

A FRAMEWORK FOR THE ASSESSMENT OF ONLINE FASHION RETAILERS: THE FASHION SHOPPER WEB EMPOWERMENT INDEX

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ABSTRACT

The objectives of this paper are:

- 1. To understand customers' value drivers in the on-line fashion shopping experience with regard to the perceived empowerment;*
- 2. To analyze the key factors of an efficient web strategy in the fashion e-retailing context;*
- 3. To build an index for measuring the degree of empowerment provided by online fashion retailers;*
- 4. To provide a rank of a sample of on-line fashion retailers based on their ability to offer high levels of empowerment to fashion web shoppers.*

The adopted methodology is based on an extensive literature review, an online survey distributed to a sample of web shoppers, the definition of an index based on a set of indicators weighted according to the survey results and the evaluation of a sample of website

Keywords— On-line retailers, on-line fashion shopping, customers, purchase experience.

1. LITERATURE REVIEW

a. On-line fashion retailers

The globalization process and the extraordinary growth in the use of Internet is changing retail industry, especially fashion retail, and is creating new growth opportunities for firms [1]. In the actual changing retail environment, online channels are becoming increasingly important [2-5]. In addition, mobiles, tablets and social media are powering the opportunities for traditional retailers to go online [6, 7].

b. On-line purchase experience

The concept of customer experience is valid, and even more relevant, in the online retail context [8]. Novak, Hoffman, and Yung [9] define online customer experience as the “cognitive state experienced during navigation”. Online customer experience is the cumulative outcome of different components of the website company’s offer [10] and is important to deeply understand what are these

elements and how significant their role is in shaping the experience.

When consumers make a purchase online they do not have perfect information about product quality because they cannot touch, smell or feel the product [11]. In particular, when we talk about fashion products, it can be more critical to present and sell on websites if compared to other types of products, because these are products/articles that need to be experienced, and their quality can only be fully determined after purchase [12, 13]. Thanks to the recent predominance of internet retailing, information available on web sites has become a strategic element to determine whether a company will success or fail in the electronic commerce [14].

c. Tools for web site benchmarking

Several papers have been published on web site quality evaluation methodology [15-20]. Many of these publications offer frameworks containing groups of quality dimensions that are similar to the SERVQUAL (Service Quality) model proposed by Parasuraman [21]. Also some publications have proposes evaluation methodologies for specific web sites such as e-government web sites [22, 23] hotel web sites [24], online library web sites [25, 26], and health care web sites [15, 27, 28]. Kuo [29] presented a new point of view by integrating quality function deployment aspects into web site quality assessment methodology. In a number of publications, quantitative methods for Web site quality evaluation are used. Statistical methods are the most widely used assessment tool [18, 20, 30, 31].

2. OBJECTIVES AND METHODOLOGY

The baseline research hypothesis is that the information and services provided by online fashion retailers via the web

are capable of enhancing shoppers’ empowerment in two key dimensions: information held by customers and control of the purchase process with respect to his/her needs.

Starting from literature review, some features of the websites were selected to develop an indicator of

customer web empowerment. This indicator, named F-SWEI (Fashion Shopper Web Empowerment Index), is made of the aggregation of seven weighted components. F-SWEI was used to assess the websites of two categories of fashion e-retailers operating in Italy: pure players and private clubs; the aim was to assess the current state of maturity of their web strategy for an increase of customers' empowerment.

F-SWEI is a multidimensional indicator, composed of a series of 7 web experience elements (sub-indicators) based on the review of the scientific literature according to their role in improving customer empowerment and weighted using the results of our survey addressed to online shoppers.

The index sub components, their references from literature and the main features are shown in table 1

In order to assess the relevance of the subindicators, an online survey was delivered to a sample of 204 autonomous and collaborative Italian respondents who declared themselves to buy fashion online. The survey was aimed to collect the relevance that respondents perceive for each element of the subindicators by using a 1-7 Likert scale. The process allowed to rank the subindicators by determining their relative weights in improving the on line fashion shopper web empowerment.

TABLE 1: THE FSWEI INDEX SUB COMPONENTS

F-SWEI INDEX SUB COMPONENTS AND LITERATURE	MAIN ASSESSED FEATURES
F-SWEI 1 WEB DESIGN [32-37]	<ul style="list-style-type: none"> • Accessibility: Italian language option and usability of the content; • Structure: design of the webpage, layout, sitemap, hyperlinks both to website areas or to corporate website; • Attractiveness: graphical elements, music, animation, and others
F-SWEI 2 PRODUCT DISPLAY [32-34, 37, 38]	<ul style="list-style-type: none"> • Zoom feature, catwalk, many pictures available, pictures differentiated by colors, and rotation effects to view a fashion garment from various angles; • “Refine by” function that allows consumer to filter products (e.g. by price, by brand, by product category, by size, by color, by material).
F-SWEI 3 PRODUCT INFORMATION (Szymanski D. and Hise R. 2000; Burke R. 2002; Srinivasan S., Anderson R. et al. 2002; Tarafdar M. and Zhang J. 2005; McCormick H. and C. 2012)	<ul style="list-style-type: none"> • Information about fabrics, dimensions and usability of the products; • Availability of a detailed size guide; • Instruction on how to wash properly an item; • Warranty information; • Product stock information.

F-SWEI 4 CUSTOMIZATION (Srinivasan S., Anderson R. et al. 2002; Tarafdar M. and Zhang J. 2005; Steenkamp J. and Geyskens I. 2006; Kim J., Kim M. et al. 2007; Lin H. 2007)	<ul style="list-style-type: none"> • Augmented reality tools, • Product suggestion based on previous purchases information; • Outfits advices; • Offer a “wishing list”
F-SWEI 5 PURCHASING PROCESS [34-39]	<ul style="list-style-type: none"> • Different payment methods (e.g. payment by credit card, PayPal, cash upon delivery); • Tracking options for shipments; • Free delivery promotions; • Free return and time extension for exercising the right of return.
F-SWEI 6 COMPANY-CUSTOMER INTERACTION (Kim J., Kim M. et al. 2007; Lin H. 2007)	<ul style="list-style-type: none"> • FAQ service on generic issues (such as payment, shipping, return); • Online chat presence; • Evidence of a telephone channel for generic advice and information; • Presence of a generic emails address for problems and complaints.
F-SWEI 7 WEB 2.0 TOOLS [32, 33, 36, 40]	<ul style="list-style-type: none"> • Presence of the website on different social networks (e.g. Facebook, Instagram, Flickr); • Availability of hyperlinks in the webpage directed to fashion blogs; • Possibility for customers to evaluate both products and website surfing experience through online procedures; • A mobile strategy or the presence of an official app or a mobile simplified version of the website.

By weighting the subindicators, F-SWEI was calculated as follows:

$$\text{F-SWEI} = 12,99\% \text{F-SWEI 1} + 15,54\% \text{F-SWEI 2} + 15,8\% \text{F-SWEI 3} + 13\% \text{F-SWEI 4} + 16,07\% \text{F-SWEI 5} + 13,26\% \text{F-SWEI 6} + 13,34\% \text{F-SWEI 7}$$

3. MAIN RESULTS

The F-SWEI indicator was used in January 2016 to evaluate a sample of fashion websites that comply with all the following criteria:

- E-retailers Business-to-Consumers;
- Non store retailers: pure players and private clubs
- Selling fashion products including clothing, accessories, shoes, bags for women, men and kids (from the list were removed websites focusing only on a specific category such as selling sportswear, wedding dresses, shirts etc.);
- Displayed in Italian language;
- Sold on the Italian market.

Considering the above requirements, the index was calculated for 32 websites and table 2 and 3 show the final ranking (scores are expressed out of 100):

TABLE 2: PURE PLAYER WEBSITES SAMPLE F-SWEI RANKING (SCORES OUT OF 100)

PURE PLAYER	F-SWEI
Zalando (www.zalando.it)	82,6
Theoutnet (www.theoutnet.com)	79,1
Mr Porter (www.mrporter.com)	70,9
Yoox (www.yoox.com)	69,8
Asos (www.asos.com)	69,8
Shopbop (www.shopbop.com)	68,0
Net-a-Porter (www.net-a-porter.com)	66,3
Mytheresa (www.mytheresa.com)	65,1
Zappos (www.zappos.com)	64,5
La Redoute (www.laredoute.it)	64,0
Bluefly (www.bluefly.com)	58,7
Letmeoutlet (www.letmeoutlet.com)	56,4
Spence (www.spence.it)	54,7
Modnique (www.modnique.com)	54,1
Fashiongriffe (www.fashiongriffe.com)	52,9
Fashionis (www.fashionis.com)	51,7
Storytalia (www.storytalia.com)	51,7
Luxyuu (www.luxyuu.net)	50,6
Pricy (www.pricy.it)	49,4

TABLE 3: PRIVATE CLUB WEBSITES SAMPLE F-SWEI RANKING (SCORES OUT OF 100)

PRIVATE CLUB	F-SWEI
Venteprivee (www.it.vente-privee.com)	63,2
Gilt (www.gilt.com)	63,2
Ideel (www.ideel.com)	57,9
Privalia (www.it.privalia.com)	57,9
Amazon Buyvip (www.it.buyvip.com)	55,3
Più Style (www.piustyle.com)	53,9
Rue La La La (www.ruelala.com)	53,9
Myhabit (www.myhabit.com)	51,3
Saldi Privati (www.saldiprivati.com)	51,3
Private Outlet (www.privateoutlet.it)	50,0
Showroomprive (www.showroomprive.it)	50,0
Secret Sales (www.secretsales.com)	48,7
Cocosa (www.cocosa.co.uk)	38,2

4. CONCLUSIONS AND MANAGERIAL IMPLICATIONS

On average, pure players show a higher ability to create empowerment through their websites, while some private clubs still show a limited orientation to empowerment. Both in pure players and private clubs the highest scores are registered in F-SWEI3 (product information), which shows and excellent quality, and in F-SWEI 2 (product display) and F-SWEI 6 (company-customer interaction), whose quality could still be improved.

The most critical subindicators for the pure players are F-SWEI 1 (web design) and FSWEI 5 (purchasing process), while in private clubs the most neglected items are linked to F-SWEI 4 (customization), despite the close relationship which would be expected from these players.

The websites' analysis using the "customer 2.0" perspective shows a certain degree of immaturity that leads to confirm that there are still wide ranges of improvement in the Italian e-commerce context.

REFERENCES

- [1] Shi X. and Wang J., Interpreting Hofstede Model and Globe Model: Which Way to go for Cross-cultural Reserch? *International Journal of Business and Management* 2011. 6(5): p. 93-99.
- [2] J. Dawes and M. Nenycz-Thiel, Comparing Retailer PurchasePatterns and Brand Metrics for In-Store and Online Grocery Purchasing. *Journal of Marketing Management*, 2014. 30: p. 364-382.
- [3] Scott Neslin, et al., Challenges andOpportunities in Multichannel Customer Management. *Journal of Service Research*, 2006. 9(2): p. 95-112.
- [4] Scott Neslin and Venkatesh Shankar, Key Issues in Multichannel Customer Management: Current Knowledge and Future Directions. *Journalof Interactive Marketing*, 2009. 23(1): p. 70-81.
- [5] Jie Zhang, et al., Crafting Integrated Multi-channel Retailing Strategies. *Journal of Interactive Marketing*, 2010. 24(2): p. 168-180.
- [6] Peter C. Verhoefa, P.K. Kannanb, and J. Jeffrey Inman, From Multi-Channel Retailing to Omni-Channel RetailingIntroduction to the Special Issue on Multi-Channel Retailing. *Journal of Retailing*, 2015. 91(2): p. 174-181.
- [7] Kristina Melis, et al., The Impact of the Multi-channel Retail Mix on Online Store Choice: DoesOnline Experience Matter? *Journal of Retailing*, 2015. 91(2): p. 272-288.
- [8] Steve Elliot and Sue Fowell, Expectations versus Reality: A Snapshot of Customer Experience on Internet Retailing. *International Journal of Information Management*, 2000. 20(5): p. 323-337.
- [9] Thomas P. Novak, Donna L. Hoffman, and Yiu-Fai Yung, Measuring the Customer Experience in Online Environments: A Structural Modeling Approach. *Marketing Science*, 2000. 19(1): p. 22-42.
- [10] Shohreh A. Kaynama and Christine I. Black, A Proposal to Assess the Service Quality of Online Travel Agencies: An Exploratory Study. *Journal of Professional Services Marketing*, 2000. 21(1): p. 63-88.
- [11] Pfeffer J. and Salancik G., *The External Control of Organization: A Resource Dependence Perspective* ed. H. Row. 1978, New York.
- [12] Kim M. and Lennon S.J., Television shopping for apparel in the United States: Effects of perceived amount of information on perceived risks and purchase intention. *Family and Consumer Sciences Research Journal* 2000. 28(3): p. 301-331.
- [13] Kim Jung-Hwan, Kim Minjeong, and Sharron J. Lennon, Information components of apparel retail web sites: task relevance approach. *Journal of Fashion Marketing and Management: An International Journal*, 2007. 11(4): p. 494-510.
- [14] Z. Yang. Consumer perceptions of service quality in internet-based electronic commerce. in 30th EMAC Conference. 2001. Bergen.
- [15] Bilsel, R.U., G. Büyüközkan, and D. Ruan, A Fuzzy Preference-Ranking Model for a Quality Evaluation of Hospital Web Sites. *International Journal of Intelligent Systems*, 2006. 21: p. 1181-1197.
- [16] Aladwani, A. and P. Palvia, Developing and validating an instrument for measuring userperceived Web quality. *Information & Management*, 2002(39): p. 467- 476.
- [17] Van Iwaarden, J., et al., Perceptions about the quality of Web sites:Asurvey amongst students at Northeastern

- University and Erasmus University. *Information & Management*, 2004(41): p. 947-959.
- [18] Cox, J. and B. Dale, Key quality factors in Web site design and use: An examination. *International Journal of Quality & Reliability Management*, 2002(19): p. 862-888.
- [19] Van Iwaarden, J. and T. Van derWiele (2002) A study on the applicability of SERVQUAL dimensions for Web sites.
- [20] Kim, S.-E., T. Shaw, and H. Schneider, Web site design benchmarking within industry groups. *Internet Research*, 2003(13): p. 17-26.
- [21] Parasuraman, A., V. Zeithaml, and L. Berry, SERVQUAL: A multi-item scale for measuring consumer perceptions of service quality. *Journal of Retailing*, 1988(64): p. 2- 40.
- [22] Kaylor, C., R. Deshazo, and D. Eck, Gauging e-government: a report on implementing services among American cities. *Government Information Quarterly*, 2001(18): p. 293-307.
- [23] Smith, A., Applying evaluation criteria to New Zealand government websites. *International Journal of Information Management*, 2001. 21: p. 137-149.
- [24] Chung, T. and R. Law, Developing a performance indicator for hotel websites. *International Journal of Hospitality Management*, 2003(22): p. 119-125.
- [25] Chao, H., Assessing the quality of academic libraries on the Web: The development and testing of criteria. *Library & Information Science Research*, 2002(24): p. 169-194.
- [26] Novljan, S. and Z. Maja, Web pages of Slovenian public libraries: Evaluation and guidelines. *Journal of Documentation*, 2004(60): p. 62-76.
- [27] Buccoliero, L., E. Bellio, and A. Prenestini, Patient web empowerment index (PWEI): a tool for the assessment of healthcare providers' web strategies. A first benchmark of Italian NHS Hospitals., in *MEDINFO 2010 Proceedings of the 13th World Congress on Medical Informatics*, C. Safran, S. Reti, and H. Marin, Editors. 2010, IOS PRESS: Amsterdam. p. 38-42.
- [28] Bedell, S., A. Agrawal, and L. Petersen, A systematic critique of diabetes on the World Wide Web for patients and their physicians. *International Journal of Medical Informatics*, 2004(73): p. 687- 694.
- [29] Kuo, Y.-F., Integrating Kano's model into Web-community service quality. *Total Quality Management*, 2004(15): p. 925-939.
- [30] Jeong, M., H. Oh, and M. Gregoire, Conceptualizing Web site quality and its consequences in the lodging industry. *International Journal of Hospitality Management*, 2003(22): p. 161-175.
- [31] Kim, S. and L. Stoel, Dimensional hierarchy of retail Website quality. *Information & Management*, 2004(41): p. 619- 633.
- [32] Srinivasan S., Anderson R., and P. K., Customer loyalty in e-commerce: an exploration of its antecedents and consequences. *Journal of Retailing*, 2002. 78: p. 41-50.
- [33] McCormick H. and L. C., Analysing the influence of the presentation of fashion garments on young consumers' online behaviour. *Journal of Fashion Marketing and Management*, 2012. 16(1): p. 21-41.
- [34] Tarafdar M. and Zhang J., Analysis of critical websites characteristics: a cross category study of successful websites. *Journal of Computer Information Systems*, 2005. 46(2).
- [35] Kim J., Kim M., and K. J., The impact of buying environment characteristics of retail websites *The Service Industries Journal*, 2007. 27(7): p. 865-880.
- [36] Lin H., The impact of website quality dimension on customer satisfaction in the B2C E-commerce context. *Total Quality Management*, 2007. 18(4): p. 363-378.
- [37] Szymanski D. and Hise R., E-satisfaction: an initial examination. *Journal of Retailing*, 2000. 76(3): p. 309-322.
- [38] Burke R., Technology and the customer interface: what consumers want in the physical and virtual store. *Journal of the Academy of Marketing Science*, 2002. 30(4): p. 411-432.
- [39] Steenkamp J. and Geyskens I., How country characteristics affect the perceived value of web sites. *Journal of Marketing*, 2006. 70: p. 136-150.
- [40] Luo J., Ba S., and Z. H., The effectiveness of online shopping characteristics and well-designed websites on satisfaction. *Mis Quarterly*, 2012. 36(4).