Customize Apparel Design Online System: A Conceptual Solution

Abdul Rahman Ahmad Dahlan, Siti Aminah Mohd Ariffin, Puteri Nur Sakeenah Saiful Sidek, Nor Izianti Idris

Abstract—Nowadays, everything is done online. Many traditional services are made online to ease customers. This conceptual paper propose on a web-based online system that offers customers to customize and design their own apparels, shoes and bags and provide designers a platform to advertise their designs. While there are many websites that provide customize apparel design for normal size people, there are only few websites (especially in local) for big size and tall people. Few short interviews have been conducted to collect information about plus size and tall people; and their buying behavior. The key objectives of this customize apparel design online systems are to ease customers to choice, buy and design their own items such as pants, shirts, blouse and shoes in one stop center. The system is also specialize in customize plus size and tall people because according to the interviews most of them had difficulty when finding apparels and shoes. By using the system, each of the customers can have their own unique design based on their preferences. This system also provides a platform for designers to upload and share their design for free. For this conceptual paper, literature reviews and three integrated suite of tools are being used to helps understand the context and to helps create value for the business and the customer segments. The three integrated suite of tools are the nine blocks of business model canvas (BMC), the value proposition design (VPD) and the environment map (EM).

Index Terms—customize, custom-made, design, apparels, plus size, tall, BMC, VPD, EM

I. INTRODUCTION

Based on the observation and interviews, the researchers found that tall and plus size people always found buying clothes and other stuff like shoes a frustrating proposition. There are only a few high quality, big and tall apparel stores, the selection was usually limited and the prices are always high. Using the web-based services, customers could tailor-made shirts, shoes and trousers based on length, waist size, foot size and a number of other fit variables. Customers could also select among a variety of color and style options.

These web-services also allow designers to upload their design and pay for the advertisement fee. It is a platform for designers to show the talent and enhance their skills. In addition, if customers like their design and interested in buying they will get side incomes.

II. BACKGROUND

Shopping online is one of the greatest aspects of the internet today. By choosing to shopping online people will be able to enjoy many benefits, some of them are saving time, variety and price. As we all know, we are living in a modern society in which many people care more about their appearance. In addition, it has been proven that “Customer’s preferences has greatly changed nowadays and they cannot tolerate that other people show the same appearance or life style with them” (Rong Liu and Jing Wang, 2012). There are many boutiques, fashion shops served for young people. But it will be more convenient if we can buy whatever we want through online.

Talking about online shopping, online customization is one of powerful marketing strategies. However, customers’ attitudes toward acceptance and their behavioral intentions to use play a critical success factor. Focusing on the customer, many companies have resorted to inventing new programs and procedures to meet every customer’s request. Readily available information technology and flexible work processes permit them to customize goods or services for individual customers in high volumes and at a relatively low cost. According to Kai Shi, Dajuan Fan (2008) “Individual customization on the Internet is a new production and sale mode appearing in recent years which uses information technology and network technology to customize production.” (p335). Kai Shi, Dajuan Fan (2008) added that with this kind of platform, it will be able to meet the customers’ satisfaction of appearance and wearing comfort. “The ability of a company to deliver highly customized products and services to different customers around the globe is what defines mass customization.” (http://www.exampleessays.com/viewpaper/97824.html).

In Malaysia there are only few shops that specifically focused on plus-size apparel such as Republic of Big, Branded Outlet Store Boutique, and also Ms. Read. They do not have many branches and for people who live far from the city, it is very inconvenient for them to go to the city just to shopping. These shops also did not provide the facility to customize shoes and apparel. They only sell things that are ready made. Some people who are overweight might have issues with self-esteem when it comes to shopping. They tend to feel embarrassed when the items that they want are limited in sizes and designs.
Furthermore, from the observation and interviews, designers do not have any idea on where to start and advertise their designs. They can upload as many designs as they want without any fees.

III. PROBLEM STATEMENT

- It is tiresome to shop from one location and transfer to another location. What is worse is that there are no available stocks for the items you want to buy. (Gagandeep Kaur and Sukhwinder Singh Kharoud, 2015)
- Availability - For busy/working people they might have no time to go shopping.
  - It is very rare to find stores that are open 24/7
  - Marketers and advertisers may want to incorporate models of various sizes to appeal to a wider target market. (Angela Michelle Perrier, 2008)
- For people who lives in rural area, there are few shops around them that provide this facility. They will have to go to the city to find such shops. (Emil B. Karlsson, 2012)
- Most of the shops does not provide all the things in one place. They only specify/sell one item at one place. (Gagandeep Kaur and Sukhwinder Singh Kharoud, 2015)
- Ready-made – limited choices in term of design, materials and size. (Nicole Lynn Weidner, 2010)
- Designers – Don’t have any platform to advertise their designs.
- Expensive advertisement fees. (Marc Thomas, 2012)

IV. OBJECTIVES

The main objectives of the system are:

- To make the customers easy to customize all items in one website. The items include shoes, shirts, and pants.
- Producing an online shop for the customers especially the tall and plus size people so that they do not have trouble in finding their size.
- To save time and energy of the customers especially working people. They can browse through the website at anytime and anywhere.
- To give the customers tailor made their shoes, shirts, and pants on their own creativity so that they are happy with their preferences.
- To provide a platform for designers to show their talent by uploading their own design and expanding their market reach.

V. METHODOLOGY

Respondents of the Study

From the IIUM population, 20 plus size and tall people were chosen as a sample of this study. Out of 20 respondents, 10 of them were male and 10 others were female.

Research Instrument

The questionnaire consisted of five questions was used to collect information on the perceptions of IIUM students towards web-based online systems that offers for plus size and tall people. The questions that have been asked, does the body image effected their buying behavior and do they prefer shopping online when it comes to buying. The third question was there any problem faced when buying apparels. The fourth question was what are their expectation while shopping online and lastly, does the latest fashions available for their sizes.

Research Procedure

To analyze the data, the variables (respondents’ appearance, buying behaviors) were taken into account. Based on the result it can be concluded that the body image effected their buying behavior. This statement can be supported as some of the manufacturers use their own individual methods to size their line and it will cause the customers deal with inaccurate apparel size. This situation will puts the customers in a option where he or she perceive their body to be the problem. (LaBat, 1990 as cited by Nicole, 2010). In addition, the marketing and advertisements play an important role as it will attract people to buy their apparels. According to Angela (2008) “Advertisements today are filled with models that are extremely, if not dangerously, thin”. She added that if people use models in advertisements as reference points for evaluating the self, overexposure to thin models in media may result in a skewed ideal of beauty and may negatively affect consumer’s physical and psychological health.

VI. CONCEPTUAL SOLUTION

In the past, the choices regarding clothing made for plus size and tall individuals was limited and always lacking compare to the fashion trends within society. The availability of different styles was quite poor and unaccommodating. But according to Çekiç, Özkamalı and Buğa (2013), “obesity has become widespread in many countries in year 2011 onwards.” (p1). Therefore, the demand for a better selection increases with unfortunate rise in overweight or obese individuals across the world. The system not only provides plus size and tall people to custom made their apparels, but it is also a platform for designers to show their talent. All needed information and customer details will be included in the usable form. Leveraging on the nine blocks of Business Model Canvas (BMC) framework, the conceptual solution of the Customize Online System is as follows:
Figure 1: Business Canvas Model

**Business Idea:** Customize Online System  
**Product / Service Idea:** Customize Apparels

<table>
<thead>
<tr>
<th>Key Partners</th>
<th>Key Activities</th>
<th>Value Propositions</th>
<th>Customer Relationship</th>
<th>Customer Segments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Suppliers</td>
<td>Supplier- supply plain apparels.</td>
<td>Customers are able to custom-made their apparel and shoes that includes design, material, size, and color.</td>
<td>Affordable price</td>
<td>Plus size and</td>
</tr>
<tr>
<td>Tailors</td>
<td>Designer – proposed a few ready-made designs to be display in the website.</td>
<td>Freedom to shop at their own pace and convenience.</td>
<td>Gain trust from customers</td>
<td>tall people.</td>
</tr>
<tr>
<td>Designers</td>
<td>Tailor – For altering and produce customer apparel choices.</td>
<td>Provide all things in one place (shirts, pants, shoes, bags, and other custom wear) compared to our competitors like Shoes of Prey, Blank Label and eShacki.</td>
<td>Encourage beginner/amateur designer to expose their design and show their talent</td>
<td>Beginner/amateur</td>
</tr>
<tr>
<td></td>
<td>Marketing &amp; Sales</td>
<td></td>
<td></td>
<td>designers.</td>
</tr>
<tr>
<td></td>
<td>Delivery/CCD</td>
<td>Provide platform for beginner/amateur designer to upload and promote their design</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Key Resources</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Quality</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brand</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Software</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Warehouse</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Cost Structure</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Value-driven</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Variable cost</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Revenue Streams</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Asset sale</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sale commission</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

KEY PARTNERSHIP
1) Printing company
The printing company will print all the customize design and produce based on the design that have been requested by the customers.

*Suppliers*
Suppliers are the partnership that will supply all the items that can be customize on the website. The items that can be customized are apparel, shoes, bags and pants. All the items come in different sizes, materials and colors.

2) Tailors
Tailors are the one who responsible to produce the items that need to be customized based on customers’ request. The items will be exactly like the customers’ wanted it to be and satisfying the customers’ needs.

3) Designers
The website have their own designers that will design some recommended design for customers’ to choose. However, the website also allow the designers to upload and promote their designs to the customers. They can advertise their designs for free but if any of the customers would like to use their design, they have to pay 10% for the commission.

4) Web developer
Web developer plays a major role in the company. They will develop the website as well as maintain in order to make the customer easy to place order and customize their items. The website is also the platform for the designers to upload their design, thus web developers have to make sure that they will be no lagging in the systems that will interrupt the uploading process.

KEY RESOURCES
1) Web-based system
In order to run the business, the company needs a web-based system to operate and as a platform for customers to customize the items as well as for the designers to upload and promote their designs.

2) Warehouse
Warehouse is important for the company to kept and allocate all the items that have been received from the suppliers. It is also a place where all the customized items that already produced are kept before it needs to be delivered to the customers.

KEY ACTIVITIES
1) Supplier- supply plain apparels
Supplier is a role that will supply plain apparels to the company. In this activity, the supplier will have to make sure that all the items that have been requested by the company are delivered and restock without any delay. It is also important in
order to gain more loyalty customer and provide a very good service.

2) Designer – proposed a few ready-made designs to be displayed on the website.

The aim of the designers in this activity is to propose a few ready-made designs to be displayed in the website. Besides having their own designers, the company also allow the designers to upload and promote their design in the website. Thus, the customers will have more choices to choose and use it on their items.

3) Tailor – For altering and produce customer apparel choices.

In this activity, tailor will make a service like altering and produce apparel based on the customer choices. All the apparel needs to be altered before it is send to the printing company to get it design print on it.

4) Marketing & Sales

Marketing and sales also play an important role as they will monitor all the sales and product that need to be promoted to the customers. They also need to keep up to date with the current issues that related to the fashion so that it will attract more customers with their latest apparel and design.

5) Delivery (courier service)/COD

The Delivery (courier service) and Cash on Delivery (COD) aims to deliver all the items that have been purchased by the customers and the delivery service is free of charge. The company uses the payment system like COD because we want the customers to receive their items safely and only then they pay for the received items.

CUSTOMER SEGMENTS

This web-based customize online system will focus on plus size and tall people. It is also a platform for designers to show their talent.

VALUE PROPOSITIONS

1) One stop center to shop and custom made apparel, bags, shoes and muslimah wears for plus size and tall people.

The main value proposition for this web-based customize apparel online system is to provide plus size and tall people a one stop center to shop as there are not many physical stores and online systems that provide plus size apparel and include all items in one place. The system allows users to custom made their own apparel, shoes, bags and also muslimah wears. As the items are custom made, the user will get a unique design for each of their items. They can easily upload their own design, choose own material and also enter their own measurements. There is also some ready-made design provided for customer that includes size from L to XXXXL.

2) Platform for designers

This system also provide a platform for designers to upload their own design for free. This encourage them to show their talent and generate side incomes. By generate side incomes means that if there are user interested in their design, the system will notify the designer and they should only pay 10% for the commission.

3) Islamic Value

As we know, there are not many online shops that provide custom made muslimah wears. The system provides muslimah to custom made their own shirts, scarfs and hand socks. This aligns to one of the verse in Quran that stated “O children of Adam, We have bestowed upon you clothing to conceal your private parts and as adornment. But the clothing of righteousness - that is best. That is from the signs of Allah that perhaps they will remember”.

CUSTOMER RELATIONSHIPS

Customer relationship involve all aspects of interaction with the customer that are the plus size and tall people and in some circumstances, the designers. The customer relationship is important to gain trust and loyalty. The return policy is provided to the customers to make sure they are satisfied with the items they have ordered. The ‘Cash on Delivery’ is also one of the ways to gain customer trust as they can see the items upon receiving. The customize apparel online system also provide affordable prices. In addition, the system allows designer to upload their design for free to the website. This activity encourages designers to show their talent. They can also generate side income if the customers are interested in their designs. They only need to pay 10% commission.

CHANNELS

As stated above, the system provides a web-based system for customers and also social media such as Instagram and twitter for any updates and marketing purposes. Customers can also use email and phone number to directly call the warehouse.

COST STRUCTURE

This strategy is characterized by complete focus on the creation and delivery of a high value, value proposition which is highly customized to the customer segment’s preferences. Another cost structure that included is variable costs. Variable costs are represented by utility bills and raw materials used for production of the end product.

REVENUE STREAM

1) Asset sale

The company generates revenue based on the asset sale by gaining the money from the items that have been sold.

2) Sales commission

The sales commission is gaining from the designs that have been sold by the designer that upload their design on the website. If any of the customers buy and use the designer’s design on their items, the designer will have to pay 10% commission to the company.

7. VALUE PROPOSITION DESIGN CANVAS

The value proposition design canvas can be divided into two segments that are customer profile and value map. The customer profile describes a specific customer segment in the business model in a more structured and detailed way. It breaks the customer down into its jobs, pains and gains. While the value map describes the value proposition in the business model and it breaks the value proposition into products and services, pain relievers, and gain creators. As shown in Figure 2, these are the overview of the value proposition design canvas for the system. The systems have two types of customers. The main objective of this system is to attract plus size and tall people. The second are the designers.
Figure 1: Value Proposition Design for Designers

Figure 2: Value Proposition Design for Plus Size and Tall People
8. ENVIRONMENTAL MAP
The purpose of the environmental map is to show what
the business opportunity is in this industry and market.

KEY TRENDS
Technology Trends
- Online website that enhances the traditional way of
tailor-made services.
Regulatory Trends
- Operation of the plus size/tall fashion retail industry
fitting into the larger economy worldwide.
Societal and Cultural Trends
- IoT – Everything are made online
- Quality has become the main objective among
shoppers
- Young designers are becoming more valued by both
consumers and investors, and the innovation they represent
Socioeconomic Trends
- Social perceptions can be derived from the brands of
clothing a person might own.
- Kiran et al. (2002) held a survey to see what people
believed were the factors that were responsible for
changes in fashion trends.

INDUSTRY FORCES
Competitors (Incumbents)
- Physical Stores
- Existing online websites
New Entrants (Insurgents)
- Growing online websites
- Sports apparel for plus size could enter the
performance apparel market in the future
Substitute Products and Services
- Offering customer the service of entering their
measurement and design instead of they have to go
to the tailors by themselves.
Supplies and Other Value Chain Actors
- Supplier – Supply materials
- Tailors – For alteration and tailor-made item
- Designers
Stakeholders
- Customers
- Suppliers
- Tailors
- Designers

MARKET PLACE
Market Segments
- Direct buying
- Wholesale buying
Needs and Demands
- The product must be exactly like what the customers
need.
- High quality of product
- Reasonable price depends on the materials and design
- Delivery within a certain a period of time
Market Issues
- Competition with the other online shopping
- Gaining trust from the customers at the beginning
might be slightly difficult

Revenue Attractiveness
- Design and materials itself
- Reasonable price

MACRO-ECONOMIC FORCES
Global Market Conditions
- Economic factors can have both positive and negative
impacts
- Economic boom periods, people may buy more
clothing, increasing sale
Commodities and other Resources
- Undersupply of certain materials such as leather may
force supplier company to sell more fake or
substitute products. They may increase the price if
they encounter shortage of this raw materials.
Capital Market
- Needs to create style that appeal to those of different
cultures, especially cultural groups represent large
enough segments of the market.

CONCLUSIONS
Online shopping especially in customization is a new
experience and has greatly impacted the lives of consumers in
its short time of existence. It made consumers more effective
and efficient in their shopping behavior and has driven
businesses to a new level, forcing many to make the necessary
adjustments and changes to reach the new market of
knowledgeable consumers. The results of this survey
underscore the need for businesses to take the online market
seriously. The survey conducted revealed a positive attitude
and behavior toward customization online shopping even by
those consumers who still like traditional stores.

REFERENCES
of Variables Predicting Eating Habits of University
Students. Procedia - Social and Behavioral Sciences,
116, pp.3332-3335.
October 23, 2015.
[4] Lynn Weider, Nicole. 'Vanity Sizing, Body Image, And
Purchase Behavior: A Closer Look At The Effects Of
On Consumer Attitudes And Purchase Intention'. (2008):
pag. Print.
5364573
4730582
&context=etd
ertising-work-in-a-responsive-world/
Vanity Sizing Body Image and Purchase Beha
vior A Closer Look at the Effects of Inaccurat
e Garment Labeling