

Content Analysis of M-Commerce: A Comparison of Apparel and Non-apparel Sites

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“Mobile is now your store.” Mobile is transforming not only e-commerce, but the entire retail system by revolutionizing the way people shop (Berry, 2014). According to InReality (2015), 3 out of 4 customers shopping in brick-and-mortar stores use mobile while shopping. People use mobile phones for a variety of ways; getting inspiration and ideas, researching product information, accessing reviews, comparing prices and/or making a purchase. According to Deloitte Digital Report (2015), most shoppers interact with brands or products before they actually go to the store. M-commerce is projected to double their retail sales to \$280 billion worldwide (Murphy, 2015) and many retailers prioritize mobile as their key initiative (Berry, 2014). Nonetheless many shoppers report unsatisfactory mobile shopping experience, which ultimately erodes brand loyalty and adversely impacts sales (Faulder, 2015). Despite its rapid growth and rising importance in the retail industry, a comprehensive study on mobile commerce sites is largely lacking. Therefore, this exploratory research aimed to conduct a systematic and comprehensive assessment on mobile sites’ performance in facilitating shopping. Gronroos’ (1984) service quality model and e-service environment research by Kim, Kim and Kandampully (2007) guided the conceptual development of the current study. Kim et al. conducted a comprehensive assessment on the five e-service dimensions (convenience, customization, information, communication and website aesthetics) and offered empirical support and validation. To extend existing research based on apparel sites, the purpose of this study was to examine whether availability of service attributes differ between apparel and non-apparel sites.

Method. Mobile sites (N=194) from Internet Retailer (2011) were selected for content analysis. The coding guide published in Kim et al. (2007) was modified to fit to the context of m-commerce and capture new service attributes (e.g., social networking). The revised coding guide followed the original five dimensions with one change. Addressing the growing importance of digital visual merchandising, the website aesthetics dimension was expanded to include product presentation and labeled as visual merchandising. After establishing adequate inter-coder reliability using 10 mobile sites, one coder content analyzed the remaining 184 sites. The final m-commerce coding guide included the five dimensions including 61 service attributes; convenience (13 attributes), customization (14), information (5), communication (20) and visual merchandising (9). Most items were evaluated as available (1) or unavailable (0). Higher scores indicate greater availability of service attributes supporting each dimension.

Results and conclusion. The mobile sites analyzed included both apparel (n=102) and non-apparel (n=92). Non-apparel mobile sites sold a variety of products from books to consumer electronics to household items. To compare how apparel and non-apparel mobile sites perform, ANOVA was conducted. The results showed a significant difference between apparel and non-apparel mobile sites for the convenience ($p<.001$), customization ($p<.001$) and communication

($p < .05$) dimensions. Apparel mobile sites outperformed non-apparel mobile sites on all three dimensions, suggesting that apparel mobile sites were more convenient, better customized and provided more information than non-apparel mobile sites.

The Chi-square goodness-of-fit tests were conducted to determine specific mobile service attributes that differ in their distributions of availability between apparel and non-apparel mobile sites. For the convenience dimension, the distribution of the three mobile service attributes including site map ($\chi^2=5.74, p < .05$), guest checkout ($\chi^2=5.61, p < .05$), and advanced search function ($\chi^2=5.95, p < .05$) differed. For the customization dimension, the five service attributes including wish list ($\chi^2=8.07, p < .01$), account management ($\chi^2=16.70, p < .001$), e-gift card service ($\chi^2=11.78, p < .0001$), online store credit card ($\chi^2=3.38, p = .06$) and free shipping ($\chi^2=8.21, p < .01$) differed. For the information dimension, two attributes including the availability of order status tracking ($\chi^2=10.44, p < .001$) and availability of privacy and security statement ($\chi^2=5.32, p = .06$) differed. For the communication dimension, the four attributes including email service ($\chi^2=12.02, p < .0001$), social networking ($\chi^2=8.80, p < .001$), consumer reviews ($\chi^2=6.46, p < .01$), and consumer rankings ($\chi^2=5.45, p < .05$) differed. For the visual merchandising dimension, zoom function ($\chi^2=11.47, p < .001$) differed. All these attributes were more frequently available on apparel mobile sites than non-apparel sites. Perhaps strong e-commerce business strategies for apparel firms help build effective mobile sites facilitating mobile shopping experience. Overall the findings further suggest that certain service attributes (e.g., guest checkout, item availability, wish list, suggested items) were frequently unavailable, which is consistent with existing e-commerce research findings. The findings of this exploratory study offer a useful snap shot of the current performance of m-commerce sites for both scholars and practitioners. Firms that wish to expand into m-commerce or improve existing m-commerce operation can benefit from the findings of the current study that offers a systematic and comprehensive assessment on service attributes available on mobile sites. Future research is needed to examine consumer expectation and evaluation of m-commerce service attributes.

References

- Berry, A. (2014). Infographic: Mobile movers and shakers in retail. Retrieved from <https://nrf.com/news/infographic-mobile-movers-and-shakers-retail>
- Faulder, K. (2015). Apple, Best Buy and Kohl's deliver the most satisfactory mobile shopping experiences... Retrieved from <https://www.mobiquityinc.com/apple-best-buy-and-kohls-deliver-most-satisfactory-mobile-shopping-experiences-finds-new>
- Gronroos, C. (1984). A service quality model and its marketing implications. *European Journal of Marketing*, 18(4), 36-44.
- Internet Retailer (2011). *Mobile Commerce Data Book*. Chicago, IL: Vertical Web Media LLC.
- Kim, J., Kim, M., & Kandampully, J. (2007). Buying environment characteristics of retail websites. *Service Industries Journal*, 27(7), 865-880.
- InReality (2015). Mobile trends. Retrieved from <http://www.inreality.com/resources/report/20150331/>
- Murphy, I. (2015). Why shopping apps are struggling to break out. <http://www.retaildive.com/news/why-shopping-apps-are-struggling-to-break-out/402575/>