

Investigation of Online Visual Merchandising (OVM) Elements of Apparel Web Stores

Hristo Katrandjiev*

Ivo Velinov**

Summary:

The paper presents the results of a scientific research project concerning the new emerging academic field of Online merchandising. The study aims to identify, classify, and measure the OVM elements/subelements and it is the first one that generalizes and systematizes on a global basis the groups, the categories, the elements, and the subelements of OVM of apparel online shops. The method of content analysis is applied in the context of randomly selected apparel web stores. The adopted inductive approach in the study reveals 55 subelements which are grouped into 13 elements. These elements form 5 categories. Finally the 5 categories form 2 major groups. The OVM elements/subelements are analyzed and the frequency of usage of each subelement is measured and discussed. Finally, the authors summarize the results and outline the future directions for research.

Key words: online merchandising, apparel web store, content analysis

JEL Classification: M31, M39, L67, L86

1. Research importance and research goals

The importance of Internet as a distribution channel of apparel products is constantly growing. According to research conducted by EUROSTAT the online shoppers in the 27 EU member states increase by three percentage points each year.

The reports of Forrester Research also point out the global uptake of eCommerce. Nevertheless online shopping varies by country (Barber, T., et al., 2011).

The average growth rate of online sales has been 20% approximately since the beginning of the century. (Internet Retailer; Top 500 Guide; National Real Estate Investor).

Online apparel shops offer benefits to the online shopper, as well to the online retailer: the online shopper receives better information and convenience; the online retailer achieves improvement of economic performance (Jang and Burns, 2004). Online shoppers can examine retailers' offers much faster and easier while browsing with the mouse than while

* Associated Professor, Ph.D., Department Marketing and Strategic Planning, University of National and World Economy, e-mail: hristokat@abv.bg.

** Ph.D., Department Business Administration, New Bulgarian University.

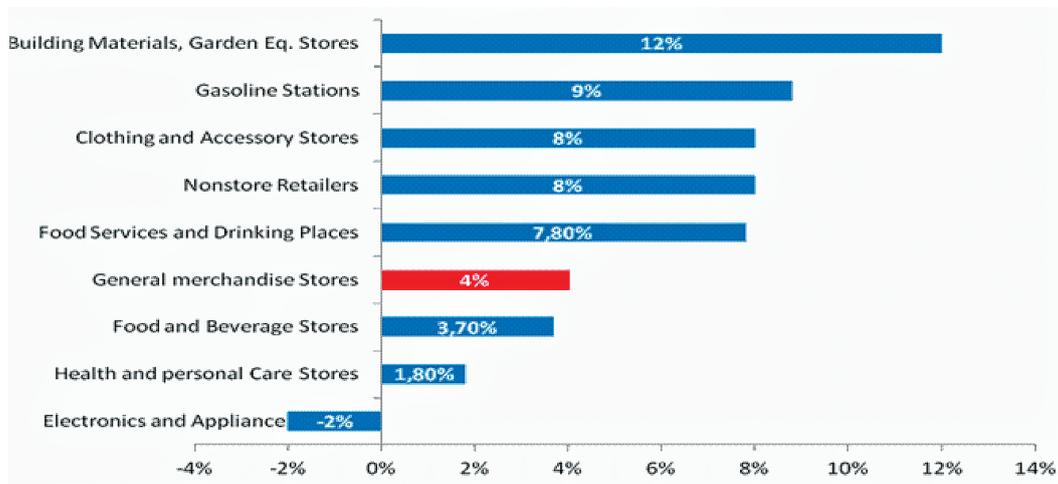


Fig. 1. Increase in online retail sales by Select Establishment Type (Change 2011Q1-2012Q2)

walking on foot from store to store. Online shoppers can also browse online shops all over the world and order products from almost everywhere. This peculiarity of online shopping behavior drags the online shops for apparel products into severe competition for the shoppers' attention. The decisions in the field of online visual merchandising (OVM) play a crucial role in the competitive battle for attracting the consumers' attention (Ha, Kwon and Lennon, 2007).

However few researchers have delved into this topic. Previous research undoubtedly confirmed that marketers are facing "a new medium that is not bound by either space or time and that has the technical capability to involve and engage the consumer" (McMillan et al., 2003) and they have to adapt their approaches to that medium. This adaptation is crucial in the context of OVM. Although the VM elements in the traditional apparel stores are described

and studied relatively exhaustively, the thorough examination of OVM elements of online stores has just begun. Hence, the purpose of this research project includes:

- 1. Investigation of OVM elements.** The starting point of this first stage of the project was the previous research of OVM of apparel websites (Ha, Kwon, Lennon, 2007), which analyzed the differences between American and Korean apparel websites from the point of view of OVM elements. By replicating the study with a larger sample of websites we verified their conclusions and discovered new OVM elements.
- 2. A detailed list of OVM.** The fulfillment of the first research goal resulted in a detailed list of OVM elements as well as in a thorough description of OVM elements.
- 3. Measurement of the frequency of usage** of each OVM element by calculating the proportion of online stores containing it.

Previous research

One of the most important research projects in the field of online merchandising elements divides the diverse and numerous online elements of merchandising into two categories or the so called "high task relevant environment" (HTRE) and "low task relevant environment" (LTRE) (Eroglu et al., 2001). According to Eroglu et al. (2001), the "low task relevant environment" includes merchandising elements of an online store that are "relatively inconsequential to completing the shopping task" such as: font types, music, decorations (unrelated to the merchandise), background colours, security options, etc. On the other hand, the "high task relevant environment" includes verbal information connected with the merchandise (Eroglu et al., (2001) such as: verbal information concerning the goods offered in the online store (merchandise narrative, terms of delivery, return and price policies, pictorial demonstration of merchandise, etc.), navigation options (searching toolbar, site map, etc.).

We accept this two-category classification as relevant but we make a step further by quantifying and analyzing the elements and subelements belonging to each category (Table 3, Table 4).

Our analysis is also based on the comparative research of American and (South) Korean apparel websites (Ha, Kwon and Lennon, 2007). We broadened the scope of their research by applying the method of content analysis worldwide via a random selection of websites from a huge database (containing several thousand apparel websites worldwide). This approach allowed us to fulfill the following tasks: (1) to verify all the OVM elements

discussed by Ha, Kwon and Lennon (2007); (2) to discover and describe newly emerged OVM elements; (3) to measure the usage (or appearance) of each OVM element within the sample of websites.

Before going ahead with the methodology and the analysis let us briefly discuss the previous research projects devoted to OVM elements.

LTRE elements

We argue that this category of OVM elements includes two groups of elements: (1) atmospheric features, and (2) website registration. Having in mind the previous description of LTRE we suggest the following sub-elements as components of the so called atmospheric features: background colour, audio and intro features, and text colour. While applying the method of content analysis we noticed that some of the most often used colours (background colours and text colours) are the following: white, black, red, blue, and yellow. That is why we measured the frequency of usage of these colours. We added an option other (colour) for the sake of measuring the usage of colours different from the abovementioned. Another sub-element belonging to the atmospheric element is the so called "audio and intro features". It comprises the following components: the presence/absence of an intro-page, intro-music, and music during browsing. The second element within the LTRE category is the website registration. As an OVM element the registration has a contradictory impact on the consumers' attitude towards an online store. This peculiarity of website registration is discussed later.

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Table 1. Previous research of OVM elements – classification by categories and elements

		ELEMENTS	
CATEGORIES	LOW TASK RELEVANT VIRONNMENT	REGISTRATION	Kollock, (1999); Lee and Yoo, (1999); Jarvenpaa, (2000); Chircu, 2000; Friedman, (2001); Bhattachajee, (2002); Tedeschi, (2002); Ba et al., (2003); Zhout et al., (2007); Tsai et al., (2011)
		ATMOSPHERIC	Mehrabian and Russell, (1974); Donovan and Rossiter, (1982); Bitner, (1992); Lewison, (1994); Sherman et al., (1997); Eroglu et al., (2001); Eroglu et al., (2003); Verchopoulos et al., (2004); Ha et al., (2007); Tsao and Chang, (2010); Hunter and Mukerji, (2011).
	HIGH TASK RELEVANT ENVIRONMENT	WEB NAVIGATION	Gomory et al., (1999); Swaminathan et al., (1999); Lee et al., (2001); Eroglu et al., (2001); Koivumaki, (2001); Kim and Lim, (2001); Park and Stoel, (2002); Eroglu et al., (2003); Siddiqui et al., (2003) Jang and Burns, (2004); Seock and Norton 2007
		WEB GRAPHICS	Berman and Evans, (1995); Donnellan, (1996); Levy and Weitz, (1996); Bruce and Cooper, (1997); Buchanan et al., (1999); Koelemeijer and Oppewal, (1999); Nilsen, (2001); Davies and Ward, (2002); Potts, K., (2007);
		PRODUCT DEMONSTRATION	Delone and McLean, (1992); Wang and Strong, (1996); Peterson et al., (1997); Bakos, (1997); Lohse and Spiller, (1998); Gomory et al., (1999); Schmit, (1999a); Allen, (1999); Then and Delong, (1999); Palmer, (2000); Allen, (2000); Park and Stoel, (2002); Reda, (2002); Park and Kim, (2003); Eroglu et al., (2003); Jang and Burns, (2004); Park et al., (2005); Halepete and Park, (2006); McCormick and Livett, (2012);

Website registration

The research devoted to online stores' registration covers mainly the consumers' privacy problems. The process and consequences of collecting personal data is in the focus of several studies (Zhou, L. et al., 2007, Tsai et al., 2011). A research report of Privacy & American Business states that 64% of the respondents refrain from buying goods online because of personal data requirements and 67% of the respondents avoid registering at online stores (Tsai et al., 2011). A Jupiter Research Report proves that a considerable proportion of online shoppers (82%) feel inclined to exchange personal data for an option of winning money (\$100) while

another 63% are willing to allow the tracking of their online behavior in exchange for \$5 price reductions (Tedeschi, 2002).

Atmospheric

The importance of the stores' atmospheric has been discussed numerous times. There is empirical evidence that in-store atmospheric influences shopping behavior in traditional (offline) stores by changing shoppers' emotions, purchase intentions, bought quantity, time/money spent in stores, etc. (Donovan and Rossiter, 1982; Bitner, 1992; Sherman et al., 1997).

At the beginning of the era of online purchases some researchers noticed that in spite of the fact that internet does not

possess physical environment (such as buildings, desks, shelves, windows, etc.) the online environment (or interface) in fact plays the role of an atmospheric environment (Shih, 1998). The very first step in examining online stores' atmospherics was done by Eroglu et al. (2001). On the basis of knowledge about the atmospheric environment in traditional stores the researchers develop a model of atmospheric cues' impact on shopper's cognitions, emotions, and behavior. The authors analyze two major categories of environmental factors in the context of online stores – HTRE and LTRE. This model was tested and proved as reliable in a later research project (Eroglu et al., 2003).

Other researchers also confirm that pleasant online environment (atmospheric) positively affects surfers' cognitions, and consumer reactions (Dailey, 2004).

A relatively detailed description of atmospheric features in apparel online stores is given by Ha et al. (2007). The authors call it environment and according to their suggestions it includes atmospheric features, sale/promotion signage, and colour.

Lately researchers have laid the emphasis on the congruence between online atmospherics and consumer preferences (Hunter and Mukerji, 2011).

HTRE elements

Website navigation

One of the early research projects concerning the website navigation as OVM elements illustrates its importance from the point of view of "tracking and measuring the effectiveness of different merchandise strategies in an online store" (Gomory et al, 1999). Researchers

analyzed the approaches that online shoppers could adopt to find products in the internet environment. They named these approaches "shopping metaphors" which in fact means "browsing through the product catalog hierarchy, various forms of searching, and configuration for "build-to-order" type products" (Lee et al, 2001). In spite of the fact that the work of (Gomory et al. 1999) and (Lee et al, 2001) treat the navigation in a broader sense (not within the context of a single website but in the context of the entire internet environment) it points out the impact of the good website navigation on sales volume. Swaminathan et al. (1999) discovered that the greater the perceived usefulness of information, the greater the customer satisfaction and the likelihood of repeat buying.

Eroglu et al. (2001, 2003) developed an S-O-R (Stimulus-Organism-Response) Model of atmospheric effects on online shopping behavior. According to this model the atmospherics of an online shop (Stimulus) affects the affective/cognitive consumers' states (Organism), which in turn affects the online shopping behavior (Response). One of the important OVM elements (atmospheric cues) in this process is website navigation. It is among the high task-relevant cues that include "verbal content related to the shopping goals (e.g., descriptions of the merchandise, price, terms of sale, delivery, and return policies), pictures of the merchandise, availability of sampling, and navigation aids (e.g., site map, guide bar at top or bottom of page)" (Eroglu et al., 2001).

Koivumaki (2001) noted that online stores' characteristics as ease of navigation, shopping comfort, presentation of products, selection option, and interactivity have a

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positive influence on customer satisfaction. Kim and Lim (2001) revealed that the importance of online stores' attributes affects customers'; satisfaction with other parameters of online stores: for example, customers' estimation of "information quality" correlates with customers' estimation of "entertainment" parameter. In other words online shoppers perceive the high informational value (quality) of online stores as an entertaining element.

A study of online apparel shopping in the US reveals that online stores with richer information have higher purchase activity and vice versa. Park and Stoel (2002) and Jang and Burns (2004) found that female college students have their favorite apparel online stores and the favorability depends on three major factors: product information, navigation, and customer service. Siddiqui et al. (2003) discovered that navigation is an important factor that stimulates online purchasing of apparel assortment.

Jang and Burns (2004) investigated the elements of apparel online stores and discovered four types of Web retailers: virtual e-retailer, catalog company, bricks-and-mortar retailer, and multi-channel retailer. Researchers found significant differences among the four types of online stores from the point of view of their merchandising components (OVM elements). They proved that "competition among Web sites is not based on what information is available, but how information is provided". Their recommendation about website navigation as an OVM element states that apparel online stores should provide "advanced search function through various categories,

or useful and detailed information for shopping pleasure" in order to gain unique competitive advantages.

Seock and Norton (2007) studied online stores' attributes in connection with the female college students' perceptions of their favorite online stores. This study revealed three major merchandising elements (product information, customer service and navigation factors) that represent students' perception of their favorite online stores.

Web graphics

The web graphics of an online store is an important tool for attracting and retaining customers. Online store's layout influences the ease and the speed of information processing by consumers (Nilsen, 2001). Some researchers prove that the aesthetics of a website impacts purchasing intentions (Potts, K., 2007). Website graphic adds value in two ways – by offering pleasant environment and by making easier customers' orientation.

We defined two sub-elements within the element "website graphics" – website "geometry" and presentation format. When talking about website "geometry" we have in mind the orientation/position of major buttons within the first page (entrance) of the online store. We distinguished 3 options – horizontal arrangement, vertical arrangement, and mixed approach. The second element or the so called presentation format includes 5 variants of online presentation of merchandise. It includes the forms in which the items appear on the screen – (1) simple click-on banner; (2) multiple click-on banner; (3) pop-up banner; (4) automatically moving banner; (5) static banner. The merchandise

is displayed by a simple click-on banner when it is visualized on a square/rectangular bar that can be unfolded by a simple click. This simple click displays details as price, sizes, colours, terms of payment, terms of delivery, etc. The multiple click-on banner means that the online shopper can reach these details by many clicks (not just one) – one click to see the price, another click to see the available colours, etc. The pop-up banner pops up right after entering the online store or opening a new page of an already visited online store. The automatically-moving banner displays merchandise details after positioning the cursor onto it which means that it is not necessary to click on this kind of banner. The static banner is not clickable, neither automatically moving – it represents simple visual demonstration of merchandise.

Product demonstration

The wider and higher quality of information available online, leads to better buying decisions and higher levels of customer satisfaction (Peterson et al., 1997). According to DeLone et al. (1992) the quality of information and user interface influence users' information satisfaction in online stores. The information provided by the online store is divided into product information and information services to the user. Catalog information includes attribute, users' recommendations (forum), evaluation reports and other (Park and Kim, 2003). The focus lies on the effectiveness of merchandise methods used in the product presentation and its sale in the online store (Gomory et al., 1999). This can be seen in a banner ad, cross-

merchandise techniques, promotions and more. Other merchandising techniques can be expressed through images, text, size, color, location, etc. (Gomory et al., 1999; Schmitt, 1999a). With new technologies in the online product offering and according to customers' needs, we can see better products visualization (Allen, 1999). Products' presentation in online stores can be improved by introducing a 3D view, such as furniture, appliances and clothing. (Allen, 1999). Clothes are often combined with pants, shirts and accessories. This way, the product description is complete and gives a sense of integrity for buyers. Thus, the consumers tend to choose and buy the complete collection (Allen, 2000).

A vast majority of Internet users believe that they cannot buy clothes before trying them on. This is one of the biggest problems in online shopping (Reda, 2002). Therefore, the importance of online merchandising techniques for product demonstration should not be underestimated. As touching and feeling are particularly important and are critical for the purchase of products, the lack of a similar experience should be compensated with a realistic representation of the product line. Visual display functions and various dummy modifications according to personal measures, can bring a positive influence on purchasing decisions (Then and DeLong, 1999). In particular, a three-dimensional image of the product can create positive attitudes and increase purchase intentions from the online store (Park et al., 2005; Halepete and Park, 2006).

Similar descriptions in different corners of the online store can help customers to

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decide about the purchase. The amount of sales with such characteristics has increased between years 1995 to 1997 (Palmer, 2000).

Machleit and Davis (Eroglu, Machleit and Davis, 2003) have found that some OVM signals (which are not directly related to the purchase) as background, font color, models, animated icons and others are responsible for the final process of purchase. However, they have not yet been empirically tested among online users.

When consumers buy clothes online from an online store, they evaluate a number of factors - how they will look on the body, sensory and aesthetic information and how the garment can be worn with other products.

According to McCormick and Livett (McCormick and Livett, 2012), users select and analyze according to four factors: product personalization, details magnification, practical information and product position, and movement on a dummy.

Research methodology

Sampling method and sample size

We searched internet for data bases containing web addresses of apparel online shops (Table 2).

Our analysis is based on the web addresses of online shops listed in five data bases (Table 2). All databases were thoroughly checked by the help of students attending "Marketing research" classes and all duplications were removed as well as online stores selling non-

apparel merchandise. After this procedure the final number of unduplicated (unique) apparel sites equaled 5753. At the next step we randomly chose 200 online apparel stores. All analyses and conclusions that follow hereinafter are based on this sample.

Research method

The research method employed in this study is Content analysis, defined as "a research technique for making replicable and valid inferences from texts (or other meaningful matter) to the contexts of their use" (Krippendorff, 2004). As a research method, content analysis is expected to be reliable. More specifically, the research results discovered by the means of content analysis must be replicable. As an important form of reliability, replicability suggests that scientists should achieve the same results every time they apply the same method to the same data. That is why the first stage of our research design included replication of previous research focused on OVM elements of apparel online shops. As a starting point we choose the comparative analysis of apparel online shops in the United States and Korea (Ha et al., 2007). We applied the method of content analysis to verify the research results of this study for a broader sample. As a beginning we verified the coding structure of the American-Korean study that suggests a complete analogy between the online and offline apparel shops. In fact this coding structure was designed on the basis of the three general types of visual merchandising

Table 2. Online shops data bases and sample formation

DATA BASES	NUMBER OF APPAREL ONLINE STORES	LAST VISITED AT:
1. www.yoox.com	7401	July-August 2012
2. www.topbrandsmall.com	628	July-August 2012
3. www.net-a-porter.com	375	July 2012
4. www.my-designers.com	57	July 2012
5. www.fashion.bg	175	July 2012
TOTAL	8636	*
AFTER REMOVING DUPLICATIONS	5753	*

elements in traditional (offline) apparel stores: environment, manner of presentation, and path finding assistance (Kerfoot, S., Davis, B., Ward, P., 2003). In our study we reorganized this structure in order to match the specific nature of online environment and especially the peculiarities of the cognitive perception of information while looking at the monitor and browsing with the mouse (Table 2).

Analysis of OVM elements

Analysis of LTRE elements

We applied the classification of Eroglu et al. that defines 2 types of OVM elements. The first group encompasses the so called "low task relevant environment" that "represents site information that is relatively inconsequential to the completion of the shopping task" (Eroglu, et al. 2001, p. 180).

We identified 2 categories of OVM elements that belong to this group: *atmospherics* and *registration*. The *atmospherics* consists of several subcategories or elements:

(1) *Background color*: white, black, blue, yellow, red, and other. Our results show that the most often used background colour is black (49,55%). Second comes white (47,11%), followed by red (9,40%), blue (4,30%), and yellow (3,54%). Different background colours (from the mentioned above) are registered in 10,71% of the online stores (Table 3).

(2) *Atmospheric features*: intro-page, intro music, music during browsing. The analysis of these atmospheric features proved that the most common atmospheric cue among online apparel shops is the intro-page (45,76%). About 38,23% of the studied online shops offer music during browsing while 39,95% of studied web stores offer intro-music.

Table 3. LTRE elements – identification, classification, and measurement

GROUPS	CATEGORIES	ELEMENTS	Sub-elements	%
LOW TASK RELEVANT ENVIRONMENT (LTRE)	ATMOSPHERIC	BACKGROUND COLOR	<i>White</i>	47,11
			<i>Black</i>	49,55
			<i>Red</i>	9,40
			<i>Blue</i>	4,30
			<i>Yellow</i>	3,54
			<i>Other</i>	10,71
		ATMOSPHERIC FEATURES	<i>Intro-page</i>	45,76
			<i>Intro-music</i>	39,95
			<i>Music during browsing</i>	38,23
		TEXT COLOR	<i>White</i>	7,09
			<i>Black</i>	70,15
			<i>Red</i>	6,89
	<i>Blue</i>		8,73	
	<i>Yellow</i>		5,13	
	<i>Other</i>		10,98	
REGISTRATION	REGISTRATION REQUIREMENT	<i>Yes</i>	44,53	
		<i>No</i>	55,47	

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(3) *Text color*: white, black, blue, yellow, red, other. We noticed a huge diversity of text colours in our research. Over 10% of monitored online shops include colours different from white, black, blue, yellow, or red. Black text colour is very popular within the online apparel stores: black coloured text is found in 70,15% of the sample while white coloured text is typical of 7,09% of the analyzed online shops. The proportion of usage of the rest of the colours is 8,73% for blue, 6,89% for red, and 5,13% for yellow.

We also investigated the registration requirement as an element of LTRE. The research results indicate that a smaller proportion of online apparel stores require registration (44,53%) compared to the proportion of online apparel stores omitting this option (55,47%)

Analysis of HTRE elements

The theoretical background of HTRE was explained earlier. In our study we identified 3 categories of elements belonging to the HTRE family:

(1) *Website navigation*: sitemap and search engine. More than 63,18% of the analyzed online stores offer a site map as a navigation aid. A searching engine (within the web store) was found in over 76,94% of the investigated online shops. Many of the

apparel online stores offered sophisticated searching – by brand (32,94%), by item (34,91%), by target (10,72%), by style (33,44%), and by price (42,53%).

(2) *Website graphics*: website geometry (horizontal (69,66%), vertical (19,54%), mixed (10,76%) and presentation format (simple click-on banner (67,50%), multiple click-on banner (12,95%), pop-up banner (10,63%), automatically-moving banner (8,92%), static banner (16,05%).

(3) *product demonstration* contains the following elements: product view dimensionality (2-D F-B on same page (93,69%), 2-D click on F-B (90,94%), 2-D automatic F-B change (31,16%), 2-D static of F -B and side view (33,9%), 3-D click on rotation (30,62%), 3-D automatic rotation (32,48%), 2-D larger view on separate page (28,77%)¹, zoom-partitioning² (37,84%); apparel color (change by color swatch click (27,31%), change by scroll down option (10,05%), automatic color change (5,88%), size according to personal measures (55,06%); product display method (hanging(4,51%), mannequin (10,30%), folded (7,54%), flat (11,25%), mannequin-cut (8,59%), model (55,08%), video (42,98%) invisible model (4,87%); mix and match (suggestions by type (61,73%), suggestions for each item (31,16%).

¹ The sub-elements in brackets are named after Ha et al. (2007) and their explanations is the following: "2-D F-B on same page" – item's front view and back view exposition in 2 dimensions; "2-D click on F-B" – clickable exposition of item's front view and back view in 2 dimensions; "2-D automatic F-B change" – replace item's front view by item's back view after positioning the cursor on it; "2-D static of F-B and side view" - static demonstration of three views (front, back, and side) in 2 dimensions; "3-D click on rotation" – 3-dimensional view of an item rotation (360°) after clicking on it; "3-D automatic rotation" - 3-dimensional view of an item (360°) after positioning the cursor on it; "2-D larger view on separate page" – clicking on the item's banner opens a separate page showing enlarged view. More details can be found in Ha, Y., Kwon, S., Lennon, S., Online visual merchandising (VMD) of apparel web sites, Journal of Fashion Marketing and Management, (2007) 11, 477–493.

² Zoom-partitioning – means multiple magnifying of small apparel elements (for example buttons, sutures, threads, clasps, collars, etc.). A multiple magnification is realized by a series of clicks – each click provides a greater magnification than the previous one. See Ha, Y., Kwon, S., Lennon, S., Online visual merchandising (VMD) of apparel web sites, Journal of Fashion Marketing and Management, (2007) 11, 477–493.

Table 4. HTRE elements – identification, classification, and measurement

GROUPS	CATEGORIES	ELEMENTS	Sub-elements	%
HIGH TASK RELEVANT ENVIRONMENT (HTRE)	WEB NAVIGATION	SITEMAP	Yes	63,18
			No	36,82
		SEARCH ENGINE	Search engine	76,94
			by brand	32,94
			by item	34,91
			by target	10,72
			by style	33,44
	by price	42,53		
	WEBSITE GRAPHICS	WEBSITE GEOMETRY	Horizontal	69,66
			Vertical	19,54
			Mixed positioning	10,76
		PRESENTATION FORMAT	Simple click-on banner	67,50
			Pop-up banner	10,63
			Multiple click-on banner	12,95
			Automatically moving banner	8,92
	Static banner	16,05		
	PRODUCT DEMONSTRATION	PRODUCT VIEW DIMENSIONALITY	2-D F-B on same page	93,69
			2-D click on F-B	90,94
			2-D automatic F-B change	31,16
			2-D static of F-B and side view	33,93
			3-D click on rotation	30,62
			3-D automatic rotation	32,48
			2-D larger view on separate page	28,77
			Zoom partitioning	37,84
		APPAREL COLOR	Change by color swatch click	27,31
			Change by scroll down option	10,05
			Automatic color change	5,88
			Size according to personal measures	55,06
		PRODUCT DISPLAY METHOD	Hanging	4,51
			Mannequin	10,30
			Folded	7,54
			Flat	11,25
Mannequin -cut			8,59	
Model			55,08	
Video	42,98			
Invisible model	4,87			
MIX AND MATCH	Suggestions by type	61,73		
	Suggestions for each item	31,16		

Summary and Guidelines for Future Research

The research presented in the paper is one of the few oriented towards the emerging science of Online merchandising. Within this research projects we identified, registered and classified numerous OVM elements. By means of content analysis we revealed the following structure of OVM elements:

- 1) Two broad groups of OVM elements – HTRE and LTRE.
- 2) Five categories within groups – atmospheric and registration within LTRE; web navigation, website graphics, and product demonstration within HTRE.
- 3) Thirteen OVM elements within categories – background color, text color, atmospheric features, and registration requirement within LTRE; site map, search engine, website geometry, presentation format, product view dimensionality, apparel color, product display method, and mix/match option within HTRE.
- 4) Fifty five subelements were identified and measured (as percentage of usage in online apparel stores) – 17 subelements within LTRE group (Table 3) and 38 subelements within HTRE group (Table 4).

We state that this research as well as the previous studies is trying just to outline the bases of the new field of Online merchandising. Several paths of investigation can be offered to interested researches:

First, the next research projects have to measure the relative importance of each OVM element/subelement from the point of view of the impact on sales.

Second, the typology of online stores from the point of view of OVM elements/subelements must be analyzed.

Third, methods and models for OVM elements/subelements optimization have to be developed. Such methods and models can bring a practical value to online sellers that are interested in optimizing their online stores in accordance with the specifics of their target groups.

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