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Abstract

This chapter proposes a conceptual framework to encapsulate our understanding of how consumers' search behavior influences the content in search advertising in the hotel industry. We suggest that firms can better match consumers' preferences and needs by embracing a trade-off between price information and product information in search advertising. The dynamics of this trade-off is driven by consumers' prior product knowledge and the type of advertisers in the competitive market. Our framework suggests that travel agents tend to focus more on price advertising in their search ads, whereas hotels do not change their level of price advertising in a competitive market. More interestingly, competition from travel agents and hotels has different effects on the content of search advertising by travel agents and hotels. Our study provides critical insights in responding to different market conditions, which enhance the understanding of firms' behaviors in designing their search advertising content.

Keywords

search, behavior, advertising, impact, hotel, consumer, industry

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The Impact of Consumer Search Behavior on Search Advertising in the Hotel Industry

Abstract

This paper proposes a conceptual framework to encapsulate our understanding of how consumers' search behavior influences the contents in search advertising in a competitive market. An investigation of search advertisements ($n=3,835$) shows that hotels provide significantly more price information in their search advertising to consumers. In addition, the analysis of search keywords indicates that consumers' have prior product knowledge. Overall, the study provides critical insights that firms can better match consumers' preferences and needs by embracing a trade-off between price information and product information in search advertising. The dynamics of this trade-off is driven by the type of advertiser in the competitive market. The findings indicate that channel intermediaries tend to focus more on price advertising in their search ads, whereas brand suppliers do not change their level of price advertising in a competitive market. More interestingly, competition from intermediaries and brand suppliers has different effects on the content of search advertising by intermediaries and brand suppliers. These findings provide critical insights in responding to different market conditions, which enhance the understanding of firms' behaviors in designing their search advertising content.

Introduction

With the ever increasing growth of the search engine advertising (SEA), it is important to understand the dynamics of consumer search behavior in hotel industry. In 2013, SEA across various interactive platforms collectively grew by 32.4% and reshaped the focus of the global advertising industry (Nielsen 2013). In the United States, the growth accounted for 46% which is equivalent to \$16.9 billion worth of industry (IAB 2012). As consumers spend more time online to research their buying options, search advertising has become crucial to provide real time value to customers (Yao and Mela 2011). The basic difference between SEA and traditional advertising lies in customization in order to communicate and deliver differentiated value to customers based on the unique needs. With a focus to serve customers with what they want and when they want, SEA is increasingly focusing on consumer search behavior in matching their offers. However, despite widespread research on consumer search behavior, it continues to be a challenge for marketers in hotel industry how to better match the needs and preferences of target market. To cope with such challenges, this study proposes a conceptual framework extending the economic models of advertising content (Anderson and Renault 2006; Grossman and Shapiro 1984; Nelson 1970, 1974).

In this paper, we conceptualize the dynamics of SEA in hotel industry for enhanced service performance by aligning concepts on prior knowledge and price acceptability, prior knowledge and information search, competition and advertiser types. By presenting this conceptual framework, our research contributes to SEA in hotel industry in multiple ways. First, the study contributes to the literature investigating the impact of search behavior on hotel industry. Our works extend this stream of literature by examining the relationships among proposed concepts. The framework contributes to academics and practitioners

understand how hotels decide, on the basis of how consumers' searches, what to advertise in their search advertising to better match the preferences and needs of target consumers.

Specifically, we argue that what hotels advertise should depend on consumers' prior information, search keywords, competition and advertiser types. With regard to information, the study proposes that the more information consumers have, the less price information firms should include in an ad. The study also puts forward the arguments that search keywords can indicate consumers' degree of prior knowledge. Finally the study explores that competition among advertisers varies greatly across keywords, therefore, firms must decide what to advertise in different competitive settings to achieve their goals, such as attracting their target consumers and creating brand loyalty, value, or image. In this paper, we examine how market competition affects what firms advertise in their search ads (price advertising versus brand advertising) and how the impact depends on advertiser type (brand supplier versus channel intermediary). Hence, our study adds to the search advertising literature by studying the advertising behaviors of firms and the motives underlying their behaviors.

2. Conceptual Model

The informative view of advertising focuses on providing direct or indirect information about the price and attributes of a product (Anderson and Renault 2006; Grossman and Shapiro 1984; Nelson 1970, 1974). In matching buyers' needs with seller's offers, information needs from buyers' perspectives play an instrumental role. Because, search engine reflects not only an individual's needs (Hosanagar and Cherepanov 2008) but also the demographic profile (Agarwal et al. 2011), which influence buying decision behavior on product attributes and price. This process also helps contribute to the learning curve for firms as they constantly try

to match buyers' needs. With this improved matching, consumers can make better purchase decisions, and firms can attract the right consumers to click their ads, leading to higher conversion rates and profits. Firms can include information about price and product attributes in their ads (Resnik and Stern 1977). Price information in advertising informs consumers about product prices or signals a pricing strategy. Content about product attributes can help consumers learn which products best match their needs or tastes and can be used by firms to change consumers' preferences and tastes, thus creating brand loyalty (Baye & Morgan, 2009). However, because search engines often limit the space in a search advertisement (AdWord 2013), firms must determine the key information they want to provide in the ad. In this paper, we examine the impact of what consumers search on the amount of price information in search advertising.

2.1 Prior knowledge and price acceptability

The extant literature sheds adequate light on the impact of prior knowledge on buying decision process (see Table 1). For example, Hong and Sternthal (2010) show that consumers' evaluations can be improved by establishing a fit between prior knowledge and message processing. In a similar spirit, the impact of prior knowledge on the acquisition of information about new products was explored by Wood and Lynch (2002) who find that knowledgeable consumers learn less about a new product. These findings were also reflected by Rohem and Sternthal (2001) who confirm that the effectiveness of a new product appeal could be enhanced by prior knowledge using an analogy between a familiar product and a new product. They find that the effect is influenced by the consumer's ability and resources allocated to completing the task.

Table 1: Prior knowledge and buying decision process

Concepts	Studies
Prior knowledge and new products purchase	Wood and Lynch 2002
Prior knowledge and product category evaluation	Hong and Sternthal (2010)
Prior knowledge and new product appeal	Rohem and Sternthal (2001)
Prior knowledge and price acceptability	Rao and Sieben (1992)
Prior knowledge of consumers uncertainty and product quality	Ford and Smith (1987)

Rao and Sieben (1992) extend this line of research by linking prior knowledge on with consumer price acceptability. They also put forward the argument that a lower rating of a product's quality is correlated with lack of a prior product knowledge due to uncertainty in evaluations, which confirm Ford and Smith's (1987) research findings. It might also result into low acceptable price-range endpoints (price limits). Using data from two experiments, these authors find that price limits are lowest for low-knowledge subjects. In other words, less knowledgeable consumers have higher price consciousness. Price consciousness has been defined in the marketing literature as *"the degree to which the consumer focuses exclusively on paying low prices"* (Lichtenstein et al. 1993, p.235). Firms can increase their ads' match with these price-conscious consumers by providing more price information in their ads. Thus, firms will provide more price information and less product attribute information to consumers who have less price knowledge.

2.2 Prior knowledge and consumer information search

The extant literature shows that search behaviour largely depends on the extent and nature of prior knowledge (see Table 2). Specifically, studies show that consumers who have different prior knowledge may have different impact on search behavior (Punj and Staelin 1983; Park and Lessig 1981). Hayes-Roth (1977) and Marks and Olson (1981) argue that prior knowledge can contribute to knowledge structure development. A well-developed knowledge structure includes evaluative criteria and any stimuli that associate the evaluative criteria with relevant product assessments. Based on this finding, Park and Lessig (1981) proposed that consumers with different prior knowledge use different information in product evaluations because they may have developed different knowledge structures.

White and Morris (2007) and White et al. (2009) show that consumers who have more prior knowledge and expertise submit longer and more specific queries when searching for information in a search engine. Thus, we expect the following:

Proposition 1: Less price information is provided in search advertisements for a longer keyword.

Table 2: Prior knowledge and consumer information search

Concepts	Studies
Prior knowledge and knowledge structure development	Marks and Olson (1981) Hayes-Roth (1977)
prior knowledge leads to longer and more specific queries	Dodds et al. (1991)
price and product quality	Monroe and Krishnan (1985; Gerstner (1985).
Brand name and buying decision process	Keller (2012)
Prior knowledge and product attribute information	Park and Lessig (1981; Rao and Monroe (1988).

When consumers make purchase decisions, they may search for different types of extrinsic information, such as price and brand name (Dodds et al. 1991). Price is used by consumers in product evaluation, and researchers have examined the relationship between price and product quality (Monroe and Krishnan 1985; Gerstner 1985). Brand name also influences consumers' purchase decisions; a well-established brand has equity, and consumers can use this to determine product quality (Keller 2012).

Previous research shows that consumers with little prior knowledge are more likely to search for information about non-functional dimensions of a product, such as brand name and price, to evaluate the product. In contrast, consumers with prior knowledge are more likely to use product attribute information (Park and Lessig 1981; Rao and Monroe 1988). This is because the former type of consumer has less intrinsic information and a less developed knowledge structure to analyze complicated product information than the latter type. Therefore, we expect the following:

Proposition: 2: More price information is provided in search advertisements for keywords containing a trademark.

Proposition: 3: More price information is provided in search advertisements for keywords containing a price-related word (e.g., cheap, deal, discount, last minute) than for keywords containing no price-related word.

2.3. *Impact of market competition on the content of search advertising*

The focus of marketing and promotional efforts in the context of tourism destinations is increasingly moving toward online, especially search advertising (Buhalis, 1998, 2000; TIA, 2006; Wang & Fesenmaier, 2006; Werthner & Ricci, 2004). The content of search advertising reflects a firm's marketing strategy in a market (see Table 3). Given the limited bandwidth of the search ad (Bhardwaj et al., 2008; Shapiro, 2006), ad content choice is an important decision in search advertising (Lee et al., 2013; Mayzlin & Shin, 2011; Janssen & Non, 2009).

There are different types of search advertising depending on the types of messages, for example, persuasive or informative. First, persuasive advertising aims to influence consumers' tastes for established brand names or company reputations, thus creating brand loyalty, prestige, image, or goodwill over the long term (Braithwaite, 1928; Comanor & Wilson, 1967; Dixit & Norman, 1978). According to the persuasive view of advertising, advertising may reduce the influence of price on consumers and therefore can have important anti-competitive consequences.

Second, the objective of informative advertising is providing economically relevant information to consumers (Marshall 1919). Researchers have developed formal models to examine situations in which firms send advertising messages to explicitly inform consumers of their brand's existence, price, or observable characteristics (Butters, 1977; Grossman & Shapiro, 1984; Stigler, 1961). In contrast to this *explicit* information, Nelson (1974), Kihlstrom and Riordan (1984), and Milgrom and Roberts (1986) analyzed models in which firms producing nondurable experience goods use advertising to *implicitly* signal information regarding their brand's experience characteristics (e.g., unobserved qualities). Whether advertising provides explicit information or implicitly signaled information to consumers, the

informative role of advertising is to improve the match between buyers and sellers in a market with differentiated products (Bagwell, 2007).

Resnik and Stern (1977) examined actual advertisements to assess informational content such as price and product attributes. Price information in advertising focuses more on the informational role of advertising because advertisers use it to inform consumers about product prices or to signal their pricing strategy. Content about product attributes may have both informative and persuasive effects on consumers. On the informative side, information provided in advertising can help consumers to learn which products best match their needs or tastes. On the persuasive side, product attributes can be used by firms to change consumers' preferences and tastes, thus creating brand loyalty (Baye & Morgan, 2009). In this study, we consider information content related to product attributes to be brand advertising, which has both informative and persuasive effects on consumers.

Table 3: Contents of search advertising

Concepts	Studies
Bandwidth of the search ad	Bhardwaj et al(2008) Sapiro(2006)
Ad content choice	Lee et al. (2013); Mayzlin & Shin, (2011); Janssen & Non (2009).
Persuasive advertising	Braithwaite (1928); Comanor & Wilson (1967); Dixit & Norman (1978).
Informative advertising	Marshall (1919)
Explicit information of brands	Butters(1977); Grossman & Shapiro(1984); Stigler(1961)
Implicit information of brands	Nelson (1974), Kihlstrom and Riordan (1984), Milgrom and Roberts (1986)
Differentiated products	Bagwell (2007)
Actual advertisements	Resnik and Stern (1977)
Product attributes and brand loyalty	Baye & Morgan (2009)
Advertising content and media type	Abernethy and Franke (1996)
Consumer price sensitivity	Narasimhan, Neslin, & Sen (1996); Turley & Kelley(1997)

The meta analysis conducted by Abernethy and Franke (1996) explored the roles of media type, level of economic development, and product durability on advertising content. However, the study did not address the research question: how does marketing competition influence a firm's advertising content choice? The dynamics of a competitive market is characterized by the large number of substitutes. Therefore, with an increase in the level of competition will reduce the number of loyal customers for each firm which ultimately results into brand switching. Therefore, the intensity of competition presents a price sensitive market (Narasimhan, Neslin, & Sen, 1996). If consumers are sensitive to price, firms must include more information about price in their ads (Turley & Kelley, 1997). For example, they may use terms such as “affordable, bargain, budget, cheap, and competitive deal” in their search ads (see Appendix). Thus, we expect

Proposition 4: Market competition leads to more price advertising.

2.4. Moderating impact of advertiser types

This paper draws a boundary line between channel intermediaries and brand suppliers due to their distinguishing roles in the distribution channel. Now that more brand suppliers have added a direct online channel to their distribution channel, how do brand suppliers and channel intermediaries advertise differently to compete with one another in a highly competitive market?

Compared to channel intermediaries, brand suppliers not only care about short-term sales but also about long-term brand equity. Therefore, brand suppliers are more likely to differentiate themselves by building brand equity when there is more competition, while intermediaries are more likely to compete on price because they usually handle several brands at the same time (Bergen & John, 1997; Young & Greyser, 1983). The role of price advertising is to inform consumers about product prices and to attract price-conscious

shoppers, while the role of brand advertising is to attract customers who value brands and to create brand loyalty in the long run. Thus, when competition is high, brand suppliers are more likely to use brand advertising to create favorable attitudes toward the product, while intermediaries are more likely to use price advertising to precipitate a purchase decision.

Proposition 5: The advertiser type (i.e., brand suppliers or channel intermediaries) moderates the impact of market competition on the content of search advertising.

Table 4: Moderating impact of advertiser types

Concepts	Studies
Brand supplier & brand equity vs. intermediaries & price competition	Bergen & John (1997); Young & Greyser (1983)
Relationship complexity between suppliers and intermediaries	Bailey & Bakos(1997)
Anticipation of disintermediation	Sen & King (2003)
Role of intermediaries	Giaglis, Klein, & O’Keefe (2002)

As discussed in the literature (Bailey & Bakos, 1997), the relationship between suppliers and intermediaries has become more complicated since the addition of the Internet channel. Because many suppliers can now easily and directly reach their customers through the Internet, suppliers and their intermediaries are considered to be competitors. Some researchers (Sen & King, 2003) even predicted disintermediation. However, intermediaries are also playing a very important role (Giaglis, Klein, & O’Keefe, 2002) in distributing the products and reaching consumers who suppliers cannot easily reach. Therefore, intermediaries and brand suppliers are not complete substitutes, but complementary in some sense. Intermediaries are less concerned about how many suppliers are in the market but are more concerned about how many other intermediaries are in the market because they are direct competitors. For example, if there are more hotels available in Los Angeles, travel

agents will have more alternatives available for consumers and be more likely to make a sale. However, if there are more travel agents selling hotel rooms in LA, travel agents will have to engage in more intensive price competition. Therefore, when there are many competing intermediaries in the market, the intermediaries are likely to increase price advertising to inform consumers about their competitive prices.

Proposition 6: Intermediaries are likely to engage in more price advertising when there are more intermediaries competing in a market.

Discussion and future research direction

Search engine advertisements are playing an instrumental role in destination marketing (Nielsen 2013). In this context, the emergence of customized advertising has gained enormous attention to both practitioners and academics. Search advertising has made it possible to decide what to advertise based on what consumers search. Based on information processing theories, we develop a theoretical framework that links consumers' prior information with ad search content. We argue that what firms advertise should depend on consumers' prior information; the more information consumers have, the less price information firms should include in an ad. Furthermore, we argue that search keywords can indicate consumers' degree of prior knowledge. Specifically, we show that firms should have less price information when consumers' keywords contain price and/or brand names. In contrast, firms should have more price information when consumers' keywords are long.

We also find that channel intermediaries provide significantly more price information to consumers who search for price-related information than brand suppliers do. This finding suggests that channel intermediaries focus on price information in their search advertisements

to differentiate themselves from brand suppliers and position themselves as low-price sellers when targeting price-conscious consumers.

Because channel intermediaries and brand suppliers offer the same products, channel intermediaries often differentiate themselves by focusing on their competitive prices to attract more sales. Brand suppliers care about sales in the short run as well as their brand value in the long run (Bergen & John, 1997). Therefore, brand suppliers are less likely to provide more price information to price-conscious consumers compared to channel intermediaries, and they are more likely to differentiate themselves by building brand value. Therefore, when targeting price-conscious consumers, channel intermediaries provide more price information than brand suppliers do.

In this paper, we do not consider consumers' other purchase behaviors (e.g., click-through, making purchases) when we examine the impact of consumer search behavior on search advertising content. Future research could study how consumer search behavior affects search ad content and subsequent purchase behavior. These research issues, which are beyond the scope of this study, could be addressed in an experimental setting or through an empirical study of individual consumers' click-through or purchase data from various advertisers within the same industry.

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