Visual Design Elements of Photos on Taiwanese Female Clothing On-Line Sales

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Abstract. The number of on-line shoppers has gradually increased over time. Due to the change of the market, a virtual store has to think highly about the way its brand is represented on its website. In order to be competitive in the market, building a brand image is vital to future success. Recorded documents state that besides the quality of the products, the reputation of the store, and the price of the products, the way in which a store represents itself is of the upmost importance. From an academic perspective, the style and the presentation of the photos from the on-line store is worthy of discussion and systematization. This research will be separated into three parts: (a.)Use a photography perspective to study the difference between traditional commercial photography and photos from on-line stores. (b.)Use a morphology perspective and organize the visual design elements (lighting, framing, composition, angle of shooting, shooting scene and the presentation of products) of the photos of products from on-line clothing store. (c.)Establish how visual design is composed through the use of multiple photography styles with varying emphasis on focal points.

Keywords: visual design element, on-line sale, photo, female.

1 Introduction

Due to the change of the market, a virtual store has to think highly about the way its brand is represented on its website. Recorded documents state that besides the quality of the products, the reputation of the store, and the price of the products, the way in which a store represents itself is of the upmost importance [1].

Due to the concept of an online store, browsers do not have physical contact with the product. The goal of every on-line seller in this particular industry is to present unique and stylish photographs of clothing items. Achieving this will increase trustworthiness from the female consumer toward shopping websites in regard to the professionalism of the photos. Furthermore, unique presentation can make a tactile impression on the browser [2]. Hui-Chen Chung stated that females pay more attention on the impression of the clothing website than males when it comes to on-line shopping and decision

making [3]. Ya-Wen Yu also indicated that the focal point of a photograph can influence and affect the feelings of consumers [4]. Due to the shopping behavior of females, they value the elements of web design more than males. Therefore, it is critical to create a shopping environment within the on-line market especially for females. The presentation of photos from on-line stores might affect the feelings of, and decisions made by a shopper. From an academic perspective, the style and the presentation of the photos from the on-line store is worthy of discussion and systematization. For the purpose of this research, the following will occur: (1) Study the difference between traditional commercial photography and photos from on-line stores. (2) Establish how visual design is composed through the use of multiple photography styles with varying emphasis on focal points. (3) Discuss the composition of visual design elements by analyzing different photos. On conclusion of this research, it is anticipated a discussion can take place. The focus of this discussion will be whether the combination of different visual design elements can create a selling environment and deliver style and brand image to the market.

2   Literature Review

2.1   Presentation of the Photos from On-Line Clothing Stores

At present, the main presentation on a store's website is as follow: (1) Floor photography: It means photograph an object which lies on the floor. Notomi Yasukuni indicated that it was used by the web seller in the early stage [5]. (2) Hang clothes on a hanger. This method is usually used by the seller of a small company or second hand seller in the event of a clearance sale when there is zero cost of human resource [6]. (3) Mannequin: Misawa Atsushi once addressed that using a mannequin could be more effective and three-dimensional than (1) and (2) above [7]. (4) Self-portraits by seller. Recently, sellers of much smaller companies have taken on the role of model and photographer in presentation due to budget considerations. They usually dress themselves in the company's products and take pictures from the reflection in mirror. The angle of the photograph is well positioned so their facial features are not exposed in order to create a mystical feeling. (5) Model. Pictures can either be shot indoors or outdoors. When photography shoots take place indoor; lighting, composition, and the posture of model need to be considered. When photography shoots take place outdoor; climate, framing, and scenery need to work together with the composition and the posture of model [8].

2.2   The Difference between Traditional Frame Photography and Photography Styles from On-Line Stores

The following tables summarize information from recorded documents and statements from experts. The following will define the difference between traditional commercial photography and photos from on-line stores.

The Difference between Traditional Commercial Photography and Photos from On-line Store for Framing

Table 1 shows the difference between traditional commercial photography and photos from on-line store for framing.

Table 1. The difference between traditional commercial photography and photos from on-line store

Method of Framing	Traditional commercial photography	Photos from on-line store
Full Shot	It's better on performing an associative perception [9]. Not gloomy if enough space is provided [10].	Taiwanese Famous photographer Hei-Mian indicated that it can work with model to bring out the associative perception [11].
Medium Full Shot	The range is between a model's face to knees, placing emphasis on the upper body [12]. Chiung-Chieh Chin &Well Planning stated that it's better to crop the parts of a photo below the knees to avoid being unnatural [8].	Medium full shot can be used to present the clothing on the upper body [13].
Medium Shot	David Image Studio said used to take photos above waist [14]. It is best to show the model's expression and have it harmonized with the background [15].	Medium shot can be used to present dresses or long sleeve tops. It can show the expression of models and their posture [15].
Bust Shot	Bust shot is the most common framing used by traditional commercial photographer. It completely reveals the expression of a model [9].	Bust shot cannot present the full feature of clothing products, so it is less applied in the clothing industry. [13].
Close-up Shot	Close-up shots emphasize the emotions of the model.	Close-up shots do not allow the features on clothing items to stand out [11].

The Difference between Traditional Commercial Photography and Photos from On-line Store for Composition

Composition is the placement or arrangement of visual elements or ingredients in a work of art in photography. Framing, shooting distance, and shooting angle are all part of the process (see the Table 2).

Table 2. The difference between traditional commercial photography and photos from on-line store for composition

Composition	Traditional commercial photography	Photos from on-line store
Dot Composition	Shrink character into a dot and centralize it in a clean picture [16].	Using dot composition can make the character stand out [11].
S Composition	S composition: a curve style which works perfectly for the presentation of the female body [9].	S composition presents maturity and sexiness from the photos on the internet [16].
Three aspects Composition	It is also called the golden cropping composition. It shows a sense of proportion [9].	Three aspects composition can fully present clothing products and combine the expression and posture of the model [17].
Two aspects Composition	It separates the image into two parts. It is usually used for outdoor shots and focuses on expression [12].	Two aspects composition will focus on the expression of the model, but combined with the framing can emphasize the features on the clothes [9].
Circle Composition	This composition is used to focus on a main feature and grab attention [12].	This composition will emphasize the facial expression rather than features on clothing items [14].
Triangle Composition	It gives a sense of stability above the knees [16].	Model can use appropriate posture in order to present the triangle composition [10].

The Difference between Traditional Commercial Photography and Photos from On-line Store for the Angle of Shooting

Shooting angle is the placement of the angle from a camera. Different angles affect the photo result (see the Table 3).

Table 3. The difference between traditional commercial photography and photos from on-line store for the angle of shooting

Angle of shooting	Traditional commercial photography	Photos from on-line store
Eye Angle	Misawa Atsushi indicated that it is important to add a gaze from the model to avoid being unnatural [7].	The most traditional way of shooting but communicating as though a story is being told [9].
Low Angle	Low angle can make figures slimmer and taller [17].	It can make the model look slimmer and taller [11].
High Angle	High angle will make the head big and body smaller [4]. It can produce cute expressions [18].	It can work on cute clothing and youth clothing in order to show a lively feeling [9].

The Difference between Traditional Commercial Photography and Photos from On-line Store for Location

When taking photographs, the location and model must correspond with each other in order to create an environment that appeals to consumers. Table 4 shows the difference between indoor and outdoor.

Table 4. The difference between traditional commercial photography and photos from on-line store for location

Scene	Traditional commercial photography	Photos from on-line store
indoor	Roger Hicks indicated that round 10am in the morning is the best time to get a clear tactile impression or detailed subject for the photo [19]. In summer, the best time to take a photo is sunrise or sunset. In winter, photographs facing the southern direction of a room can be taken any time of day [7].	The advantage to shoot indoors is convenience. A model has to provide a lively posture due to the simple background [16].The simplest way to shoot indoor is to use white background. The result will be clean and comfortable [11].
outdoor	The best time to shoot outdoor is between 7-10am or 3-6pm [11]. During this time the sunshine is gentle but sufficient and will not leave a shadow on the face [16].	David Image Studio said the goal of shooting the photo outdoor is to make the consumer feel comfortable and the background should not be messy [14].

3 Methods

This research is separated into two parts: (a) Analyze the visual design element of the present female clothing photos found on on-line stores. (b) Discuss how visual design is composed through the use of multiple photography styles with varying emphasis on focal points.

3.1 Analyze the Morphology of Visual Element of Photography

- According to ARO(Access Rating Online), MIC(Market Intelligence & Consulting Institute), and Nielsen Net Watch, Yahoo Auction was Taiwan's most popular website for on-line selling [20]. Therefore photos found on Yahoo Auction from the past three years were collected and organized in order to analyze popular female brands.

- Scope of reference：To avoid multiple styles appearing among the research; female fashion for the age category of 18 to 28 was selected for this particular research. After collecting and filtering various fashion photos found within the Asian market, 40 product photos were chosen as samples.

- Method of analyzing：Using a sound level of photography knowledge, the visual design elements of the 40 sample photos in morphology perspective were analyzed.

3.2 Styles of Visual Design Elements on Photo

A focus group was formed to discuss the styles of visual design elements on photo.

Participators：

(1) Female consumer who has more than 3 years on-line shopping experience.
(2) Expert who has studied visual design for at least 2 years, has passed through a cognitive process and can perceive and share concepts with others.

Content of discussion：

(1) The 40 samples into groups and discuss the style and presentation of each group.
(2) Discuss the composition of the visual design element of each group.

4   Conclusions

4.1 Synthesize the Visual Design Element of the Present Female Clothing Photos on On-Line Store as Table 5

Table 5. The visual design element of the present female clothing photos on on-line store

	A Lighting	B Framing	C Composition	D Angle of Shooting	E Location	F Presentation of products
a	Front Light	Full Shot	Dot Composition	Eye Angle	Indoor	Floor pho-tography
b	Plain Light	Medium Full Shot	S Composition	Low Angle	Outdoor	Hang Clothes on a hanger
c	Side Light	Medium Shot	Three as-pects Composition	High Angle		Self-portraits by seller
d	Rembrandt Light		Two aspects Composition			Model
e			Circle Composition			
f			Triangle Composition			

4.2 After Synthesizing, the Photos Were Categorized into 4 Groups: (1) Modern Fashion, (2) Mellifluent Fashion, (3) Simple Fashion, and (4) Clothing Focus Fashion

1. Modern fashion: Photography shoots in nature scenes, street scenes or in front of a featured store all belong to this category. These types of scenes are usually seen in female fashion magazines. A sense of fashion can be felt on the streets of the city. This type of photography mostly uses side lighting and eye angle. In order to get the associative perception, full shot and three aspects composition are involved. Table 6 shows the composition of visual design element from the photo category of modern fashion.

Table 6. The visual design element of modern fashion

Sample	A lighting				B Framing			C Composition						D Angle of Shooting			E Location		F Presentation of products			
	a	b	c	d	a	b	c	a	b	c	d	e	f	a	b	c	a	b	a	b	c	d
1		✓			✓					✓				✓			✓					✓
2			✓		✓					✓					✓		✓					✓
3		✓			✓						✓					✓	✓					✓
4		✓			✓					✓				✓			✓					✓
5		✓					✓			✓				✓			✓					✓
6		✓			✓					✓					✓		✓					✓
7			✓				✓				✓			✓			✓					✓
8		✓					✓				✓				✓		✓					✓
9		✓			✓			✓						✓			✓					✓
10	✓				✓			✓						✓			✓					✓
11		✓			✓						✓				✓		✓					✓
12			✓		✓					✓				✓			✓					✓
13			✓		✓			✓						✓			✓					✓
14		✓					✓				✓			✓			✓					✓
15		✓			✓					✓				✓			✓					✓
16			✓		✓			✓						✓			✓					✓

2. Mellifluent fashion: white background is mostly applied in this category. It delivers a gentle, clean and calm feeling. This type of photo is usually shot indoors against white or wooden background. The photographer uses the reflections of natural lighting from outside due to space limitations. The photographer uses full shots with side lighting and high angles. Two aspects or three aspects composition is used to accurately place the model in the photograph. Table 7 shows the composition of visual design element from the mellifluent fashion category.

Table 7. Tthe visual design element of mellifluent fashion

Sample	A lighting				B Framing			C Composition						D Angle of Shooting			E Location		F Presentation of products			
	a	b	c	d	a	b	c	a	b	c	d	e	f	a	b	c	a	b	a	b	c	d
17		✓				✓				✓				✓			✓					✓
18			✓		✓			✓						✓			✓					✓
19	✓								✓			✓				✓	✓					✓
20			✓		✓					✓				✓			✓					✓
21			✓		✓					✓						✓	✓					✓
22			✓		✓			✓						✓			✓					✓
23		✓			✓					✓						✓	✓					✓
24	✓				✓					✓				✓			✓					✓
25		✓			✓			✓								✓	✓					✓
26		✓			✓			✓							✓		✓					✓

3. Simple fashion: photography in this category does not use models. Products are photographed on the floor against a white background. Even though the focal point is clear, the consumer will feel the product is too simple and the shopping desire is easily reduced. This type of photography is simple: products are located in the central of the photo. If the clothes are photographed on a hanger, the angle of shooting has to be parallel with the camera. If items are photographed on the floor, the angle of shooting has to be vertical with the camera. Table 8 shows the composition of visual design element from the simple fashion category.

Table 8. The visual design element of simple fashion

Sample	A Lighting				B Framing			C Composition						D Angle of Shooting			E Location		F Presentation of products			
	a	b	c	d	a	b	c	a	b	c	d	e	f	a	b	c	a	b	a	b	c	d
27	✓				✓			✓								✓	✓		✓			
28	✓				✓					✓				✓			✓			✓		
29	✓				✓				✓							✓	✓		✓			
30		✓			✓				✓					✓			✓			✓		
31		✓			✓						✓			✓			✓			✓		
32		✓			✓			✓						✓			✓			✓		

4. Clothing focus fashion: this category makes use of models for photo shoots. The angle of shooting attempts to keep the model's face from being revealed. Therefore this style creates a polarized feeling. Some may think it will emphasize the features on the clothes. Others, however, may be distracted by the fact that the model's face cannot be seen and thus believe it spoils the entire photograph. The photos in this category all use full shots. Three aspects composition is applied a lot when shooting takes place outside. When shooting

takes place indoors, two aspects composition is more likely to be applied with high angle shooting techniques. This will accurately place the model in the photograph. In comparison, shooting outdoors provides the photographer with greater available space. Table 9 shows the composition of visual design element from clothing focus fashion category.

Table 9. The visual design element of clothing focus fashion

Sample	A Lighting				B Framing			C Composition						D Angle of Shooting			E Location		F Presentation of products			
	a	b	c	d	a	b	c	a	b	c	d	e	f	a	b	c	a	b	a	b	c	d
33	✓				✓			✓						✓			✓					✓
34	✓				✓					✓					✓		✓					✓
35	✓				✓							✓				✓	✓				✓	
36		✓			✓				✓	✓				✓			✓					✓
37		✓			✓					✓				✓			✓					✓
38		✓			✓							✓		✓			✓					✓
39					✓							✓				✓	✓				✓	
40					✓			✓							✓		✓					✓

5 Discussion

In the past, recorded documents stated that low angle shots represented pride and distant feelings. High angle shots created quirky images. Nevertheless it was discovered that there isn't great difference among varying angle shots. After analyzing the photos, our assumption was in regard to tones and the way in which they can affect the impression made by a photo.

According to the discovery from the 40 product photos, it is found that the composition been applied the most were (1) three aspects composition, (2) two aspects composition and (3) dot composition. Three aspects composition demonstrates proportion, and it works on both vertical and horizontal shooting. Two aspects composition corresponds with full scene shooting and allows clothing items to stand out. Two aspects composition however lacks the associative perception. The purpose of using dot composition is to emphasize the creation of a shopping environment. In comparison to three aspects and two aspects composition, it cannot completely present the features and details of products. The most common framing method is full shot along with three aspects composition; the second most common method is medium full shot with side lighting. It can produce an outstanding result. Medium full shot has already usually applied in fashion magazines in the past because of the gentle natural lighting.

In conclusion of the above research, it is strongly believed that different composition can affect the feelings of female consumers. Although various angles of shootings did not appear to have much difference, the photos of products shot outside corresponded to lighting, framing, and composition outlines in recorded documents. More importantly, the critical element for presenting products on an on-line store is the location. Due to the increasing trend of on-line shopping, it is hoped this information can be of value to virtual stores in regard to visual design of female clothes.

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