words

Label	N-Grams	Logistic regression coefficient
Positive	excellent customer service	0.587
	great customer service	0.476
	shirt tailor store	0.328
	best customer service	0.287
	fit like glove	0.276
	shirt fit perfectly	0.254
	customer service excellent	0.241
	good customer service	0.238
	amazing customer service	0.237
	shirt fit well	0.21
Negative	customer service never	-1.0048
	joke way expensive	-0.927
	bad service bad	-0.854
	long jacket long	-0.854
	pant long jacket	-0.854
	service bad tailoring	-0.854
	horrible customer service	-0.842
	poor customer service	-0.809
	awful customer service	-0.792
	extremely helpful though	-0.765

and were more negatively talked about in the comments. The results indicated that most positive feedback obtained was about shirts and about fit. When it comes to customer service the positive coefficient was comparatively less than negative coefficient values, leading to the conclusion that there was a more negative impact on customer service. Also, when analyzing negative comments, the frequent words were on price and length of jacket and pants which shows that most of the consumers were not satisfied with the price and length of the product.

Overall, the results displayed in Figure 2 and Table 2 are consistent, which confirmed the reliability of the tests. Interestingly enough, both positive and negative comments are mainly centered around customer service and product fit, indicating fit and service are the key factors for either winning or losing a customer. For instance, a satisfied customer wrote:

I was a little suspicious at first but when I received my coat, I was more than pleased it was a perfect fit and the quality of make is exceptional, I will be ordering my new suit next I can't recommend it more highly than I will be buying again from them.

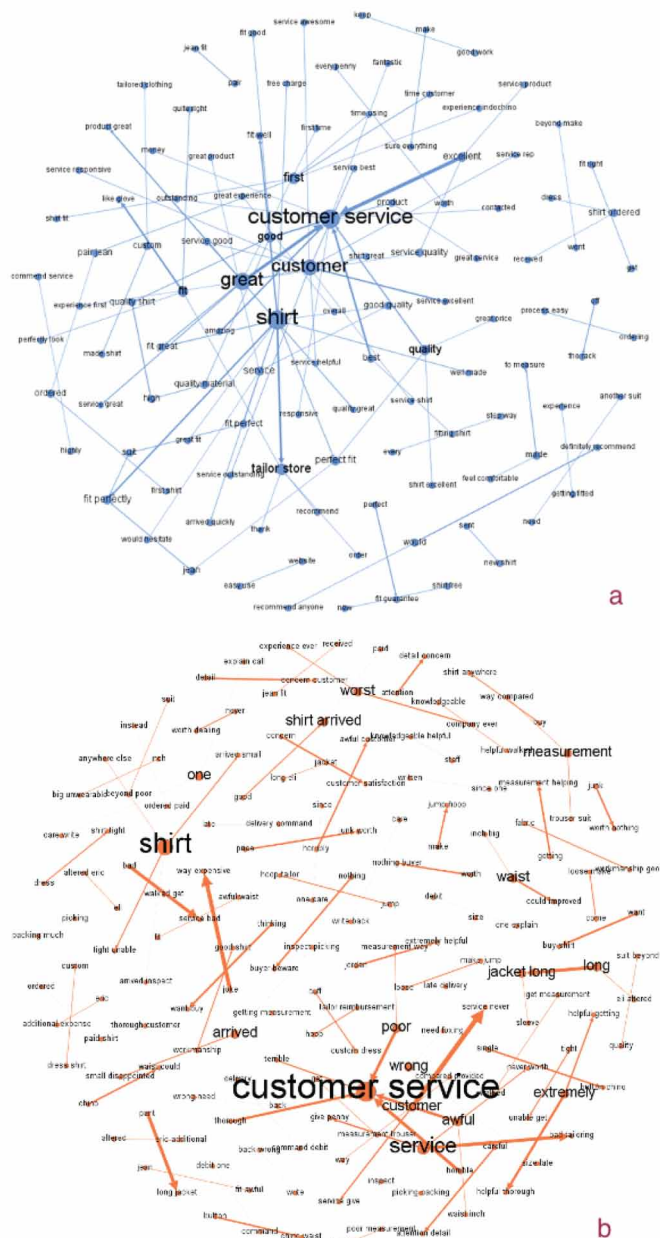
An upset customer also talked about fit and customer service:

The fitting process was rushed, and after I received my blazer, the fit was completely off. I was told (rudely, by Edgar) that it would be over 2 weeks before I could come in for a "last look" appointment, despite the blazer's fit being unwearable for the wedding before that.

Objective 2: To Identify the Dominating Dimensions of Value Derived From Menswear Customization Experiences

Network figures of 100 trigrams of both positive and negative words were generated (see Figure 3). To generate the figures, the authors separated the resulting trigrams into positive and negative trigrams and plotted them accordingly in Figure 3a and Figure 3b respectively. The results indicated that the customers mostly investigated price and quality, in addition to customer service and fit.

Figure 3. The co-occurrence plot on positive (a) and negative (b) comments subsets



The majority of the customers ordered dress shirts, making “shirt” emerge as a major theme. Reviewing all the very positive comments, the authors noticed that customers frequently mentioned quality materials, and quality products (i.e., shirts, suits). For instance, one happy customer wrote:

Suit was a little late and arrived 5 days later than planned but is a perfect fit, excellent quality, the color is lovely, really happy with the product even got a free fitted shirt offer included and a free pocket square included Customer service was very helpful, spoke to a person on chat quickly and they sorted my complaint.

Regarding customer service, a customer commented, “Skillful work I was impressed with everything, the raw material is more than wonderful, the colors are as they are, and the delivery service is on time, I am highly recommended it [sic] to those who look for elegance,” and:

Excellent service, my shirt arrived exactly as scheduled and I can say that it fits perfectly, I am very pleased about the quality and have also to say that the complementary mask made of the same fabric is always appreciated.

Based on further analysis of consumers’ comments, the authors confirmed that functional value-related quality and fit of mass-customized menswear played a more critical role in consumers forming a positive attitude towards mass-customized menswear.

On the other hand, when consumers complained about the product, they also try to address why their functional value was not addressed and why their products were not worth the price they paid. For example, one consumer wrote:

Despite all precise measurements provided suit that turned up was completely off in almost every way - the worst suit I have ever tried on, even off the rack. The expectation was it would be closer to fit with the measurements but it was worse!! The quality of the materials and garment structure is really poor for the money too.

Unsatisfied customers also complained about the price (“Very expensive for one tiny embroidered initial on this shirt collar!”) and poor customer service. For example, consumers complained: “Great product, HORRIBLE customer service,” “Avoid these cheap, nasty suits and disgraceful company with terrible customer service,” and:

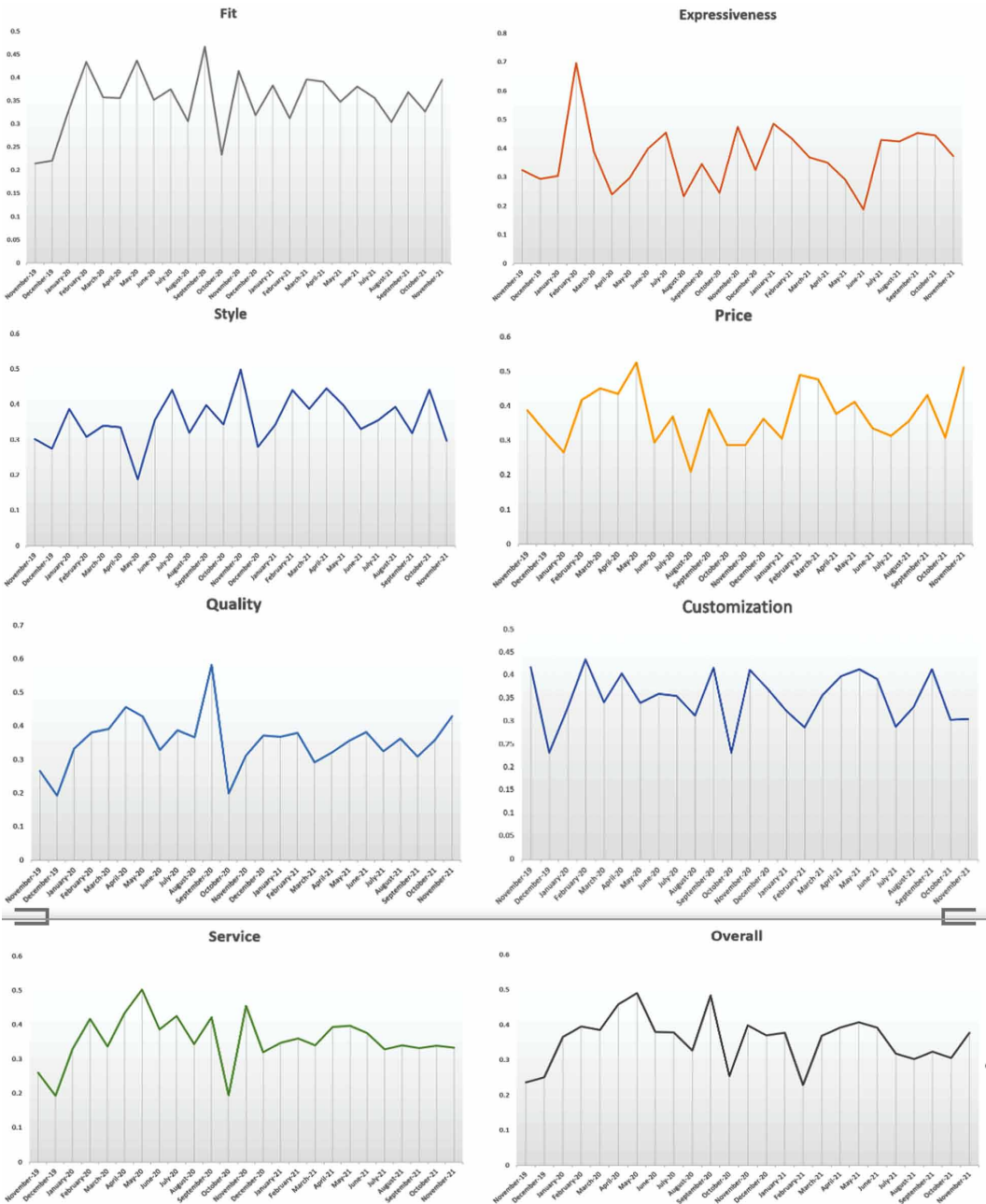
Horrible customer service no connection between employees in the store and the back end sad that I could not get a phone call to sort things out and never received an email response or update on my order still have not received my refund for the switching to a lower priced fabric.

Overall, the results from Step 1 analysis showed that the dominant values that the consumers pursued from customized apparel product consumption were customer service, fit, quality, and price.

Objective 3: To Identify the Change of Values Derived From Menswear Customization Experiences Over the Past Two Years

In the Step 2 analysis, the authors averaged the polarity score of each month on identified labels for the past two years (see Figure 4). A higher score indicated a more favorable evaluation of a specific class. When comparing across the labels, the authors observed that consumers’ overall attitude towards MC was more favorable in April-May 2020 and September 2020 while less favorable attitudes were seen in October 2020 and February 2021. With the relief of lockdown, October 2020 was the time

Figure 4. The averaged polarity score of each month on identified class



when customers started to visit the physical stores and can compare their online mass-customized apparel with the ready-to-wear apparel in stores, in terms of fit and quality of the fabric; February 2021 was the time when people heard more about the availability of vaccination, with the hope towards the end of the pandemic. By checking each detailed value, the top two highest points of fit were also seen in May 2020 and September 2020 while the lowest point of fit was found in October

2020; the highest point for expressiveness was found in February 2020 while the two lowest points were found in April 2020 and June 2021; the style was found to have two lowest points in May 2020 and December 2020 while some highest points were in July 2020, November 2020, and April 2021; price was found to have highest points in May 2020 and February 2021, while the lowest point was in August 2020; quality has the highest point in September 2020 and a relatively high point in April 2020, while two lowest points were in December 2019 and October 2020; both customization and service have the lowest points found in December 2019 and October 2020 respectively. The results also indicated that the patterns of change for fit, quality, service, and overall are similar.

CONCLUSION

This study analyzed the comments of customers who have purchased mass-customized menswear in the past two years. By using the content mining method to study the user-generated content, this study discovered values that are related to the MC of menswear. In the study, the eight selected retailers offered dress shirts, pants, suits, jackets, jeans, blazers, and coats. Two steps were used for data analysis.

Firstly, this study aimed to identify what are the customer values derived from menswear customization experiences. The results indicated that shirt (dress shirts) was the product category that was frequently mentioned and “product,” “order,” “service,” “fit,” and “quality” in both positive and negative comments among all categories of products. The findings indicate that satisfied customers obtained value from getting fitted products with good quality, receiving online orders on time, and experiencing good customer service when having any issues. For instance, customers commented the shirt “fits like a glove,” “material is great quality,” “personnel is experts [sic],” “excellent product,” and “seamless delivery.” Along the same lines, unsatisfied customers complained about service the most, such as: “manager was apathetic,” package “a few weeks delayed,” and “lack of delivery/shipment options.” The findings are consistent with previous research which also pointed out that unsatisfied service was one of the major concerns (Lang et al., 2020). Moreover, it was further observed from the content analysis that consumers always addressed values together in their comments. “Fit,” “quality,” “service,” and “customization” were always mentioned together in one comment, and they were always the factors that set up the overall attitude. For example, one comment said: “love my shirt from Apposta, it fits like a glove and the material is great quality. I gave them my dimensions from my tailored shirt and they nailed it!” Another one stated:

This is an excellent store with quality tailored suits. The personnel is experts [sic] in the way a suit should fit and make recommendations based on how you say you want the suit to fit. There are a lot of customization options. You can change the cuffs, buttons, pockets, collars, etc.

Surprisingly, “style” was not a value that was captured in the results. However, the authors did find a lot of customers commented on their overall attitude (satisfaction). Some comments also mentioned that the “the shirt was fabulous” and that they also received a free “matching face mask” which was “such a delightful and considerate gift,” highly improving consumers’ satisfaction.

Secondly, functional value is still the dominant dimension of value derived from menswear customization experiences. The results indicated that the functional value was the foundation and core benefit. According to Herzberg’s (1971) two-factor theory, the absence of dissatisfiers (poor fit, low quality, or poor customer service) is not enough to motivate a purchase, rather satisfiers must be present. Therefore, by simply satisfying consumers’ needs for functional value, MC retailers can motivate consumers to purchase MC menswear products; they will have to work on improving performance on factors that cause satisfaction, namely providing value

beyond basic and functional value. When the needs of fit and quality are provided, consumers can start recognizing the retailer and the products they provide. Further, they will appreciate other values that the retailer provides (such as expressiveness, style, service, etc.). Therefore, the most critical improvement for MC retailers is that they should try to improve the quality of the fabric, taking more measurement points to improve the fit, offering more selections of basic styles and options for consumers to choose from, and providing better service (such as knowledgeable agents, timely delivery, free matching face masks, etc.).

Thirdly, this study explored the change over time in the values derived from menswear customization experiences. The timeline of the past two years included the timeline of the COVID-19 Pandemic: the lockdown in US states in March 2020 (Centers for Disease Control and Prevention, 2021), the reopening in July 2020 (The New York Times, 2021), and the nationwide availability of vaccines in April 2021 (Centers for Disease Control and Prevention, 2021). Consistent with previous findings, “fit,” “quality,” “service,” “customization,” and “overall” had similar changes of patterns. For example, both “fit” and “quality” increased at the beginning of the lockdown and after the reopening, which also improved the overall attitude. The results indicated that consumers were more accommodating and considerate of the service and business from the retailers during the lockdowns at the beginning of the pandemic. The overall attitude improved, and consumers appreciated the MC offering to shop for menswear. They felt the price of their mass-customized apparel was “reasonable,” and they appreciated that even with the pandemic and a busy period, retailers “still managed to make and deliver” their orders. For example, one consumer commented: “Perfect fit and excellent customer service which isn’t normal, especially not during this pandemic!” This indicates that it might be a good opportunity for retailers to maintain and develop customer relationships during crisis times when customers set reasonably low expectations for businesses to exceed.

IMPLICATIONS

Theoretically, this exploratory, qualitative study investigated consumers’ values derived from menswear customization experiences. This is an addition to the literature on menswear in general, men’s fashion needs, and values of mass customization. Moreover, the method which was used to analyze the user-generated content in this study is a new application in fashion literature. This method can be used in future fashion studies to thoroughly explore the underlying meaning of content. Managerially, this study guided MC retailers on how to optimize their MC offerings in providing and enhancing values through customized offerings. Based on the study results and comments, consumers value the uniqueness, perfect fit, and superior quality that mass-customized menswear can provide. This is even important when consumers are motivated to shop for special occasions/events. Therefore, retailers can promote their products online via email or social media platforms to motivate consumers who have these special needs to try mass customization programs. Meanwhile, highlighting the fit and quality that their mass customization system could offer would be a great promotion strategy for attracting new customers. For potential retailers who plan to offer mass-customized menswear, dress shirts can be the category for them to start and retain customers. Additionally, offering monetary promotions or gifts (e.g., coupons, complementary accessories) could also be a great addition for consumers beyond enjoying the values that mass-customized menswear could offer.

LIMITATIONS AND FUTURE STUDY

This study has some limitations. Firstly, it was limited to online (website) menswear MC retailers; future studies can expand to include other channels. Further, this study was limited to only collecting

comments from Trustpilot.com, which may have missed other comments from other channels and social media platforms. Future studies can explore and compare the discrepancies among the comments from different platforms. For example, consumers' comments on Trustpilot.com may focus on the products or complain about the service, however, their comments on social media platforms may feature the MC experience. In the next stage of exploration, this type of comparison will further help retailers to address consumers' values.

COMPETING INTERESTS

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Yuli Liang, Ph.D., is an Assistant Professor of Fashion Merchandising at Texas State University, San Marcos, TX. Her research interests include consumer behavior in digital commerce, fashion technologies, and sustainability.

Snigdha Rangineni is a master's student from the Department of Computer Science at Texas State University.

Chuanlan Liu, Ph.D. and MBA, is a professor of merchandising at Louisiana State University. Her research focuses on consumer experiences, slow fashion, mass customization, and sustainability, branding, and entrepreneurship in fashion. Dr. Liu's research has been recognized nationally and internationally. She has published research in Journal of Business Research, Journal of Interactive Marketing, International Journal of Consumer Studies, and others.