

## Instagram As a Search Engine: Can Browsers Convert to Shoppers?

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**Research purpose and significance.** As digital media continues to change the way information is reported, consumed, and shared, users discover information in a more visual and engaging manner (Park et al., 2016; “YouTube,” n.d.). The progressive popularity of visual-focused social media such as YouTube and Instagram has developed consumers’ use of these channels as information search engines, while common outlets such as AOL, Bing, and Yahoo! become a less attractive approach (DiSilvestro, 2016; “YouTube,” n.d.). This new phenomenon leads to our research interest in understanding key factors that influence consumers’ perception of social media as a search engine. Thus, this study identifies indicators of Instagram’s content quality (i.e., visual aesthetics, textual information, and timeliness) and system quality (i.e., intuitiveness, interactivity) and develops a research model that depicts consumers’ experience of social media as a search engine. We adopt the theory of flow as a theoretical framework, and investigate how consumers’ flow experience in information search on Instagram converts browsers into shoppers with intention to purchase.

**Conceptual framework/hypotheses development.** Drawing from Csikszentmihalyi’s (1990) definition of flow theory, this study explores how “people [become] so intensely involved in an activity that nothing else seems to matter; the experience itself is so enjoyable that people will do it even at great cost, for the sheer sake of doing it” (p. 4). Based on this reasoning, Instagram content quality and system quality are expected to encourage user motivations through flow states and ultimately create gratifying experiences. Previous studies support that users’ exposure to informational content (i.e., textual information) and visual aesthetics in social media platforms generate positive online experiences and attitudes (De Vries, Grensler, & Leeflang, 2012; Valacich et al. 2007). Thus, we hypothesize that Instagram’s content quality such as (a) visual aesthetics, (b) textual information, and (c) timeliness of content will have a positive influence on flow experience (H1a-c), while mental simulation will mediate the effects of (a) visual aesthetics and (b) textual information on flow experience (H2a-b). Huang (2003) found that system quality such as interactivity and complexity influences flow experience. Thus, we hypothesize that Instagram’s system quality such as (a) intuitiveness and (b) interactivity (H3a-b) will have a positive influence on flow experience, while perceived difficulty of task will mediate these relationships (H4a-b). Furthermore, user’s online flow experience has been proven to influence behavior intention (Hsu & Lu, 2004). To test how flow experience on Instagram influences consumers’ conversion, we hypothesize users’ flow experience will increase purchase intention after browsing Instagram for information (H5).

**Method and Results.** An online survey was used to collect the data in Amazon Mechanical Turk. A total of 200 responses were used for data analysis after excluding incomplete responses.

Participants were given a shopping scenario and instructed to browse their Instagram account to search information for running shoes. The product was chosen for its gender-neutral interest. Participants then answered survey questions based on their browsing experience. The survey items were adapted from existing literature and measured using 7-point Likert scales, and demographic items (e.g., age, gender) were also included in the survey. Using SPSS 23.0, descriptive statistics were conducted and internal reliabilities were satisfactory ( $\alpha = .84-.94$ ). The measurement model and hypotheses were tested using AMOS 23.0, and the results of measurement model had an acceptable fit ( $\chi^2 = 868.9$ ,  $df = 548$ ,  $p < .001$ ,  $CFI = .94$ ,  $RMSEA = .06$ ,  $NFI = .85$ ). Subsequent structural model resulted in an acceptable fit ( $\chi^2 = 885.48$ ,  $df = 532$ ,  $p < .001$ ,  $CFI = .93$ ,  $RMSEA = .05$ ,  $NFI = .85$ ). SEM results showed that all the hypotheses were supported except H1c ( $\beta = .19$ ,  $p = .12$ ) that predicted a positive impact of timeliness of content on flow experience. As predicted, quality of visual aesthetics ( $\beta = .43$ ,  $p = .000$ ) and textual information ( $\beta = .27$ ,  $p = .05$ ) led to respondents' flow experience ( $\beta = .48$ ,  $p = .000$ ), supporting H1a-b. In addition, perceived interactivity on Instagram ( $\beta = .67$ ,  $p = .000$ ) engendered respondents' flow experience ( $\beta = .40$ ,  $p = .05$ ), supporting H3b. Lastly, respondents' flow experience increased purchase intention after browsing ( $\beta = .40$ ,  $p = .000$ ), supporting H5. Hayes (2012) PROCESS analysis was conducted to test mediating effects of mental simulation (H2a-b) and difficulty of tasks (H4a-b). The results revealed that mental simulation and perceived difficulty of task partially mediate the effects of content quality (i.e., visual aesthetics, textual information) and system quality (i.e., interactivity) on flow experience. Thus, H2a-b and H4b were supported.

**Discussion.** Although substantial research has been done relating to consumers' flow experience in online settings (e.g., Baker, 2015; Islam, Kang, & Yang, 2013; Sherry, 2004), only recent studies have begun to investigate flow in social media domains (i.e., Facebook and Twitter). Findings from this study demonstrated the effectiveness of social media, in particular Instagram, as a search engine, and the importance of flow experience in consumers' conversion into potential shoppers. Particularly, the exploration of flow on a continuously evolving platform such as Instagram contributes to the limited research available regarding image-based social media platforms. By examining Instagram's content quality and system quality, brands/firms can effectively create brand messages that eventually contribute to users' flow experience and behaviors (e.g., extended search intention, purchase intention, and satisfaction). Findings from this study are valuable for researchers and marketers in that our research model demonstrated key factors that influence consumers' media experience and the significant role of popular social media such as Instagram as a search engine which can be used for a brand's conversion strategy. Theoretical and managerial implications are discussed.

*References available upon request.*