What Triggers Impulse Purchase Behavior: The Moderating Effects of User Expertise and Product Type

Research-in-Progress

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Abstract

Exposing consumers to persuasive cues can cause them to make impulse purchases. Persuasive cues can be heuristic cue or systematic cue. Heuristic cue uses simple rules to process the information such as identity of the source or other non-content cues. Systematic cue emphasizes detailed processing of message content and uses messagerelevant content or arguments to assist in decision making. The features of heuristic cue and systematic cue are investigated to see how they can impact one's impulse purchase behavior. The amount of expertise a consumer has in a specific product type (search or experience) will shape the relationships between persuasive cues and impulse purchase. The findings contribute to the impulse purchase literature and help merchants and website designers decide on what persuasive cues to provide consumers without overloading them with unnecessary information. To consumers, they will have better grip on their own impulse purchase behavior when exposed to persuasive cues.

Keywords: Heuristic cue, systematic cue, novice, expert, search product, experience product, impulse purchase

Introduction

Exposing consumers to persuasive cues can cause them to make unplanned purchase spontaneously. This sort of purchase is termed as impulse purchase and it holds three main features: 1) unplanned, 2) the result of an exposure to a stimulus and 3) decided "on-the-spot" (Piron 1991). Impulse purchase is prevalent in both traditional storefronts (Stern 1962) and online settings. Especially on the Internet, approximately 40 percent of all the money spent on electronic commerce sites is attributed to impulse purchases (Verhagen and van Dolen 2011). With consumers getting increasingly more comfortable with electronic commerce, there is potentially a very big revenue source motivating online merchants to capture all these extra sales. However, despite the prevalence of impulse purchase online, there is rather limited knowledge concerning the psychological mechanism underlying online impulse purchase behavior (Jeffrey and Hodge 2007). An opportunity exists for us to investigate one's impulse purchase behavior in the electronic marketplace.

Persuasive cues encourage consumers to make impulse purchases. Based on the heuristic-systematic model of information processing by Shelly Chaiken, a person can process persuasive cues either heuristically or systematically. These cues can be classified as heuristic cues or systematic cues. A heuristic view of persuasion de-emphasized detailed information processing and focuses on the role of simple rules or cognitive heuristics to change opinion, while a systematic view of persuasion emphasizes detailed processing of message content and the role of message-based cognitions to change opinion (Chaiken 1980, 1987). Both types of persuasive cues can make consumers feel that a deal is attractive. Thinking that it will be a waste to let go of such a good deal, consumers succumb to impulsive buys that are unplanned and unintentional.

Heuristic cue triggers heuristic information processing, which involves the use of relatively general rules such as schemata developed by individuals through their past experiences and observations (Abelson 1976). Heuristic cue facilitates decision making and reduce the amount of cognitive effort that is involved in the process, thereby prompting a person to behave impulsively. It can come from external advices (Axsom et al. 1987) given by 1) the experts (authority), 2) friends or family that an individual likes and resonates well with (liking) and/or 3) the general public (social proof).

Systematic cue triggers systematic information processing. A feature of systematic cue is argument quality (i.e., the amount of details online merchants give for a product). Recipients exert considerable cognitive effort to understand the persuasive message's arguments and to assess their validity in relation to the message's conclusion (Chaiken 1980). When argument quality is high, this means that more details (e.g., specifications for an electronic product) are provided to provide support for the overall persuasive message. Individual pieces of information that are consistent build upon one another to give consumers more confidence in a product, until a threshold is reached where consumers will then give in to their impulses.

The amount of knowledge a consumer has in a product (user expertise) and the type of product that is available will influence the way he or she processes the persuasive cues. In this study, user expertise is defined as the message recipient's familiarity with the product (Bhattacherjee and Sanford 2006). It is categorized into novice user and expert user. A common way to classify product type is to look at it either as a search product or an experience product. When a consumer is familiar with the product (i.e., high user expertise) or when given a deal for search product, he or she deploys own-based decision-making processes (King and Balasubramanian 1994). By relying on himself or herself to evaluate the familiar product or search product, this means that systematic cues will become more prominent in inducing impulse purchases.

Since impulse purchase is common online but little is known about the phenomenon, it is important to investigate the influence of persuasive cues on one's impulse purchase behavior contingent upon his or her familiarity in the product (termed as user expertise) and product type. Our study therefore attempts to answer two key research questions:

- 1. What persuasive cues can induce impulse purchases?
- 2. How do user expertise and product type influence the impacts of persuasive cues on one's impulse purchase behavior?

This paper makes two theoretical contributions. First, this study adds on to the literature on impulse purchase behavior and proposes a theoretical model to help websites understand what persuasive cues are good in inducing impulse purchases. It further looks at the two interesting moderators to see how the amount of knowledge a consumer has with a particular product and the type of product can likely influence one's decision to buy impulsively. Therefore in view of the different conditions, we can better comprehend which type of persuasive cues is more effective. Second, the study provides more in-depth investigation of the persuasive cues. It looks at the various sources of heuristic cue – expert heuristic (authority), liking-agreement heuristic (liking) and consensus heuristic (social proof); and systematic cue in terms of argument quality. Although heuristic and systematic cues induce impulse purchases, it is interesting to dwell deeper into their respective features and analyze whether these features have the same amount of influence on impulse purchase behavior.

There are three practical contributions. First, merchants have better insights as to what persuasive cues are more effective in encouraging consumers to buy impulsively. They can then show only information that is of most value to promote sales. This allows effective use of the space on the website, without overloading consumers with too much unnecessary information. Second, the research model guides website designers to understand how the two types of persuasive cues can be used to attract consumers with different levels of knowledge in a particular product, depending also on the product type, to buy impulsively. For example, heuristic cue works better on consumers with little knowledge of the product or for sale of experience product. To increase the chance of sales, online merchants can perhaps try to tease out the amount of expertise a consumer has regarding a certain product (category) and depending on what products they are selling, to show the right type of cues to prompt him/her in completing the transaction. Third, findings from the study enables consumers to comprehend their own impulsive purchase behavior on websites and understand specifically how heuristic cue and systematic cue, right down to their features, work to tempt them into making impulsive buys.

Theoretical Foundation

Impulse Purchase Behavior

When consumers buy on impulse, which are unplanned and/or unintended purchases, this means more revenue for the merchants (Rook and Fisher 1995). Impulsive consumers are less likely to consider the consequences of their decisions and go through less thorough evaluation for their purchase decisions than a typical informed shopper (Jones et al. 2003). They are more receptive in accepting spontaneous purchasing ideas (Hoch and Loewenstein 1991) and tend to focus more on the immediate gratification of fulfilling their impulses. Online merchants need to know how they can induce impulse purchases so that they can shorten consumers' hesitation and encourage them to commit early. Exposing consumers to the right persuasive cues tempts them to behave impulsively towards a deal.

Heuristic-Systematic Model

The heuristic-systematic model of information processing attempts to explain how people receive and process persuasive messages. It states that an individual can process message in one of the two ways: heuristically or systematically (Chaiken and Eagly 1983).

Heuristic information processing occurs when message recipients attend only to a subset of available information, exert limited cognitive effort and employ relatively simple decision rules called schemata or cognitive heuristics most probably learned from experiences and observations in life (Metzger et al. 2010). It involves the use of judgmental rules known as knowledge structures that are learned and stored in memory (Chen et al. 1999). Due to the use of knowledge structures in heuristic information processing, a recipient is likely to agree with messages without fully processing the semantic content of the message (Eagly and Chaiken 1993). As a result, they tend to be more impulsive in making decisions.

During heuristic information processing, recipients judge the validity of messages by relying more on accessible context information such as the identity of the source or other non-content cues, which are more persuasive to them than the message characteristics. There are three sources of heuristic cue: expert heuristic (believing statements made by experts; represented by authority), liking-agreement heuristic

(agreeing with people the message recipient likes; represented by liking) and consensus heuristic (validity of a message relies on others' approval of it; represented by social proof).

Systematic processing involves methodological, critical and thorough processing of systematic cues (Maheswaran and Chaiken 1991). Recipients scrutinize the message-relevant content or arguments in relation to other information concerning the object or issue addressed (Littlejohn and Foss 2009). The decision making process thus involves comprehensive and analytic, cognitive processing of judgment-relevant information (Chen et al. 1999). Argument quality, which is a key feature of systematic cue, refers to the extent of argumentation or amount of description of the product in a deal. Strong and convincing messages contain extra arguments to support consumers in their systematic information processing, i.e., "length implies strength" and/or "more arguments are better arguments" (Chaiken and Eagly 1989; Wood et al. 1985).

Moderators – User Expertise and Product Type

User expertise (i.e., how familiar an individual is with the product) can shape the impact of persuasive cues on one's impulse purchase behavior. Novice users with little experience in a product will tend to rely on others to share their experiences and feedback (use of heuristic cue). In contrast, expert users who are very familiar with a product will trust their own intuitive better and rely on themselves to reach a decision (use of systematic cue).

The type of product can affect which persuasive cue works better on an individual. For search products like electronics, consumers tend to rely on themselves during the decision-making process (use of systematic cue). For experience products like holiday destination, consumers tend to look to others for support in their decision-making process (use of heuristic cue).

Research Model and Hypotheses

Figure 1 presents the research model. This model investigates the use of persuasive cues by marketers to understand the effect of these cues on one's impulse purchase behavior. It also looks at user expertise and product type to see how they can help to moderate the relationships between the persuasive cues and one's impulse purchase behavior.

Persuasive cues, both heuristic cue and systematic cue, will influence one's impulse purchase behavior. Heuristic cues provide consumers with confidence about a deal and re-assure consumers that it is worthwhile to give the deal a try (Cialdini 2001). The assurance provides consumers a shortcut in reaching their purchase decision, thereby increasing the likelihood of an impulse buy. Hence we posit:

• H1: The presence of heuristic cue will increase impulse purchase.

Recipients developing attitudes from systematic information processing exert considerable cognitive effort to comprehend and evaluate the message's arguments, and attempt to assess their validity as it relates to the message's conclusion. When the argument quality of systematic cue is high, consumers are repeatedly shown information that is in line with the message's conclusion (Maddux and Rogers 1980). They will be convinced that the deal is good (say of high quality) and worth getting. This makes them impulsive in getting the deal. We therefore posit:

• H2: The presence of systematic cue will increase impulse purchase.

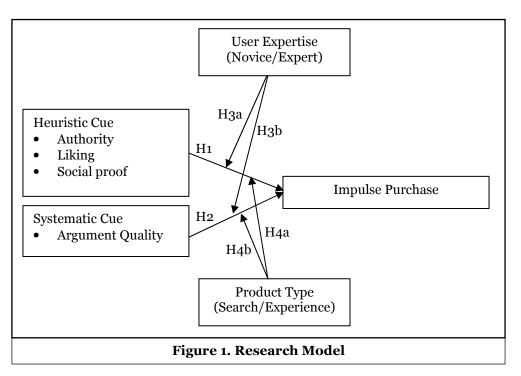
User expertise refers to the level of familiarity a consumer has with a product offered in a deal (Zaichkowsky 1985). Here, novice user has little experience or knowledge of a product and hence relies on external parties for an indication of whether the deal is worth buying. As a result, authority, liking and social proof which involve a form of endorsement from others will impact novice users more strongly. When user has ample knowledge of a product (i.e., expert user), he or she tends to trust his or her own judgment instead (Park and Lessig 1981). Persuasive arguments provided in the product description are therefore very crucial to assist expert users in making their purchase decision. We posit:

H3a: The presence of heuristic cue will increase impulse purchase more for novice user than for expert user.

• H3b: The presence of systematic cue will increase impulse purchase more for expert user than for novice user.

For product type, we use the classification of search product versus experience product (Huang et al. 2009). Search product can be assessed based on its objectives attributes without the need for prior experience. Consumers evaluating a search product are more likely to use own-based decision-making processes (i.e., to rely on themselves for product search, evaluation and purchase); in contrast, those evaluating an experience product tend to use other-based decision-making processes (i.e., to subcontract either part or all of their decision-making process) (King and Balasubramanian 1994). This means that argument quality (with the persuasive arguments in the description) is important when it comes to assessing a search product. For experience product, its attributes need to be experienced prior purchase. This means that consumers can look to others who have already experienced the product to share their feedback and make their decision based on third party opinions (Senecal and Nantel 2004). We posit:

- H4a: The presence of heuristic cue will increase impulse purchase more for experience product than for search product.
- H4b: The presence of systematic cue will increase impulse purchase more for search product than for experience product.



Research Methodology

Research Design

The research is in progress. A preliminary experiment with 2 (heuristic cue vs. systematic cue; between subjects) x 2 (novice user vs. expert user; between subjects) x 2 (search product vs. experience product; within subjects) design was used to test the research model.

Search product is characterized by attributes (e.g., color, size and price) that can be assessed based on the values attached to it without the need to experience the product directly, whereas experience product is characterized by attributes (e.g., taste, smell, softness and fit) that need to be experienced prior to

purchase (Xiao and Benbasat 2011). In this study, we use laptop (Smart X Laptop) as the search product and holiday destination (Canada) as the experience product.

See Table 1 for the experimental manipulations.

Participants

In the preliminary experiment, participants were students from a respectable university. The participants first filled in a pre-experiment survey that measure their level of familiarity in getting a laptop (search product; measured using questions on a 7-point Likert scale) and whether they have been to Canada (experience product; measured using dichotomous question requiring yes/no response). For the measurements of user expertise or how familiar he or she is in getting a laptop, should a participant obtained a middle score, he or she was then asked an additional dichotomous (yes/no response) of whether they find themselves familiar with the product. The questions are shown in Table 2.

Novice user means the recipient has little prior knowledge of the product, while expert user means the recipient has much prior knowledge of the product through his or her previous experiences. The participants were placed into the right experimental conditions and each participant responded for one search product and one experience product (i.e., two conditions per participant).

Table 1. Experimental Conditions						
	Novice		Expert			
	Search (Electronic Device)	Experience (Holiday Destination)	Search (Electronic Device)	Experience (Holiday Destination)		
Heuristic Cue	"IT gadget blogger A recommends Smart X Laptop." (authority)	"Travel blogger A recommends Canada as a holiday destination." (authority)	"IT gadget blogger A recommends Smart X Laptop." (authority)	"Travel blogger A recommends Canada as a holiday destination." (authority)		
	OR	OR	OR	OR		
	"Your best friend recommends Smart X Laptop." (liking)	"Your best friend recommends Canada as a holiday destination." (liking)	"Your best friend recommends Smart X Laptop." (liking)	"Your best friend recommends Canada as a holiday destination." (liking)		
	OR	OR	OR	OR		
	"Many people recommend Smart X Laptop." (social proof)	"Many people recommend Canada as a holiday destination." (social proof)	"Many people recommend Smart X Laptop." (social proof)	"Many people recommend Canada as a holiday destination." (social proof)		
	* Little experience in getting a laptop.	* Have not been to Canada.	* Much experience in getting a laptop.	* Have been to Canada.		
Systematic Cue	Condition 1 "Smart X Laptop is	Condition 2 "Canada is a fun,	Condition 3 "Smart X Laptop	Condition 4 "Canada is a fun,		

lightweight, high performance and looks stylish." (argument quality)	interesting and exciting holiday destination to visit." (argument quality)	is lightweight, high performance and looks stylish." (argument quality)	interesting and exciting holiday destination to visit." (argument quality)
* Little experience in getting a laptop.	* Have not been to Canada.	* Much experience in getting a laptop.	* Have been to Canada.
Condition 5	Condition 6	Condition 7	Condition 8

Procedure

The participants were given a common task of purchasing new stationaries for school from a fictitious website. Just before they complete their shopping, the participants were shown two special deal-of-theday deals for a laptop (search product) and a holiday destination (experience product). For each deal, the participants had to decide whether to purchase the deal. We also captured the amount of time (via the system) a participant use to select his or her response.

There was a post-experiment questionnaire for the participants. In this survey, each participant's impulse purchase tendency was measured using questions on a 7-point Likert scale. We used several recall questions to check if our manipulation of heuristic (authority, liking and social proof) and systematic (argument quality) cues had been effective. See Table 2 for the questions.

Table 2. Survey Questions				
Familiarity: pre-experiment survey	 I am very familiar with getting a laptop. (7-point Likert scale) I know exactly what to look out for when getting a laptop. (7-point Likert scale) I feel at ease with getting a laptop. (7-point Likert scale) Are you familiar with getting a laptop? (dichotomous scale) 	Self- developed		
Impulse Purchase	 Have you been to Canada? (dichotomous scale) I always have the urge to buy things other than those on my 	(Parboteeah		
Tendency:	 I always have the urge to buy things other than those on my shopping list. (7-point Likert scale) 	et al. 2009)		
post-experiment	– I have the desire to buy things that are not in my shopping	et un 2009)		
survey	list. (7-point Likert scale)			
	 I have the inclination to buy things outside my shopping list. (7-point Likert scale) 			
Manipulation Check:	– For the two deals, what interface elements are different?	Self-		
post-experiment	– What products do you see for sale in the two deals?	developed		
survey	 What do you think we are investigating by showing you the two deals? 			

Data Analysis

We computed the descriptive statistics for the continuous variables. A careful examination of the skewness and kurtosis values for these variables indicates that the data are normally distributed.

A two-stage methodology was employed for the data analysis (Gefen et al. 2000). First, the measurement model was assessed to determine how observed items load on the constructs in the model. Next, the assessment of the structural model allows for hypothesis testing by assessing the relationships among the variables. SPSS and LISREL were used in the statistical analyses.

An initial assessment of the fit statistics indicated that the fit of the measurement model was acceptable. Convergent and discrimination validity tests were also all good. From our preliminary assessment of the structural model, all paths within the research model were significant.

We used the Meng et al. (1992) Z-tests for comparing the correlated correlation coefficients. Based on the path coefficients and the Z-test, we found that for expert user and search product, systematic cue has more impact on their impulse purchase behavior compared to heuristic cue. In sum, support was found for all the hypotheses in the preliminary data analyses.

Concluding Remarks

Implications

There are two theoretical implications. First, this study investigates impulse purchases that is relatively less researched on and proposes a model to websites in understanding how to capture sales fast. This is important since impulse purchase constitutes a large part of electronic commerce and presenting the right type of persuasive cues helps to promote unplanned or unintentional buys. It also looks at how one's user expertise and product type can shape and change the amount of influence that a heuristic or systematic persuasive cue can have on consumers. Second, it contrasts the extent of influence that the sources of heuristic cues (expert, liking and social proof) have on one's impulsive purchase behavior.

There are three practical implications. First, the findings from this study serve to guide websites on how to design their information push so as to get consumers to purchase early. Second, it provides deeper understanding of how a consumer's user expertise and product type can induce impulse purchases when he or she is being exposed to heuristic or systematic cues. For example, when dealing with more (less) experienced consumers, websites might want to focus more on the systematic (heuristic) cues. Another example, websites selling experience (search) products might be better off emphasizing the heuristic (systematic) cues to prompt more unplanned and unintentional buys. Third, this research paints a complete picture to help websites push for quicker and more sales by manipulating the different aspects of heuristic and systematic cues.

Conclusion

The findings provide marketers with a clearer understanding of what persuasive cues they can use to tempt consumers to commit impulsively. Depending on a consumer's user expertise and product type, marketers know which information (heuristic cue or systematic cue) to provide in order to encourage impulse purchases. Providing the right piece of information is important in triggering positive reactions from consumers and also, so as not to overload them with the unnecessary information.

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