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Online visual merchandising vs. fashion Websites' attractiveness and popularity<sup>1</sup>

**Abstract** 

By developing the techniques of online visual merchandising, it is possible to contribute to the improvement of the virtual environment for e-shopping, in order to meet the needs of consumers about the online sensory experience and search for information. Online visual merchandising helps to reduce the risk perceived by the consumer, thus making the Internet competitive or supplementary to traditional sales channels. Given the limited existing literature on the topic of online visual merchandising, this study aims to investigate the methods adopted by companies that are currently using e-commerce in the fashion industry, which can induce positive or negative responses from potential buyers. The analysis has the aim to investigate the presence of evidences supporting the hypothesis of the existence of relations between the commercial success of an e-commerce site of the fashion industry (measurable through traffic data, those on sales not being available) and the visual merchandising techniques used in the Website.

**Keywords:** visual merchandising, online visual merchandising, fashion industry, content analysis

**Introduction and objectives** 

Visual merchandising refers to the whole series of activities designed and carried out in a store to pursue the dual goal of increasing the marketability of products and to develop and stre ngthen the store loyalty (Soscia, 2001). Visual merchandising has gained an especially particular importance in the clothing industry. It is focused primarily on the determination of an optimised layout of the goods in order to introduce the visitor to an exhibition space designed specifically to stimulate her sensory perceptions and involve her in an allencompassing experience that goes far beyond the simple purchase action (Castaldo and Mauri, 2008).

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<sup>&</sup>lt;sup>1</sup> A special thank you to Maja Cosabic for the statistical processing.

Visual merchandising, through visual stimulation and the contribution of its communication techniques, has always been an important tool in the marketing of retail companies (McGoldrick, 1990; Pegler, 2001). Pegler (2001) defines visual merchandising as a "mode of presentation of the product aimed at communicating the concept of the product itself to consumers in order to maximize sales and profits". In fact, the display will guide and coordinate the selection of the assortment by customers (Poloian, 2003).

The model of the buying process from the display was developed by Kerfoot (et al., 2003). This model describes the effect of the visual merchandising point of sale environment on consumer behaviour and psychology. In accordance with the model, the modes of presentation, the hangings or dummies influence the degree of preference or dislike for the garment and have an impact on the intention to purchase. An item of clothing placed on a mannequin generates a positive response, while the same item of clothing displayed on a shelf' gets a negative comment by the respondents. Other elements, such as lighting and equipment, have an immediate impact on consumer response.

The art of visual merchandising was developed in the United States in the sixties. The purpose of visual merchandising is to create desire. Literally, visual merchandising could be translated as a "display of goods", but this would be limiting, given the wider variety of actions that it includes. Merchandise (goods) leads to merchandising (sales, in the sense of bringing the goods available to those who are potentially interested, the commercial management of goods). Apart from the multiplicity of definitions, visual merchandising means selling a commercial formula: the service, the choice, the pricing, the institutional image of the store. Once the frame has been made ready (floors, walls, ceiling), it can be set in motion, so to speak, with visual merchandising (Ravazzi, 2009).

The display layout, as well as the location and the street of the store, the area where the store is located, will influence the propensity of consumers to stay in the store and buy (Colborne, 1996). In the store, the visual merchandising activity is developed in three strategic and operational steps (Ravazzi, 2008): the classification and aggregation of goods, the rational organisation of retail space (layout) and finally, the exposure of attractive and interesting products (display). Therefore, visual merchandising involves more than just exposing the product, although this remains the most striking and immediately apparent element. It is, in fact, impossible to make an effective product display space without having previously arranged the sale, i.e., without having planned how to arouse the interest of customers to all parts of the store and without allowing easy access to any combination of goods (Tuci, 2008).

But what happens when the store is a virtual space? How does the consumer behave? What do retailers do to meet the emotional and informational needs of their clients?

The approach of the fashion industry to the Web has peculiar characteristics. At first reluctant to accept the Internet as a marketing vehicle, all actors in the industry have now realised that it is essential to be on the Web. It is possible to distinguish among the presence on the web as a promotion effort and the presence on the web in order to sell products (e-commerce). Fashion brands are required to be online and often also to sell online. The most famous brands are, in a sense, those most at risk because, if they are unable to be present in the net successfully, they must give way to new brands that are going to flourish thanks to a careful Web presence and social media. The big brands have always been proposed as leaders in the creation of a sophisticated image and as having a marketing edge, but not all have well assimilated the importance of the Web nor have many implemented the methods necessary to improve the quality and desirability of their sites (Fintoni, 2010).

It is not a coincidence that online sales of the clothing sector have had difficulties in development (Netcomm, GfK Eurisko, 2009). In fact, such an offer is characterised not so much by the functional features (performance-related), as by the semiotic and psychological dimensions. Apparel is increasingly characterised as an offer whose value is tied to the role of the product as a communication tool towards the individual consumer and others and to the evocative power (that is, the affective and emotional sphere) that it exercises over individuals. In a previous research on online stores (Khakimdjanova, Park, 2005), it has been shown that clothing shopping sites are visited mostly by women and that the increase in online sales is greatly correlated with the introduction of new technologies for the display of the product. However, due to the inherent nature of the medium, which does not allow the development of sensory experiences and the physical inspection of the product, online shopping in the clothing industry has not taken off (Greenspan, 2003). Of the women who visit the sites, 85% say they do not buy clothes because of the impossibility of wearing the articles in order to verify the size and fit. Approximately 58% of the women visitors also complained that it is not possible to see the articles in detail in order to examine the individual attributes. The colour reproduction of the clothing on the screen appears to be a further source of concern for online shoppers. Only clothing for children and early childhood has in fact had a significant increase in online sales, as these do not require a high level of sensory experience of the buyer (Netcomm, GfK Eurisko, 2009).

In order to meet the needs of consumers for sensory experience and for online information, then, there is the need to improve and develop online visual merchandising techniques. This could help create a virtual environment in some ways similar to traditional retail outlets.

The present analysis has the aim to investigate the presence of evidences supporting the hypothesis of the existence of relationships between the commercial success of an ecommerce clothing site (measured though traffic data, sales data not being available) and its visual merchandising features.

Therefore, this study aims to analyse the current applications of visual merchandising in online clothing stores. Moreover, distinguishing between businesses that work exclusively online (click-on business operations) and those that operate also in the real world with stores (click and mortar<sup>2</sup>), and between department and specialty stores, it will highlight the differences between online visual merchandising techniques used in different types of e-business and distribution channels.

### Literature review

In the online environment, virtual visual merchandising changes and may present special opportunities to serve customers. The presentation of the product is the greater concern, especially in the online commerce, which must convey the image of the product that cannot be touched, measured, worn directly or otherwise physically assessed. Compared to the Internet, a store offers the opportunity to go around, to spend time with friends, plus you can count on assistance and advice from sales staff, and most of all touch and try on products (Zaghi, 2008). For an emotional purchase, as is that of fashion, the physical point of sale also has the advantage of offering instant gratification to the customer, who can take home what he or she has decided to buy (Levy and Weitz, 2006).

The significance of the Website layout and design in fashion Websites has been emphasised in previous studies (Allen, 2000; Lindroos, 1997; Then and DeLong, 1999). Then and DeLong (1999) claimed that the online clothing stores can offer their consumers more information through visual merchandising and as a consequence the consumer will be increasingly interested in buying online. The visual display, as well as how to display the product (such as 3-D), the ability to zoom the image, the presentation of clothes coordinated

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<sup>&</sup>lt;sup>2</sup> Click and mortar are businesses that develop both online and in the virtual world (from which comes clicks, a synonym for electronic interaction), both through traditional retail outlets in the real world (from which comes mortar, concrete).

with other articles, positively contribute to the information collection and decision to purchase. Approximately 89% of respondents to Then and DeLong's (1999) survey claimed to prefer a realistic human model to examine the line of the garment than a presentation on a mannequin or on a flat surface. The majority of respondents (65%) also said they preferred that the product be visible from different perspectives.

Dahan and Srinivasan (2000) suggest that online presentation through three-dimensional animation can create an experience similar to the physical one that can be experienced in traditional retail. Allen (2000), on the other hand, suggested to expand the product information online through multiple photographs of the same piece of clothing and products, and to combine with other coordinated items.

The structure of the display and layout plays an important role in the information phase of the buying process for consumers. As stated by Yantis (1993), the selection of information through visual means happens in two ways: through a selection dictated by the objectives and through selection-driven stimuli. The selection based on objectives derived from the actor's ability to control the process in that space or objects in the visual field is consistent with the goals and beliefs regarding the target of purchase. On the other hand, the selection of visual stimuli derived from certain properties of stimuli can capture the same attention regardless of the goals and beliefs of the observer. Each of these factors or some combination thereof may affect the process of selection of information. In addition, special events or external stimuli may affect the process of selection of information (Folk et al., 1992). As noted by Yantis and Jonides (1984), the human visual system is particularly sensitive to movement. Cheal and Chastain (1998) have shown that movement leads to more attention than does a static view. Nakayama and Silverman (1986) have observed that people tend to pay more attention to and select information primarily by moving elements within their field of vision. Information such as shapes, movement and measures can be more easily detected and processed. These may be important aspects of Websites to promote the purchase of clothing products online. This is due to the unique nature of the Internet, on which the user is free to choose, and it is essential to attract the user, and to bring him or her back at another time.

Attraction, playfulness and liveliness of the site are some ways to capture the interest and attention of e-shoppers. Allen (2000) suggests that buyers tend to seek and to enjoy themselves when they browse the Websites: attractive applications, games, interactive presentations, images in 3-D and virtual images of the products can facilitate the process of consumer information. As stated by Lindroos (1997), to surf the Internet by choosing between

sites is comparable to a pleasant walk in which the subject's attention can be captured and turned into interest, transforming the visitor into an active consumer.

Based on the literature, five dimensions have been developed that are important constructs of the visual presentation used in the following empirical research:

- a) presentation mode (Kerfoot et al., 2003);
- b) presentation techniques (Then and DeLong, 1999);
- c) additional presentation (Then and DeLong, 1999);
- d) aesthetics of the presentation (Pegler, 2001); and
- e) structure and layout display (Kerfoot et al., 2003; Then and DeLong, 1999).

The encoding tool originally developed by Park and Stoel (2002) to evaluate the online information about products and customer service has been revised in order to reflect the five dimensions of online visual presentation identified above. As follows, the encoding tool has been pre-tested on 10 sites of clothing in order to ensure their suitability for this study.

The mode of presentation category includes four items: the use of dummies, human models, hangers and flat surfaces. The importance of using mannequins and real models has been stressed by several recent contributions (Kerfoot et al., 2003; Then and DeLong, 1999).

The second dimension, presentation techniques, the importance of which has been suggested by previous studies on e-shopping (e.g., Park et al., 2003; Park and Stoel, 2002), consists of four items: how to present the screen (2-D or 3-D, manual or automatic rotation), availability of the whole view of the dummy (when the product is put on the mannequin), availability of the whole view of the model (when the product is worn by a model) and zooming of the image.

The third dimension, additional presentations, includes five elements (Then and Delong, 1999):

- a) the colour options (colour chart, displaying the garment in the desired colour);
- b) the options for the size (images of the article in different sizes);
- c) display alternative images of different body shapes (images of models with different body shapes);
- d) the display of the garment details (pockets, seams, etc.);
- e) the presentation coordinated with other garments or accessories.

Numerous studies have shown that the aesthetics and entertainment were important criteria for the success of a Website (Allen, 2000; Park and Stoel, 2002). Thus, the aesthetic dimension and the layout of the image were included as additional categories coded

separately. In the aesthetic dimension, the following aspects have been considered: (a) the use of different models, (b) the presence of different poses of the mannequins and (c) the presence of different settings for the image of the product. In the layout structure, the three main items considered are as follows (Janiszewski, 1998, Kerfoot et al., 2003):

- a) the arrangement of the image of the product on the Website (center, left, right);
- b) the number of images available in the initial screen without any further clicking; and
- c) the number of images available as an option through additional clicks.

### The empirical analysis

The study focuses on the visual merchandising approach of the most visited 30 retailers in the "fashion clothing" industry using a cluster analysis methodology. The data analysis was performed using scripts specially formulated for the study, in the R language and, together, the statistical software SYSTAT, following a three-step approach:

- traffic analysis, analysis of the ranking of sites according to Web traffic data with dimensionality-reduction techniques;
- content analysis according to visual characteristics, using qualitative variables, coming to a clustering of sites with cluster analysis techniques; and
- the cross-analysis of the outcome of the two, in order to observe the structure of the clusters obtained from the point of view of traffic variables.

The sampling of sites was carried out, the first time, by selecting the site categorisation of the Alexa items "Shopping" and, later, "Clothing". It was decided to restrict the analysis to a single segment of the offer. The segmentation found on Alexa focuses on the criterion of function or occasion of use, so sub-sectors in "Clothing" are accessories, casual, clothing for children, bathing suits, ethnic fashion, footwear fashion, formal leather, menswear, natural fibers, uniforms, second-hand clothing and women's fashion. Although we considered "women's fashion" a segment of interest, we had to exclude it, because the size of the sample was too small: there were, in fact, only 20 sites. Therefore, we chose the category "casual" (including corduroy pants, jeans, Dockers, knitwear, shirts, t-shirts, jackets, coats, jackets). This type was the most common on the Web (758 Websites, against 205 of the Formal category).

The sample includes the first 33 positions of Alexa, as it was decided to exclude three sites because they are considered of little significance for the purposes of this study. These are

Printfection.com, T-Shirt Hell and Rossstores.com: the first, as merchandisers do not offer a product per se, but rather a service, the second was excluded because of the irreverent content of the prints on t-shirts and the practically non-existent visual exposure of the product and finally, the third site was excluded, as it does not present the products in any way. Finally, we have chosen the 30 sites with the highest ranking, according to Alexa's traffic data (Table 1). The analysis of visual merchandising features has been done considering a hypothetical search for a shirt for women (in the case of de-specialisation stores), while in the case of specialised sites, the purchase of an item of women's clothing was assumed.

For subsequent statistical analysis, the qualitative variables related to the visual presentation were coded using dummy variables. This leads to the data matrix (Appendix 1), which constitutes the input data set analysis.

Tab.1 The sample

Brand	Web site Website	Click - Click and mortar	Specializsed  Despec.	One brand  -  Multi Brand	Delux – Diffusion – Bridge - Mass
Gap	www.gap.com	C&M	Desp	ob	В
Forever 21	www.forever21.com	C&M	Desp	ob	В
Lands' End	www.lands.end.com	C&M	Desp	ob	D
L.L.Bean	www.llbean.com	C&M	Desp	ob	D
J. Crew	www.jcrew.com	C&M	Desp	ob	D
Threadless	www.threadless.com	С	Spec	ob	M
Urban Outfitters	www.urbanoutfitters.com	C&M	Desp	ob	D
America Eagle Outfitters	www.ae.com	C&M	Desp	ob	В
Aéropos tale	www.aoeropostale.com	C&M	Desp	ob	В
Abercombie	www.abercombie.com	C&M	Desp	ob	D
Eddie Bauer	www.eddiebauer.com	C&M	Desp	ob	D
Old Navy	www.oldnavy.com	C&M	Desp	ob	M
Guess	www.quess.com	C&M	Desp	ob	В
The Wet Seal	www.wetseal.com	С	Desp	ob	M
Lids	www.lids.com	C&M	Spec	mb	M
Bus ted Tees	www.bustedtees.com	С	Spec	mb	M
Buckle Inc.	www.buckle.com	C&M	Desp	mb	В
Es prit	www.es.prit.com	C&M	Desp	ob	M
J.Jill	www.jjill.com	C&M	Spec	ob	В
Banana Republic	www.bananarepublic.com	C&M	Desp	ob	D
Chadwick's	www.chadwicks.com	С	Desp	ob	M
J!NX	www.jinx.com	С	Spec	ob	M
SnorgTees.com	www.snorgtees.com	С	Spec	ob	M
Sheplers	www.sheplers.com	C&M	Spec	mb	В
T-Shirt Hell	www.ts hirthell.com	С	Spec	ob	M
Lucky Brand Jeans	www.luckybrand.com	C&M	Spec	mb	В
True Religion	www.truereligionbrandjeans.com	C&M	Spec	ob	В
Printfection.com	www.printfection.com	С	Spec	mb	M
Jack Wills	www.jackwills.com	C&M	Des p	ob	В
Shop Eck o	www.shopecko.com	C&M	Spec	ob	M
Ross Dress For Less	www.rossstores.com	C&M	Des p	mb	В
Ted Baker	www.tedbaker.com	C&M	Desp	mb	D
Boston Proper	www.bostonproper.com	C	Spec	ob	В

Having completed the preparatory stage of the visual field data, we proceed to collect data about the traffic of the quantitative variables (Appendix 2).

Of the quantitative variables, we chose to use the monthly data in the first place because these are available in homogeneous "time units" and therefore comparable, and secondly a limited time interval is considered more significant (given the changing nature of the classifications that have been used), and finally, the weekly data (as in line with the survey period) is not made available for low-ranked sites. For each example of the traffic data, we have calculated the mean and variance. We then standardised these and calibrated for the different units of measurement, as the difference of scale can lead to some distortions in the multivariate analysis. The standardised variables present a zero mean and variance equal to one, a private unit of measurement.

### **Traffic Analysis**

This step consists of the analysis of the positioning of the 30 e-commerce sites. In dealing with quantitative data that is objectively detectable (using the Alexa toolbar), the placement that will emerge is objective. The statistical analysis technique used is Principal Component Analysis (PCA).

PCA is the method that is used when the products, customers, brands or other statistical units under investigation, in this case the Web-sites, are thought of as points in p-dimensional hyperspace, defined by a set of statistical variables of interest for the position (or segmentation). The variables here are the traffic data. For purposes of interpretation, it would certainly be valuable to represent scatterplots of points; however, this would be virtually impossible at the start, given the high dimensions of the space (8 dimensions are taken into consideration). The Principal Component Analysis is used as a dimensionality reduction technique: i.e., on N subjects (30 sites), p quantitative variables (8 variables on the traffic) have been observed. We want to obtain q new variables (where q is strictly less than p), which retain much of the information contained in the initial p variables. The goal is to get a good summary of the p-dimensional variable, in a smaller size. An optimal solution would be to obtain a two-dimensional graphic representation. The reduction of dimensionality inevitably involves a loss of information. It is important to note that the information lost in the process is not very significant for the phenomenon studied. Principal Component Analysis is chosen to maximise the information retained (i.e., minimising the lost one).

The Y variables, resulting from the processing of the initial X variables, are called Principal Components (or factors) of X. Once obtained, they, instead of the original variables, are used in the analysis,.

The main problems related to PCA are, in essence:

- to determine the quality of the synthesis (assessing the amount of information retained by percentage, and on this basis, decide whether or not to do the screening). We proceed to the examination of the eigenvalues screen plot.
- once the usefulness of the summary has been established, there is the problem of the interpretation of the principal components. Continuing their analysis, it is of primary importance to give them a clear and accomplished meaning. We must analyse the factor loadings plot.

The eigenvalues (latent roots) are quantities related to the performed algebraic projection procedure. They concretely measure the amount of information contained in each PC.

In our case, the first two PCs carry 70% of the overall information. The reduction of dimensionality can be done, because the information that will be lost is around 30%. The hypothetical use of the third dimension would significantly increase the difficulty of the representation, and it would improve the quality of the synthesis of only 10%, therefore it would not be crucial for the analysis.

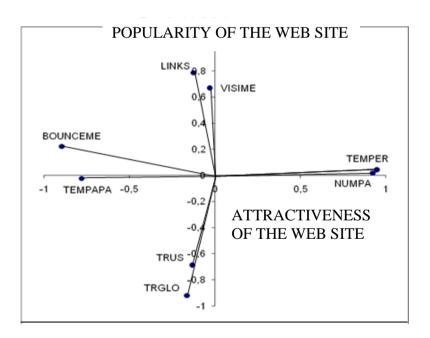
At this point, it is necessary to interpret the principal components, because from here on, the analysis will be of the bivariate type with Y1 and Y2. The understanding is facilitated by the factor loadings plot (graph of the scores of PCs), reported in Figure 1. The loadings (Tab. 2) are, in fact, scores given to each of the p initial variables to express the contribution of each to the overall significance of the PC.

The length of the stay (TEMPER) and the number of pages visited (NUMPA) are highly correlated positively with each other and with the first PC. The number of incoming links (LINKS) and the monthly visits (VISIME) are related to each other and with the second PC. The monthly bounces (BOUNCEME) and the time of opening of the page (TEMPAPA) are positively correlated with each other and negatively correlated with the first PC. The two types of rank considered (overall, TRGLO, and by country, TRUS) are positively correlated with each other and with the second PC.

**Tab.2 Factor loadings** 

		LOADINGS 1	LOADINGS 2
Monthly visits	VISIME	- 0,03	0,671
Monthly bounce rate	BOUNCEME	- 0,897	0,222
Global traffic rank	TRGLO	- 165	- 0,92
Country traffic rank	TRUS	- 0,133	- 0,687
Length of stay on the Website	TEMPER	0,947	0,044
Number of pages visited	NUMPA	0,923	0,017
Incoming links to the Website	LINKS	- 0,125	0,787
Time of opening the page	TEMPAPA	- 0,78	- 0,023

Fig. 1 Factor loadings plot



Therefore, the first PC is strongly and positively correlated with the length of the stay and the number of pages visited, and negatively related to the bounce and the time of opening of the page. This could be defined as the attractiveness of navigation. The second PC, however, has a medium/high bond of correlation with the monthly visits, and a fairly strong correlation with the number of incoming links. Conversely, it has a negative correlation to the two types

of rank considered (overall and by country). It is therefore defined as the popularity of the site.

The fact that the popularity and attractiveness of navigation are two key components means, from a statistical point of view, that they are uncorrelated. That means that the popularity of the site does not follow the attractiveness of navigation, or that popular sites are not necessarily attractive.

To complete the analysis, Figure 3 presents the scatterplot of the position of the 30 sites, based on the variables of synthesis.

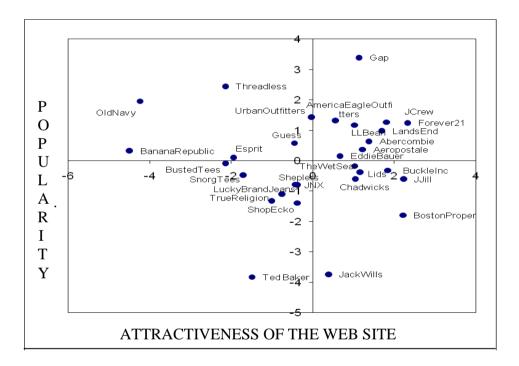


Fig. 3 Scatterplot of the 30 Websites plot

## Cluster analysis of the visual merchandising variables

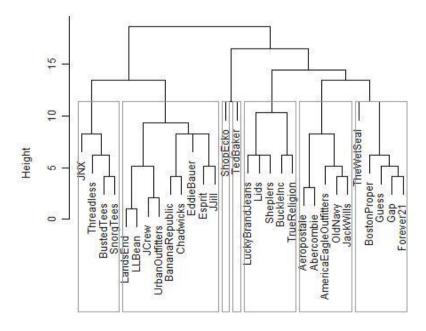
The statistical techniques appropriate for the segmentation analysis are related to the Cluster Analysis (CA). They are exploratory methods with which N subjects, quantitatively described by a p-dimensional profile, are divided into k groups. The groups must have obtained a twofold characteristic: to be as homogeneous as possible in them (internal cohesion) and inconsistent with each other (separation external). Another cornerstone of Cluster Analysis is the concept of similarity between the statistical units, defined with a first approximation, as

the proximity between them. The sense, however, varies depending on whether use is made of quantitative or qualitative variables.

In this case, the variables related to the visual component are qualitative; however, as a result of the encoding, they can be given as input to the software for the calculation of Euclidean distance. Since each unit has been observed only by dichotomous variables, the Euclidean distance was applied to the corresponding tetrachoric table. Therefore, in this case, the similarity or proximity can be calculated as the distance between points in the space of definition.

The method considered in this analysis is hierarchical agglomeration. The distances between the groups were calculated using the complete bond methodology (the distance is calculated between the most distant unities). The results of the analysis are graphically represented by the cluster tree graph (Fig. 4), which reproduces the hierarchical structure of the algorithm and lets you choose graphically at which level to stop the aggregation. What we obtained are five clusters, while two single sites remain out of any categorisation (Appendix 3).

Fig. 4 Cluster dendrogram



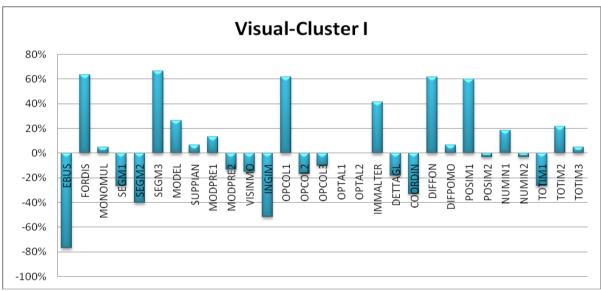
The sites that are part of the first cluster (Fig. 5) are all part of the specialised click types that are aimed at the mass segment. The product display is in 2D, without the option of image

zoom. Only the colour options are visible, and it is not possible to see them applied to the product. There are no suggested items to match. Since we lack the visual appeal of the product, the sites try to catch up using the background (different depths appear). On the first page, there is a very high number of images, and that removes even more visibility from the individual product. The number of images related to the product is not too high. The four sites are clustered on the basis of visual variables to sell mostly patterned T-shirts.

The cluster is basically aimed at the low market level, with limited focus on the product (lack of visual merchandising). The design on the t-shirt is emphasised, as are the promotions.



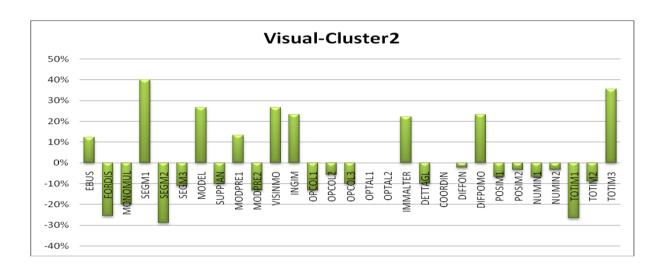
Fig. 5 Cluster 1



In the second cluster of sites (Fig. 6), mostly de-specialised click and mortar businesses appear (i.e., they offer a full range or total look), and they address the diffusion segment (the highest found, not being present in the sample of the luxury segment). The predominant type of visual presentation is on a model, full length, with the option of image zoom and the product is worn in several different colour options in that size. It is often worn by models in different poses, and with the suggestions of possible combinations. There are significant numbers of images on the home page, but there are also a large number of images related to the individual product on the product page. The cluster has, in short, the following features. The product has an excellent presentation on the product detail page, both in terms of the presentation overall (combined with other products, with the entire image of the model), and for the presentation of details (possibility to zoom and magnify the image).

The third cluster sites (Fig. 7) are specialised, multi-brand click and mortar sites, in the segment of diffusion. The presentation was made both on the model and on a flat surface. On average, the view is available in 3D. There is a wide range of alternatives as to colour and sizes. It is possible to zoom the image, but not to see the product in detail; we assume the product quality is known by the customer. For the same reason, it is not coordinated with other products.





The customer does not need particular forms of persuasion, and the sites do not pay high attention to visual merchandising techniques. The product in 40% of cases is placed at the center, contrary to the most common practice of being on the left. The cluster is characterised by the fact that it offers products for a well-defined public; in some cases, a niche (for category).

The fourth cluster sites (Fig. 8) are all de-specialised, single-brand click and mortar sites. There is no specialisation of product for market groups (multi-segment). The presentation of a model is absent, and the products are all on flat surfaces. The view is only in 2D. The visual component is strongly penalised by the lack of models. The product is available in various alternatives, but it is not worn. There are a small number of images per item.

The group of sites has a rather flat visual approach.

Fig. 7 Cluster 3

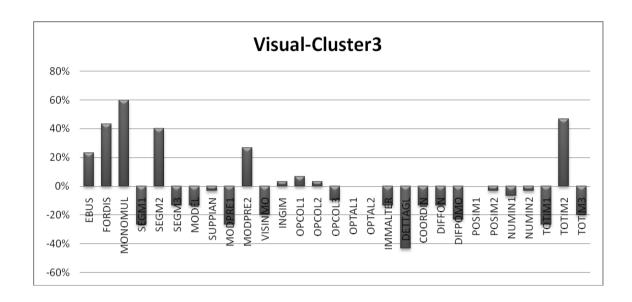
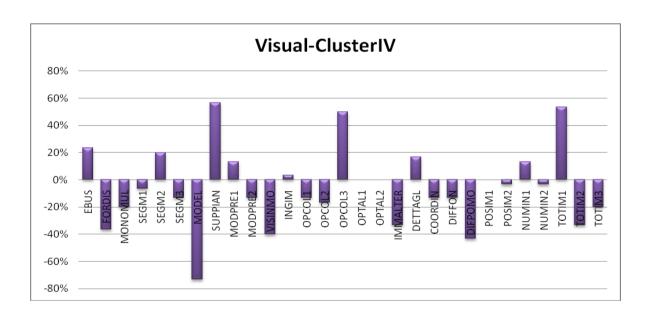
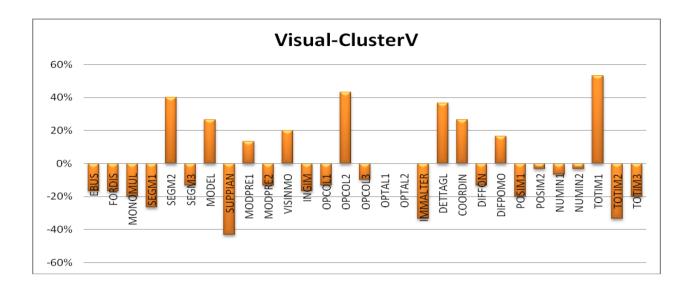


Fig. 8 Cluster 4



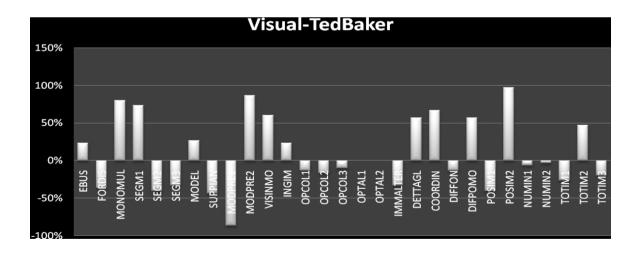
The fifth cluster (Fig. 9) consists mostly of de-specialised, single-brand click and mortar sites. The segment is diffuse. The presentation is done on models, often in full view, or with image magnification, with the possibility to zoom. There are alternatives for the colour and size information. Coordinated articles are presented. The number of images in the first page is high, while few images are related to each product. The type is mostly of a window site. Interestingly, in the cluster there are two sites with higher rank.

Fig. 9 Cluster 5



TedBaker (Fig. 10) is not grouped in any cluster; in fact, it is distinct from the segment of diffusion (first cluster) as it has a much more complete visual appearance. For the same reason, it is not part of the fifth cluster, which is limited on the visual side.

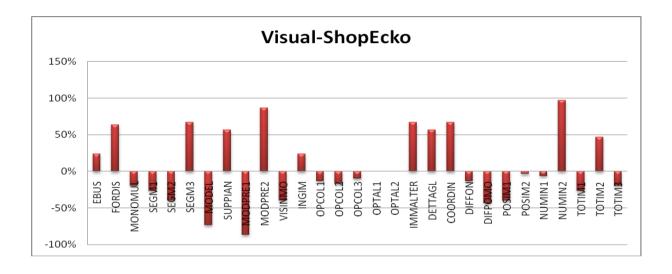
Fig. 10 TedBaker



ShopEcko (Fig. 11) is also not included in some segments, and it is an outsider among the low-level sites for some aspects of visual merchandising: in terms of the 3D viewing and the suggestion of items to match. However, it chooses not to show the products on a model. Despite this choice, it does not join the second cluster, just for being innovative in some

visual aspects. In all probability, there is an attempt to reposition to upper segments of the market.

Fig. 11 ShopEcko



### **Discussion and limitations**

The literature on e-shopping trends and consumer behaviour (Then and DeLong, 1999) has stressed the importance of online visual merchandising techniques. The visual functions that complement the sensory experience online can create positive experiences and help reduce the perceived risk.

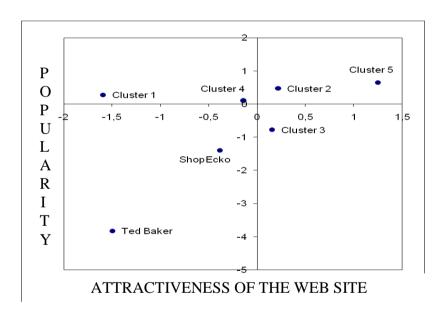
The last stage of the analysis is the cross-analysis of the previous two analyses, and the aim is to examine how the cluster behaves in terms of traffic size. From the average of the two indicators of traffic, calculated for each site, you switch to the cluster's (Tab. 3).

The first cluster (Fig. 12) presents a certain popularity of sites. The lack of attention in visual presentation that, among other things, would seem in line with its positioning on the low range, hardly qualifies it as attractive to navigation.

**Tab. 3 Factor loading** 

Cluster	Average attractiveness	Average popularity
1	-1.5955	0.2734
2	0.2173	0.4708
ShopEcko	-0.3850	- 1.3971
TedBaker	-1.4966	-3.8260
3	0.1555	-0.7772
4	-0.1428	0.1067
5	1.2489	0.6490

Fig. 12 Factor loadings plot



The situation is different for the second cluster. Both synthetic traffic dimensions have positive values: the popularity of the sites seems to be supported by a good visual presentation. We could expect it to be the most attractive cluster; it is therefore surprising to note that it is outweighed by the fifth cluster, window sites. Although TedBaker has a high visual side, it remains unattractive for the navigation, as well as being not popular. ShopEcko is the outsider in low-level sites, but it aims to improve the visual aspect (with some innovative solutions, such as manual rotation in 3D), although it still shows clear deficiencies. Nevertheless, it presents lower values of negativity on both the synthetic traffic indexes in

respect to TedBaker. The third cluster does not show its popularity (having an audience limited to the lovers of a particular style), while the attraction is good (probably it is calibrated on the visual aesthetic criteria and canons of choice of the public, which are known). Finally, the fourth cluster presents a popularity low to the minimum necessary to be able to be ranked as positive (although brands known internationally are among the offer), while the second index of synthesis is clearly negative.

As explained above, the popularity and attractiveness of the navigation are statistically uncorrelated. This should be read in the sense that the popularity of the site does not come from the attractiveness of the navigation. So it seems that we can reach the conclusion that the popularity is reached through marketing strategies on the product or the brand: an aesthetically elaborated site does not serve this purpose. You can be popular and have a not very appealing site, as well as be less popular and have a site worthy in terms of visuals. A good Website is not the tool that leads to popularity; rather, it derives from investments in global marketing. The best sites are those that managed to be popular and have a good appeal at the same time in terms of online visual merchandising. Visual merchandising is not a substitute to traditional marketing, which leads to the conclusion that there is a clear need for synergistic efforts in both directions, according to an integrated strategy, both within the multi-channel. The marketing drivers of popularity could be related to other important factors, like the search engine positioning and the integrated online and offline communication.

Based on this investigation and on current practice in the field of visual merchandising techniques, we can say that there is still considerable room for improvement in all five of the dimensions of the analysed visual merchandising techniques; in particular, as regards the use of 3-D views that can help reduce the risks associated with the purchase of the product from the Websites and increase the positive experiences of e-shopping (Park et al., 2003). In the analysed sites, no one has used this technique and its many applications such as functions that allow customers to create virtual models of the forms that reflect their own body. It would be useful to reduce the uncertainty of the real fit and final appearance of the product.

On the other hand, it should be noted that it is possible that the products selected for this analysis may not represent the most appropriate expression of the variable under study. In fact, this study was limited to the 30 most visited online stores of clothing in the world and the differences between the groups examined in this study, type of e-business, type of store and strategic group membership may not be applicable to all existing online businesses: the comparison may not be representative.

In the future, given the presence of sales data, it would be interesting to investigate whether there are correlations between online visual merchandising efforts and variables and actual sales/redemptions (beyond the sole popularity of the site).

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# Appendix 1 Visual merchandising data set

sitoweb	EBUS	FORDIS	MONOMUL	SEGM1	SEGM2	SEGM3	MODEL	SUPPIAN	MODPRE1	MODPRE2	VISINMO	INGIM	OPCOL1	OPCOL2	OPCOL3	OPTAL1	OPTAL2	IMMALTER	DETTAGL	COORDIN	DIFFON	DIFPOMO	POSIM1	POSIM2	NUMIN1	NUMIN2	TOTIM1	TOTIM2	TOTIM3
Gap	1	0	0	0	1	0	1	0	1	0	1	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0
Forever21	1	0	0	0	1	0	1	0	1	0	1	1	0	1	0	0	0	0	1	0	0	1	0	0	0	0	0	1	0
LandsEnd	1	0	0	1	0	0	1	1	1	0	1	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0
LLBean	1	0	0	1	0	0	1	1	1	0	1	1	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	1	0
JCrew	1	0	0	1	0	0	1	0	1	0	1	1	0	0	0	0	0	0	0	1	0	1	1	0	0	0	0	1	0
Threadless	0	1	0	0	0	1	1	1	1	0	1	0	1	0	0	0	0	1	0	0	0	0	1	0	0	0	0	1	0
UrbanOutfitters	1	0	0	1	0	0	1	0	1	0	1	1	0	1	0	0	0	0	0	0	0	1	1	0	0	0	0	1	0
AmericaEagleOutfitters	1	0	0	0	1	0	0	1	1	0	0	1	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	1	0
Aeropostale	1	0	0	0	1	0	0	1	1	0	0	1	0	0	1	0	0	0	0	0	0	0	1	0	0	0	1	0	0
Abercombie	1	0	0	1	0	0	0	1	1	0	0	1	0	0	1	0	0	0	0	0	0	0	1	0	1	0	1	0	0
EddieBauer	1	0	0	1	0	0	1	1	1	0	0	1	0	0	0	0	0	1	0	1	1	1	0	0	0	0	0	0	1
OldNaw	1	0	0	0	0	1	0	1	1	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0
Guess	1	0	0	0	1	0	1	0	1	0	0	0	0	1	0	0	0	0	1	1	0	1	0	0	0	0	1	0	0
TheWetSeal	0	0	0	0	0	1	1	0	1	0	0	0	0	1	0	0	0	0	0	1	0	0	1	0	0	0	1	0	0
Lids	1	1	1	0	0	1	0	1	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0
BustedTees	0	1	1	0	0	1	1	0	1	0	0	0	1	0	0	0	0	0	0	0	1	1	1	0	0	0	0	1	0
BuckleInc	1	0	1	0	1	0	0	0	0	1	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0
Esprit	1	0	0	0	0	1	1	0	1	0	1	1	0	0	0	0	0	1	1	1	0	1	1	0	0	0	0	0	1
JJill	1	1	0	0	1	0	1	0	1	0	1	1	0	0	0	0	0	1	1	0	0	1	0	0	0	0	0	0	1
BananaRepublic	1	0	0	1	0	0	1	0	1	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
Chadwicks	0	0	0	0	0	1	1	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
JNX	0	1	0	0	0	1	1	1	1	0	0	1	0	0	0	0	0	1	1	0	1	0	1	0	1	0	0	1	0
SnorgTees	0	1	0	0	0	1	1	0	1	0	0	0	1	0	0	0	0	1	0	0	1	1	1	0	0	0	0	0	1
Sheplers	1	1	1	0	1	0	1	0	1	0	0	1	0	1	0	0	0	0	0	0	0	1	1	0	0	0	0	1	0
LuckyBrandJeans	1	1	1	0	1	0	1	1	1	0	1	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0
TrueReligion	1	1	0	0	1	0	1	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
JackWills	1	0	0	0	1	0	0	1	1	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	1	0	0
ShopEcko	1	1	0	0	0	1	0	1	0	1	0	1	0	0	0	0	0	1	1	1	0	0	0	0	0	1	0	1	0
TedBaker	1	0	1	1	0	0	1	0	0	1	1	1	0	0	0	0	0	0	1	1	0	1	0	1	0	0	0	1	0
BostonProper	0	1	0	0	1	0	1	0	1	0	1	1	0	0	0	0	0	0	1	1	0	1	0	0	0	0	1	0	0
Media sull'intero campione	77%	37%	20%	27%	40%	33%	73%	43%	87%	13%	40%	77%	13%	17%	10%	0%	0%	33%	43%	33%	13%	43%	40%	3%	7%	3%	27%	53%	20%

# Legend

Code	Variable
EBUS	E-business types (click/click and mortar)
FORDIS	Store type (specialised/despecialised)
MONOMUL	One brand/multibrand
SEGM	luxury/diffusion/bridge/mass
MANICH	Dummies
MODEL	Model
APPEND	Hanging
SUPPIAN	Flat surfaces
MODPRE	Presentation mode
VISINMA	Full view of the dummy
VISINMO	Full view of the model
INGIM	Image zoom
OPCOL	Colour options
OPTAL	Size options
IMMALTER	Alternative images of body
DETTAGL	Details zoom
COORDIN	Presentation coordinated with other articles
DIFFON	Different backdrops
DIFPOMO	Different positions of the model
DIFPOMA	Different positions of the dummy
POSIM	Positioning of the image
NUMIN	Number of images in the first page
TOTIM	Total number of images for each product

# Appendix 2 Standardised monthly traffic data

Rank	sitoweb	VISIMESD	BOUNCEMESD	TRGLOSD	TRUSSD	TEMPERSD	NUMPASD	LINKSSD	TEMPAPASD
1	Gap	3,7234	-0,5281	-1,1179	-0,362	0,7147	0,4442	2,1224	-0,8313
2	Forever21	0,4737	-0,7875	-1,0319	-0,3562	1,745	1,4101	0,6626	-0,5979
3	LandsEnd	0,2405	-0,6866	-0,9967	-0,3558	1,5308	0,8902	0,3945	-0,0569
4	LLBean	0,4613	-0,6362	-0,9695	-0,3532	0,6188	0,2335	0,6558	-0,4932
5	JCrew	0,4603	-0,874	-0,9952	-0,3567	0,6362	1,4375	0,8528	-0,6274
6	Threadless	-0,5897	1,9648	-1,0002	-0,3442	-1,039	-0,9513	3,4979	0,1045
7	UrbanOutfitters	-0,3879	0,1708	-0,985	-0,3532	0,2286	0,2061	1,7099	0,423
8	AmericaEagleOutfitters	1,2545	-0,4417	-0,9736	-0,3524	0,3625	-0,0483	0,2529	-0,2205
9	Aeropostale	0,0585	-0,8019	-0,8951	-0,3466	0,4816	0,6166	-0,4852	-0,2914
10	Abercombie	-0,2094	-0,8812	-0,8778	-0,3419	0,1012	0,4524	0,3247	-1,3451
11	EddieBauer	-0,4541	-0,5209	-0,7011	-0,3381	0,5295	-0,4232	-0,3066	-0,5357
12	OldNavy	2,3836	2,2386	-0,6202	-0,3254	-2,2899	-1,7038	0,5101	2,5751
13	Guess	0,7389	-0,0814	-0,3617	-0,3099	-0,6694	-0,5874	-0,0891	-0,2478
14	TheWetSeal	-0,3085	-0,6866	-0,2512	-0,3111	0,422	0,425	-0,505	-0,4027
15	Lids	-0,3079	-0,4921	-0,0221	-0,3108	0,3898	0,945	-0,7027	-0,3612
16	BustedTees	-0,7304	1,2083	-0,1859	-0,2775	-0,8413	-1,1976	-0,241	1,3425
17	Bucklelnc	-0,3085	-0,6002	-0,0289	-0,3006	0,4617	1,6564	-0,5898	-0,9197
18	Esprit	1,0175	1,4821	0,0322	0,5882	-1,2515	-1,2688	-0,4373	-0,2434
19	JJill	-0,4556	-0,6146	0,2598	-0,3036	1,4804	1,9574	-0,7492	-0,2543
20	BananaRepublic	-0,1759	2,3827	0,2579	-0,2768	-2,2403	-1,6655	0,4472	3,0376
21	Chadwicks	-0,5094	-0,4417	0,1578	-0,2767	1,1538	0,2882	-0,7807	-0,0285
22	JNX	-0,7036	0,1924	0,7338	-0,076	-0,6512	-0,3685	-0,2423	-0,6285
23	SnorgTees	-0,7304	1,9144	0,3297	-0,2653	-0,9563	-1,3454	-0,6548	-0,8368
24	Sheplers	-0,6634	0,2428	0,4589	-0,263	-0,0724	-0,6695	-0,7553	-0,0384
25	LuckyBrandJeans	-0,7264	-0,067	0,7888	-0,2532	-0,7554	-0,8884	-0,8162	-0,0722
26	TrueReligion	-0,7344	-0,312	1,1168	-0,1895	-0,2948	-0,6969	-0,7355	1,4854
27	JackWills	-0,7089	-1,0181	2,1832	3,6418	-0,1981	0,042	-0,938	-0,8292
28	ShopEcko	-0,7344	-0,3264	1,2878	-0,1239	-0,3535	-0,2043	-0,6671	0,4907
29	TedBaker	-0,7304	-0,1967	2,4698	3,7298	-0,628	-0,5327	-0,8155	1,3393
30	BostonProper	-0,6433	-0,8019	1,9375	-0,2363	1,3845	1,5469	-0,9195	-0,9361
	media	0	0	0	0	0	0	0	0
	varianza	1	1	1	1	1	1	1	0
	vailaliza	<u>                                     </u>	ı		ı		I	l l	I

# Appendix 3 Visual merchandising variables of the clusters

Cluster II																													
sitoweb	EBUS	FORDIS	MONOMUL	SEGM1	SEGM2	SEGM3	MODEL	SUPPIAN	MODPRE1	MODPRE2	VISINMO	INGIM	OPCOL1	OPCOL2	OPCOL3	OPTAL1	OPTAL2	IMMALTER	DETTAGL	COORDIN	DIFFON	DIFPOMO	POSIM1	POSIM2	NUMIN1	NUMIN2	TOTIM1	TOTIM2	TOTIM3
LandsEnd	1	0	0	1	0	0	1	1	1	0	1	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0
LLBean	1	0	0	1	0	0	1	1	1	0	1	1	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	1	0
JCrew	1	0	0	1	0	0	1	0	1	0	1	1	0	0	0	0	0	0	0	1	0	1	1	0	0	0	0	1	0
UrbanOutfitters	1	0	0	1	0	0	1	0	1	0	1	1	0	1	0	0	0	0	0	0	0	1	1	0	0	0	0	1	0
BananaRepublic	1	0	0	1	0	0	1	0	1	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
Chadwicks	0	0	0	0	0	1	1	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
EddieBauer	1	0	0	1	0	0	1	1	1	0	0	1	0	0	0	0	0	1	0	1	1	1	0	0	0	0	0	0	1
Esprit	1	0	0	0	0	1	1	0	1	0	1	1	0	0	0	0	0	1	1	1	0	1	1	0	0	0	0	0	1
JJill	1	1	0	0	1	0	1	0	1	0	1	1	0	0	0	0	0	1	1	0	0	1	0	0	0	0	0	0	1
media cl.ll	89%	11%	0%	67%	11%	22%	100%	33%	100%	0%	67%	100%	0%	11%	0%	0%	0%	56%	33%	33%	11%	67%	33%	0%	0%	0%	0%	44%	56%
media cl.ll-media glob	12%	-26%	-20%	40%	-29%	-11%	27%	-10%	13%	-13%	27%	23%	-13%	-6%	-10%	0%	0%	22%	-10%	0%	-2%	23%	-7%	-3%	-7%	-3%	-27%	-9%	36%

Cluster III																													
sitoweb	EBUS	FORDIS	MONOMUL	SEGM1	SEGM2	SEGM3	MODEL	SUPPIAN	MODPRE1	MODPRE2	VISINMO	INGIM	OPCOL1	OPCOL2	OPCOL3	OPTAL1	OPTAL2	IMMALTER	DETTAGL	COORDIN	DIFFON	DIFPOMO	POSIM1	POSIM2	NUMIN1	NUMIN2	TOTIM1	TOTIM2	TOTIM3
LuckyBrandJeans	1	1	1	0	1	0	1	1	1	0	1	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0
Lids	1	1	1	0	0	1	0	1	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0
Sheplers	1	1	1	0	1	0	1	0	1	0	0	1	0	1	0	0	0	0	0	0	0	1	1	0	0	0	0	1	0
BuckleInc	1	0	1	0	1	0	0	0	0	1	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0
TrueReligion	1	1	0	0	1	0	1	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
media cl.III	100%	80%	80%	0%	80%	20%	60%	40%	60%	40%	20%	80%	20%	20%	0%	0%	0%	20%	0%	20%	0%	20%	40%	0%	0%	0%	0%	100%	0%
media cl.III-media glob	23%	43%	60%	-27%	40%	-13%	-13%	-3%	-27%	27%	-20%	3%	7%	3%	-10%	0%	0%	-13%	-43%	-13%	-13%	-23%	0%	-3%	-7%	-3%	-27%	47%	-20%

Cluster IV																													
sitoweb	EBUS	FORDIS	MONOMUL	SEGM1	SEGM2	SEGM3	MODEL	SUPPIAN	MODPRE1	MODPRE2	VISINMO	INGIM	OPCOL1	OPCOL2	OPCOL3	OPTAL1	OPTAL2	IMMALTER	DETTAGL	COORDIN	DIFFON	DIFPOMO	POSIM1	POSIM2	NUMIN1	NUMIN2	TOTIM1	TOTIM2	TOTIM3
Aeropostale	1	0	0	0	1	0	0	1	1	0	0	1	0	0	1	0	0	0	0	0	0	0	1	0	0	0	1	0	0
Abercombie	1	0	0	1	0	0	0	1	1	0	0	1	0	0	1	0	0	0	0	0	0	0	1	0	1	0	1	0	0
AmericaEagleOutfitters	1	0	0	0	1	0	0	1	1	0	0	1	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	1	0
OldNavy	1	0	0	0	0	1	0	1	1	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0
JackWills	1	0	0	0	1	0	0	1	1	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	1	0	0
media cl.IV	100%	0%	0%	20%	60%	20%	0%	100%	100%	0%	0%	80%	0%	0%	60%	0%	0%	0%	60%	20%	0%	0%	40%	0%	20%	0%	80%	20%	0%
media cl.IV-media glob	23%	-37%	-20%	-7%	20%	-13%	-73%	57%	13%	-13%	-40%	3%	-13%	-17%	50%	0%	0%	-33%	17%	-13%	-13%	-43%	0%	-3%	13%	-3%	53%	-33%	-20%

Cluster V																													
sitoweb	EBUS	FORDIS	MONOMUL	SEGM1	SEGM2	SEGM3	MODEL	SUPPIAN	MODPRE1	MODPRE2	VISINMO	INGIM	OPCOL1	OPCOL2	OPCOL3	OPTAL1	OPTAL2	IMMALTER	DETTAGL	COORDIN	DIFFON	DIFPOMO	POSIM1	POSIM2	NUMIN1	NUMIN2	TOTIM1	TOTIM2	TOTIM3
TheWetSeal	0	0	0	0	0	1	1	0	1	0	0	0	0	1	0	0	0	0	0	1	0	0	1	0	0	0	1	0	0
BostonProper	0	1	0	0	1	0	1	0	1	0	1	1	0	0	0	0	0	0	1	1	0	1	0	0	0	0	1	0	0
Guess	1	0	0	0	1	0	1	0	1	0	0	0	0	1	0	0	0	0	1	1	0	1	0	0	0	0	1	0	0
Gap	1	0	0	0	1	0	1	0	1	0	1	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0
Forever21	1	0	0	0	1	0	1	0	1	0	1	1	0	1	0	0	0	0	1	0	0	1	0	0	0	0	0	1	0
media cl.V	60%	20%	0%	0%	80%	20%	100%	0%	100%	0%	60%	60%	0%	60%	0%	0%	0%	0%	80%	60%	0%	60%	20%	0%	0%	0%	80%	20%	0%
media cl.V-media glob	-17%	-17%	-20%	-27%	40%	-13%	27%	-43%	13%	-13%	20%	-17%	-13%	43%	-10%	0%	0%	-33%	37%	27%	-13%	17%	-20%	-3%	-7%	-3%	53%	-33%	-20%

TedBaker																													
sitoweb	EBUS	FORDIS	MONOMUL	SEGM1	SEGM2	SEGM3	MODEL	SUPPIAN	MODPRE1	MODPRE2	VISINMO	INGIM	OPCOL1	OPCOL2	OPCOL3	OPTAL1	OPTAL2	IMMALTER	DETTAGL	COORDIN	DIFFON	DIFPOMO	POSIM1	POSIM2	NUMIN1	NUMIN2	TOTIM1 T	OTIM2	TOTIM3
TedBaker	1	0	1	1	0	0	1	0	0	1	1	1	0	0	0	0	0	0	1	1	0	1	0	1	0	0	0	1	0
TedBaker	100%	0%	100%	100%	0%	0%	100%	0%	0%	100%	100%	100%	0%	0%	0%	0%	0%	0%	100%	100%	0%	100%	0%	100%	0%	0%	0%	100%	0%
media cl.IV-media glob	23%	-37%	80%	73%	-40%	-33%	27%	-43%	-87%	87%	60%	23%	-13%	-17%	-10%	0%	0%	-33%	57%	67%	-13%	57%	-40%	97%	-7%	-3%	-27%	47%	-20%

ShopEcko																													
sitoweb	EBUS	FORDIS	MONOMUL	SEGM1	SEGM2	SEGM3	MODEL	SUPPIAN	MODPRE1	MODPRE2	VISINMO	INGIM	OPCOL1	OPCOL2	OPCOL3	OPTAL1	OPTAL2	IMMALTER	DETTAGL	COORDIN	DIFFON	DIFPOMO	POSIM1	POSIM2	NUMIN1	NUMIN2	TOTIM1	TOTIM2	TOTIM3
ShopEcko	1	1	0	0	0	1	0	1	0	1	0	1	0	0	0	0	0	1	1	1	0	0	0	0	0	1	0	1	0
Shop Ecko	100%	100%	0%	0%	0%	100%	0%	100%	0%	100%	0%	100%	0%	0%	0%	0%	0%	100%	100%	100%	0%	0%	0%	0%	0%	100%	0%	100%	0%
ShopEcko-media glob	23%	63%	-20%	-27%	-40%	67%	-73%	57%	-87%	87%	-40%	23%	-13%	-17%	-10%	0%	0%	67%	57%	67%	-13%	-43%	-40%	-3%	-7%	97%	-27%	47%	-20%