

Paying Attention to News Briefs about Innovative Technologies

Full Paper

Nancy K. Lankton
Marshall University
lankton@marshall.edu

D. Harrison McKnight
Michigan State University
mcknight@broad.msu.edu

Abstract

News sources about innovative technologies like Google's driverless car and Apple's Siri feature can help potential users evaluate the benefits and risks involved. However, individuals must pay attention to this information before they can make sense of it, and decide to change their technology trusting intention. While other fields investigate attention, no research to date has investigated why people pay attention to news briefs about innovative technologies. We propose four factors based on information processing theory. An exploratory study in which respondents are given a series of news briefs and asked how much they paid attention to them and why, provides support for four of our eight propositions. We find the strongest reasons for paying attention/(disregarding) the news briefs are the positive/(negative) nature of the news brief content characteristics. However, the biggest changes in trust are from positive and negative technology involvement factors.

Keywords

Attention, trust change, technology innovations, information processing.

Introduction

“While the idea of a car driving itself is not only culturally intriguing but increasingly scientifically possible, the reality is that factors such as government regulations, liability concerns and consumer reaction make the leap to full autonomy more sci-fi than immediate urban reality.” – USAToday.com 2016¹

Many individuals are fascinated by innovative technologies, yet the newer an innovation, the higher the uncertainty (Rogers 1983). Fortunately, the growing abundance and ubiquity of information provides unprecedented opportunities for individuals to learn about these innovative technologies (van Knippenberg et al. 2015). Individuals may use the information they glean from these sources to decide whether the technology can be depended on, i.e., whether they can trust it. Trust can alleviate the fears and potential risks of using innovative technologies (Lin 2011). However, due to the influx of information about these technologies, individuals' trust may change over time as they are exposed to more and more information that ranges from being very positive about the technology to being very negative. Because trust can impact individuals' adoption and use of innovative technologies (Lin 2011), it is important to understand what factors contribute to trust change.

How this trust change process works is not clear due to the limited research on trust change. Some researchers have examined trust over two time-periods (Gefen et al. 2003), and others have considered trust growth or change as a process or set of stages (Ba 2001). In an attempt to integrate this literature, McKnight et al. (2014) proposed that trust change is the result of an information processing cycle that includes attention, attribution, and judgment. In this study, we focus on attention because it is the first stage of the information processing cycle, and the trustor must pay attention to information for further processing such as sensemaking, judgments, or evaluations to occur (McKnight et al. 2014).

¹ <http://www.usatoday.com/story/tech/news/2016/12/12/google-steer-clear-fully-driverless-car-report/95360570/>

While attention is critical to the information processing cycle, it is not clear what factors are associated with attention. This is important to understand because there is a plethora of information available about innovative technologies, and individuals have to decide what information to attend to and what information to disregard (van Knippenberg et al. 2015). Prior research has investigated attention and its antecedents in contexts such as marketing (Celsi and Olson 1988), management (van Knippenberg et al. 2015), and psychology (Hart et al. 2009). However, researchers have not yet examined attention in a trust change context. Our research objective is to study individuals' attention to information sources about innovative technologies. Our research questions are: (1.) Why do individuals pay attention to information about innovative technologies? (2.) Do these reasons relate to a change in trust in technology?

To address these research questions, we perform an exploratory study to examine factors that increase one's attention to news briefs about innovative technologies. We first briefly theorize what these factors are based primarily on information processing theory (Mitchell 1981). We then analyze qualitative data from 1,529 students exposed to positive and negative news briefs about five innovative technologies. We compare the actual factors identified by respondents to the theorized factors, and examine whether the factors are associated with respondents' attention and trust change.

Theoretical Background and Propositions

Researchers have long characterized information processing as consisting of distinct stages including exposure, attention, elaboration, and memory (Hovland et al. 1953). Recently, McKnight et al. (2014) used an information processing cycle to study trust change. It depicts attention, sensemaking, and threshold judgement as necessary precursors to trust change. Our research focuses on the attention stage as the first step in the information processing cycle. Attention means the extent to which a trusting person notices an information source, and must take place for further processing to occur (McKnight et al. 2014).

We examine the two main factors from consumer information processing theory that influence attention: the stimulus and involvement (Mitchell 1981). The stimulus is defined as the information source and in our study is represented by news brief content characteristics. Involvement is defined as the amount of arousal, interest or drive evoked by a particular stimulus or situation (Mitchell 1981). We examine technology involvement factors, which are personal relevance-related characteristics of the innovative technology. We also include experience or domain knowledge because while involvement is the motivation to process information, domain knowledge is the ability to process information (Celsi and Olson 1988). Finally, we include confirmation bias or the tendency to select information that supports one's beliefs (Nickerson 1988), because individuals may choose attitude-congruent information when their motivation and/or ability to process information is restricted (Smith et al. 2007).

News Brief Content Characteristics

Researchers identify the stimulus or information source as a factor in whether people pay attention to information (Mitchell 1981). Communication is critical for innovation adoption (Loh and Venkatraman 1992). The diffusion of an innovation is the process by which the innovation "is communicated through certain channels over time among the members of a social system" (Rogers 1983; p. 5). Communication channels for information technology innovations can include direct interpersonal contacts or indirect observations within the user community, promotional efforts by the technology vendors, results of research studies or summaries of state-of-the-art practices (Loh and Venkatraman 1992). A recent study found conventional media was important for processing information about the value of virtual reality innovations (Berente et al. 2011).

The stimulus has various qualities that may affect whether people will take notice. For example, in information searches individuals may pay attention to the breadth and depth of content, information characteristics, accuracy, and currency (Grant et al. 2007). Consumers may also have preferences for objective versus subjective information and hence be more or less likely to notice these types of content (Grant et al. 2007). The elaboration likelihood model suggests that argument quality (the persuasive strength of arguments embedded in an informational message) and peripheral cues (number of messages,

number of message sources, source likeability, and source credibility) are important for information processing and belief change (Bhattacharjee and Sanford 2006). We propose:

Proposition 1a: Individuals will cite characteristics of the news brief content (e.g., unbiased, accurate and credible) as reasons they paid attention to the news brief.

Proposition 1b: Reasons about positive/(negative) characteristics of the news brief content will be positively (negatively) correlated with attention.

Technology Involvement Factors

Individuals may also pay attention to the news brief because they feel that the technology is beneficial, useful, essential, important, interesting, and relevant. These concepts are captured in what advertising researchers refer to as product involvement or one's perceived product relevance (Zaichkowsky 1985). Individuals can have personal involvement (inherent interests, values, or needs that motivate one toward the product) with a product, as well as physical involvement (characteristics of the product that cause differentiation and increase interest), and situational involvement (something that temporarily increases relevance or interest toward the product) (Zaichkowsky 1985). Thus, technology involvement relates to characteristics of the product and its relevance to the consumer.

Researchers suggest that product involvement is a precursor to attention and further processing of product-related advertising (Greenwald and Leavitt 1984; MacInnis and Jaworski 1989). Individuals may be involved in a product and attend to information about it because it has important problem-solving attributes, or because it provides needed social or aesthetic utility (MacInnis and Jaworski 1989). An innovative technology like smart clothing for example, can be functional (fit and ease of movement) and have compatible and aesthetically appealing design features (Hwang et al. 2016). Individuals may also attend to information about a product because it has distinguishing characteristics (Greenwald and Leavitt 1984). Finally, diffusion of innovations research also describes how individuals assess the characteristics of an innovation (e.g., its relative advantage), and its relevance to users (e.g., its compatibility). Based on this:

Proposition 2a: Individuals will cite technology involvement factors (e.g., relevance, interest, usefulness), as reasons they paid attention to the news brief.

Proposition 2b: Reasons about positive/(negative) technology involvement factors will be positively (negatively) correlated with attention.

Experience or Domain Knowledge

Experience or domain knowledge may also affect whether individuals pay attention to a news brief. Domain knowledge is general semantic and episodic knowledge regarding the product that develops in long-term memory as consumers' experiences with the product accumulate (Celsi and Olson 1988). To the extent that consumers can retrieve relevant knowledge from memory in a given situation, they have the ability to attend to and process the information in their environments (Celsi and Olson 1988). Researchers have found that domain knowledge influences attention (Celsi and Olson 1988), and evaluation processes (Sujan 1985). Weick (1995) articulates the retrospective consideration of experiences as a key characteristic of making sense of information. Direct personal experience may also be relevant in our context because it is an important component of processing information about technologies like virtual worlds (Berente et al. 2011).

Proposition 3a: Individuals will cite experience or domain knowledge as reasons they paid attention to the news brief.

Proposition 3b: Reasons about positive/(negative) experiences or domain knowledge will be positively (negatively) correlated with attention.

Confirmation Bias

Finally, we propose that individuals may pay attention to news brief information because it confirms their pre-existing beliefs. Confirmation bias is defined as the non-intentional selection of only positive evidence as grounds for a certain claim (Nickerson 1998). This is a very commonly documented issue associated with the human condition and holds a long-lasting place in both psychological and philosophical traditions (Nickerson 1998). Further, researchers investigating selective exposure effects suggest that individuals preferentially select attitudinally consistent information because it is less likely to induce dissonance (Festinger 1957) making it more psychologically pleasant and cognitively easier to process (Smith et al. 2007). Selective exposure relates to attention because the more congruent information one exposes oneself to, the more compelling one's attitude may seem, and the more one might be inclined to preferentially allocate attention to and elaborate on each piece of congruent information (Smith et al. 2007). Berente et al. (2014) find that positive assessments of virtual worlds contain elements of confirmation bias such that individuals tend to use positive examples (even when negative examples also exist) as *ex post* justification about the technology's value.

Proposition 4a: Individuals will cite confirmation as a reason they paid attention to the news brief.

Proposition 4b: Reasons about confirmation/(disconfirmation) will be positively/(negatively) correlated with attention.

Trust Change

While we do not develop specific trust change propositions, we also investigate informally whether responses about why users pay attention/(disregard) news articles are associated with trust change. Attention is important to trust. For example, Kovar et al. (2000) discusses the importance to trust of paying attention to Web site assurance seals. According to the information processing cycle, attention is a necessary, but not sufficient condition for trust change (McKnight et al. 2014). While users also need to make sense of the information and determine if a threshold for change has been met before trust change occurs, attention does significantly affect trust change directly (McKnight et al. 2014). It seems reasonable that the factors affecting attention may also be associated with trust change.

Methodology

We examined the research questions and propositions using questionnaire data obtained as part of a larger study on information processing and trust-in-technology. Survey participants were students (average age = 22; 64% male) recruited from information systems and business courses at four comprehensive North American universities. The students received course extra credit, and at one school they did the survey during class time. The response rate was 85% for a sample of 1,799. The survey was administered online. Participants were assigned randomly to give their opinions about one of five different technologies: the Apple Siri feature, the Google driverless car, a TomTom GPS, the Ford SYNC in-car voice communication system, and Facebook. After reading a brief Wikipedia excerpt about the technology, they were asked their initial impressions of the technology and were then shown a series of eight news briefs about that technology (four positive and four negative). Then they answered additional questions relating to their opinions about the technology.

The news briefs were selected from recent Nexis newspaper articles and were shortened to make them easier to read. Articles typically discussed the technology's features or experiences with it. A separate group of students rated the news briefs on a 7-point scale from Strongly Negative (1) to Strongly Positive (7). We selected news briefs for each technology such that four were positive and four were negative. Each participant received the news briefs in one of eight negativity orders within the technology treatments: [+ - - - + - -], [- - - + - - +], [+ + - - + - -], [- - + + - - + +], [+ + + + - - - -], [- - - - + + + +], [+ + - - - - + +], [+ + - - + + - -]. However, the cumulative valence of the eight news brief was identical for each of the orders. We felt it important to vary the order because of competing theories about which is more influential, the recency effect or the anchoring-and-adjusting effect.

Our main analysis used the questions respondents saw immediately after seeing the fourth news brief: “If you saw the above news brief while you were considering [*technology name*] for possible use, would you ignore the news brief or would you pay attention to it?” “Why?” We picked the fourth news brief because it gives a good sense of trust change over multiple time periods, yet being in the half-way point it provides the best balance between too little and too much information received. Choice options for the Likert scale question ranged from “I would definitely ignore it” to “I would definitely pay attention to it.” There was a free-form memo field for them to answer why. We received 1,529 responses to the why question (85% of total respondents), which we used for the data analysis. We also captured individual trust in the technology during the initial stage and after each news brief. Due to survey length, we used a 1-item scale, but only after a pilot test showed it was part of a validated multi-item scale. Trust was measured by “For [*doing actions that employ the technology*], I feel I can depend on [*technology product name*].” This wording is central to trust because trust indicates a willingness to depend (i.e., be vulnerable—McKnight et al. 2002).

Data Analysis and Results

We coded the qualitative memo responses using a code sheet that one co-author created from pilot data. This co-author used an open-coding method that involved identifying concepts, comparing these concepts, and then categorizing similar concepts together (Corbin and Strauss 2008). Table 1 shows the resulting 42 codes. A different co-author and a research assistant then used this code sheet to assign the first 100 responses made after the first news brief to one or more codes. They did this independently and then met and reconciled disagreements to create final, reconciled codes for each response. These same two individuals then followed this method of coding and reconciling the remaining responses for the first 1,195 responses given after the first and second news briefs. They achieved 79% agreement on at least one code for the first news brief and 80% for the second. These agreement levels are reasonable given standard cutoffs typically range from 75-80% (De Wever et al. 2006). Because of this, we used the coding performed by just the research assistant as the basis for analyzing the responses after news brief four. The coding resulted in 2,127 coded responses because each response could relate to one or more codes (Table 1).

Table 2 presents the proposition results. Proposition 1a was strongly supported because 422 responses (20%) mentioned the news brief as reasons why respondents would pay attention to or disregard the news brief. Thirteen percent of the responses (269) related to positive aspects of the news brief. This was the highest number of responses for any code. Another 121 responses (6%) related to negative aspects of the news brief, and 32 (2%) related to neutral aspects. As examples, one respondent positively commented, “It gives details on what Siri has to offer,” and another negatively commented, “It is just one person's opinion.” These comments relate to the news briefs' content quality (gives details), and objectivity/subjectivity. A more neutral comment was, “Doesn't knock it down, but doesn't build up Siri's integrity.” Generally supporting Proposition 1b, positive comments were positively correlated with attention ($r=.21^{***}$), and negative comments were negatively associated with attention ($r=-.31^{***}$). Neutral comments were not significantly associated with attention.

Proposition 2a was also supported because 528 responses (25%) mentioned technology involvement factors as reasons they would pay attention to or disregard the news brief (Table 2). There were 227 (11%) positive responses, 260 (12%) negative comments, and 41 (2%) neutral comments. Positive responses included “Actual tests were completed to see how the google car ran, thus showing hard facts on its efficiency”, “The mentioned improvements would significantly increase the usefulness of the TomTom app”, and “Siri is interesting.” Negative responses about technology involvement were “It's another expensive add-on that I will never opt to include on my vehicle,” and “Not too interested in the new feature since it hasn't worked too much.” These responses relate to how interesting, useful, and beneficial the technologies are. Proposition 2b was partly supported because positive technology involvement correlated positively with attention ($r=.16^{***}$), however negative technology involvement also correlated positively with attention ($r=.16^{***}$), rather than negatively as proposed. This means that paying attention to news briefs is associated with either more *or* less, useful and relevant technology characteristics. Neutral comments were slightly negatively correlated with attention and included responses like “It's a nice feature but not a necessity feature,” and “It effects my driving.”

Code #	Content Codes	# Coded (%)
1	Confirms my current views, feelings, opinions regarding this technology	33 (2%)
2	Contradicts my current views, feelings, opinions regarding this technology	3 (0%)
3	About my trust or feelings—Positive	41 (2%)
4	About my trust or feelings—Negative	84 (4%)
5	About my trust or feelings—Neutral	2 (0%)
6	About the News Brief—Positive	269 (13%)
7	About the News Brief—Negative	121 (6%)
8	About the News Brief—Neutral	32 (2%)
9	About the Vendor—Positive	37 (2%)
10	About the Vendor—Negative	26 (1%)
11	About the Vendor—Neutral	7 (0%)
12	About the Technology—Positive	227 (11%)
13	About the Technology—Negative	260 (12%)
14	About the Technology—Neutral	41 (2%)
15	About Other Products and Vendors—Positive	44 (2%)
16	About Other Products and Vendors –Negative	6 (0%)
17	About Other Products and Vendors –Neutral	6 (0%)
18	About General Technologies-Positive	25 (1%)
19	About General Technologies-Negative	24 (1%)
20	About General Technologies-Neutral	20 (1%)
21	First- or Second-Hand Experience with the Product or Vendor—I Know—Positive	7 (0%)
22	First- or Second-Hand Experience with the Product or Vendor—I Know—Negative	6 (0%)
23	First- or Second-Hand Experience with the Product or Vendor—I Know—Neutral	7 (0%)
24	About Me: Preferences and Personal Strategies—Positive	135 (6%)
25	About Me: Preferences and Personal Strategies—Negative	181 (9%)
26	About Me: Preferences and Personal Strategies—Neutral	2 (0%)
27	About Other People—Positive	13 (1%)
28	About Other People—Negative	12 (1%)
29	About Other People—Neutral	15 (1%)
30	Don't know, Doubt, Uncertainty, Not sure	7 (0%)
31	Need More Information or Experience	81 (4%)
32	Undecipherable	15 (1%)
33	Other	49 (2%)
34	Event encourages me to buy/use the technology	20 (1%)
35	Event discourages me from buying/using the technology	55 (3%)
36	Event neither encourages or discourages me from buying/use the technology	52 (2%)
37	I would pay attention to it	118 (6%)
38	I would not pay attention to it	24 (1%)
39	Not clear whether or not my attention to it is affected	2 (0%)
40	It causes me to reconsider my trust in this technology	12 (1%)
41	It does not cause me to reconsider my trust in this technology	6 (0%)
42	Not clear whether or not it causes me to reconsider my trust in this technology	0 (0%)
	Total Responses	2,127

Table 1. Content Codes, and Number and Percent of Responses

Proposition #	Code #	Code	Count (%) of Responses Coded to Item	Correlation of Coded Items with Attention	Correlation of Coded Items with Trust Change
1	6	About the news brief-Positive	269 (13%)	.21***	ns
	7	About the news brief -Negative	121 (6%)	-.31***	ns
	8	About the news brief-Neutral	32 (2%)	ns	ns
	Total for Category		422 (20%)	ns	ns
2	12	About the technology-Positive	227 (11%)	.16***	.16***
	13	About the technology-Negative	260 (12%)	.16***	-.25***
	14	About the technology-Neutral	41 (2%)	-.05*	ns
	Total for Category		528 (25%)	.23***	-.06*
3	21	First- or second-hand experience with the technology or vendor-Positive	7 (0%)	ns	ns
	22	First- or second-hand experience with the technology or vendor-Negative	6 (0%)	ns	-.09***
	23	First- or second-hand experience with the technology or vendor-Neutral	7 (0%)	ns	ns
	Total for Category		20 (1%)	ns	ns
4	1	Confirms my current views, feelings, or opinions regarding this technology	33 (2%)	ns	ns
	2	Disconfirms my current views, feelings, or opinions regarding this technology	3 (0%)	ns	ns
	Total for Category		36 (2%)	ns	ns

Table 2. Proposition Testing

We found very weak support for Proposition 3a with 20 responses (1%) coded as relating to either first- or second-hand experience with the technology or the vendor (Table 2). Of these 20 responses, seven were positive, six were negative, and seven were neutral. A respondent discussing positive experiences wrote, "Ford SYNC has worked great anytime that I've tried to use it." A respondent with negative experiences wrote, "I have the problems that were outlined in the brief." (Table 2). Neither the positive, negative, nor neutral responses were significantly correlated with attention, so Proposition 3b was not supported.

Finally, only 36 responses (2%) mentioned that the news brief confirmed or disconfirmed their current views or opinions about the technology. This shows weak support for Proposition 4a. Also, Proposition 4b was not supported because these codes did not significantly correlate with attention.

Other reasons for paying attention to or disregarding the news briefs that we did not propose included: About me: Personal preference and strategies-negative (181 or 9%), About me: Personal preference and strategies-positive (135 or 6%), About my trust or feelings-negative (84 or 4%), Need more information or experience (81 responses or 4%), Discourages me from buying/using the technology (55 or 3%), and Neither encourages nor discourages me from buying/using the technology (52 or 2%) (Table 1). We also found that sometimes respondents just reiterated whether or not they would pay attention. One hundred and eighteen responses (6%) indicated they would pay attention, and 24 (1%) indicated they would not pay attention.

We also correlated the attention codes with trust change. To come up with a measure for trust change we subtracted the score for trust after they saw the third news briefs, from the score for trust after they saw the fourth news brief. We found that the code for About the technology-negative that relates to Proposition 2 had a negative correlation with trust change ($r = -.25^{***}$), and the code for About the technology-positive had a positive correlation ($r = .16^{***}$). The code for First or second-hand experience-negative (related to Proposition 3) had a negative correlation ($r = -.09^{***}$). Thus, positive and negative reasons related to involvement with the technology, and negative technology experiences had significant effects on trust change. There were no other proposed codes associated with trust change.

Respondents had little experience with TomTom, Sync, Siri, and Driverless car (mean experience 1.56/7.00), which means this study mainly deals with changes in initial trust in a technology. The exception is Facebook (mean experience = 5.58). Our results are very similar if we exclude Facebook from the analysis with the only difference being the addition of a slight positive correlation between News brief content-negative and trust change (.07*) and a negative correlation between the First- or second-hand experience category and trust change (-.06*). The first difference indicates that for low experience technologies, the more negative respondents are about the news brief content, the more trust changes positively. The second one indicates that the more experience one has, the more trust changes negatively. Both make sense when one has low experience with a technology.

Discussion, Limitations, and Conclusion

This study investigates the factors that cause individuals to pay attention to news briefs about innovative technologies. We performed a qualitative analysis of memo responses made after seeing a series of four news briefs about five technologies. There were 42 total reasons given for paying attention to/(disregarding) the technology. Among these were reasons that supported or partially supported four out of the eight propositions. Our research contributes by showing reasons for paying attention to news briefs about innovative technologies, and whether they are associated with trust-in-technology changes.

Respondents' main reasons for paying attention to the news briefs were related to positive aspects of the news brief, and both positive and negative technology involvement factors. This emphasizes the import of creating high-quality and objective news briefs about innovative technologies, regardless of whether they point out positive or negative technology involvement factors. This latter finding is consistent with the basic premise that trust or willingness to depend is based on the trustor's perceptions of the trustee's attributes (McKnight et al. 2002). In technology trust, trustors will pay attention to technology information whether it is positive or negative to help them in later stages of the information processing cycle. This finding also contributes to the literature on attention and trust-in-technology because the positive reasons about the technology are associated with positive trust changes. By perceiving that these technologies are more reliable and dependable, these individuals may be more likely to use the technology in the future (McKnight et al. 2002). On the contrary, individuals who commented about negative aspects of technology involvement were likely to have negative trust changes. This suggests from the standpoint of the vendor, news briefs should include more objective arguments about the merits of the technology.

Reasons for not paying attention to the news brief were negative aspects of the news brief content characteristics (e.g., the news brief is biased or opinionated), and neutral aspects of technology involvement. These codes however, did not correlate with trust change. This suggests that these respondents did not feel these issues related to their ability to depend on the technology. This seems reasonable because just as organizations tend to ignore most negative events (Miller and Friesen 1984; Sitkin 1992), trustors may ignore or minimize small events so that the entire mental complex of relationship belief structures (including trust) will not have to change.

Two codes that were associated with a trust change were negative aspects of the technology and negative first- or second-hand experiences. Individuals are weighing these items more strongly in terms of deciding whether or not to depend on the technology. Both negative trustor characteristics and negative prior experiences are reasons for not wanting to move forward with relationships and rely on the other party (McKnight et al. 2002). Also, that negative first- or second-hand experiences was not associated with attention could mean that while they may or may not have paid immediate attention to the news

brief, they ruminated about it later when deciding whether to change their trust.

Our study has several limitations. First, due to respondent time constraints, we were limited to using one item to measure trust. To ensure construct validity we analyzed pilot data in which we measured this construct with three items and found it passed all validity tests. However, this is still a study limitation. A second limitation is that our respondents were university students, limiting generalizability. Yet students are a key user group for some innovative technologies. A third limitation is that we did not analyze the predictive effects of the reasons on trust change and other behaviors like continued use. Future research can examine these issues, controlling for factors like experience, news brief valance, and disposition to trust. It can also examine possible interactions of the factors on attention (MacInnis and Jaworski 1989).

In conclusion, this study contributes to the literature by showing that users pay attention to news briefs about innovative technology for specific reasons, and that these reasons are sometimes associated with trust changes. This study suggests several opportunities for future research.

REFERENCES

- Ba, S. 2001. "Establishing Online Trust through a Community Responsibility System," *Decision Support Systems* (31), pp. 323-336.
- Berente, N., Hansen, S., Pike, J. C., and Bateman, P. J. 2011. "Arguing the Value of Virtual Worlds: Patterns of Discursive Sensemaking of an Innovative Technology," *MIS Quarterly* (35:3), pp. 1-25.
- Bhattacharjee, A., and Sanford, C. 2006. Influence Processes for Information Technology Acceptance: An Elaboration Likelihood Model," *MIS Quarterly* (30:4), pp. 805-825.
- Celsi, R. L., and Olson, J. C. 1988. "The Role of Involvement in Attention and Comprehension Processes," *Journal of Consumer Research* (15), pp. 210-224.
- Corbin, J. M., and Stauss, A. L. 2008. *Basics of Qualitative Research: Techniques and Procedures for Developing Grounded Theory*, Sage Publications, Inc.
- De Wever, B., Schellens T., Valcke, M., and Van Keer H. 2006. "Content Analysis Schemes to Analyze Transcripts of Online Asynchronous Discussion Groups: A Review," *Computers and Education* (46), pp. 6-28.
- Festinger, L. 1957. *A Theory of Cognitive Dissonance*. Evanston, IL: Row, Peterson.
- Gefen, D., E. Karahanna and Straub, D. W. 2003. "Inexperience and Experience with Online Stores: The Importance of TAM and Trust," *IEEE Transactions on Engineering Management* (50:3), pp. 307-321.
- Grant, R., Clarke, R. J., and Kyriazis, W. 2007. "A Review of Factors Affecting Online Consumer Search Behavior from an Information Value Perspective," *Journal of Marketing Management*, (23:5-6), pp. 519-533.
- Greenwald, A. G., and Leavitt, C. 1984. "Audience Involvement in Advertising: Four Levels," *Journal of Consumer Research* (11), pp. 581-592.
- Hart, W., Albarracín, D., Eagly, A. H., Brechan, I., Lindberg, M.J., and Merrill, L. 2009. *Psychological Bulletin* (135:4), pp. 555-588.
- Hovland, C. I., Janis, I. L., and Kelly, H. H. 1953. *Communication and Persuasion: Psychological Studies of Opinion Change*, New Haven, CT: Yale University Press.
- Hwang C., Chung, T.-L., and Sanders, E. A. 2016. "Attitudes and Purchase Intentions for Smart Clothing: Examining U.S. Consumers' Functional, Expressive and Aesthetic Needs for Solar-Powered Clothing," *Clothing and Textiles Research Journal* (34:3), pp. 207-222.
- Kovar, S. E., Burke, K. G., and Kovar, B. R. 2000. "Consumer Responses to the CPA WEBTRUST Assurance," *Journal of Information Systems* (14:1), pp. 17-35.
- Lin, H.-F. 2011. "An Empirical Investigation of Mobile Banking Adoption: The Effect of Innovation Attributes and Knowledge-Based Trust," *International Journal of Information Management* (31), pp. 252-260.
- Loh, L., and Venkatraman, N. 1992. "Diffusion of Information Technology Outsourcing: Influence Sources and the Kodak Effect," *Information Systems Research* (3:4), pp. 334-358.
- MacInnis, D. J., and Jaworski, B. J., 1989. "Information Processing from Advertisements: Toward an Integrative Framework," *Journal of Marketing* (53), pp. 1-23.

- McKnight D. H., Choudhury, V., Kacmar, C. 2002. "Developing and Validating Trust Measures for e-Commerce: An Integrative Typology," *Information Systems Research* (13:3), pp. 334–359.
- McKnight, D. H., Liu, P., and Pentland, B. T. 2014. "A Cognitive Process Model of Trust Change," in *Proceedings of the Thirty Fifth International Conference on Information Systems (ICIS)*, Auckland.
- Miller, D., and Friesen, P. 1984. *Organizations: A Quantum View*, Englewood Cliffs, NJ: Prentice Hall.
- Mitchell, A. A. 1981. "The Dimensions of Advertising Involvement," in *Advances in Consumer Research*, Vol. 8, K. B. Monroe (ed.), Ann Arbor, MI : Association for Consumer Research, pp. 25-30.
- Nickerson, R. S. 1998. "Confirmation Bias: A Ubiquitous Phenomenon in Many Guises," *Review of General Psychology* (2:2), pp. 175-220.
- Rogers, E. M. 1983. *Diffusion of Innovations (3rd ed.)*, New York, NY: Free Press of Glencoe.
- Sitkin, S. B. 1992. "Learning through Failure: The Strategy of Small Losses," *Research in Organizational Behavior* (14), pp. 231-266.
- Smith, S. M., Fabrigar, L. R., Powell, D. M., Estrada, M.-J. 2007. "The Role of Information-Processing Capacity and Goals in Attitude-Congruent Selective Exposure Effects," *Personality and Social Psychology Bulletin* (33:7), pp. 948-960.
- Sujan, M. 1985, "Consumer Knowledge: Effects on Evaluation Strategies Mediating Consumer Judgements." *Journal of Consumer Research*. (12), pp. 31-46.
- Weick, K. 1995. *Sensemaking in Organizations*, Thousand Oaks, CA: Sage Publications.
- van Knippenberg, D., Dahlander, L., Haas, M. R., and George, G. 2015. "From the Editors: Information, Attention, and Decision Making," *Academy of Management Journal* (58:3), pp. 649–657.
- Zaichkowsky, J. L. 1985. "Measuring the Involvement Construct," *Journal of Consumer Research* (12), pp. 341-352.