Chapter 16
Designing Website Interfaces for M–Commerce With Consideration for Adult Consumers

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ABSTRACT
This chapter analyzes the interaction effects between the principal design cues of a mobile commerce website, such as background/foreground colors, font text and layout. Three experiments have been conducted based on visits to a fictitious m-commerce website. Experiment 1 manipulates the levels of color contrast: positive contrast (light text on a dark background) versus negative contrast (dark text on a light background). In experiment 2, contrast and font have been manipulated with a complete factorial plan: 2 x 2 (negative vs positive contrast x serif font vs sans serif font). Finally, contrast and layout have been manipulated in a third experimental 2 x 2 plan (negative vs positive contrast x dense vs airy layout). This research involved 219 French participants. Results show significant effects of the positive contrast (light text on a dark background) of the mobile website design on the purchase and revisit intentions of adults. Discussions about the interaction effects of design elements, limitations and directions for future research follow.

INTRODUCTION
Mobile commerce (m-commerce), which now accounts for 1.6% of the total retail segment, is expected to reach a market share of 2.7% by 2019 (Criteo, 2015). This way of conducting commercial transactions refers to the one- or two-way exchange of value facilitated by a mobile consumer electronic device (e.g. smartphone or tablet), which is enabled by wireless technologies and communication networks (Mobile...
Marketing Association, 2013). For example, in France m-commerce accounts for 22% of all online transactions with 37% on smartphones and 63% on tablets, according to Criteo (2015). Mobile devices are likely to continue to increase not only in sessions on online retail websites but also in conversion rates, as a larger and larger percentage of consumers continue to become more comfortable completing transactions with their handheld devices (Criteo, 2015). The shopping process of a mobile consumer usually starts by collecting information about the product and analyzing some parameters such as finding out the opinions of other users by using social media. Indeed, the latter have quickly become the most popular destinations on the Internet (Gil-Or, 2010). Then, consumers usually check the purchase price. This means comparing the prices in various online stores, through applications or price comparison websites. Shoppers use their mobile devices to visit comparison-shops, read product reviews and purchase products, browsing social media as a point of departure (Refuel Agency, 2015). They then check the possibility of obtaining discounts while purchasing products and finalize this shopping session with the online purchase of the product after its selection has been made following the analysis of its advantages and price attractiveness (Mobile Institute, 2015). Among mobile consumers, another activity appears to have become increasingly practiced, namely “showrooming”, where people use smartphones while inside traditional shops and search for information about the products on the Internet at the same time, comparing the online and shop prices; in cases where a more attractive offer is found on the Internet, consumers will leave the shop and make their purchase online (Pralat, 2013).

Several research projects on m-commerce in the recent past focused on the adoption, acceptance and use of mobile shopping, and the utilitarian and hedonic factors that might influence it (Li, Dong, & Chen, 2012; Lu & Su, 2009; Wu & Wang, 2005; Holmes, Byrne, & Rowley, 2013). Several attempts were aimed at presenting conceptual reviews of mobile marketing and mobile retailing (e.g. Shankar, Venkatesh, Hofacker, & Naik, 2010; Varnali & Toker, 2010). However, in the context of smartphones, very few recent studies examine consumer attitudes towards smartphone marketing (Persaud & Azhar, 2012). For this reason, the authors consider that e-commerce studies can be applicable in the m-commerce context, considering analogical conditions such as indoor conditions for example.

However, results of previous studies (see for example Pelet & Uden, 2015, Pelet & Papadopoulou, 2015, Pelet & Lecat, 2014) reinforce the importance of taking into account the environment of the m-commerce website where consumers spend time shopping, commenting, sharing, marking, buying, and selling. In particular, the color, font and layout scheme appear to be important aspects of the website interface which should be considered in order to better understand consumer behavior. Holmes et al. (2013) also reported that when shopping on a smartphone, consumers value its convenience and accessibility.

Furthermore, older users represent an important consumer sector with real growth potential (Piqueras-Fiszman, Ares, Alcaide-Marzal, & Diego-Más, 2010). A major factor to be considered remains the quality of the navigation experience in relation to the progressive aging of the population using the Internet, especially when people browse m-commerce websites on their mobile devices. Eyesight deteriorates over the age of 45 (Mutti & Zadnik, 2000). Hence, understanding age-related differences in website navigation via mobile devices is a key issue for designers (Bergstrom, Olmsted-Hawala, & Jans, 2013).

The importance of color, text and layout in website design and its effect on trust, purchase and revisit intentions implied by the results of previous studies (see for example Pelet & Papadopoulou, 2012; 2013; 2014; 2015) led us to further examine the effects of these design assets (background/foreground colors, text and layout) on purchase and revisit intentions as variables in the proposed research model. Hence, the authors developed certain research hypotheses proposing links between these variables, guided by the results of the previously mentioned studies together with the literature. The research hypotheses