EFFECT OF PERCEIVED INTERACTIVITY OF ONLINE STORES ON

PURCHASE INTENTION

BY

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To the faculty of Washington State University:

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(Chair)

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Abstract

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The realm of online shopping has become more challenging for designers with the advent of newer technologies that try to make shopping experiences more interactive. In order to stay ahead of the game many online stores have incorporated interactive features. What is not clearly known is whether making the websites more interactive has a positive effect on purchase intention. This study attempts to provide pertinent data for improving our understanding of the effects of interactivity on purchase intention.

It has been noted that perception based measures of interactivity are better indicators of the actual degree of interactivity compared to feature-based measures. The concept of 'perceived interactivity' has been plagued with numerous definitions and has consequently been operationalized in a multitude of ways. This study uses the 18-item perceived interactivity scale developed by McMillan & Hwang (2002). This scale conceptualizes perceived interactivity as a three-dimensional construct.

In order to contribute towards further understanding of interactivity and its effects, this study examines the effects of perceived interactivity on purchase intention and attitude towards website. Forty three subjects were exposed to nine websites in three product

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categories, with varying levels of interactivity within a product category in a laboratory setting. Perceived interactivity, attitude towards website, attitude towards brand and purchase intention was measured after exposure to each website. Results showed that perceived interactivity, attitude towards website and attitude towards brand are all significant predictors of purchase intention. Further, perceived interactivity was positively related to attitude towards website.

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Dedication

I dedicate this thesis to my parents Damodara Reddy and Uma Devi for the immense love and support they have given me.

CHAPTER 1

INTRODUCTION

The Internet today, has become a very widely used and accepted platform for shopping and has brought a change in industry structure and commerce (Kim & Shim, 2002). According to Fiore & Fin (2003), the increasing competition and the introduction of the Internet and associated technologies have resulted in the expansion of website factors, beyond extensive product offerings, customer convenience, ease of navigation, and security that affect online marketing success. Some examples of this change are "24/7" customer service representatives via e-mail, Active Server Pages (ASP) allowing customization of information that appears on the web page, 3D virtual tours, contests etc. (Fiore & Fin, 2003; Li, Daugherty & Biocca, 2001). The Basic attributes of shopping in a traditional store that shoppers have come to take for granted-like the opportunity for sensory experience, quick information gathering, product comparison etc., are being simulated by businesses in the online environment. For example, shoe-maker Nike's website (www.nikeid.com) allows customers to design their own customized shoes. Potential customers can select their own combination of colors, shoe designs etc. and can see how the product looks in 3-D before ordering it. This approach towards trying to provide these benefits to online shoppers is an effort to give potential consumers more control over their shopping experience, make the experience more sensory, get them more involved and consequently increase the likelihood of intent to purchase. One method of increasing the control shoppers have and make them more involved is by making the online experience more interactive (Benzian-Avery & Iacobucci, 1998; Fiore & Fin, 2003; Thorbjornsen, Supphellen, Nysveen & Pedersen, 2002).

The concept of interactivity has been variously defined and can be broadly classified as belonging to one of the three groups-definitions focusing on process, definitions focusing on features, and definitions focusing on perception (McMillan & Hwang, 2002). While researchers have largely looked at the effects of feature and process based interactivity on purchase intent (Fiore & Fin, 2003; Li, Daugherty & Biocca, 2002; Kim & Shim, 2002), very few studies have looked at the effect of perceived interactivity on purchase intent. Li et al. (2002) looked at 3-D advertising on the Internet to evaluate its effects on presence, product knowledge, brand attitude and purchase intent. Jee and Lee (2002) did look at the effects of perceived interactivity like speed of loading, ease of navigation, variety of content that have been identified (McMillan & Hwang, 2002) as significant factors affecting perceived interactivity.

As noted above, there is a significant lack of research on perceived interactivity and its effects on purchase intent. Indeed, investigators, Reeves & Nass (1996) contend that "perceptions are far more influential than reality defined objectively". The purpose of this study was, therefore, to fill a void in literature by looking at the effects of perceived interactivity on purchase intentions. Also, no other study has looked at effects of interactivity on purchase intentions across product categories. There is a possibility that the effects of perceived interactivity may be different for different product categories. So, this study also attempted to document any differences across different product categories.

Implications to Theorists, Researchers and Practitioners

The term interactivity has been variously defined and is constantly undergoing refinement. This uncertainty carries over to the operationalization of the constructs associated with interactivity and it is important to know if the results obtained in older studies still hold true.

Jee & Lee (2002) looked at the consequences of perceived interactivity namely, attitude towards the website and purchase intent. Wu (as cited in Lee & Jee, 2002) designed a nine-item scale to measure perceived interactivity which was later was used by Jee & Lee (2002) to operationalize and measure perceived interactivity. This scale developed by Wu reflects the multi dimensional nature of perceived interactivity such as perceived control, responsiveness, and personalization (Jee & Lee, 2002). McMillan & Hwang (2002), argue that existing scales to measure perceived interactivity are unreliable and present an 18-item scale as a refined measure of perceived interactivity (MPI). This scale also takes into account the fact that interactivity is multidimensional construct and includes some elements of perceived interactivity that haven't been included in earlier studies.

Since, no study has yet looked at consequences of perceived interactivity on purchase intentions using the MPI, this study, by using the MPI to operationalize perceived interactivity aims to find out any discrepancies in existing literature on the effects of perceived interactivity on purchase intent. The study also contributes to literature on perceived interactivity by documenting any differences among product categories (computers, shoe and clothing websites) that will be investigated. If any differences are

noted among product categories, then researchers have a reason to explore other product categories and try to understand how product category, purchase intentions and perceived interactivity are related.

The results of a study such as the present one could have great value to online businesses. Indeed, Chen & Dubinsky (2003) contend that since much of the cognitive and physical effort of the purchase occurs prior to actual buying, e-marketers must know how to influence potential consumers in the pre-purchase stage. For example, if it is conclusively known that perceived interactivity of the marketers' web sites positively influence purchase intentions, then the marketers can try to push potential customer's to their web sites in the pre-purchase stage to create more positive purchase intentions. Favorable purchase intentions can be considered as a sign of customer maintenance (does not require much effort in terms of effort and expense) and unfavorable purchase intent as a customer's secession, and so online stores must be interested in customers' purchase intent (Kim et al., 2002; Zeithmal, Parasuraman & Berry, 1996). By understanding the causal relationship between perceived interactivity and purchase intentions, they would be better equipped to design more effective websites. By looking at differences in perceived interactivity and purchase intentions across product categories, online businesses would be able to make better business decisions regarding the inclusion of interactivity. For example, if it has been documented that for a certain product category, perceived interactivity has no effect on purchase intention, then marketers can avoid investing a lot of money required to make the web site more interactive.

CHAPTER 2

LITERATURE REVIEW

A review of literature on interactivity indicates that the concept of interactivity is a continually changing and that approaches towards the conceptualization and operationalization of interactivity are many. Literature also shows that there is no existing standard that clearly identifies what makes one medium more interactive than another (Kiousis, 2002). Some scholars suggest that interactivity can be adjusted by altering technological properties (Newhagen et al., 1995; Steuer, 1992), while others believe that interactivity levels change according to people's perceptions (Schneiderman, 1987; Day 1998; Kiousis, 1999; McMillan, 2000; Wu, 1999). The following section highlights these varied definitions.

Definitions of Interactivity

Steuer (1992), states that interactivity is 'the extent to which users can participate in modifying the form and content of a mediated environment in real-time'. Bretz (1983) conceptualizes interactivity as being related to interdependence of messages. Rafaeli (1998) stated that interactivity is 'an expression of the extent that in a given series of communication exchanges, any third (or later) transmission (or message) is related to the degree to which previous exchanges referred to even earlier transmissions'. Similarly, Williams, Rice & Rogers (1988) state that interactivity is 'the degree to which previous exchanges have control over, and can exchange roles in their mutual discourse'. Jensen (1998) explains that interactivity 'is a measure of a media's potential ability to let the user exert an influence on the content and/or form of

the mediated communication'. Cho and Leckenby (1999), define interactivity as 'the degree to which a person actively engages in advertising processing by interacting with advertising messages and advertisers'. Pavlik (1998) says 'Interactivity means two-way communication between source and receiver, or, more broadly multidimensional communication between any number of sources and receivers'. Lombard and Snyder (2001), define interactivity as 'a characteristic of a medium in which the user can influence the form and/or content of the mediated presentation or experience'. Struabhaar and LaRose (1996, p.12) use the term interactive 'to refer to situations where real-time feedback is collected from the receivers of a communications channel and is used by the source to continually modify the message as it is being delivered to the receiver'. Coyle and Thorson (2001, p.67), state 'A website that is described as interactive should gave good mapping, quick transitions between a user's input and resulting actions, and a range of ways to manipulate the content'. Lieb (1998) conceptualizes interactivity as having two primary definitions- one is kind of a personalization and the second type is community building.

It is clear from the various definitions that there have been multiple approaches to defining interactivity. At frequent intervals, attempts have been made to put together some form of structure to this ambiguous concept. For example, Heeter (1989) developed a six-dimensional definition of interactivity that includes the following:

- a) Complexity of choice available
- b) Effort that users must exert
- c) Responsiveness to the user

d) Monitoring of information use (tracking users for example)

e) Ease of adding information

f) Facilitation of interpersonal communication

Hanssen, Jankowski, and Etienne (1996) summarized in their study that aspects of interactivity are clustered around three terms:

a) Equality (containing aspects such as participants, mutual activity, role exchange, control)

b) Responsiveness (mutual discourse, nature of feedback, response time etc.)

c) Functional Communicative Environment (bandwidth, transparency, artificial intelligence etc.)

Downs and McMillan (2000) came up with a five-dimensional definition of interactivity comprising:

a) Direction of communication

b) Timing flexibility

c) Sense of place

- d) Level of control
- e) Responsiveness and the perceived purpose of communication

In an attempt to clear the confusion and disagreement surrounding the definition of interactivity, Kiousis (2002) examined both communication and non-communication perspectives on the term interactivity and came up with a definition that encompasses three domains-technological properties, communication context, and user perceptions. He concluded that interactivity was "...the degree to which a communication technology can

create a mediated environment in which participants can communicate (one to -one, one to -many, and many to -many), both synchronously and asynchronously, and participate in reciprocal message exchanges". He further added, "...with regard to human users, it additionally refers to their ability to perceive the experience as a simulation of interpersonal communication and increase their awareness of telepresence".

Some scholars agree that interactivity is a multi-dimensional construct and they incorporate such dimensions into their definitions. Other researchers while agreeing that interactivity is a multi-dimensional construct, insist that interactivity cannot be measured by analyzing processes or features (McMillan & Hwang, 2003). In fact Lee (2000) recommends that researchers investigate how users perceive and/or experience interactivity rather than focus on process or features. Reeves and Nass (1996, p.253) note that "Perceptions are far more influential than reality defined more objectively". Schumann, Artis, and Rivera (2001) state 'Ultimately it is the consumer's choice to interact, thus interactivity is a character of the consumer, and not a characteristics of the medium. The medium simply serves to facilitate the interaction'. All of these suggest an approach to research that examines interactivity from the users' perspective.

It is not very difficult to agree that finally it is the user who decides whether or not a medium is interactive or not. Thus, interactivity is based on the subjective perception of the users. Though these numerous approaches to define and conceptualize interactivity have led only to more ambiguity, one can safely say that a majority of factors that contribute to interactivity have been identified.

In this context, McMillan & Hwang's (2002) work is particularly noteworthy because of the fact that they have not only tried to list all the factors that appear to influence perceptions of interactivity, but have also operationalized (18-item MPI Scale) the concept of perceived interactivity in a way that encompasses all the known dimensions of interactivity. They have noted that all definitions can be categorized based on the authors' focus on process, features, perception or any combination of the three. They have further documented the following factors as featuring prominently in a majority of the definitions:

- a) The amount of control vested with the end user
- b) Responsiveness
- c) Extent of dialogue between consumer and manufacturer
- d) Responsiveness
- e) Customer involvement
- f) Time required for interaction
- g) Functions that enable customized feedback
- h) Simulation of interpersonal communication
- i) Speed
- j) Feedback
- k) Action & reaction
- l) Multimedia

Perceived Interactivity Scale (18-point MPI)

In the same study McMillan & Hwang (2002) found that three interactive elements occurred frequently: direction of communication, user control, and time. They posit that direction of communication encompasses the concepts of responsiveness and exchange. User control 'includes functions such as participation and features such as search engines'. The element time 'includes issues such as timely feedback and time required for information retrieval'. They further noted that in majority of the literature these concepts overlap and are interrelated.

In their study McMillan & Hwang (2002) started with 28-items that had been compiled from existing literature on interactivity, faculty who teach interactivity, and focus groups. These were subjected to extensive testing to come up with the 18-item scale that strongly predicts perceived interactivity.

Figure 1 (in the following page) shows the 18 items, which dimension(s) of perceived interactivity they represent and what they predict.

Item	Communication	User control	Time	Predict
Enables two way	X			Real-time
communication				conversation
Enables concurrent	X		X	Real-time
communication				conversation
Non concurrent	Х		X	Real-time
communication				conversation
Is interactive	Х	Х	Х	Real-time
				conversation
Primarily one-way	Х			Real-time
communication				conversation
Is interpersonal	Х			Real-time
-				conversation
Enables conversation	Х			Real-time
				conversation
Loads fast			Х	No Delay
Loads slow			Х	No Delay
Operates at high speed			X	No Delay
Variety of content		Х		Engaging
Keeps my attention	Х	Х		Engaging
Easy to find my way		Х		Engaging
through the site				
Unmanageable		Х		Engaging
Doesn't keep my		Х	Х	Engaging
attention				
Passive	Х	Х		Engaging
Immediate answers to			X	Engaging
questions				
Lacks content		Х		Engaging

Figure 1: MPI items, dimensions they represent and elements they predict

Advantages of the 18-Item Perceived Interactivity Scale

Wu (2000) designed a nine-item perceived interactivity scale. Although at first glance the 9-item scale appears to incorporate all the three dimensions (direction of communication, control and time), some components of interactivity that appear in McMillan & Hwang's (2000) scale were not been represented in Wu's (2000) scale. For example, the ability of the website (or any other medium) to hold one's attention is a factor that has been identified as contributing to perceived interactivity, but was not included in the Wu (2000) scale. Other factors like ease of navigation, speed of loading and variety of content also haven't found importance in Wu's (2000) scale.

As can be seen in the figure, McMillan & Hwang's (2002) MPI scale can be subcategorized into real-time conversation scale, no-delay scale and engaging scale which together measure perceived interactivity.

Also, McMillan and Hwang's (2002) MPI scale can be considered to be a more useful tool because of its ability to measure three different components of perceived interactivity viz. 'real-time conversation', 'no-delay', and 'engaging'. For media applications where one of these components is more (or less) important than the other, researchers can easily vary the features of the application to give more (or less) weight to some components and the MPI scale then becomes a tool that can be used to make sure that overall perceptions of interactivity are at the requisite levels.

Studies Examining Interactivity and Purchase intent

One of the most widely used measures for advertising effectiveness is purchase intention (Andrews, Akhter, Durvasula & Muehling, 1992; Beerli & Santana, 1999). Even those studies that have looked at effects of interactivity on purchase intent have approached interactivity as feature based. For instance, Li et al. (2002) looked at 3-D advertising on the Internet to evaluate its effects on presence, product knowledge, brand attitude and purchase intent. The researchers operationally defined three-dimensional advertising as "a user controlled product website in which consumers may rotate, zoom in or zoom out, and move the product for detailed inspection". They found that participants exposed to 3-D advertising reported higher levels of presence than those exposed to 2-D advertising. They also found that 3-D advertising led to more favorable brand attitudes and product knowledge but no significant differences were found in purchase intent.

Schlosser (2003) examined how individuals process information presented through virtual interaction with a product (object interactivity) and its consequent impact on their purchase intentions. She found that object interactivity led to higher purchase intentions than when the same information was presented passively. She further observed that object interactivity does not depend on individuals' self-generated mental images. Those who lack knowledge of the object or are unable to vividly imagine the object, benefit most from it. Kim et al. (2002) explored consumers' propensity to pursue hedonistic and practical goals while shopping online and its relationship to purchase intent. They found more support for the assertion that the quality of the information system, customer support service, shopping mall perception and security influence purchase intention. Yet

another important study by Fiore et al. (2003) found empirical support for the hypothesis that image interactivity function has a positive influence on approach responses towards an online retailer. According to them, the image interactivity function allows the customers to create and manipulate visual images of a product on a website. They found that this image interactivity function enhanced global attitude, willingness to purchase, willingness to return to the online store, likelihood of spending more time than planned shopping online, and likelihood of patronizing the online retailer's bricks-and-mortar store.

Although not much research has concentrated on perceived interactivity and effects on purchase intentions, it has been argued that perceived interactivity of a website has a positive influence on attitudes towards the website (Raney, Arpan, Pashupathi, Brill, 2003).

The concept of perceived interactivity warrants more attention because some studies have found a difference between the actual level of interactivity on a website and perceived interactivity (Heeter 2000; Jee & Lee, 2002). In their study, Raney et al. (2003), examined the effects of including entertaining and/or interactive content on automotive websites on site evaluations, intent to return to the site, levels of arousal and purchase intent. They found significant increases in purchase intent only for a website that featured a mini movie as compared to other websites that included product footage video only, video footage and audio with an interactive feature or audio with interactive feature. Jee et al. (2002) found that need for cognition and internet/computer skills are

predictors of perceived interactivity. They also found that consumers' purchase intention was influenced by their attitude toward the web site and not by perceived interactivity. Although perceived interactivity was not found to have any effect on purchase intention, perceived interactivity was found to influence attitude towards the website, thus finding support that perceived interactivity and purchase intentions may be indirectly related. Though the results of the study were interesting, the results are far from conclusive. Some discrepancies in the results were attributed to the existing brand attitudes of the products playing a mediating role.

From the above discussion of existing literature, it is clear that the concept of interactivity as well the concept of perceived interactivity are yet to be fully understood. More researchers have started to now focus on perceptions of interactivity rather than studying interactivity as a feature or process-based concept. The effects of perceived interactivity on purchase intentions, attitude towards web site also need to be studied in more depth, especially in light of the ever-changing definitions and operationalizations of the concept.

CHAPTER 3

METHODOLOGY

Hypotheses:

Given a lack of consistent and reliable knowledge about the effects of perceived interactivity on purchase intentions, the following hypothesis was tested.

H1: Perceived interactivity is positively related to purchase intention across product categories

H2: Perceived interactivity is positively related to attitude towards the website across product categories

H3: Attitude towards the website is positively related to purchase intention across product categories

Conceptual and operational definitions (Refer to Appendix B for scales)

Perceived Interactivity:

Perceived interactivity in this study is seen as the extent to which consumers perceive the website to be interactive. McMillan & Hwangs' (2002) 18 item MPI scale was used to measure perceived interactivity.

Attitude towards website:

Chen and Wells (1999) defined attitude toward the Web site (A_{st}) as a "predisposition to respond favorably or unfavorably to Web content in natural exposure situations." Attitude toward the Web site was measured on eight 5-point scales ranging from 1 ("Strongly disagree") to 5 ("Strongly agree"). This scale was adapted from Chen and Wells' (1999) "attitude toward the site" scale.

Purchase Intention:

Purchase intention refers to the level of likelihood of making a purchase.

Baker, Lavy & Grewals' (1992) "Willingness to buy" scale will be used to measure purchase intention.

Attitude towards brand:

Attitude towards brand refers to the overall evaluation of a particular brand. Existing attitude towards the brand will be measured using Bruner's (1998) scale that asks participants to indicate how they feel about the brand using seven point semanticdifferential items.

Sampling

A convenience sample of forty three students at a large northwestern university was recruited for this study. The product categories that were tested are Shoes, Clothing and Computers, which are products that college students would generally be able to purchase with their available financial resources. Jee & Lee (2002) studied just one product category- computers. The other two product categories were chosen by the researcher to see if the results are similar for those product categories. Specifically shoes and clothing categories were chosen because of the availability of a number of high-interactive and low-interactive websites.

The brand websites chosen were for Nike (nikeid.com), Adidas (usa.adidas.com), Puma (puma.com), Dell (dell.com), Puget Systems (pugetsystems.com), e Machines (emachines.com), Abercrombie & Fitch (abercrombie.com), IC3D (ic3d.com) and Gap

(gap.com). The websites were chosen by the researcher based on the number and kind of interactive features that the websites had to see variance in results. Since perceived interactivity to some extent is dependent on the features of the web site, it was easier to choose websites from the large pool in order clearly see variance in the results. To further improve validity, the subjects were asked to assume that they have the financial resources to make the purchase.

Data Collection

The subjects were welcomed and asked to read and sign the consent forms which are shown in Appendix A. They were told that they had to browse nine websites-three for each product category (see Appendix C). The websites were chosen by the researcher to include websites of brands that varied in the amount of interactive features. This was done in order to assure some variance in the data. A website with less interactive features and a less chance of enabling interactive exchange makes it likely to generate low scores on the perceived interactivity scale, and a website with many interactive features makes it likely to generate higher scores. A five minute time limit was be imposed per website and after browsing each website subjects were asked to fill out a questionnaire that measured perceived interactivity and purchase intention. The MPI scaled developed by McMillan & Hwang (2002) was used to measure perceived interactivity. Attitude toward the web site was measured using Chen and Wells' (1999) scale. Brand recall was measured after the participants finished browsing all the websites. An unrelated video was shown as a distracter before measuring brand recall to avoid recency effects.

Data Analysis

All data were entered into SPSS to be analyzed. SPSS is a widely used statistical tool for data analysis. All the four constructs were first submitted to a reliability test, to ensure that the scales could perform as expected. Specifically, regression analysis was done to test H1, H2 and H3 in order to determine causation. Stepwise regression analysis was done to isolate the effects of perceived interactivity, attitude towards the website, attitude towards brand on purchase intention.

CHAPTER 4

RESULTS

Scale reliability:

To test the reliability of the scales measuring perceived interactivity, attitude towards website, attitude towards brand and purchase intention, the scales were subjected to a reliability analysis. Construct reliability of the question items for perceived interactivity was statistically significant ($\alpha = 0.8738$) after removing four items from the scale. Perceived interactivity is a multi-construct variable and the sub constructs that were tested for reliability were "engaging", "real-time" and "no delay". Of the eight-items from the original scale measuring "engaging" two items were deleted for statistical significance (reliability increased from $\alpha = 0.6260$ to $\alpha = 0.8545$). From the seven items that measured "real-time", two items were removed (reliability increased from $\alpha = 0.6093$ to $\alpha = 0.8287$). The "no delay" sub-construct was reliable at $\alpha = 0.9246$. The six-item scale measuring Attitude towards brand was statistically significant ($\alpha = 0.9696$). The eight-item scale measuring Attitude towards website was found to be statistically significant ($\alpha = 0.9147$). The three-item scale measuring purchase intention was also statistically significant ($\alpha = 0.9406$). The final scores for perceived interactivity, attitude towards website, attitude towards brand and purchase intention were calculated by averaging (mean) the values of the items that measured these constructs. The final reliabilities (α) are as follows:

Table 1: Reliability of constructs

Construct	Α
Perceived Interactivity	0.8738
Attitude Towards Website	0.9147
Attitude Towards Brand	0.9696
Purchase Intention	0.9406

Hypothesis testing:

The Hypotheses were tested by using regression analysis.

H1: *Perceived interactivity is positively related to purchase intention across product*

categories

A simple regression analysis with purchase intention as the dependent variable and perceived interactivity as the independent variable showed a significant causal relationship ($\beta = 0.741$, t= 21.647 and p<0.05) between perceived interactivity and purchase intention across the three product categories (shoes, clothes and computers).

In order to test the validity of the results across individual product categories, regression analysis with the same independent and dependent variables was performed for each individual category (shoes, computers and clothes). For each product category there was a significant causal relationship between perceived interactivity and purchase intention. Table 2 (following page) shows the β , t and p values for each of the product categories.

Product Category	β	Т	Р
1. Shoes	0.676	10.342	< 0.05
2. Computers	0.806	15.355	< 0.05
3. Clothes	0.650	9.648	< 0.05

Table 2: Regression analysis between perceived interactivity and purchase intention

The results show that the hypothesis holds for all the three product categories and the effect is significant in each case. Based on these results perceived interactivity of online stores may be considered a significant predictor of purchase intention. Perceived interactivity appears to be a better predictor of purchase intention in the computers category.

H2: *Perceived interactivity is positively related to attitude towards the website across product categories*

A simple regression analysis with attitude towards the website as the dependent variable and perceived interactivity as the independent variable showed a significant causal relationship ($\beta = 0.786$, t= 24.982 and p<0.05) between perceived interactivity and attitude towards the website.

In order to test the validity of the results across individual product categories, regression analysis with the same independent and dependent variables was performed for three different cases. For each product category there was a significant causal relationship between perceived interactivity and attitude towards the website. The following table shows the β , t and p values for each of the product categories.

Product Category	β	Τ	Р
1. Shoes	0.758	13.077	< 0.05
2. Computers	0.828	16.655	< 0.05
3. Clothes	0.686	10.632	< 0.05

Table 3: Regression analysis between perceived interactivity and attitude towards website

The results show that the hypothesis holds for all the three product categories and the causal relationship is significant in each case. According to previous research attitude towards the website is a significant predictor of purchase intention. The results in this study show that there is a strong causality between perceived interactivity and attitude towards the website. This shows a possibility of perceived interactivity having effects on purchase intention directly as well as indirectly.

H3: *Attitude towards the website is positively related to purchase intention across product categories*

A simple regression analysis with attitude towards the website as the dependent variable and purchase intention as the independent variable showed a significant causal relationship ($\beta = 0.875$, t= 35.401 and p<0.05) between attitude towards the website and purchase intention.

In order to test the validity of the results across individual product categories, regression analysis with the same independent and dependent variables was performed for each of the three product categories (shoes, clothing and computers). For each product category there was a significant causal relationship between attitude towards the website and purchase intention. Table 4 shows the β , t and p values for each of the product categories.

Product Category	β	Τ	Р
1. Shoes	0.823	16.357	< 0.05
2. Computers	0.895	22.594	< 0.05
3. Clothes	0.867	19.614	< 0.05

Table 4: Regression analysis between attitude towards website and purchase intention

The results show that attitude towards the website is a significant predictor of purchase intention. This is consistent with the results seen in previous research. The results are consistent across the three product categories tested in this study, allowing easy generalizability.

Stepwise Regression:

A stepwise regression analysis with purchase intention as the dependent variable and attitude towards website, perceived interactivity & attitude towards brand shows that attitude towards the website is the most significant predictor of purchase intention. Table 5 (following page) illustrates the same. Table 5: Stepwise regression analysis of attitude towards website, perceived interactivity and attitude towards brand on purchase intention

		Unstandardized Coefficients		Standardi zed Coefficien ts		
Model		В	Std. Error	Beta	t	Sig.
1	(Constant)	606	.148		-4.097	.000
	ATTWEBST	1.544	.044	.875	35.401	.000
2	(Constant)	910	.149		-6.113	.000
	ATTWEBST	1.155	.074	.654	15.645	.000
	ATTBRAND	.320	.050	.267	6.373	.000
3	(Constant)	-1.275	.212		-6.014	.000
	ATTWEBST	1.057	.084	.599	12.578	.000
	ATTBRAND	.294	.051	.245	5.778	.000
	PERCDINT	.176	.073	.093	2.404	.017

Coefficients^a

a. Dependent Variable: PURCHINT

As

Attitude towards website, attitude towards brand and perceived interactivity are all significant predictors of purchase intention; but attitude towards the website is the best predictor ($\beta = 0.599$) if all three are compared followed by attitude towards brand ($\beta = 0.245$) and perceived interactivity ($\beta = 0.093$).

CHAPTER 5

DISCUSSION

The purpose of this study was to explore and fill a void in current understanding of interactivity by looking at the effects of perceived interactivity of online stores and purchase intention. Also, no other study has looked at effects of interactivity on purchase intentions across product categories. Therefore, this study investigated the effects of perceived interactivity on purchase intention. Findings strongly suggest that perceived interactivity is indeed a significant predictor of purchase intention. When compared to other predictors of purchase intention like attitude towards website and attitude towards the website $\beta = 0.599$; attitude towards brand $\beta = 0.245$; perceived interactivity $\beta = 0.093$). But, the important point to be noted is that perceived interactivity is positively related to attitude towards website, which in turn is a very significant predictor of purchase intention ($\beta = 0.875$).

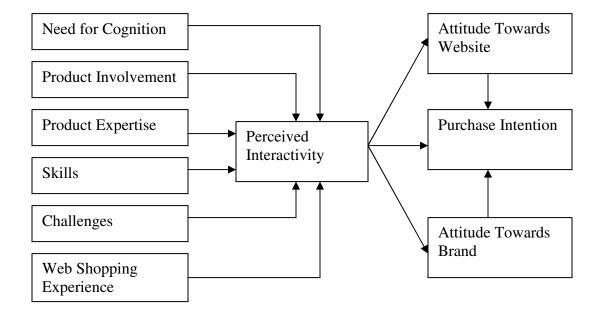
From the review of literature it is clear that very few studies have looked at the effects of perceived interactivity and purchase intention and the results have been mixed. Jee et al. (2002) found that perceived interactivity has no effect on purchase intention. This study's results are contrary to this earlier finding in that perceived interactivity has been found to be significantly related to purchase intention. This study also upheld the findings of previous consumer behavior research - attitude towards website was found to be a very significant predictor of purchase intention. The results of the study are interesting in that the effects of perceived interactivity on purchase intention have been inconclusive so far.

This study incorporated McMillan & Hwang's (2002) MPI scale to operationalize perceived interactivity. It is possible that until a highly reliable and valid scale for measuring perceived interactivity is developed, these conflicting results will persist. Although it was not the study's intention to look at the effects of attitude towards brand on purchase intention, it was found that attitude towards brand is also a significant predictor of purchase intention. Furthermore, perceived interactivity was also found to have a significant effect on attitude towards brand. This finding was not an objective of this study but it is interesting to note that perceived interactivity positively influences two established predictors of purchase intention (attitude towards website and attitude toward brand). It is indeed an interesting finding that perceived interactivity of a website can have positive influences on attitude towards brand. No previous literature has looked at the effects of perceived interactivity on attitude towards the brand nor conceptualized such effects. The results of this study can contribute towards a strong theoretical model incorporating perceived interactivity, attitude towards website, attitude towards brand and purchase intention. Jee & Lee (2002) attempted to identify the antecedents and precedents of perceived interactivity. As discussed in the literature review section, the antecedents are general factors like need for cognition, product involvement, product expertise and Internet-specific factors like skills, challenges and web shopping experience. Of the various antecedents listed by Jee & Lee (2002) only web shopping experience can be manipulated to a certain extent by the website designer. Taking into account the findings of Jee & Lee's (2002) study and the results of this study a conceptual model incorporating perceived interactivity, attitude towards website, purchase intention and attitude towards brand can be developed. It must be kept in mind

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that none of the other studies have used the MPI scales for measuring perceived interactivity and so such a conceptual model must be viewed as a tentative step towards a broad understanding of perceived interactivity and its relation with a number of other predictors of purchase intention.

Figure 2: Proposed conceptual model for perceived interactivity:



The above model is an extension of the model proposed in Jee and Lee's (2002) study of the antecedents & consequences of perceived interactivity and the results obtained in this study. There are many antecedents and precedents of perceived interactivity. We must look at perceived interactivity in relation to these factors in order to get a more thorough understanding of its effects.

Practical Applications:

The results of this study hold great value for online shopping website designers and marketing departments of retailers with an online presence. This study showed that perceived interactivity is positively related to purchase intention, attitude towards website and attitude towards brand. The results of the study suggest that once an online store is designed, the testing must include measures of perceived interactivity. It is people's perception of the degree of interactivity that significantly predicts purchase intention. Website designers might believe that the inclusion of interactive features is enough to consider that website as interactive, but potential customers might not perceive so. Also, as discussed in the literature review section, this measure of perceived interactivity is dependent on the speed with the website works. This implies that while testing websites for perceived interactivity, care must be taken to ensure that the website is tested from different locations or with different speeds. For example, users of dial-up services (generally slower compared to DSL/cable) may find the website to be slow and consequently less in interactivity. Care should be taken while testing and different Internet access methods must be simulated, in order to get a real picture of the degree of perceived interactivity. Since perceived interactivity is a multi-dimensional construct with time (no delay), control (engaging) and communication (real time), different websites can be designed for different speeds by manipulating feature interactivity to change levels of time, control and communication, to achieve the desired levels of perceived interactivity. For example, the scores for the time component for people using dial-up might be low, so by reducing some of the features contributing to control and communication a variant of the website could be designed to improve the perceived

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interactivity scores. Once multiple websites are designed, potential customers can be automatically transferred to the correct website according to their connection speed (some websites are already doing this).

One of the interesting results of this study is that perceived interactivity proved to be a significant predictor of attitude towards brand. Brand attitude building is a difficult task and a majority of the effort towards brand attitude building is done through advertising and post-purchase customer service. This interesting result gives marketers a new approach towards building brand attitude. There is a significant causal relationship between perceived interactivity and attitude towards brand. This fact must also be kept in mind while designing websites for online stores. If perceived interactivity is high, then marketers can be confident that the website is contributing towards building brand attitude. Even if the potential consumer does not make a purchase, but perceives the website to be interactive, the website would have served multiple purposes. Once marketers are sure that perceived interactivity is high for their website, then can work on directing potential customers to their websites in order to build brand attitude too.

In conclusion, it is not enough if interactive features are included in an online store. Very comprehensive tests must be done with samples from the target market to understand how the different components of perceived interactivity are performing. Once that is done, modifications to the existing website must be done and decisions on maintaining multiple websites must be taken in order to ensure that the degree of perceived interactivity remains high irrespective of the kind of Internet access customers use.

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LIMITATIONS

The sample constituted entirely of undergraduate students from a large university. The use of a non-probabilistic convenience sample is major limitation. The generalizations of the results from this study to a larger population must be accepted cautiously keeping in mind the how the sample was generated.

In this study the subjects were exposed to the websites in a laboratory setting where the opportunity to simulate varying connectivity speeds was absent. The computers in this particular setting were connected to a fairly high speed network, which could have skewed the results. The subjects were asked to browse nine websites continuously over a period of one hour, so there is a possibility that fatigue could have had some effect on their web browsing experience. There were some unexpected technical problems with the computers in the laboratory. Some of the participants had a problem connecting to a few websites because of local computer malfunctioning and this could have had an effect on their evaluation of the websites.

Another major limitation was that the sample distribution was uneven with males constituting just 35% of the sample. It is commonly accepted notion that female are less interested as well as comfortable while shopping for computers compared to males. Also, the sample constituents were exclusively college undergraduate students with limited income. It is possible that motivational factors could have played a role in their evaluation of the websites.

CONCLUSION

This study was a small step in trying to reduce the uncertainty that exists in findings about perceived interactivity and its effects on purchase intention. Future studies must concentrate on replicating this study with other product categories and also look at other brands in the categories that were tested in this study. Also studies must simulate various connectivity speeds (reflecting actual speeds of dial-up, DSL, Cable etc.) for the Internet. Since this was a convenience sample replication is necessary to confidently accept the results and also to see to what extent the results confirm the findings in this study.

Among perceived interactivity, attitude towards the website and attitude towards brand, attitude towards website was found to be the strongest predictor of purchase intention. It was also found that perceived interactivity is a strong predictor of attitude of website, so future studies must also try to analyze via path analysis if perceived interactivity has a significant indirect effect on purchase intention. No other study has documented the effects of perceived interactivity on attitude towards brand and the positive results obtained in this study must be motivation enough for future research to corroborate this finding. This study also limited itself to single-brand websites. Future studies can look at multi-brand websites to see if the results still hold true.

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APPENDIX A

CONSENT FORM

This study is being conducted as part of a thesis requirement by Karthik Changal, graduate student, School of Communication, Washington State University. This study attempts to further our understanding of consumer behavior. The information in this content form is provided so that you can decide whether to participate in this study. Your participation is completely voluntary and you are free to withdraw at any stage, without penalty.

You will be asked to browse nine websites, each for 5 minutes. After browsing each website you will be asked a few questions about your experience. Your participation will take approximately one hour. You will receive extra credit points for your participation in this study. Also, upon completion of the study you will be provided with a brief explanation of the questions that this study addresses.

This project has been reviewed and approved for human participation by the WSU IRB. If you have any questions not addressed by this consent form, please do not hesitate to ask. Thank you for your time.

(Researcher's signature)

Karthik Changal, Graduate student, School of Communication, Washington State University kchangal@wsu.edu Ph: 509-332-7578

CONSENT STATEMENT:

I have read the above comments and agree to participate in this study. I understand that if I have any questions or concerns regarding this project I can contact the investigator at the above location or the WSU Institutional Review Board at (509)335-9661.

(Participant's signature)

(Date)

APPENDIX B

SCALES

Purchase Intention Scale

The likelihood that I would shop on this website is high.
 Strongly Disagree 1 ____2 ___3 ___4 ___5 ___6 ___7 ___ Strongly Agree
 I would be willing to buy a product on this website.
 Strongly Disagree 1 ____2 ___3 ___4 ___5 ___6 ___7 ___ Strongly Agree
 I would like to recommend this website to my friend.
 Strongly Disagree 1 ____2 ___3 ___4 ___5 ___6 ___7 ___ Strongly Agree

Perceived Interactivity Scale

 1. This website enables two-way communication

 Strongly Disagree 1___2_3_4__5_6_7_ Strongly Agree

 2. This website enables immediate communication.

 Strongly Disagree 1__2_3_4_5_6_7_ Strongly Agree

 3. This website enables delayed communication.

 Strongly Disagree 1_2_3_4_5_6_7_ Strongly Agree

 4. This website is interactive.

 Strongly Disagree 1_2_3_4_5_6_7_ Strongly Agree

 5. This website primarily enables one-way communication.

 Strongly Disagree 1_2_3_4_5_6_7_ Strongly Agree

 6. This website is interpersonal.

 Strongly Disagree 1_2_3_4_5_6_7_ Strongly Agree

7. This website enables conversation.

Strongly Disagree 1____2___3___4___5___6___7___ Strongly Agree 8. This website loads fast. Strongly Disagree 1____2___3___4___5___6___7___ Strongly Agree 9. This website loads slowly. Strongly Disagree 1____2___3___4___5___6___7___ Strongly Agree 10. This website operates at high speed Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree 11. This website has variety of content. Strongly Disagree 1____2___3___4___5___6___7___ Strongly Agree 12. This website keeps my attention. Strongly Disagree 1____2___3___4___5___6___7___ Strongly Agree 13. It was easy to find my way through the website. Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree 14. This website was unmanageable. Strongly Disagree 1____2___3___4___5___6___7___ Strongly Agree 15. This website doesn't keep my attention. Strongly Disagree 1____2__3__4__5__6__7___ Strongly Agree 16. This website appeared passive. Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree 17. This website provided immediate answers to questions. Strongly Disagree 1____2___3___4___5___6___7___ Strongly Agree 18. This website lacks content.

Strongly Disagree 1____2___3___4___5___6___7___ Strongly Agree

Attitude Toward Website Scale

1. This Web site makes it easy for me to build a relationship with this company.

Strongly Disagree 1____2__3__4__5___ Strongly Agree

2. I would like to visit this Web site again in the future.

Strongly Disagree 1____2___3___4___5___ Strongly Agree

3. I am satisfied with the service provided by this Web site.

Strongly Disagree 1____2___3___4___5___ Strongly Agree

4. I feel comfortable in surfing this Web site.

Strongly Disagree 1 2 3 4 5 Strongly Agree

5. I feel surfing this Web site is a good way to spend my time.

Strongly Disagree 1____2___3___4___5___ Strongly Agree

6. This site is for a brand that I am familiar with.

Strongly Disagree 1____2___3___4___5___ Strongly Agree

7. I've visited this Web site before.

Strongly Disagree 1____2___3___4___5___ Strongly Agree

8. Compared with other Web sites, I would rate this one as

One of the worst 1____2___3___4___5___ One of the best

Attitude Toward Brand Scale

 Bad
 1
 2
 3
 4
 5
 6
 7
 Good

 Unappealing
 1
 2
 3
 4
 5
 6
 7
 Appealing

 Unpleasant
 1
 2
 3
 4
 5
 6
 7
 Pleasant

 Unattractive
 1
 2
 3
 4
 5
 6
 7
 Pleasant

 Unattractive
 1
 2
 3
 4
 5
 6
 7
 Attractive

 Boring
 1
 2
 3
 4
 5
 6
 7
 Interesting

 Dislike
 1
 2
 3
 4
 5
 6
 7
 Like

APPENDIX C

SCREEN SHOT OF INTRUCTION PAGE AND QUESTIONNAIRES

<mark>ම Main Shopping Page - Mozilla Firefox</mark> File <u>E</u> dit <u>V</u> iew <u>G</u> o <u>B</u> ookmarks <u>T</u> ools <u>H</u> elp		
< 🔹 📄 🐇 🔕 🚮 🗋 http://www.wsu.edu/~kchangal/s	shopping.htm	v C .
	Welcome	
Finase assume that you are here to shop for items like shoes, clothes and personal computers. Also assume that you have enough money to make the purchases. You will be given 5 minutes to browse each website. At the end of the allotted five minutes, we would like to know how you feel about the website you had just browsed. Fill out the questionnaire and wait for instructions to start browsing the next one. If you have any questions, please ask new ! Flease try not to interrupt while the study is in progress. If you are experiencing technical difficulties, close the browser window of the website you are having trouble with and open it again from this page. If you accidentally closed this page, you can find a short cut to this webpage on your computer's desktep titled 'Let's go shopping'	Let's go shop for shoes Website 1: <u>ADIDAS</u> Website 2: <u>NIKE ID</u> Website 3: <u>PUMA</u> Let's go shop for a home computer Website 4: <u>DELL</u> Website 5: <u>e MACHINES</u> Website 5: <u>e MACHINES</u> Website 6: <u>PUGET SYSTEMS</u> Let's go shop for clothes Website 7: <u>ABERCROMBIE</u> Website 8: <u>IC3D</u> Website 9: <u>GAP</u>	
Done		
🐉 start 🔞 Main Shopping Page 🔞 Google - Mozilla Firefox	🗃 Thesis2.13.05 - Micro	📢 🛃 🖏 🧶 🔁 10:27 PM

Website1:

Please express how strongly you agree or disagree with the following statements.

Indicate your choice by placing a check mark beside the correct number.

1. The likelihood that I would shop on this website is high. Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree 2. I would be willing to buy a product on this website. Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree 3. I would like to recommend this website to my friend. Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree 4. This website enables two-way communication Strongly Disagree 1____2___3___4___5___6___7___ Strongly Agree 5. This website enables immediate communication. Strongly Disagree 1____2___3___4___5___6___7___ Strongly Agree 6. This website enables delayed communication. Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree 7. This website is interactive. Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree 8. This website primarily enables one-way communication. Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree 9. This website is interpersonal. Strongly Disagree 1____2___3___4___5___6___7___ Strongly Agree 10. This website enables conversation.

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Strongly Disagree	1	_2	_3	_4	_5	_6	_7	Strongly Agree		
11. This website loads fast.										
Strongly Disagree	1	_2	_3	_4	_5	_6	_7	Strongly Agree		
12. This website loads slowly.										
Strongly Disagree	1	_2	_3	_4	_5	_6	_7	Strongly Agree		
13. This website op	erates a	at high s	speed							
Strongly Disagree	1	_2	_3	_4	_5	_6	_7	Strongly Agree		
14. This website ha	s variet	y of co	ntent.							
Strongly Disagree	1	_2	_3	_4	_5	_6	_7	Strongly Agree		
15. This website ke	eps my	attentio	on.							
Strongly Disagree	1	_2	_3	_4	_5	_6	_7	Strongly Agree		
16. It was easy to fi	ind my	way thr	ough th	e websi	te.					
Strongly Disagree	1	_2	_3	_4	_5	_6	_7	Strongly Agree		
17. This website wa	as unma	anageab	ole.							
Strongly Disagree	1	_2	_3	_4	_5	_6	_7	Strongly Agree		
18. This website do	esn't k	eep my	attentio	on.						
Strongly Disagree	1	_2	_3	_4	_5	_6	_7	Strongly Agree		
19. This website appeared passive.										
Strongly Disagree	1	_2	_3	_4	_5	_6	_7	Strongly Agree		
20. This website provided immediate answers to questions.										
Strongly Disagree	1	_2	_3	_4	_5	_6	_7	Strongly Agree		
21. This website la	cks con	tent.								
Strongly Disagree	1	_2	_3	_4	_5	_6	_7	Strongly Agree		

22. This Web site makes it easy for me to build a relationship with this company.

Strongly Disagree 1____2___3___4___5___ Strongly Agree

23. I would like to visit this Web site again in the future.

Strongly Disagree 1____2__3__4__5___ Strongly Agree

24. I am satisfied with the service provided by this Web site.

Strongly Disagree 1____2__3__4__5___ Strongly Agree

25. I feel comfortable in surfing this Web site.

Strongly Disagree 1____2___3___4___5___ Strongly Agree

26. I feel surfing this Web site is a good way to spend my time.

Strongly Disagree 1____2___3___4___5____ Strongly Agree

27. This site is for a brand that I am familiar with.

Strongly Disagree 1____2___3___4___5___ Strongly Agree

28. I've visited this Web site before.

Strongly Disagree 1____2__3__4__5___ Strongly Agree

29. Compared with other Web sites, I would rate this one as

One of the worst $1 _ 2 _ 3 _ 4 _ 5 _$ One of the best

Please indicate how you feel about this brand. Circle the number that best represents your choice..

Bad1234567GoodUnappealing1234567AppealingUnpleasant1234567PleasantUnattractive1234567AttractiveBoring1234567InterestingDislike1234567Like



Let the researcher know that you are done. DO NOT TURN THE PAGE UNTIL INSTRUCTED TO DO SO.

Website2:

Please express how strongly you agree or disagree with the following statements.

Indicate your choice by placing a check mark beside the correct number.

1. The likelihood that I would shop on this website is high. Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree 2. I would be willing to buy a product on this website. Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree 3. I would like to recommend this website to my friend. Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree 4. This website enables two-way communication Strongly Disagree 1____2___3___4___5___6___7___ Strongly Agree 5. This website enables immediate communication. Strongly Disagree 1____2___3___4___5___6___7___ Strongly Agree 6. This website enables delayed communication. Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree 7. This website is interactive. Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree 8. This website primarily enables one-way communication. Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree 9. This website is interpersonal. Strongly Disagree 1____2___3___4___5___6___7___ Strongly Agree 10. This website enables conversation.

Strongly Disagree	1	_2	_3	_4	_5	_6	_7	Strongly Agree		
11. This website loads fast.										
Strongly Disagree	1	_2	_3	_4	_5	_6	_7	Strongly Agree		
12. This website loads slowly.										
Strongly Disagree	1	_2	_3	_4	_5	_6	_7	Strongly Agree		
13. This website op	erates a	at high s	speed							
Strongly Disagree	1	_2	_3	_4	_5	_6	_7	Strongly Agree		
14. This website ha	s variet	y of co	ntent.							
Strongly Disagree	1	_2	_3	_4	_5	_6	_7	Strongly Agree		
15. This website ke	eps my	attentio	on.							
Strongly Disagree	1	_2	_3	_4	_5	_6	_7	Strongly Agree		
16. It was easy to fi	ind my	way thr	ough th	e websi	te.					
Strongly Disagree	1	_2	_3	_4	_5	_6	_7	Strongly Agree		
17. This website wa	as unma	anageab	ole.							
Strongly Disagree	1	_2	_3	_4	_5	_6	_7	Strongly Agree		
18. This website do	esn't k	eep my	attentio	on.						
Strongly Disagree	1	_2	_3	_4	_5	_6	_7	Strongly Agree		
19. This website appeared passive.										
Strongly Disagree	1	_2	_3	_4	_5	_6	_7	Strongly Agree		
20. This website provided immediate answers to questions.										
Strongly Disagree	1	_2	_3	_4	_5	_6	_7	Strongly Agree		
21. This website la	cks con	tent.								
Strongly Disagree	1	_2	_3	_4	_5	_6	_7	Strongly Agree		

22. This Web site makes it easy for me to build a relationship with this company.

Strongly Disagree 1____2___3___4___5___ Strongly Agree

23. I would like to visit this Web site again in the future.

Strongly Disagree 1____2__3___4__5___ Strongly Agree

24. I am satisfied with the service provided by this Web site.

Strongly Disagree 1____2__3__4__5___ Strongly Agree

25. I feel comfortable in surfing this Web site.

Strongly Disagree 1____2___3___4___5___ Strongly Agree

26. I feel surfing this Web site is a good way to spend my time.

Strongly Disagree 1____2___3___4___5____ Strongly Agree

27. This site is for a brand that I am familiar with.

Strongly Disagree 1____2___3___4___5___ Strongly Agree

28. I've visited this Web site before.

Strongly Disagree 1____2__3__4__5___ Strongly Agree

29. Compared with other Web sites, I would rate this one as

One of the worst $1 _ 2 _ 3 _ 4 _ 5 _$ One of the best

Please indicate how you feel about this brand. Circle the number that best represents your choice..

Bad1234567GoodUnappealing1234567AppealingUnpleasant1234567PleasantUnattractive1234567AttractiveBoring1234567InterestingDislike1234567Like



Let the researcher know that you are done. DO NOT TURN THE PAGE UNTIL INSTRUCTED TO DO SO.

Website 3:

Please express how strongly you agree or disagree with the following statements.

Indicate your choice by placing a check mark beside the correct number.

1. The likelihood that I would shop on this website is high. Strongly Disagree 1____2___3___4___5___6___7___ Strongly Agree 2. I would be willing to buy a product on this website. Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree 3. I would like to recommend this website to my friend. Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree 4. This website enables two-way communication Strongly Disagree 1____2___3___4___5___6___7___ Strongly Agree 5. This website enables immediate communication. Strongly Disagree 1____2___3___4___5___6___7___ Strongly Agree 6. This website enables delayed communication. Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree 7. This website is interactive. Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree 8. This website primarily enables one-way communication. Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree 9. This website is interpersonal. Strongly Disagree 1____2___3___4___5___6___7___ Strongly Agree 10. This website enables conversation.

Strongly Disagree	1	_2	_3	_4	_5	_6	_7	Strongly Agree		
11. This website loads fast.										
Strongly Disagree	1	_2	_3	_4	_5	_6	_7	Strongly Agree		
12. This website loads slowly.										
Strongly Disagree	1	_2	_3	_4	_5	_6	_7	Strongly Agree		
13. This website op	perates a	at high :	speed							
Strongly Disagree	1	_2	_3	_4	_5	_6	_7	Strongly Agree		
14. This website ha	as variet	ty of co	ntent.							
Strongly Disagree	1	_2	_3	_4	_5	_6	_7	Strongly Agree		
15. This website ke	eps my	attenti	on.							
Strongly Disagree	1	_2	_3	_4	_5	_6	_7	Strongly Agree		
16. It was easy to find my way through the website.										
Strongly Disagree	1	_2	_3	_4	_5	_6	_7	Strongly Agree		
17. This website was unmanageable.										
Strongly Disagree	1	_2	_3	_4	_5	_6	_7	Strongly Agree		
18. This website doesn't keep my attention.										
Strongly Disagree	1	_2	_3	_4	_5	_6	_7	Strongly Agree		
19. This website appeared passive.										
Strongly Disagree	1	_2	_3	4	_5	_6	_7	Strongly Agree		
20. This website provided immediate answers to questions.										
Strongly Disagree	1	_2	_3	_4	_5	_6	_7	Strongly Agree		

21. This website lacks content.

Strongly Disagree 1____2___3___4___5___6___7___ Strongly Agree

22. This Web site makes it easy for me to build a relationship with this company.

Strongly Disagree 1____2___3___4___5___ Strongly Agree

23. I would like to visit this Web site again in the future.

Strongly Disagree 1____2___3___4___5___ Strongly Agree

24. I am satisfied with the service provided by this Web site.

Strongly Disagree 1____2__3__4__5___ Strongly Agree

25. I feel comfortable in surfing this Web site.

Strongly Disagree 1____2__3__4__5___ Strongly Agree

26. I feel surfing this Web site is a good way to spend my time.

Strongly Disagree 1____2__3__4__5___ Strongly Agree

27. This site is for a brand that I am familiar with.

Strongly Disagree 1____2___3___4___5___ Strongly Agree

28. I've visited this Web site before.

Strongly Disagree 1____2__3__4__5___ Strongly Agree

29. Compared with other Web sites, I would rate this one as

One of the worst $1 _ 2 _ 3 _ 4 _ 5 _$ One of the best

Please indicate how you feel about this brand. Circle the number that best represents your choice..

Bad1234567GoodUnappealing1234567AppealingUnpleasant1234567PleasantUnattractive1234567AttractiveBoring1234567InterestingDislike1234567Like



Let the researcher know that you are done. DO NOT TURN THE PAGE UNTIL INSTRUCTED TO DO SO.

Website 4:

Please express how strongly you agree or disagree with the following statements.

Indicate your choice by placing a check mark beside the correct number.

1. The likelihood that I would shop on this website is high. Strongly Disagree 1____2___3___4___5___6___7___ Strongly Agree 2. I would be willing to buy a product on this website. Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree 3. I would like to recommend this website to my friend. Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree 4. This website enables two-way communication Strongly Disagree 1____2___3___4___5___6___7___ Strongly Agree 5. This website enables immediate communication. Strongly Disagree 1____2___3___4___5___6___7___ Strongly Agree 6. This website enables delayed communication. Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree 7. This website is interactive. Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree 8. This website primarily enables one-way communication. Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree 9. This website is interpersonal. Strongly Disagree 1____2___3___4___5___6___7___ Strongly Agree 10. This website enables conversation.

Strongly Disagree	1	_2	_3	_4	_5	_6	_7	Strongly Agree		
11. This website loads fast.										
Strongly Disagree	1	_2	_3	_4	_5	_6	_7	Strongly Agree		
12. This website loads slowly.										
Strongly Disagree	1	_2	_3	_4	_5	_6	_7	Strongly Agree		
13. This website op	perates a	at high :	speed							
Strongly Disagree	1	_2	_3	_4	_5	_6	_7	Strongly Agree		
14. This website ha	as variet	ty of co	ntent.							
Strongly Disagree	1	_2	_3	_4	_5	_6	_7	Strongly Agree		
15. This website ke	eps my	attenti	on.							
Strongly Disagree	1	_2	_3	_4	_5	_6	_7	Strongly Agree		
16. It was easy to find my way through the website.										
Strongly Disagree	1	_2	_3	_4	_5	_6	_7	Strongly Agree		
17. This website wa	as unma	anageat	ole.							
Strongly Disagree	1	_2	_3	_4	_5	_6	_7	Strongly Agree		
18. This website do	oesn't k	eep my	attentic	on.						
Strongly Disagree	1	_2	_3	_4	_5	_6	_7	Strongly Agree		
19. This website appeared passive.										
Strongly Disagree	1	_2	_3	_4	_5	_6	_7	Strongly Agree		
20. This website provided immediate answers to questions.										
Strongly Disagree	1	_2	_3	_4	_5	_6	_7	Strongly Agree		
21. This website la	cks con	tent.								
Strongly Disagree	1	_2	_3	_4	_5	_6	_7	Strongly Agree		

22. This Web site makes it easy for me to build a relationship with this company.

Strongly Disagree 1____2___3___4___5___ Strongly Agree

23. I would like to visit this Web site again in the future.

Strongly Disagree 1____2__3___4__5___ Strongly Agree

24. I am satisfied with the service provided by this Web site.

Strongly Disagree 1____2__3__4__5___ Strongly Agree

25. I feel comfortable in surfing this Web site.

Strongly Disagree 1____2___3___4___5___ Strongly Agree

26. I feel surfing this Web site is a good way to spend my time.

Strongly Disagree 1____2__3__4__5___ Strongly Agree

27. This site is for a brand that I am familiar with.

Strongly Disagree 1____2___3___4___5___ Strongly Agree

28. I've visited this Web site before.

Strongly Disagree 1____2___3___4___5___ Strongly Agree

29. Compared with other Web sites, I would rate this one as

One of the worst $1 _ 2 _ 3 _ 4 _ 5 _$ One of the best

Please indicate how you feel about this brand. Circle the number that best represents your choice..

 Bad
 1
 2
 3
 4
 5
 6
 7
 Good

 Unappealing
 1
 2
 3
 4
 5
 6
 7
 Appealing

 Unpleasant
 1
 2
 3
 4
 5
 6
 7
 Pleasant

 Unattractive
 1
 2
 3
 4
 5
 6
 7
 Attractive

 Boring
 1
 2
 3
 4
 5
 6
 7
 Interesting

 Dislike
 1
 2
 3
 4
 5
 6
 7
 Like



Let the researcher know that you are done. DO NOT TURN THE PAGE UNTIL

INSTRUCTED TO DO SO.

Website 5:

Please express how strongly you agree or disagree with the following statements.

Indicate your choice by placing a check mark beside the correct number.

1. The likelihood that I would shop on this website is high. Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree 2. I would be willing to buy a product on this website. Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree 3. I would like to recommend this website to my friend. Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree 4. This website enables two-way communication Strongly Disagree 1____2___3___4___5___6___7___ Strongly Agree 5. This website enables immediate communication. Strongly Disagree 1____2___3___4___5___6___7___ Strongly Agree 6. This website enables delayed communication. Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree 7. This website is interactive. Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree 8. This website primarily enables one-way communication. Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree 9. This website is interpersonal. Strongly Disagree 1____2___3___4___5___6___7___ Strongly Agree 10. This website enables conversation.

Strongly Disagree	1	_2	_3	_4	_5	_6	_7	Strongly Agree		
11. This website loads fast.										
Strongly Disagree	1	_2	_3	_4	_5	_6	_7	Strongly Agree		
12. This website loads slowly.										
Strongly Disagree	1	_2	_3	_4	_5	_6	_7	Strongly Agree		
13. This website op	erates a	at high s	speed							
Strongly Disagree	1	_2	_3	_4	_5	_6	_7	Strongly Agree		
14. This website ha	s variet	y of co	ntent.							
Strongly Disagree	1	_2	_3	_4	_5	_6	_7	Strongly Agree		
15. This website ke	eps my	attentio	on.							
Strongly Disagree	1	_2	_3	_4	_5	_6	_7	Strongly Agree		
16. It was easy to fi	ind my	way thr	ough th	e websi	te.					
Strongly Disagree	1	_2	_3	_4	_5	_6	_7	Strongly Agree		
17. This website wa	as unma	anageab	ole.							
Strongly Disagree	1	_2	_3	_4	_5	_6	_7	Strongly Agree		
18. This website do	esn't k	eep my	attentio	on.						
Strongly Disagree	1	_2	_3	_4	_5	_6	_7	Strongly Agree		
19. This website appeared passive.										
Strongly Disagree	1	_2	_3	_4	_5	_6	_7	Strongly Agree		
20. This website provided immediate answers to questions.										
Strongly Disagree	1	_2	_3	_4	_5	_6	_7	Strongly Agree		
21. This website la	cks con	tent.								
Strongly Disagree	1	_2	_3	_4	_5	_6	_7	Strongly Agree		

22. This Web site makes it easy for me to build a relationship with this company.

Strongly Disagree 1____2___3___4___5___ Strongly Agree

23. I would like to visit this Web site again in the future.

Strongly Disagree 1____2__3__4__5___ Strongly Agree

24. I am satisfied with the service provided by this Web site.

Strongly Disagree 1____2___3___4___5___ Strongly Agree

25. I feel comfortable in surfing this Web site.

Strongly Disagree 1____2___3___4__5___ Strongly Agree

26. I feel surfing this Web site is a good way to spend my time.

Strongly Disagree 1____2___3___4___5___ Strongly Agree

27. This site is for a brand that I am familiar with.

Strongly Disagree 1____2__3__4__5___ Strongly Agree

28. I've visited this Web site before.

Strongly Disagree 1____2__3___4__5___ Strongly Agree

29. Compared with other Web sites, I would rate this one as

One of the worst $1 _ 2 _ 3 _ 4 _ 5 _$ One of the best

Bad1234567GoodUnappealing1234567AppealingUnpleasant1234567PleasantUnattractive1234567AttractiveBoring1234567InterestingDislike1234567Like



Let the researcher know that you are done. DO NOT TURN THE PAGE UNTIL INSTRUCTED TO DO SO.

Website 6:

Please express how strongly you agree or disagree with the following statements.

Indicate your choice by placing a check mark beside the correct number.

1. The likelihood that I would shop on this website is high. Strongly Disagree 1____2___3___4___5___6___7___ Strongly Agree 2. I would be willing to buy a product on this website. Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree 3. I would like to recommend this website to my friend. Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree 4. This website enables two-way communication Strongly Disagree 1____2___3___4___5___6___7___ Strongly Agree 5. This website enables immediate communication. Strongly Disagree 1____2___3___4___5___6___7___ Strongly Agree 6. This website enables delayed communication. Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree 7. This website is interactive. Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree 8. This website primarily enables one-way communication. Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree 9. This website is interpersonal. Strongly Disagree 1____2___3___4___5___6___7___ Strongly Agree 10. This website enables conversation.

Strongly Disagree	1	_2	_3	_4	_5	_6	_7	Strongly Agree		
11. This website loads fast.										
Strongly Disagree	1	_2	_3	_4	_5	_6	_7	Strongly Agree		
12. This website lo	ads slov	wly.								
Strongly Disagree	1	_2	_3	_4	_5	_6	_7	Strongly Agree		
13. This website op	perates a	at high :	speed							
Strongly Disagree	1	_2	_3	_4	_5	_6	_7	Strongly Agree		
14. This website ha	as variet	ty of co	ntent.							
Strongly Disagree	1	_2	_3	_4	_5	_6	_7	Strongly Agree		
15. This website ke	eps my	attenti	on.							
Strongly Disagree	1	_2	_3	_4	_5	_6	_7	Strongly Agree		
16. It was easy to find my way through the website.										
Strongly Disagree	1	_2	_3	_4	_5	_6	_7	Strongly Agree		
17. This website was unmanageable.										
Strongly Disagree	1	_2	_3	_4	_5	_6	_7	Strongly Agree		
18. This website doesn't keep my attention.										
Strongly Disagree	1	_2	_3	_4	_5	_6	_7	Strongly Agree		
19. This website appeared passive.										
Strongly Disagree	1	_2	_3	_4	_5	_6	_7	Strongly Agree		
20. This website provided immediate answers to questions.										
Strongly Disagree	1	_2	_3	_4	_5	_6	_7	Strongly Agree		
21. This website lacks content.										
Strongly Disagree	1	_2	_3	_4	_5	_6	_7	Strongly Agree		

Strongly Disagree 1____2___3___4___5___ Strongly Agree

23. I would like to visit this Web site again in the future.

Strongly Disagree 1____2__3___4__5___ Strongly Agree

24. I am satisfied with the service provided by this Web site.

Strongly Disagree 1____2__3___4__5___ Strongly Agree

25. I feel comfortable in surfing this Web site.

Strongly Disagree 1____2__3__4__5___ Strongly Agree

26. I feel surfing this Web site is a good way to spend my time.

Strongly Disagree 1____2___3___4___5____ Strongly Agree

27. This site is for a brand that I am familiar with.

Strongly Disagree 1____2___3___4___5___ Strongly Agree

28. I've visited this Web site before.

Strongly Disagree 1____2___3___4___5___ Strongly Agree

29. Compared with other Web sites, I would rate this one as

 Bad
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 Unappealing
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 Appealing

 Unpleasant
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 6
 7
 Pleasant

 Unattractive
 1
 2
 3
 4
 5
 6
 7
 Attractive

 Boring
 1
 2
 3
 4
 5
 6
 7
 Interesting

 Dislike
 1
 2
 3
 4
 5
 6
 7
 Like



Let the researcher know that you are done. DO NOT TURN THE PAGE UNTIL

INSTRUCTED TO DO SO.

Website 7:

Please express how strongly you agree or disagree with the following statements.

Indicate your choice by placing a check mark beside the correct number.

1. The likelihood that I would shop on this website is high. Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree 2. I would be willing to buy a product on this website. Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree 3. I would like to recommend this website to my friend. Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree 4. This website enables two-way communication Strongly Disagree 1____2___3___4___5___6___7___ Strongly Agree 5. This website enables immediate communication. Strongly Disagree 1____2___3___4___5___6___7___ Strongly Agree 6. This website enables delayed communication. Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree 7. This website is interactive. Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree 8. This website primarily enables one-way communication. Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree 9. This website is interpersonal. Strongly Disagree 1____2___3___4___5___6___7___ Strongly Agree 10. This website enables conversation.

Strongly Disagree	1	_2	_3	_4	_5	_6	_7	Strongly Agree		
11. This website loads fast.										
Strongly Disagree	1	_2	_3	_4	_5	_6	_7	Strongly Agree		
12. This website lo	ads slov	wly.								
Strongly Disagree	1	_2	_3	_4	_5	_6	_7	Strongly Agree		
13. This website op	erates a	at high s	speed							
Strongly Disagree	1	_2	_3	_4	_5	_6	_7	Strongly Agree		
14. This website ha	s variet	y of co	ntent.							
Strongly Disagree	1	_2	_3	_4	_5	_6	_7	Strongly Agree		
15. This website ke	eps my	attentio	on.							
Strongly Disagree	1	_2	_3	_4	_5	_6	_7	Strongly Agree		
16. It was easy to find my way through the website.										
Strongly Disagree	1	_2	_3	_4	_5	_6	_7	Strongly Agree		
17. This website was unmanageable.										
Strongly Disagree	1	_2	_3	_4	_5	_6	_7	Strongly Agree		
18. This website doesn't keep my attention.										
Strongly Disagree	1	_2	_3	_4	_5	_6	_7	Strongly Agree		
19. This website appeared passive.										
Strongly Disagree	1	_2	_3	_4	_5	_6	_7	Strongly Agree		
20. This website provided immediate answers to questions.										
Strongly Disagree	1	_2	_3	_4	_5	_6	_7	Strongly Agree		
21. This website lacks content.										
Strongly Disagree	1	_2	_3	_4	_5	_6	_7	Strongly Agree		

Strongly Disagree 1____2___3___4___5___ Strongly Agree

23. I would like to visit this Web site again in the future.

Strongly Disagree 1____2__3__4__5___ Strongly Agree

24. I am satisfied with the service provided by this Web site.

Strongly Disagree 1____2___3___4___5___ Strongly Agree

25. I feel comfortable in surfing this Web site.

Strongly Disagree 1____2___3___4___5___ Strongly Agree

26. I feel surfing this Web site is a good way to spend my time.

Strongly Disagree 1____2___3___4___5___ Strongly Agree

27. This site is for a brand that I am familiar with.

Strongly Disagree 1____2__3__4__5___ Strongly Agree

28. I've visited this Web site before.

Strongly Disagree 1____2__3___4__5___ Strongly Agree

29. Compared with other Web sites, I would rate this one as

 Bad
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 Unpleasant
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 Pleasant

 Unattractive
 1
 2
 3
 4
 5
 6
 7
 Attractive

 Boring
 1
 2
 3
 4
 5
 6
 7
 Interesting

 Dislike
 1
 2
 3
 4
 5
 6
 7
 Like



Let the researcher know that you are done. DO NOT TURN THE PAGE UNTIL

INSTRUCTED TO DO SO.

Website 8:

Please express how strongly you agree or disagree with the following statements.

Indicate your choice by placing a check mark beside the correct number.

1. The likelihood that I would shop on this website is high. Strongly Disagree 1____2___3___4___5___6___7___ Strongly Agree 2. I would be willing to buy a product on this website. Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree 3. I would like to recommend this website to my friend. Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree 4. This website enables two-way communication Strongly Disagree 1____2___3___4___5___6___7___ Strongly Agree 5. This website enables immediate communication. Strongly Disagree 1____2___3___4___5___6___7___ Strongly Agree 6. This website enables delayed communication. Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree 7. This website is interactive. Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree 8. This website primarily enables one-way communication. Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree 9. This website is interpersonal. Strongly Disagree 1____2___3___4___5___6___7___ Strongly Agree 10. This website enables conversation.

Strongly Disagree	1	_2	_3	_4	_5	_6	_7	Strongly Agree		
11. This website loads fast.										
Strongly Disagree	1	_2	_3	_4	_5	_6	_7	Strongly Agree		
12. This website lo	ads slov	wly.								
Strongly Disagree	1	_2	_3	_4	_5	_6	_7	Strongly Agree		
13. This website op	erates a	at high s	speed							
Strongly Disagree	1	_2	_3	_4	_5	_6	_7	Strongly Agree		
14. This website ha	s variet	y of co	ntent.							
Strongly Disagree	1	_2	_3	_4	_5	_6	_7	Strongly Agree		
15. This website ke	eps my	attentio	on.							
Strongly Disagree	1	_2	_3	_4	_5	_6	_7	Strongly Agree		
16. It was easy to find my way through the website.										
Strongly Disagree	1	_2	_3	_4	_5	_6	_7	Strongly Agree		
17. This website was unmanageable.										
Strongly Disagree	1	_2	_3	_4	_5	_6	_7	Strongly Agree		
18. This website doesn't keep my attention.										
Strongly Disagree	1	_2	_3	_4	_5	_6	_7	Strongly Agree		
19. This website appeared passive.										
Strongly Disagree	1	_2	_3	_4	_5	_6	_7	Strongly Agree		
20. This website provided immediate answers to questions.										
Strongly Disagree	1	_2	_3	_4	_5	_6	_7	Strongly Agree		
21. This website lacks content.										
Strongly Disagree	1	_2	_3	_4	_5	_6	_7	Strongly Agree		

Strongly Disagree 1____2___3___4___5___ Strongly Agree

23. I would like to visit this Web site again in the future.

Strongly Disagree 1____2__3__4__5___ Strongly Agree

24. I am satisfied with the service provided by this Web site.

Strongly Disagree 1____2___3___4___5___ Strongly Agree

25. I feel comfortable in surfing this Web site.

Strongly Disagree 1____2___3___4___5___ Strongly Agree

26. I feel surfing this Web site is a good way to spend my time.

Strongly Disagree 1____2___3___4___5___ Strongly Agree

27. This site is for a brand that I am familiar with.

Strongly Disagree 1____2__3__4__5___ Strongly Agree

28. I've visited this Web site before.

Strongly Disagree 1____2__3___4__5___ Strongly Agree

29. Compared with other Web sites, I would rate this one as

 Bad
 1
 2
 3
 4
 5
 6
 7
 Good

 Unappealing
 1
 2
 3
 4
 5
 6
 7
 Appealing

 Unpleasant
 1
 2
 3
 4
 5
 6
 7
 Pleasant

 Unattractive
 1
 2
 3
 4
 5
 6
 7
 Attractive

 Boring
 1
 2
 3
 4
 5
 6
 7
 Interesting

 Dislike
 1
 2
 3
 4
 5
 6
 7
 Like



Let the researcher know that you are done. DO NOT TURN THE PAGE UNTIL

INSTRUCTED TO DO SO.

Website 9:

Please express how strongly you agree or disagree with the following statements.

Indicate your choice by placing a check mark beside the correct number.

1. The likelihood that I would shop on this website is high. Strongly Disagree 1____2___3___4___5___6___7___ Strongly Agree 2. I would be willing to buy a product on this website. Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree 3. I would like to recommend this website to my friend. Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree 4. This website enables two-way communication Strongly Disagree 1____2___3___4___5___6___7___ Strongly Agree 5. This website enables immediate communication. Strongly Disagree 1____2___3___4___5___6___7___ Strongly Agree 6. This website enables delayed communication. Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree 7. This website is interactive. Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree 8. This website primarily enables one-way communication. Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree 9. This website is interpersonal. Strongly Disagree 1____2___3___4___5___6___7___ Strongly Agree 10. This website enables conversation.

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Strongly Disagree	1	_2	_3	_4	_5	_6	_7	Strongly Agree		
11. This website loads fast.										
Strongly Disagree	1	_2	_3	_4	_5	_6	_7	Strongly Agree		
12. This website lo	ads slov	wly.								
Strongly Disagree	1	_2	_3	_4	_5	_6	_7	Strongly Agree		
13. This website op	perates a	at high :	speed							
Strongly Disagree	1	_2	_3	_4	_5	_6	_7	Strongly Agree		
14. This website ha	as variet	ty of co	ntent.							
Strongly Disagree	1	_2	_3	_4	_5	_6	_7	Strongly Agree		
15. This website ke	eps my	attenti	on.							
Strongly Disagree	1	_2	_3	_4	_5	_6	_7	Strongly Agree		
16. It was easy to find my way through the website.										
Strongly Disagree	1	_2	_3	_4	_5	_6	_7	Strongly Agree		
17. This website was unmanageable.										
Strongly Disagree	1	_2	_3	_4	_5	_6	_7	Strongly Agree		
18. This website doesn't keep my attention.										
Strongly Disagree	1	_2	_3	_4	_5	_6	_7	Strongly Agree		
19. This website appeared passive.										
Strongly Disagree	1	_2	_3	_4	_5	_6	_7	Strongly Agree		
20. This website provided immediate answers to questions.										
Strongly Disagree	1	_2	_3	_4	_5	_6	_7	Strongly Agree		
21. This website lacks content.										
Strongly Disagree	1	_2	_3	_4	_5	_6	_7	Strongly Agree		

Strongly Disagree 1____2___3___4___5___ Strongly Agree

23. I would like to visit this Web site again in the future.

Strongly Disagree 1____2__3__4__5___ Strongly Agree

24. I am satisfied with the service provided by this Web site.

Strongly Disagree 1____2___3___4___5___ Strongly Agree

25. I feel comfortable in surfing this Web site.

Strongly Disagree 1____2___3___4___5___ Strongly Agree

26. I feel surfing this Web site is a good way to spend my time.

Strongly Disagree 1____2___3___4___5___ Strongly Agree

27. This site is for a brand that I am familiar with.

Strongly Disagree 1____2__3__4__5___ Strongly Agree

28. I've visited this Web site before.

Strongly Disagree 1____2__3___4__5___ Strongly Agree

29. Compared with other Web sites, I would rate this one as

Bad1234567GoodUnappealing1234567AppealingUnpleasant1234567PleasantUnattractive1234567AttractiveBoring1234567InterestingDislike1234567Like



Let the researcher know that you are done. DO NOT TURN THE PAGE UNTIL INSTRUCTED TO DO SO.

Please provide the following demographic information. You are free not to provide

any information that you do not wish to divulge.

1) Which of the following best describes your age group?

Less than 18 _____

18-24 _____

25-30 _____

31-35 _____

Greater than 35 _____

2) Gender: Male___Female___

3) Which of the following best describes your family's annual income (in dollars)?

Less than \$10,000/year_____

10,000-20,000/Year____

20,000-30,000/Year____

30,000-40,000/Year____

40,000-50,000/Year____

>50,000/Year____

4) Which of the following best describes the number of purchases made by you over the

internet in the past one month?

0____

1-3 ____

- 4-6 ____
- 7-9 ____
- >9 ____



Office of Grant and Research Development

MEMORANDUM

TO: Karthik Changal Communication, WSU Pullman (2520)

FROM: Jamie Murphy (for) Cindy Corbett, Chair, WSU Institutional Review Board (3140)

DATE: 12 May 2004

SUBJECT: Approved Human Subjects Protocol - New Protocol

Your Human Subjects Review Summary Form and additional information provided for the proposal titled "Effect of Perceived Interactivity of Online Stores on Purchase Intention and Delayed Recall," IRB File Number 7049-a was reviewed for the protection of the subjects participating in the study. Based on the information received from you, the WSU-IRB <u>approved</u> your human subjects protocol on 12 May 2004.

IRB approval indicates that the study protocol as presented in the Human Subjects Form by the investigator, is designed to adequately protect the subjects participating in the study. This approval does not relieve the investigator from the responsibility of providing continuing attention to ethical considerations involved in the utilization of human subjects participating in the study.

This approval expires on 11 May 2005. If any significant changes are made to the study protocol you must notify the IRB before implementation. Request for modification forms are available online at http://www.ogrd.wsu.edu/Forms.asp.

In accordance with federal regulations, this approval letter and a copy of the approved protocol must be kept with any copies of signed consent forms by the principal investigator for THREE years <u>after</u> completion of the project.

This institution has a Human Subjects Assurance Number FWA00002946 which is on file with the Office for Human Research Protections. WSU's Assurance of Compliance with the Department of Health and Human Services Regulations Regarding the Use of Human Subjects can by reviewed on OGRD's homepage (http://www.ogrd.wsu.edu/) under "Electronic Forms," OGRD Memorandum #6.

If you have questions, please contact the Institutional Review Board at OGRD (509) 335-9661. Any revised materials can be mailed to OGRD (Campus Zip 3140), faxed to (509) 335-1676, or in some cases by electronic mail, to ogrd@mail.wsu.edu.

Review Type: NEW Review Category: XMT Date Received: 11 May 2004 OGRD No.: NF Agency: NA