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Competitive information, trust, brand consideration and sales: Two field experiments☆

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ABSTRACT

Two field experiments examine whether providing information to consumers regarding competitive products builds trust. Established theory suggests that (1) competitive information leads to trust because it demonstrates the firm is altruistic, and (2) trust leads to brand consideration and sales. In year 1, an American automaker provided experiential, product-feature, word-of-mouth, and advisor information to consumers in a $2\times2\times2\times2$ random-assignment field experiment that lasted six months. Main-effect analyses, conditional-logit models, and continuous-time Markov models suggest that competitive information enhances brand consideration and possibly sales and that the effects are mediated through trust. However, in a modification to extant theory, effects are significant only for positively valenced information. The year-2 experiment tested whether a signal that the firm was willing to share competitive information would engender trust, brand consideration, and sales. Contrary to many theories, the signal did not achieve these predicted outcomes because, in the year-2 experiment, consumers who already trusted the automaker were more likely to opt in to competitive information. In addition to interpreting the field experiments in light of extant theory, we examine cost effectiveness and describe the automaker's successful implementation of revised competitive-information strategies.

1. Introduction and motivation

In 2003–2005, an American automaker ("AAM") faced a situation common among firms that had once dominated their industries. New competitors had entered with products perceived to be higher in quality and better matched to consumer needs. The automaker's brands no longer connoted quality or innovation; brand strength had declined. By 2003, over half of the consumers in the U.S. (and almost two-thirds in California) would not even consider AAM brands; its brands were effectively competing for only a fraction of the market. Ingrassia (210, p. 163) cites the lack of brand consideration as a cause of the decline of American brands. Although the automaker had recently invested heavily in design and engineering, the automaker would never again regain strength nor market share unless its brands could earn consumers' brand consideration.

The situation of AAM was similar to that faced by many once-dominant brands. After the financial crises of 2008, consumers were hesitant to consider and purchase financial services from established firms such as New York Life (Green, 2010). Research in Motion (Blackberry), Motorola, and Nokia once dominated the smart phone market, but lost market share and brand image to Apple's iPhone. Many consumers reject these once-dominant firms as no longer relevant. Firms entering dominated markets also face the challenge of earning consumers' brand consideration. Examples include Barnes & Noble's Nook (after Amazon's Kindle) and the Kindle Fire (after Apple's iPad). In other situations, a firm might stumble, perhaps through no fault of its own, and face an uphill battle to be considered as a viable alternative again. Examples include Tylenol after the 1982 poisonings, the Audi Quattro after the 1986 publicity on sudden acceleration, Toyota after widespread media reports in 2010 that software problems led to sudden acceleration, and Genentech after production problems in critical drugs. In B2B markets, the Brazilian aircraft manufacturer Embraer launched a new line of well-designed and high-quality business jets, but found it hard to enter buyers' consideration sets when competing with such established firms as Bombardier, Dassault, Cessna, Hawker Beechcraft, and Gulfstream (Aboulafia, 2007).

Many authors recommend that firms earn brand consideration by first earning trust from consumers. If consumers trust a brand, then

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consumers are motivated to invest the time and effort to learn more about the features of the brands (see, e.g., Urban, 2005 and citations therein). Research suggests that to earn trust a firm should make itself vulnerable by acting altruistically and putting consumers' needs above its own (Kirmani & Rao, 2000; Moorman, Deshpandé, & Zaltman, 1993; Rousseau, Sitkin, Burt, & Camerer, 1998). For example, New York Life stated publicly that "the guarantees we make last a lifetime" and that "our promises have no expiration date" (Green, 2010). Embraer, primarily a manufacturer of commercial regional jets, took a risky strategy of announcing a new line of jets specifically designed for business travel (Aboulafia, 2007). Even Procter & Gamble's Global Marketing Officer began new initiatives because "market share is trust materialized" (Bloom, 2007).

The theory of making oneself vulnerable is persuasive, but for a major automaker, such a strategy puts billions of dollars at risk. Most evidence to date is based on cross-sectional surveys (structural equation models and meta-analyses) or laboratory experiments. For example, in a review of the literature, Geyskens, Steenkamp, and Kumar (1998) cite 20 studies based on surveys, seven based on laboratory experiments, and none based on field experiments. Even today, we find few field experiments and none in which a once-dominant firm made itself vulnerable to gain trust. Before committing to a trust-based strategy, AAM decided that the strategy had to be proven in rigorous field experiments. We were interested in partnering because we felt the need to field-test theories that were developed from surveys and laboratory experiments.

Specifically, AAM would signal that it was acting in the consumers' best interests by providing unbiased competitive information to its customers. If the theories were correct, consumers would come to trust AAM and consider its brands. The vulnerability signal was risky because AAM would not win all head-to-head comparisons with its competitors and because goodwill was lacking among consumers familiar with pre-2003 products. However, if the theories were correct, competitive information would signal trust and have a positive impact. AAM's post-2003 products would win on sufficiently many comparisons that brand consideration would overcome losses due to adverse short-term comparisons.

In this paper, we describe the field experiments and general lessons. The year-1 data suggest that competitive information leads to trust, brand consideration, and sales but that the effect of competitive information is mediated through trust. However, contrary to extant theory, these effects are significant only for positively valenced information. The year-2 data suggest that contrary to many theories, a signal alone, indicating that the firm is willing to share competitive information, does not engender trust, brand consideration, and sales. The signal was not effective because consumers who already trusted the automaker were more likely to opt in to competitive information. Managerial analyses suggest that competitive information is effective when targeted cost-effectively to consumers who are otherwise skeptical of the brand. We begin with the theory.

2. Underlying theory

There is considerable precedent in the trust and signaling literatures to support the theory that providing competitive information would enhance trust, leading to brand consideration and sales.

2.1. Competitive information, vulnerability, and trust

Morgan and Hunt (1994) provide evidence that commitment leads to trust and that the sharing of meaningful and timely information is an antecedent of trust. This classic article was of particular interest because the Morgan–Hunt data were based on independent automobile tire retailers. However, the theories cut across industries. In a study of market research suppliers, Moorman et al. (1993) suggest that sincerity, timeliness, and the willingness to reduce uncertainty (presumably by sharing information) all lead to trust. Indeed, vulnerability to gain trust is a common theme throughout the literature (Kirmani & Rao, 2000; Moorman et al., 1993; Rousseau et al., 1998). Other researchers define trust with the related concepts of credible information and acting benevolently toward the other party (Doney & Cannon, 1997; Ganesan, 1994; Ganesan & Hess, 1997; Geyskens et al., 1998; Gurviez & Korchia, 2003; Maister, Green, & Galford, 2000; Sirdeshmukn, Singh, & Sabol, 2002; Urban, 2004).

Providing competitive information to achieve vulnerability, credibility, and an image of altruism is a common recommendation (Trifts & Häubl, 2003; Urban, 2004; Urban, Amyx, & Lorenzon, 2009; Urban, Sultan, & Qualls, 2000). Bart, Shankar, Sultan, and Urban (2005) provide evidence in online settings that clear, unbiased navigation and presentation enhance trust. Shankar, Urban, and Sultan (2002) argue that quality and timeliness of information enhances trust. In laboratory experiments, Trifts and Häubl (2003) show that competitive price information enhances an online retailer's perceived trustworthiness. These authors go on to state, citing other authors, that "the sharing of relevant and potentially self-damaging information can be viewed as a type of communication openness, which is an important form of trust-building behavior and has been found to have a direct positive relationship with the level of trust" (p. 151).

However, gaining trust is only useful if it leads to sales. Fortunately, there is ample evidence supporting this conclusion. Bart et al. (2005) show that trust mediates relationships between website design characteristics and purchase intensions. Crosby, Evans, and Cowles (1990) show that enhanced trust leads to continued exchanges between parties and to sales. Doney and Cannon (1997) demonstrate that trust influences buyer's anticipated future interactions. Ganesan (1994) shows that trust and interdependence determine the long-term orientation of both retail buyers and their vendors. Geyskens et al. (1998), in a meta-analysis of 24 papers (27 studies), suggest that trust mediates roughly 49% of long-term outcomes. Trifts and Häubl (2003) show that the effect of competitive price information is mediated through trust. Hoffman, Novak, and Peralta (1999, p. 85) posit that "the most effective way for commercial web providers to develop profitable exchange relationships with online customers is to earn their trust." Sirdeshmukn et al. (2002) provide evidence that benevolent management policies and procedures enhance trust and that trust enhances long-term loyalty. Büttner and Göritz (2008) provide evidence that trust enhances intentions to buy.

Based on this literature, we posit that sharing competitive information with consumers will demonstrate that AAM is both altruistic and vulnerable. Altruism and vulnerability will cause consumers to trust the automaker, which, in turn, will lead to brand consideration and sales. We also posit that the effect of competitive information will be mediated through trust. The following hypotheses are tested in the year-1 field experiment.

H1. Competitive information provided to the test group will increase consumers' trust of the automaker relative to the control group.

H2. Competitive information provided to the test group will increase brand consideration relative to the control group.

H3. Conditional on brand consideration, competitive information provided to the test group will increase sales relative to the control group.

H4. The increase in brand consideration and sales in the test group is mediated through trust.

The literature does not distinguish between positively valenced and negatively valenced competitive information: both are assumed to communicate altruism and vulnerability and hence lead to trust, brand consideration, and sales. However, we know that negative information per se decreases brand consideration and sales relative to positive information (e.g., automotive experiments by Urban, Hauser, & Roberts, 1990, p. 407). Thus, we expect that H1 through H3 are more likely to be supported for positively valenced competitive information than for