



Impact of Digital Marketing on Consumer Buying Behaviour

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Peer Review Information	Abstract
<i>Submission: 13 Jan 2018</i> <i>Revision: 28 Feb 2018</i> <i>Acceptance: 15 March 2018</i> Keywords <i>Digital marketing, Consumer buying behaviour, Social media marketing, Electronic word-of-mouth, Purchase intention.</i>	Digital marketing has transformed the consumer decision process by expanding access to product information, peer opinions, brand interactions and personalized promotional messages. This methodology paper develops a structured research design for examining the impact of digital marketing on consumer buying behaviour, with specific attention to social media marketing, online advertising, electronic word-of-mouth (eWOM), online reviews, consumer trust and brand engagement. The study proposes a quantitative, cross-sectional survey of digitally active consumers and a conceptual model in which digital marketing exposure affects purchase intention and buying behaviour directly and indirectly through trust, engagement and brand image. The design integrates evidence from e-commerce acceptance, online review, social networking and digital advertising research published. Prior studies demonstrate that trust and perceived risk shape online transactions, online consumer reviews influence purchase decisions, social-media marketing activities can strengthen customer responses and purchase intention, and Facebook advertising can enhance brand image and purchase intention. A structured questionnaire using five-point Likert scales is recommended, followed by reliability analysis, correlation, multiple regression and, where sample size permits, structural equation modelling. Because no primary dataset is supplied, the Results section reports an illustrative pattern of expected findings rather than fabricated empirical outcomes. The proposed methodology provides a replicable framework for evaluating how digital touchpoints influence consumer information search, evaluation, intention and final purchase behaviour.

Introduction

Digital technologies have changed marketing from a largely one-way communication process into an interactive environment in which consumers search, compare, comment, recommend and purchase across websites, search engines, social networks and online marketplaces. The consumer no longer depends only on firm-generated advertisements; buying decisions can be shaped by online reviews, peer recommendations, brand communities and personalized messages encountered at several stages of the decision journey. This change has

made digital marketing an important explanatory factor in contemporary consumer behaviour.

Earlier e-commerce research established that online purchasing depends strongly on perceived usefulness, trust and perceived risk. Pavlou (2003) showed that trust and risk can be integrated with technology-acceptance variables to explain intention to transact online. As digital environments became more social, peer communication gained additional influence. Chen and Xie (2008) characterized online

consumer reviews as a new element of the marketing communication mix, while Litvin, Goldsmith, and Pan (2008) emphasized the importance of electronic word-of-mouth in purchase-related information search. These mechanisms suggest that digital marketing affects consumers not only through direct advertising but also through interactive and consumer-generated information.

The present paper therefore develops a methodology for studying the impact of digital marketing on consumer buying behaviour. It treats digital marketing as a multidimensional construct involving social-media communication, online advertising and promotions, and eWOM/online reviews. Consumer buying behaviour is represented by information-search intensity, product evaluation, purchase intention and reported purchase choice. Trust, brand image and engagement are considered important perceptual mechanisms linking digital exposure to behavioural outcomes.

Literature Review

Digital marketing research before 2016 consistently indicated that online environments can influence consumers through information, interaction, social proof and relationship formation. A foundational stream concerns trust and transaction acceptance. Pavlou (2003) demonstrated that online transaction intention is affected by usefulness, ease of use, trust and perceived risk. This is important for digital marketing because advertisements and brand content are unlikely to convert into purchases when consumers do not trust the digital channel or perceive excessive transaction risk.

A second stream concerns electronic word-of-mouth and online reviews. Chen and Xie (2008) argued that online consumer reviews operate as a distinct communication element that can affect purchase decisions. Litvin et al. (2008) similarly described eWOM as a powerful form of online interpersonal influence, particularly when products or services are difficult to evaluate before purchase. Trusov, Bucklin, and Pauwels (2009) found that word-of-mouth can generate substantial and persistent effects relative to traditional marketing in an online social-network setting. Together these studies support the proposition that consumers increasingly

incorporate peer-generated digital information into product evaluation and purchase decisions.

Social-media marketing introduced additional mechanisms. De Vries, Gensler, and Leeflang (2012) showed that the characteristics of brand posts, including interactivity and vividness, affect audience responses on brand fan pages. Kim and Ko (2012) found that perceived social-media marketing activities were positively related to customer-equity drivers and purchase intention in the luxury-fashion context. Laroché, Habibi, Richard, and Sankaranarayanan (2012) showed that social-media-based brand communities can strengthen value-creation practices, brand trust and brand loyalty. These results suggest that the influence of digital marketing is partly relational: consumers respond not only to promotional offers but also to the quality of interaction and community surrounding a brand.

Consumer engagement provides a further explanation for behavioural effects. Hollebeek, Glynn, and Brodie (2014) conceptualized consumer brand engagement in social media as a combination of cognitive processing, affection and activation, and linked engagement with brand-related outcomes. Hajli (2014) demonstrated that social interaction in digital environments can facilitate trust and intention to buy. This implies that digital marketing may influence consumer behaviour through a sequence in which marketing content attracts attention, interactive experiences create engagement, and trust or brand perceptions lower uncertainty about the purchase.

Empirical evidence closer to the buying decision is also available. Balakrishnan, Dahnil, and Yi (2014) reported that eWOM, online communities and online advertising were associated with purchase intention and brand loyalty among Generation Y. Dehghani and Tumer (2015) found that Facebook advertising affected brand image and brand equity, which in turn contributed to purchase intention. Noreen and Han (2015) observed that social-media marketing was associated with purchase intention and that eWOM could be more influential than social-network advertising. Although these studies used different contexts and samples, collectively they justify a model in which multiple digital-marketing channels influence purchase-related attitudes and behaviour.

Table 1. Selected Literature on Digital Marketing and Consumer Behaviour

Study	Digital factor	Main contribution to the proposed study
Pavlou (2003)	Trust, risk, e-commerce acceptance	Trust and perceived risk explain online transaction intention.

Chen & Xie (2008)	Online consumer reviews	Reviews act as a marketing communication source affecting purchase decisions.
Trusov et al. (2009)	Online word-of-mouth	WOM can produce persistent effects in online acquisition.
Kim & Ko (2012)	Social-media marketing	SMM activities relate to customer-equity drivers and purchase intention.
Hajli (2014)	Social interaction and trust	Social media can build trust and intention to buy.
Dehghani & Tumer (2015)	Facebook advertising	Digital advertising influences brand image, equity and purchase intention.

Prior research establishes several digital mechanisms, but many studies focus on one platform, one product category or one behavioural outcome. A methodology that combines firm-generated digital marketing (social-media content and online advertising) with consumer-generated communication (eWOM and online reviews) can provide a more integrated view of buying behaviour. The proposed study therefore examines both direct effects on purchase intention and indirect effects through trust, brand image and engagement.

The specific objectives are to:

measure consumers' exposure to and perceptions of social-media marketing, online advertising/promotions, and eWOM/online reviews;
examine the relationship between digital marketing and consumer purchase intention/buying behaviour;
test whether trust, brand image and engagement are associated with stronger buying responses;
and

identify which digital-marketing component contributes most strongly to purchase-related behaviour.

Conceptual Framework and Hypotheses

The conceptual framework assumes that digital marketing influences the consumer decision journey through both informational and relational routes. Online advertisements and promotions provide firm-controlled information and incentives; social-media marketing adds interaction and engagement; eWOM and reviews contribute social proof and perceived credibility. These digital inputs shape consumer perceptions, particularly trust, engagement and brand image, which then influence purchase intention and reported buying behaviour. The framework is consistent with evidence on trust in e-commerce (Pavlou, 2003), eWOM (Litvin et al., 2008; Trusov et al., 2009), social-media marketing (Kim & Ko, 2012), engagement (Hollebeek et al., 2014) and digital advertising (Dehghani & Tumer, 2015).

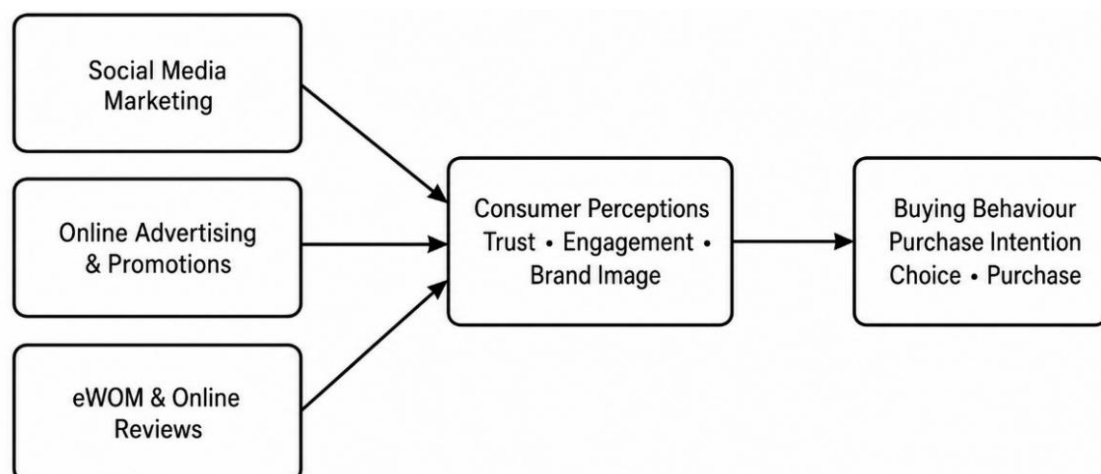


Figure 1. Conceptual Framework for the Impact of Digital Marketing on Consumer Buying Behaviour

The model proposes that social-media marketing, online advertising/promotions and eWOM/online reviews influence buying

behaviour through consumer trust, engagement and brand image.

The following hypotheses can be tested:

H1: Perceived social-media marketing effectiveness has a positive effect on consumer purchase intention.

H2: Online advertising and promotional effectiveness have a positive effect on consumer purchase intention.

H3: eWOM and online-review credibility have a positive effect on consumer purchase intention.

H4: Consumer trust, brand image and engagement are positively associated with buying behaviour.

H5: The combined digital-marketing construct significantly predicts consumer buying behaviour.

Methodology

1. Research Design

A quantitative, explanatory and cross-sectional research design is proposed. The design is appropriate because the purpose is to estimate the direction and strength of relationships among measurable constructs rather than to manipulate marketing exposure experimentally. A structured survey enables standardized measurement across a comparatively large group of consumers and supports statistical testing of the hypotheses.

2. Population, Sampling and Sample Size

The target population consists of adult consumers who use the internet and have encountered digital marketing or searched for product information online during the previous six months. Respondents may be recruited from universities, workplaces, retail customer communities and online consumer groups to obtain variation in age, occupation and purchasing experience. A purposive screening question should first confirm recent digital-shopping or digital-marketing exposure, followed by convenience or stratified convenience sampling. For multiple regression with several predictors, a minimum of

approximately 200 usable responses is recommended; a target of 250-300 responses provides greater stability and also supports exploratory factor analysis. If structural equation modelling is planned, the final sample should preferably exceed 250 cases.

3. Instrument Development and Measurement

The questionnaire should contain four sections. Section A records demographic information and frequency of internet/social-media use. Section B measures the independent variables: social-media marketing, online advertising/promotions, and eWOM/online reviews. Section C measures consumer perceptions such as trust, engagement and brand image. Section D measures purchase intention and self-reported buying behaviour. Items should be adapted from concepts validated in earlier digital-marketing studies rather than copied without contextual adjustment. The social-media component can reflect interactivity, informativeness and relevance suggested by de Vries et al. (2012) and Kim and Ko (2012); engagement items can follow the cognitive, affective and activation dimensions of Hollebeek et al. (2014); trust items can reflect the e-commerce acceptance logic of Pavlou (2003); and purchase-intention measures can be aligned with Kim and Ko (2012), Balakrishnan et al. (2014), and Dehghani and Tumer (2015).

All substantive items should be rated on a five-point Likert scale from 1 = strongly disagree to 5 = strongly agree. Example items include: "Brand content on social media provides useful product information," "Online advertisements increase my interest in advertised products," "I consider online reviews when evaluating a product," "I trust product information from digital channels when it is consistent across sources," and "Digital information increases my likelihood of purchasing the product." A pilot test with 20-30 respondents should be conducted to assess clarity, wording and completion time.

Table 2. Operationalization of Study Variables

Construct	Indicative dimensions	Measurement	Expected role
Social-media marketing	Interactivity, relevance, informativeness, content appeal	4-6 Likert items	Independent variable
Online advertising/promotions	Attention, usefulness, promotional appeal, personalization	4-5 Likert items	Independent variable
eWOM/online reviews	Credibility, usefulness, valence, reliance on reviews	4-6 Likert items	Independent variable
Trust / brand image / engagement	Confidence, positive brand perception, cognitive-affective activity	6-9 Likert items	Mediator / explanatory factors

Consumer buying behaviour	Purchase intention, evaluation, choice, reported purchase	4-6 items	Likert	Dependent variable
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4. Data Collection Procedure

After pilot revision, the questionnaire may be distributed physically and electronically. Respondents should receive a short information statement explaining the academic purpose, voluntary nature of participation, anonymity and estimated completion time. No personally identifying information is required. To reduce common-method bias, the questionnaire should separate predictor and outcome blocks, use neutral instructions and avoid leading phrasing. Data collection can remain open until the target number of complete responses is reached.

5. Data Analysis Plan

Data analysis should proceed step by step. First, responses are screened for missing values, duplicate submissions, straight-lining and implausibly short completion times. Second, descriptive statistics summarize respondent characteristics and item distributions. Third, internal consistency is assessed using Cronbach's alpha, with values around 0.70 or above generally treated as acceptable for multi-item

scales. Fourth, exploratory factor analysis can evaluate whether items load on the expected constructs; factor loadings below a reasonable threshold may be reviewed or removed.

Fifth, Pearson correlations examine bivariate relationships among digital-marketing dimensions, perceptual variables and buying behaviour. Sixth, multiple regression estimates the predictive effect of social-media marketing, online advertising/promotions and eWOM/reviews on purchase intention. Standardized beta coefficients enable comparison of relative predictor strength. A second regression model can add trust, brand image and engagement to assess whether the digital-marketing coefficients change when consumer perceptions are considered. If the sample and measurement quality are adequate, structural equation modelling can be used to test direct and indirect paths in the conceptual framework. Statistical significance may be evaluated at $p < .05$, while effect sizes, confidence intervals and model fit should also be reported.

Table 3. Step-by-Step Statistical Analysis

Step	Analysis	Purpose / decision rule
1	Data screening	Remove invalid/duplicate cases; inspect missing data and outliers.
2	Descriptive statistics	Profile sample and summarize mean/SD of constructs.
3	Reliability analysis	Cronbach's alpha approximately ≥ 0.70 preferred.
4	Factor analysis	Check whether items represent intended constructs.
5	Correlation	Assess direction/strength of bivariate relationships.
6	Multiple regression	Test H1-H5 and compare standardized effects.
7	SEM / mediation (optional)	Assess direct and indirect effects through trust, image and engagement.

6. Reliability, Validity and Ethical Considerations

Content validity should be supported by grounding the questionnaire in established literature and obtaining review from at least two faculty members or marketing researchers. Construct validity can be examined using factor analysis. Convergent validity is indicated when items intended to measure the same construct load together, whereas discriminant validity requires empirically distinct constructs. Reliability should be assessed separately for each scale. Ethical safeguards include informed consent, voluntary participation, anonymity,

secure storage of responses and reporting only aggregated results.

Results

No primary dataset was supplied for this methodology paper; therefore, numerical findings below are illustrative of the pattern that would be tested and should not be reported as actual empirical results. Based on the reviewed literature, the expected result is a positive association between the overall digital-marketing construct and purchase intention/buying behaviour.

Table 4. Illustrative Hypothesis-Testing Pattern

Hypothesis	Expected relationship	Illustrative interpretation
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H1	Social-media marketing → purchase intention (+)	Interactive and relevant brand content should increase buying interest.
H2	Online advertising/promotions → purchase intention (+)	Useful or attractive digital advertising should support consideration and intention.
H3	eWOM/reviews → purchase intention (+)	Credible reviews and peer opinions should influence evaluation and choice.
H4	Trust/image/engagement → buying behaviour (+)	Favourable perceptions should reduce uncertainty and strengthen response.
H5	Combined digital marketing → buying behaviour (+)	The integrated model should explain meaningful variance in purchase outcomes.

Results

The expected ordering of effects is that eWOM/online reviews and social-media marketing will be particularly important when consumers perceive the information as credible and useful. This expectation follows Chen and Xie (2008), Litvin et al. (2008) and Trusov et al. (2009), who highlight the decision relevance of online interpersonal influence, and Hajli (2014), who links social interaction to trust and intention to buy. Digital advertising is also expected to have a positive effect, although the strength of the effect may depend on whether consumers perceive advertising as relevant rather than intrusive. Dehghani and Tumer (2015) provide direct support for the role of Facebook advertising in shaping brand-related perceptions and purchase intention.

Trust, brand image and engagement are expected to function as explanatory mechanisms rather than merely parallel predictors. For example, a consumer may repeatedly encounter a brand through social media, but purchase intention should be stronger when the content generates cognitive or emotional engagement (Hollebeek et al., 2014) and when digital interaction contributes to trust (Laroche et al., 2012; Hajli, 2014). The expected model therefore does not assume that exposure alone guarantees purchase. Instead, the quality and credibility of the digital experience are central to behavioural influence.

Demographic and usage variables may also produce differences. Younger or highly digitally active consumers can be more accustomed to using social platforms and online reviews during product search, whereas less frequent users may rely more heavily on offline information. Such group differences should be treated as secondary analyses unless they were specified in the original objectives. The primary interpretation should focus on the magnitude, direction and statistical significance of digital-marketing effects on purchase-related outcomes.

Conclusion and Discussion

This methodology paper presents an integrated design for studying the impact of digital marketing on consumer buying behaviour. The literature up to 2015 shows a clear progression from early e-commerce acceptance research toward richer models of online reviews, social interaction, engagement and digital advertising. Trust and perceived risk are central to online transaction intention (Pavlou, 2003); reviews and eWOM contribute decision-relevant information (Chen & Xie, 2008; Litvin et al., 2008); social-media interactions can build customer equity, engagement and brand trust (Kim & Ko, 2012; Laroche et al., 2012; Hollebeek et al., 2014); and digital advertising can influence brand image and purchase intention (Dehghani & Tumer, 2015). The proposed quantitative survey translates these findings into a practical research framework. By measuring social-media marketing, digital advertising, eWOM/reviews, trust, brand image, engagement and purchase behaviour within one model, the study can identify both the overall impact of digital marketing and the specific digital mechanisms most strongly associated with consumer decisions. The step-by-step analysis plan supports reliability testing, factor assessment, correlation, regression and optional mediation/SEM analysis. From a managerial perspective, the framework implies that digital marketing should not be evaluated only by reach or impressions. Marketing activities are more likely to influence buying when they provide useful information, facilitate credible consumer interaction and strengthen trust and engagement. Managers should therefore combine paid digital advertising with responsive social-media content and active management of online reviews. From a research perspective, future studies can improve causal inference by using longitudinal designs, experiments or actual purchase data rather than relying solely on self-reported cross-sectional responses. The proposed methodology nevertheless provides a

concise and replicable basis for examining how digital marketing shapes consumer buying behaviour.

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