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Joungill Cho

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# EFFECTIVE USE OF CUSTOMIZED INCENTIVES FOR TRUST-BUILDING IN THE ONLINE FINANCIAL INDUSTRY

Approved by

**Dissertation Committee:** 

# EFFECTIVE USE OF CUSTOMIZED INCENTIVES FOR TRUST-BUILDING IN THE ONLINE FINANCIAL INDUSTRY

by

Joungill Cho, B.A.; M.A.

#### Dissertation

Presented to the Faculty of the Graduate School
of The University of Texas at Austin
in Partial Fulfillment
of the Requirements
for the Degree of

**Doctor of Philosophy** 

The University of Texas at Austin

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valuable things in life. Moments.

Joungill Cho

The University of Texas at Austin

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# EFFECTIVE USE OF CUSTOMIZED INCENTIVES FOR TRUST-BUILDING IN THE ONLINE FINANCIAL INDUSTRY

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It is essential for any business to initiate and maintain long-term relationships with its customers. Unless an initial relationship continually and confidently "matures" to a more trusting and individual level (where a user provides more intimate/private personal information), the initial costs of customer acquisition may be lost. The purpose of this study is to help e-commerce companies better understand their potential customers in terms of their comfortable ranges of providing personal information in accordance with different types of incentives. This study also examines four factors - experience, commitment, openness, and trust - that could influence the willingness to share personal information.

A total of 593 survey participants were selected randomly from visitors to the WingspanBank.com's main site, and randomly given one of twelve incentive protocols (including three protocols with no incentive) which they received in return

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for their participation in the survey. These twelve different survey protocols were created based on types (cash or a gift certificate) and values (no incentive, \$10, \$50, or \$100) of incentives and levels of personal information.

From the results of the study, first, it was demonstrated that intended use of the product/service online affects the number of questions answered online. People with an intention to use online banking tended to be more willing to provide hard to reveal personal information online.

Secondly, when harder to reveal personal information was asked, people who stated they were willing to share information only if they trusted the communicating party became more reluctant to provide their information.

Thirdly, the level of incentive affected the respondent's willingness to share personal information online. This study identified the most cost-effective use of incentives for easy, moderate, and hard to reveal information.

Finally, for more practical applications of this study, a prediction model using six factors was developed. This model showed overall correct prediction rate of 72.8 percent if an individual visitor to a site was a prospect customer. The results indicated that the trust-related concerns during online user registration influenced the probability of becoming a prospect customer.

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### Chapter 1. INTRODUCTION

It has become essential for any business, online or not, to initiate and maintain long-term relationships with its customers. According to Newell (1997), a one percent increase in loyal customers equaled a 20 percent profit improvement for a multibillion-dollar business. In an e-commerce environment, whether a visitor comes to the site with enough curiosity to click on a registration page or accidentally visits the page, marketers want to be able to capture that moment to initiate the relationship and build upon it. Unless an initial relationship with customers "matures" easily to a higher level where a user is willing to provide more intimate/private personal information and interact with the site, persistent marketing and promotional efforts will be needed to lead customers to the next level of information exchange.

Acquiring consumer's personal information is necessary for many companies since it is that information that often forms the basis of future segmentation and marketing strategy. In that way e-commerce businesses may better serve their customers and establish a trusting relationship.

At the present stage of e-commerce development, companies cannot expect customers to give out their personal information without providing a reasonable reward for their actions (Mena, 1999). Companies need to plan for building a strategic relationship that is uniquely customized for each individual consumer based on his/her preference. Giving a T-shirt or a mouse pad for filling out a list of personal

information simply will not work for everyone. With such a fixed incentive program, companies are unintentionally forcing visitors to make a choice to either exchange their information for what is given or to leave the site. Incentives can be a powerful tool to stimulate visitors' instant actions and may lead to long lasting relationships, but incentives may also be wasteful and ineffective if the exchanged item or service given as an incentive is not relevant to an individual customer's interests and values.

As the Internet has evolved as a channel that offers far advanced interactive capabilities, innovative marketing tools are becoming available. This development has motivated marketing professionals to seek new approaches that fully utilize the interactivity of the Internet to better relate messages to consumers.

The purpose of this study was to identify the factors influencing the online relationship between companies and customers, and also examine their association regarding customers' willingness to provide personal information in accordance with incentives offered. The following is a list of the initial questions that preceded the development of the study.

• Why do most e-commerce sites often ask personal questions which are not "easy to reveal" for some visitors during initial registration? Do they really need to extract such information before a trusting relationship with their visitors is established? Are other strategies more likely to produce good relationships?

- With lack of customization and choices offered in current practice of online registration, can we say that companies are fully utilizing the advantage of the Internet as a medium that is the least intrusive in gathering consumer information? If so, why do most sites not offer registration with a more gradual approach?
- How effective are fixed incentives in attracting visitors and encouraging them to reveal different levels of personal information? What comprises a suitable encouragement?

These initial questions and the literature review helped frame the experimental design of this study and the hypotheses to be tested.

## **Chapter 2. LITERATURE REVIEW**

The literature review which follows covers essential elements in permission marketing, relationship marketing, and eCRM (Electronic Customer Relationship Management). Each of these topics converge and are closely related to concepts which describe the ways in which companies gain consumer trust in an e-commerce environment.

## Section 2-1. Permission Marketing

Permission marketing focuses on satisfying individual needs through customization based on personal information provided by the consumer voluntarily, and thus trust is an essential element for its successful execution (Siegel, 1999).

According to Godin (1999), permission marketing allows consumers to be voluntarily marketed. Permission marketing encourages consumers to participate in long-term, interactive marketing campaigns in which consumers are rewarded for paying attention to advertising messages to which they are exposed. This concept differentiates itself from traditional mass marketing where essentially no permission is given by consumers to the marketer. Rather, consumers are forced to be exposed to these messages unless they take specific evasive action to reject such intrusive exposure.

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Although the concept of permission marketing has been around for many years, it had not blossomed until the Internet emerged. With traditional media, it was difficult to customize marketing messages individually to consumers. However, the Internet is an ideal medium with which to reach consumers on a one-to-one basis and the cost-effective frequent interaction it facilitates makes it a perfect medium for permission marketing (Godin, 1999).

Permission marketing is beneficial to both parties, the marketer and consumers. The marketer is satisfied by the fact that messages intended for consumers are being heard by a voluntary group of consumers. Consumers are more receptive to marketing messages since the messages are more personal, and relevant (Godin, 1999). In traditional mass marketing, messages can be often ignored by the mass audience since they lack relevancy for many in the audience.

### Origin of Permission Marketing

Although the term "permission marketing" seems to be relatively new, its core concept, allowing consumers to be voluntarily marketed, has its roots in relational exchanges built on trust introduced in "relationship marketing." According to Morgan and Hunt (1994), there are ten discrete forms of relationship marketing as shown below.

- The partnering involved in relational exchanges between manufacturers and their goods' suppliers
- Relational exchanges involving service providers
- Strategic alliances between firms and their competitors
- Alliances between a firm and nonprofit organizations
- Long-term exchanges between firms and ultimate customers
- Partnerships for joint research and development
- Relational exchanges of working partnerships
- Exchanges involving functional departments
- Exchanges between a firm and its employees
- Within-firm relational exchanges involving such business units as subsidiaries, divisions, or strategic business units

Morgan and Hunt (1994) focused such forms on the supply side of the market but their concept of relationship can be extended to the consumer level. A few years after Morgan and Hunt, six constructs associated with relationship marketing theory were introduced by Lewin and Johnston (1997). Here, the trust, commitment and communication issues that were most applicable to consumers were included. These six constructs are 1) relationship dependence, 2) trust, 3) commitment, 4) communication, 5) cooperation, and 6) equity.

## Buyer-Seller Relationship Models

There have been several models of buyer-seller relationship development studied. Ford (1980) analyzed the development of relationships by considering the variables of experience, uncertainty, distance, commitment, and adaptations in the five stages as shown below.

- The pre-relationship stage
- The early stage
- The development stage
- The long-term stage
- The final stage

These stages represent that relationship marketing, like permission marketing, is built over a period of time during which a mutually beneficial relationship is formed between the companies and consumers.

In the mid-80's, Wilson and Mummalaneni (1986) viewed relationship development as a process where satisfaction, investment and commitment develop between the buyer and the seller as a result of repeated successful interactions. Their model includes constructs such as 1) need complementarity, 2) interactions, 3) outcomes, 4) satisfaction, 5) investments, and 6) commitment. On the following year, Dwyer, Schurr, and Oh (1987) considered relationship development as a process of

deepening dependence based on five phases: awareness, exploration, expansion, commitment, and dissolution.

#### Key Components in Relationship Marketing

In general terms, trust has been defined as the willingness to rely on an exchange partner in whom one has confidence (Moorman, Zaltman & Rohit, 1992). Ganesan (1994) later suggested that a key component of trust is "the extent to which the customer believes that the vendor has intentions and motives beneficial to the customer" and is concerned with creating positive customer outcomes.

Morgan and Hunt (1994) have stated that the presence of relationship commitment and trust is essential to successful relationship marketing. Commitment and trust are the key constructs because they encourage marketers to 1) work at preserving relationship investments by cooperating with exchange partners, 2) resist attractive short-term alternatives in favor of the expected long-term benefits of staying with existing partners, and 3) view potentially high-risk actions as being prudent because of the belief that their partners will not act opportunistically. Therefore, in order to build solid, long-term relationship with its partners, both commitment and trust are critically important. They produce outcomes that promote efficiency, productivity and effectiveness. In other words, commitment and trust lead directly to cooperative behaviors that help relationship marketing success.

#### Section 2-2. Relationship Commitment and Brand Loyalty

Morgan and Hunt (1994) defined relationship commitment as committed partners believing in each other's importance so that the relationship is maintained with maximum efforts. Similarly, Moorman, Zaltman, and Rohit (1992) have defined commitment as "an enduring desire to maintain a valued relationship." When such commitment is applied toward a certain brand, it is considered brand loyalty.

#### Involvement and Commitment

Among different types of involvement, the most impressive consideration of involvement may evolve where involvement is viewed as an interaction of task and the individual (Punj & Stewart, 1983). Since e-commerce incorporates an advanced level of interactivity, the Internet can be considered as a medium that has the potential to create the highest level of involvement.

A term closely related to involvement is commitment toward the brand, which may be defined as an emotional or psychological attachment to a brand within a product class (Lastovicka & Gardner, 1979). Brand commitment is similar to the construct of brand loyalty. Commitment is essential and is often built from trust; it is implicit in gaining agreement to long-term objectives (Spekman & Sawhney, 1990).

The current theoretical perspectives on the linkage between involvement and commitment vary. Some researchers view commitment as a component of a more

encompassing involvement constructs. Lastovicka and Gardner (1979) identified three orthogonal components of involvement: 1) familiarity, 2) commitment, and 3) normative importance. Traylor (1983) on the other hand, suggested that ego involvement and brand commitment are different but related constructs.

High product involvement results when important values of the person's self-image are engaged or made salient by a decision situation, according to Crosby and Taylor (1983). Commitment results when these values, self-images, or important attitudes become cognitively linked to a particular stand or choice alternative.

Therefore, high product involvement will most likely precede or lead to commitment.

Lawler (1992) described three steps that change an involvement to a commitment. The first step involves the concept of empowerment. A definition of empowerment by Harvey and Brown (1996), which was derived from the organization setting, can be adopted to the consumer market place. In other words, empowerment can be translated as the process of giving consumers the power to make decisions about their purchases. Berry and Ulrich concluded in their study that empowerment builds commitment (Jick, 1993), and Turner (1995) and Covey (1990) emphasized that an individual has to earn trust before he/she can be empowered. Empowerment, then, comes from and is founded on trust and seems to be more relevant to involvement and commitment than the term power.

The second proposed change, which increases the strength of involvement to one of commitment, involves the concept of reward and recognition. Lawler's (1992)

description of rewards focused on financial incentives, but it can be extended to intrinsic rewards and other forms of recognition.

Third, and finally, adding shared vision completes the transformation of an involvement to a commitment. Taylor (1994) stated shared vision helps people to commit and also serves in developing goals and values for a relationship.

#### **Brand Loyalty**

The process through which consumers become attached to a specific brand has been widely discussed by many researchers. Berry and Parasuramna (1991) stated, "Relationships are built on the foundation of mutual commitment." Initially, loyalty to the brand was viewed as simply repeated purchasing. However researchers realized that repurchase does not necessarily represent loyalty to a brand. Brand loyalty is defined as "commitment to a certain brand" forming from certain positive attitudes (Assael, 1987). Brand loyalty occurs when consumers make a conscious evaluation that a brand satisfies their needs to a greater extent than others, and thus they purchase the same product/brand at the next purchase occasion (Jacoby and Chestnut, 1978).

Berry (1993) emphasized, "Trust is the basis for loyalty." Brand loyalty has been viewed and measured as an attitudinal concept, a behavioral concept, and simultaneously a behavioral and attitudinal concept (Jacoby & Chestnut, 1978).

The value of "brand" two a company is largely created by the consumer loyalty it commands according to Aakeer (1996). He also segmented customers into five groups (such as non-customers, price switchers, the passively loyal, fence sitters, and the committed) based on their expressed level of brand loyalty. "Non-customers" are those who buy competitor brands or are not product class users, and "price switchers" refer to consumers who are price-sensitive. "The passive loyals" are those who buy out of habit rather than reason, and "fence sitters" are those who are indifferent between two or more brands. Finally, "the committed" refers customers who are highly loyal customers.

The most valuable assets a website has are its loyal visitors or customers who return again and again over a period of time, and their value can be measured according to their LTV (Lifetime Value) (Mena, 1999). LTV refers to the duration of customer relationship with a site and the amount of money a customer spends during a given period of time. Similarly, Zingale (2000) stated that loyalty can be measured by a successful outcome of the relationship, in other words, by ROR (Return on Relationship). ROR reflects a company's level of readiness to deal with the fast-paced dynamics of customer relationship in Internet era. Acquisition of new customers at minimum cost and interaction with them at the right time will maximize profit turning them into loyal customers.

Besides the quality of the product/service offered, trust is also an essential element that leads to loyalty (Tapscott, Ticoll & Lowy, 2000), and loyalty drives

repeat business (Davis, 2000). Loyalty over time becomes relationship capital that enables innovation, revenue, and growth.

### Section 2-3. Trust in Relationship

Trust is an essential factor for establishing cooperative behavior in buyer-seller bargaining (Schurr & Ozanne, 1985). Trust operates in different ways depending on a buyer's state of knowledge. When buyers know a lot about a purchase decision, buyers will trust the salesperson/source, if it respects the buyer's intelligence by speaking the truth and adjusting the conversation to the level of knowledge of the buyer. On the other hand, if buyers have limited product knowledge, they are more likely to develop trust when the salesperson/source recognizes their concerns, and attempts to listen to their needs. In research focusing on the issue of trust between a user and a software agent, it has been specifically addressed that one of the key components in trust building is the user's knowledge (Van Slyke & Collins, 1996).

Morgan and Hunt (1994) identified that trust exists when one party has confidence in an exchange partner's reliability and integrity. Similar identification of trust can also be found in an earlier statement by Moorman, Zaltman, and Rohit

(1993). They stated, "Trust is defined as a willingness to rely on an exchange partner in whom one has confidence." Both definitions emphasize the importance of confidence. Confidence in trusting exchange partner means reliability and high integrity (Morgan & Hunt, 1994).

According to Berry and Parasuraman (1991), customer-company relationships require trust that is built on quality of service. They defined the meaning of quality of service to have following requirements.

- Reliability: How dependable and accurate are the support services that are being provided?
- Responsiveness: How convenient, available, and prompt are the support services?
- Assurance: How knowledgeable and professional are the support staff?
- Empathy: How well do support staffs understand the needs of users?

Trust, as it is suggested by number of researchers, is a major aspect in almost all long-term relationship between sellers and buyers on the Internet. According to NFO Interactive and Jupiter Communications, 42 percent adult browsers indicated that they would buy online if they can had greater trust in the site (Cross, 1999).

Trust is a major determinant of relationship commitment (Achrol, 1991). In order for an exchanging partner to be fully committed to the other partner, trust needs to be present beforehand.

#### Trust and Concern

As companies perceive trust as a major aspect in building a lasting relationship, database marketing has become more crucial. However, consumers have become increasingly concerned about their personal information being used without their knowledge or consent (Thompson, 1999b; Kelley, 1999). Although many companies make efforts to explain how they use consumer information and offer opportunities for consumers to take their names off the lists, public awareness remains low and concern remains high.

According to Cyber Dialogue, 34 percent of all online users agreed that the Internet is a serious threat to privacy (Thompson, 1999b). Also, the study conducted by IntelliQuest indicated that three out of five top reasons people do not buy online are related to trust-related concerns as shown below (McEwen, 1998). While these results may be tied to early usage of the Internet as a channel for commerce - - and change over time - - their presence clearly affects adoption.

- Worried about fly-by-night retailer: 81 percent
- Don't want to deal with the hassle of returning something: 72 percent
- Worried about using their credit card online: 69 percent
- Think they are going to get a bunch of junk mail: 63 percent
- Want to see, touch what they buy: 62 percent

According to the study by Milne and Boza (1998), a strong negative relationship exists between trust and concern. The results showed that trust has a positive effect on self-reported purchase levels whereas concern indicated a negative effect. The study also found that experience with an organization is the primary reason given for trusting an organization with personal information and reputation is the second reason given. As Culnan (Thompson, 1999b) stated, observing fair information practices and disclosure of privacy give website visitors a reason to trust.

### Section 2-4. Building Trust on the Internet

According to a recent study of Web trust by Cheskin Research and Studio

Archetype/Sapient, trust is a long-term proposition that builds over time as people use
a site, get positive results, and repeatedly do not feel let down or disappointed by their

interaction with the site (Nielsen, 1999). Trust is built between consumers and a company when consumers enjoy a positive experience time after time.

Building trust becomes a more prominent issue when considering the monetary loss departing customers represent to an enterprise as a consequence of lacking trust. The Harvard Business Review reported the average company loses half of its customers every five years (Reichheld, 1996). Given the high cost of obtaining new customers, these same organizations could double their profits if they could eliminate only 10-15 percent of these defections.

Although trust seems to be already a major concern for many companies, according to Jupiter Communications, 51 percent of leading Web sites take more than 5 days to reply to e-mail or don't respond at all, and only 38 percent responded within a day (Thompson, 1998). Dissatisfaction caused by such disappointment with service and support can contribute to customer defection, which means companies need to do whatever it takes to provide top-quality experiences in these areas.

Damage to trust can also be caused by technical dissatisfaction. In another study by Jupiter Communications, it was reported that half of customers will leave the site immediately when they encounter technical difficulties at a site (Nielsen, 1999). Although many of them may return to the site, the loyalty to the site has been damaged after the customer has experienced an alternative site with similar services.

As consumers interact with a site, they determine whether or not they trust it from their browsing experiences. Trust is essential for building long-term customer

relationships, and deep trust comes from behaving honestly through many subsequent encounters with the customer (Nielsen, 1999). Studio Archetype's study, shown in Table 2-1, suggested the model that classifies three different levels of trust over time (Thompson, 1999a). This model helps marketers to understand how trust is being developed through the interactions.

Table 2-1. Three Levels of Trust over Time

Level of Trust	Process
The Untrust Phase	Unaware
Extrinsic Level of Trust	Build Trust:
	Step1. Browse/Search/Compare
	Step2. Consider/Validate/Access
	Step3. Register/Transact/Confirm
Intrinsic Level of Trust	Confirm Trust
	Maintain Trust

The untrust phase is when consumers are unaware of the product or the company. Extrinsic level of trust can be described as an initial stage where the consumer interacts with the product or the company for the first time and gains an early level of trust after confirming the completion of a successful transaction. As the consumer repeats these transactions that produce extrinsic levels of trust, the consumer then establishes an intrinsic level of trust where the trust becomes natural and an essential part of relationship (Thompson, 1999e).

#### Key Components for Trustworthiness

There has been little or no research done in the area of consumer's perception about trustworthiness of e-commerce web sites until the past two years. However, the recent study by Cheskin Research and Studio Archetype/Sapient (1999) defirmed trustworthiness as "experience over time," and addressed six primary components which suggest trustworthiness of the site. The six components are as follows.

- Seals of Approval Information about other companies that special ize in
  assuring the security of Web sites. For example, symbols, like VeriSign and
  TRUSTe, are used to re-assure the visitor that particular level of security has
  been established.
- Brand The importance of the company's reputation. In other words, it
  represents the company's promise to deliver specific attributes and its
  credibility based on its reputation and the visitor's prior experience with the
  company.
- Navigation The ease of finding what the visitor is looking for.
- Fulfillment The process one works through from the time a purchase
  process is initiated until the product is received. It includes the indication of
  how orders will be processed, and provides information on how the visitor can
  seek recourse if problems arise.

- Presentation Ways in which the look of the site communicates meaningful information with design attributes that convey quality and professionalism.
- Technology Evaluation of technology usage by the visitor.

Understanding what it is consumers perceive as indications of trustworthiness of the site, and then using these indicators appropriately, helps gain consumer confidence.

#### Privacy Issues in E-Commerce

According to a survey of 100,000 Internet users in September 1999, it was found that 67 percent of the users were very or extremely concerned about online privacy and an additional 24 percent were described as somewhat concerned (Kelley, 1999). Regardless of such growing concern of privacy, a study conducted by the Georgetown Internet Privacy Policy Survey in January 1999 found that less than 10 percent of the 361 sites examined addressed the most basic privacy principles (Culnan, 1999).

There is a big question whether self-policing will be enough to address the privacy concern. Recently, RealNetworks faced at least two class-action suits for its transgressions (Clark, 1999). Without warning users or asking permission, its popular RealJukebox software was transmitting personal information including titles and

songs user's CD libraries, back to the company. In an earlier case, Microsoft improperly gathered user information through a Window 98 registration wizard. TRUSTe, the industry's self-policing solution to the privacy problem, did practically nothing after learning of such violations. E-Commerce companies pay up to \$5,000 to display the TRUSTe seal, providing their trustworthiness to visitors. Because independent privacy groups like TRUSTe and BBBOnline earn their money from e-commerce organizations, they become more of a privacy advocate for the industry rather than for consumers.

Hoffman, Novak, and Peralta (1999) found that consumer expectation of privacy depends on the medium. Their analysis of the GVU data indicated that, in electronic media, consumers showed more intense need for control and protection of their privacy than they did in traditional media. Approximately 87 percent of Web users think they should have complete control over their demographic information captured on the Web, and over 71 percent feel there is a need for new laws to protect their privacy online.

Privacy issues mentioned above become more complicated as many ecommerce companies are adopting business-to-business affiliate programs increasing their number of partnerships. Business-to-business affiliate programs are often considered the most beneficial marketing strategy that brings the age-old practice of word-of-mouth advertising into a new word-of-mouth era (Schwartz, 1999). An affiliate program is a revenue-sharing plan that uses the Internet to facilitate partnered selling (Silverstein, 1999). Most affiliate programs can be adapted to meet the needs of the business-to-business marketer. For example, if one was a marketer of financial services targeted to businesses and is part of the Amazon.com Associates program, one could select appropriate books in the financial category and sell them on that web site. Thus, the marketer of financial services is providing his site visitors with a service and gaining additional revenue at no cost. As such affiliate programs grow their partnership base, online consumers will have more doubt about how those affiliated companies share or trade their personal information.

Acknowledging that over 80 percent of online consumers simply do not want Web sites to resell their personal information to other businesses (Hoffman, Novak & Peralta, 1999), if the company chooses to offer an affiliate program, their privacy policy will need to clearly address how they handle personal information with regard to their affiliated partners. However, having the statement of privacy policy does not mean consumers will agree with it when they are informed. Amazon.com's recent attempt (September, 2000) to bring attention to millions of its customers of its new privacy policy via recent e-mail backfired. Amazon.com was hoping their honesty in bringing privacy issue upfront would reinforce positive perception of the company. However, this attempt has, in fact, caused prominent watchdog groups, such as the Electronic Privacy Information Center and Junkbusters, end their relationship with Amazon.com in protest (Helft, 2000). Although Amazon.com might have had a good intention, people who read the new policy seemed to focus on the fact it still allowed

Amazon.com to share information with its affiliated companies and others. In some ways Amazon.com's actions appeared to violate the exchange relationship that customers assumed existed.

# Section 2-5. Online Submission of Personal Information

The benefits of customized service are not possible without customers who are willing to provide information about themselves and to specify their interests. To capitalize on the interactive medium, content providers must determine how to ask consumers the right questions without turning them away in the process.

According to Harris Poll for Business Week, even though barriers to personal interaction are strong, a majority of online users are willing to share information about themselves in order to receive benefits such as customized site content (Thompson, 1999b). A strong majority are willing to participate in short surveys with demographic information about themselves in order to have online services tailor content to their specified needs and wants. However, when online users are engaged in online shopping, their willingness to share personal information tends to be more cautious. According to a study that covered 1,264 experienced online shoppers in six countries, it was found that consumers abort four out of five purchase attempts due to

invasive information requests, reluctance to enter credit card details, malfunctioning sites, and failure to find a product (Reuters, 2000).

Site registration can play an important role in profiling site traffic, if used appropriately and non-intrusively (Clark, 1999). Voluntary registration is less risky than mandatory procedures since mandatory registration turns some users away if they are not ready to commit to the site (Zeff & Aronson, 1997). Therefore, in order to avoid leaving visitors with a bad taste, incorporating registration forms on a site should be optional, non-intrusive, and positioned as a way for customers to receive added value from the site the next time they visit.

According to Jacoby and Kaplan (1972), there are five types of perceived risk that consumers seek to reduce in commercial transactions: financial risk, functional risk, physical risk, social risk, and psychological risk. First, financial risk refers the risk of losing money or paying too much. Second, functional risk means the risk of receiving a wrong or malfunction product. Third, physical risk means the risk that the consumers might be harmed by the product. Fourth, social risk refers the risk of using a product that reflects poorly on its user. Fifth, psychological risk is the risk to harm one's self image. The personal information often asked during online registration can be categorized into different levels based on one of the above five types of risks. In financial transactions involving bank relationships, the risks extend to concerns about the invasion of privacy and the security of the information the registrant is asked to provide.

In addition to obtaining generic demographics during registration, marketers should look to other data points, such as hobbies, interests, attitudes, and opinions, to understand the online consumer better -- not only because these data points can be strong predictors of online behavior, but also because online users may choose to offer this information more readily than the more directly identifying information (i.e., name, credit card numbers, etc.). In the author's opinion, keeping registration forms focused on non-intrusive topics that clearly demonstrate how future visits will be enhanced will probably serve to increase cooperation among respondents.

The challenge lies in determining how to gather the personal information in a manner that is easy for the user, and simultaneously respect consumers' privacy needs. Since boundaries exist for the types of information people are willing to offer at a site, their willingness to cooperate can be enhanced by establishing a trustworthy relationship with individual users and translates feedback into action through providing relevant content, timely and useful information, and showing an effort to sustain a healthy communication channel. Communication channels will need to potentially extend into offline communication strategies such as direct mail and broadcast media.

# Incentives as Online Registration Stimulus

As the Internet started its revolution as a commercial medium, marketers and merchants alike found that they could appeal more directly to consumers by offering appropriately targeted incentives (Zeff & Aronson, 1997). And empowered consumers, exposed to comparison-shopping online resources, expected more for their money. In order to develop successful loyalty and retention of these savvy customers, e-commerce companies saw the need to distinguish themselves by efficiently targeting and rewarding their audiences.

In most forms of human interaction, presence of a reward acts as a positive reinforcement to the message receiver. According to Newell (1997), relationship marketing itself is what psychologists would call instrumental conditioning. Since learning in B. F. Skinner's instrumental conditioning paradigm depends primarily on reinforcements that come after the response, incentives can be viewed as a conditioned stimuli of instrumental conditioning that strengthen the relationship. It is human nature that people desire a certain form of reward for relevant action as a positive reinforcement to continue the interaction or exchange of information which in turn, leads to a more trusted relationship between exchange partners.

Mena (1999) stated that website visitors will provide their personal information if they receive some tangible rewards for the submission. Rewards such as enhanced access, customized content, club memberships, and monetary incentives may, in fact, be some of the things people want from a site. A study by NFO

Interactive of 1,905 online consumers revealed that 53 percent of Internet users stated they would buy more from e-commerce vendors that offered incentive or loyalty programs (Thompson, 1999d). The most frequently requested incentives by consumers were products and gifts. Only 15 percent of the survey's participants said these programs would not have any impact on their online shopping behavior.

Although the impact of incentives is evident, companies need to be cautious of many visitors who are concerned that their personal information may be used for solicitation and distribution lists. More and more, reputable sites are taking measures to ensure respondents of the confidentiality of any information given at their site, making it clear to visitors that the requested information will be used to provide a more satisfying site experience. Selling names for solicitation or sending invitations that will be perceived by the recipient as junk mail are obvious turn-offs and are best avoided to protect customer privacy.

The core of interactive relationships is the sharing of information between customer and content provider; a relationship that necessitates a value-given-for-value-received mutual agreement. Value here can take several forms, including customized content, monetary incentives, and access-restricted information - or at least convincing visitors their feedback has been heard. It is essential for e-commerce to identify valued customers and understand the types of information and services that will drive them back to the site.

## Section 2-6. Permission Marketing Practices

According to a study by Digital Idea, many sites have yet to experience the financial benefits of a satisfied, loyal customer base (Lake, 2000). On average, only 10 percent to 15 percent of visitors are loyal to a site, recommending it to friends and feeling an affiliation with the brand. The primary reason for this reluctance for relationship building is that consumers do not trust most Web providers enough so that they are comfortable in shopping and purchasing online (shopping does not necessarily lead to an actual purchase). Most consumers who refuse to provide personal information to companies online do not trust the entity collecting the data; they say that the gain they may achieve from providing personal information is not worth the risk they take in revealing it. Almost all consumers who have shopped online have declined to provide some kind of personal information requested by companies and almost half of consumers who have provided the information have provided false information.

## Permission Marketing Strategies and Tools

One of the most prominent methods in permission marketing practices today is to ask people to fill out the registration form including preference in interest areas or products. By obtaining this personal preference information, companies can figure out what kind of messages, promotional news or coupons to direct to the individuals.

Once companies determine their target audiences, they need to decide how they will deliver the right messages to their audiences. As one of the most popular methods of delivery, e-mail marketing is considered to be far more effective than previous advertising methods such as banner ads since it is more targeted and also based on voluntary needs by consumers. Cost-benefit of e-mail marketing over other online advertising methods seem to be the primary reason why e-mail marketing is preferred by a wide range of companies. These companies tend to prefer confidentiality of their marketing messages and also avoid complicated technical challenges (Hammer, 2000). According to Nielsen NetRatings, the average click-through rate for banner in July 1999 is only 0.58 percent (Thompson, 1999e). E-mail marketing refers promotional e-mail messages sent to its target audience based on database analysis of individual preferences gathered on the net.

As a primary tool for permission marketing today, "opt-in e-mail" enables users to voluntary subscribe and unsubscribe with the site (Allen, Kania & Yaeckel, 1998). According to a recent Zona Research study, e-mail topped the list of outsourced applications with 66 percent followed by video conferencing with 47 percent (Thompson, 1999c). A study by Bluestein, Clemmer, and Morrisette (1998) showed that on average, 26 percent of online consumers were willing to provide their e-mail address to preferred merchants. Because e-mail is capable of basic html format with graphics and links, it can be a much more powerful tool than just sending

and receiving a text based message. It is possible to even send multimedia e-mails by attaching video/audio files and other multimedia applications.

While many companies are concentrating on opt-in e-mail based strategies, some e-commerce marketing firms are taking more research-oriented approaches (please refer to "Leading Online Marketing/Consulting Companies" in Appendices). They are focusing on providing a more complete consulting package that offers the software system to analyze consumer behavior and give recommendations on individual's needs.

# Section 2-7. Online Relationship Management

In e-commerce, building a relationship to its maximized value requires nurturing prospects from the day they arrive at a company's site through maintaining them as loyal customers. Because online information available for customers tends to help them switch brands (Farris, 2000), more than ever, companies need to be able to offer the right product/service to the right customer at the right price and time through the right communication channel. According to Cyber Dialogue, more than 10.3 million Americans have changed their opinions of financial services brands over the past year as a result of information retrieved online (Miller, 2000). In detail, 30

percent of the respondents said they purchased a different brand of insurance as a result, 18 percent changed investment services, and 16 percent changed banks.

As the Internet allows marketers to integrate the increasingly sophisticated data warehousing, it is now possible to 1) acquire new customers, 2) enhance the profitability of existing customers, and 3) retain profitable customers for life (Kalakota & Robinson, 1999). Such an electronic version of managing relationship with customers is often referred to as eCRM (Electronic Customer Relationship Management).

Gumpert (2000) stated that eCRM is about how companies relate to their customers online. As customers assimilate technology, their expectations are rapidly changing about how they make a purchase and how they want to be serviced and supported by companies from which they make a purchase (Kalakota & Robinson, 1999). That is the main reason why eCRM is becoming an essential part of e-commerce relationship-building process. eCRM can be explained as a series of integrated steps that help companies increase sales revenue and strengthen online relationships between the companies and their customers by recognizing the most valuable customers and customizing communications to their individual preferences.

There are steps that many of leading eCRM solutions companies are commonly taking (please refer to "Leading Online Marketing/Consulting Companies" in Appendices) in order to ensure that the outbound communications are

relevant, timely, and integrated across online and offline channels while providing the best practices in consumer privacy protection.

As the first step in implementing eCRM, companies need to identify their most profitable customers. It is simply not enough to know "who buys what" in order to build a successful, profitable marketing campaign. Companies need to take further steps to understand who their customers are, and how much they should invest in turning them into loyal customers. In order to assess the value of the customer relationships, and determine the appropriate investments for customer segments and individuals, companies need to utilize a centralized data warehouse to provide the more detailed and unified customer views.

The second step involves customization of the marketing efforts through proper technology (Derfler, 2000). Consumers today are in control dictating how, when, and through what channels they will be interacting with a company. Therefore, developing a personal dialogue with customers is more critical than ever, but in doing so companies must enable their customers' right to opt-in and opt-out of this communication and respect their privacy. For the execution of this step, companies need technology to deliver an unparalleled cross-channel view of their customers. Such technology enables companies to develop personal relationships with their customers while practicing strict permission marketing with opt-in privacy guidelines. Companies also need to analyze individual customer characteristics and preferences,

giving them the ability to plan and execute advertising/marketing campaigns for each customer.

The final step in eCRM is to evaluate the results of the strategies. Once companies have invested in a campaign to communicate with their customers, they need to evaluate the results of their strategies. Therefore, companies need the tools required to evaluate their efforts, giving them the information needed to direct money and effort at those customers and prospects most likely to provide the greatest returns. Projecting outcomes, capturing actual results, attributing changes in customer behavior to a particular communication, and assessing those results to enhance subsequent customer interactions will be needed.

According to Intel, eCRM is now evolving to its third generation (Thomas, 2000) as summarized in Table 2-2. While the first and the second generations were vendor-centric models with little personalization, the third generation optimizes the customer experience and provides the information individual customers need.

Table 2-2. Evolution of eCRM

	1 <sup>st</sup> Generation	2 <sup>nd</sup> Generation	3 <sup>rd</sup> Generation
Support	Online customer	Online support	Personalized
	support	experience	information
			anywhere, anytime,
			in any format
Presentation	Static one-way data	Dynamic content	Seamlessly
	presentation	rendering	integrated into
			customers' internal
			process
Relationship	One to many	One to many	Many to many
Data Exchange	Server-centric	Server-centric	Balanced
			architecture
Interaction	Web presence	Back-end	Customer-centric
		integration	eCRM

Customer-centric eCRM requires a mutual exchange of values - whether it is information vs. information exchange or information vs. incentives - on both sides to make it work. They both need to agree to share data with one another for mutual, long-term relationship.

In addition, shifting to the third generation of eCRM will require companies in particular industries to spend more time and investment than others. For example, an online computer-related merchant that uses a chain of local distributors will need more time and money to establish a communication channel that monitors warehouse status of all affiliated distributors. On the other hand, an online travel agency will

require less time to update the availability of seats since they have no physical product to keep track of.

In order for eCRM to reach its true potential, companies need to establish a strategic direction that can result in a significant improvement for the total customer experience. As discussed by Menconi (2000), it is necessary for companies to realize that eCRM is an integrated strategy, not an application or technology. Only when eCRM technologies are used to support a strategic direction, will the real impact of such technologies be appreciated.

# Section 2-8. Integration of Concepts

The literature and sources reviewed in this dissertation provide a series of glimpses into the critical issues involved in customer relationships in e-commerce. Accordingly, the author has assembled a preliminary model that seeks to integrate these factors. Figure 2-1 shows that "experience" and "commitment" function as major factors that affect desire/comfort to provide personal information as they were mentioned in the literature review. Desire/comfort here can be interpreted as relationship-building process between communicating parties. In a commercial relationship, where the customer is required to exchange personal information in

order to receive the service or product the enterprise delivers, prior experience with the channel, the brand or the function is key to the customer's acceptance. Similarly, commitment and intent need to be present so that the relationship may develop.

Desire/Comionitio Provide Desonal Information

Connected Processed

Figure 2-1. Development of Concepts – Step 1

Figure 2-2 suggests how the next stage of the relationship-building process works. "Trust" is related with other factors such as incentives, personality traits, permission, and range of personal information requested. Essentially, this interwoven set of factors comprises a predisposition to respond to the requests the enterprise makes of the customer. On the Web that interaction reflects consumer behavior in discrete and measurable acts. The role of "incentive" is to provide the reinforcement that stimulates or encourages interaction between communicating parties.

"Personality trait" refers to the predisposition that underpins the observed behavior. "Permission" in this study is the execution factor that is related to range of personal information requested. In other words, it indicates how permission is granted when different levels of personal information are requested --based on the degree of risk and sensitivity the customer perceives in revealing them.

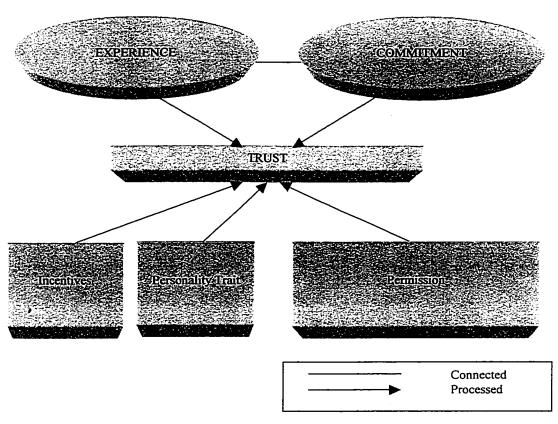


Figure 2-2. Development of Concepts – Step 2

As the third step of this development, "experience" and "commitment" interact in complex ways as shown in Figure 2-3.

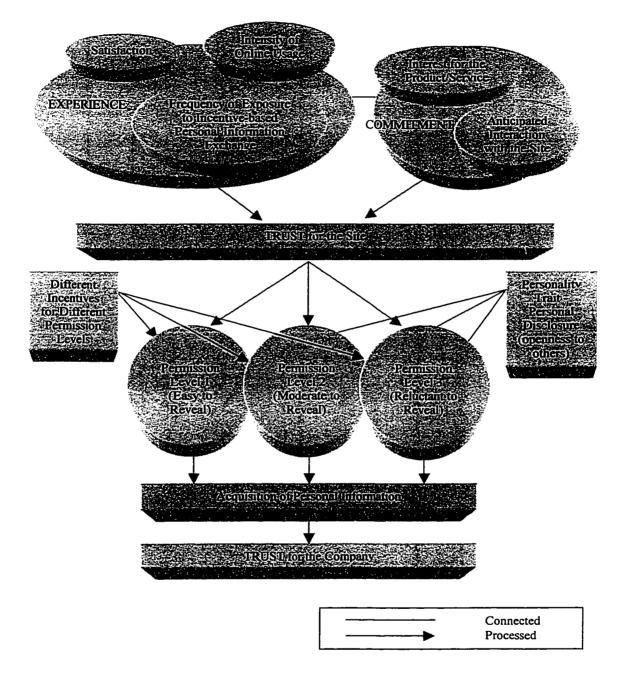


Figure 2-3. Development of Concepts - Step 3

"Experience" includes factors such as satisfaction, intensity of online usage, and frequency of exposure to incentive-based personal information exchange. During the period of time which the present study took place, varying levels of online sophistication existed. Some study participants were fairly familiar with online commercial participation; others were less experienced with the protocols and incentives offered for participation. Similarly, intention and interest varied among participants - - a variable represented in the model in Figure 2-2 as "commitment". The interaction of these variables, as the diagram shows, results in varying levels of trust - - both for the Website and the enterprise itself.

"Trust for the site" in the model refers to the initial level of trust that can be directly associated with the experience and commitment of the user while "trust for the company" is a more mature form of trust formed after permission is given.

As mentioned earlier, the permission process is further refined with differing levels of personal information, incentives and openness - - all of which are included as factors in this experimental study.

# **Chapter 3. STATEMENT OF THE HYPOTHESES**

This chapter contains two sections with the development of the hypotheses.

The first section addresses the research questions, and the second section gives the statement of the hypotheses that developed from the research questions.

# Section 3-1. Major Research Questions

The following is a list of the major research questions considered in the study's design.

- Q1. Which incentive levels are most cost effective in terms of their reported efficiency in encouraging users to provide personal information?
- Q2. Is it possible to identify the factors affecting the number of questions respondents are willing to answer during online registration?
- Q3. Are there cluster of factors that have predictive value in identifying those individuals that are prospective customers and/or those individuals who will not become customers?

# Section 3-2. Hypotheses

The three major questions, in turn, generated the following set of hypotheses.

- H1) People who are cautious about trust are less likely to provide the personal information requested online than others.
- H2) The more satisfied Internet users are with the product/service offered online (as revealed by a constructed customer satisfaction index), the more likely they will respond to online requests for personal information.
- H3) The more active and frequent a respondent's Internet usage is (as revealed by frequency of email check and/or frequency of online purchase), the more likely that user will respond to online requests for personal information.
- H4) The more interest/relevance Internet users have for the product/service presented (as indicated by expressed interest in the category), the more likely they will respond to personal information requested.
- H5) The greater the intended use of the product/service (intend in online banking vs. traditional banking and/or intended frequency of using online banking), the more likely the Internet users will respond to personal information requested.

- H6) The more expensive the incentives that are given to Internet users, the more likely they will provide the personal information requested.
- H7) The more Internet users have been exposed to incentives for providing their personal information (as indicated by respondents' self report of frequency of registration incentive exposure in past 6 months), the more likely they will respond to an online request for personal information.
- H8) The more Internet users are open to disclosure of their personal information (categorized openness total), the more likely they will respond to online request for personal information.
- H9) The trust-related concerns during online user registration will moderate probability of becoming a prospect customer.

## **Chapter 4. METHODOLOGY**

This chapter describes the methodology used to test the hypotheses developed in the previous chapter. Within the subsections of experimental design section, sample, data collection period, variables, details of method and procedure employed, and survey protocols will be described. An arrangement was made with Wingspanbank.com in Wilmington, Delaware to use their site as a recruiting facility for online respondents and for them to provide incentives to the survey respondents. Prior relationships between the thesis supervisor and Wingspanbank.com enabled this arrangement. The site, www.wingspanbank.com employed a gif-formatted image, appearing periodically inviting visitors to the site to participate in a survey (please refer to "Online Survey Invitation" in Appendices,).

#### Section 4-1. Experimental Design

## Sample

A total of 593 survey participants agreed to take the survey from an invitation that appeared in the WingspanBank.com site. They received the survey invitation by an embedded computer programming script (please refer to "About WingspanBank.com" in Appendices) as a consequence of their visit to the site. Out of the total participants, there were 209 participants who responded to one of the four

protocols containing all three levels of personal questions which explained in later section of this chapter.

Some of the sample members were WingspanBank customers; others were investigating the site.

#### Data Collection Period

Data was collected for a period of 28 days from 5/26/2000 until 6/22/2000. That period of time was required to satisfactorily fill all protocol cells.

#### **Variables**

Experience, commitment, openness, exposure to incentives, and trust were used as independent variables. Experience refers to the degree of satisfaction the respondent acquired from previous online interaction. In this study, experience was measured by factors such as satisfaction, intensity of online usage, and frequency of exposure to incentive-based personal information exchange. Variety of the products, pricing of the products, ease of navigation, clarity of instruction, downloading speed, relevancy of information, and quality of customer service were asked in measuring satisfaction using seven-point Likert scale (Cronbach's alpha = .9021). This measure of satisfaction was developed based on previous research conducted by Cheskin

Research and Studio Archetype/Sapient, and recently, a similar measurement is being used by number of online research companies such as Yankee Group. Kalakota and Robinson (1999) also stated four characteristics of customer satisfaction as 1) easy of use, 2) rich functionality, 3) reliability, 4) delivery of integrated performance.

Commitment refers to the degree of involvement the respondent is prepared to have with the site. The level of commitment was estimated by questions regarding interest for the product/service and the anticipated interaction with the site. Questions regarding interest for ten different products/services were later recoded as a variable that measures the number of products/services in which the respondent was interested.

As an extraneous independent variable to the incentives, openness was measured by eight questions with a seven-point Likert scale (Cronbach's alpha = .9108). In previous research, openness was defined to have six facets: fantasy, aesthetics, feelings, actions, ideas, and values (Costa & McCrae, 1992), and its measurement often requires a large number of questions in order to determine the level of openness. The purpose of having openness as a factor in the study was to specifically identify the effect of personal tendency in sharing personal information on the Web. Rather than measure the number of interests to which one is attracted and the depth to which those interests are pursued, a narrower scope of measurement was used in this study. Eight questions were selected and later tested for their adequacy in measuring openness as a single factor.

Exposure to incentives in previous online registration was included as an independent variable. Inclusion of this variable was to examine the statement by Goodmonson and Glaudin (1971) suggesting that the influence of attitudes on behavior should decrease as the level of the reward increases. By knowing how frequently people have been exposed to online incentives in exchange of their personal information, this study attempted to investigate if increases in the exposure frequency to the stimulus affected the willingness to provide personal information online.

Regarding trust, first, the role of trust in sharing personal information in general (either for online or offline communication) was asked. Second, the study examined if trust becomes a primary concern during online registration. Questions were created in an attempt to capture the relationship between trust and concern in revealing personal information based on the study by Milne and Boza (1998) mentioned in Chapter 2.

Permission, as a dependent variable, refers to the degree of agreement the respondent is prepared to have with the site. Permission was measured by the amount of personal information provided online in accordance with the given incentives.

Because the information regarding incentives was not shown until the respondents reach the point that asked for personal information, the study could measure the impact of incentives in obtaining permission.

Willingness to interact with the site can drop as information requested by the company becomes more personal in nature. For instance, information such as name and e-mail address is much easier for the respondent to reveal than salary and credit card numbers. Therefore, companies need to understand what types of visitors will be more cooperative in providing their information in exchange for what type of incentives.

In order to define the levels of willingness to provide personal information, personal information was categorized into following three categories. (It should be noted that this classification was essentially intuitive although it was based, in part, on prior knowledge of the author involving Website registration.)

- Easy to reveal: Name, Gender, Age, Education
- Moderate (moderately reluctant) to reveal: E-mail, Annual Income, Occupation,
   Marital Status
- Hard (reluctant) to reveal: Address, Phone Number, Social Security Number,
   Credit Card Information.

As it is illustrated in Figure 4-1, the face validity of above categorization indicated that there was a clear distinction among the categories.

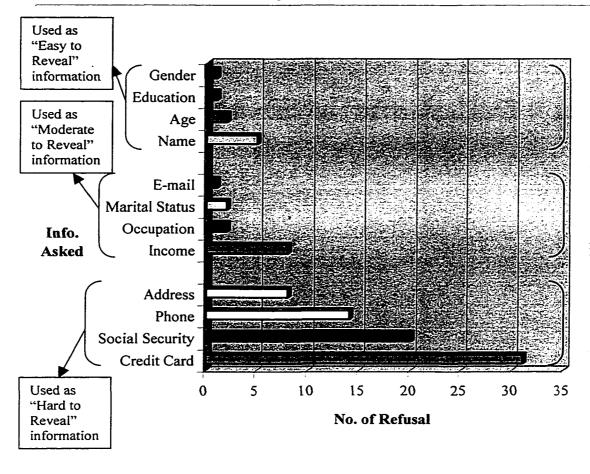


Figure 4-1. Face Validity of Categorization - Levels of Personal Information

To accommodate the experimental design and to keep the length of the survey for all respondents the same, "easy to reveal" questions (besides the four "easy to reveal" questions used for all twelve protocols) were added to those survey protocols that asked fewer personal information questions. Selected dummy questions were considered to have the minimum level of four types of risks discussed in Chapter 2.

Please note that, for the last hypothesis testing of the prediction model, one of the factors in commitment (intention to use the product/service) was used as a dependent variable. Survey protocols were designed to collect the responses using ColdFusion, and data were stored as an Access database file.

#### Method

Once a visitor agreed to participate after the exposure to the survey invitation, they were randomly assigned to one of the twelve incentive protocols in return for their participation in the survey. These twelve different survey protocols were created based on the value of the incentives and the level of personal information requested. Each survey protocol contained questions in experience, commitment, and permission. In this study, two types of incentives (gift certificate and cash) were offered and the values for the incentives were divided into four levels (no incentive, \$10, \$50, and \$100). Also, the study included three protocols in which respondents received no gift or cash incentive. There were twelve different survey protocols used and each protocol contained thirty questions (please refer to "Survey Questionnaire" in Appendices). Figure 4-2 summarizes how the study was structured online.

Survey Invitation / voluntary participation .

Privacy Policy

Re-directing Page

Surveys Questionnaire

Continuation for Data Submission

Figure 4-2. Overall Structure of Online Survey

The survey invitation was located at the WingspanBank.com's main page as a hyper-linked GIF image (please refer to "Online Survey Invitation" in Appendices). This invitation image was displayed randomly, and survey participants were then directed to one of the twelve experimentally designed survey protocols, each with its own URL (Uniform Resource Locator).

The survey invitation site included the privacy policy statements (please refer to "Survey Invitation/Privacy Policy" in Appendices) which were presented prior to obtaining agreement for survey participation.

As the visitor agreed to take part in the study, he/she was asked to complete the questionnaire (please refer to "Survey Questionnaire" in Appendices). The questionnaire contained three major sections. The first section asked the visitor questions regarding their experience in information-searching and online banking satisfaction. The second section gathered information regarding the visitor's intended product/service and his/her history of online banking frequency. In the third section of the survey, individual users' personal information levels and incentive levels were asked. In addition, there were eight questions regarding the participants' openness as a personality trait. These questions were asked in the beginning of the questionnaire so its measurement would not be directly influenced by later exposure to the incentive.

### Section 4-2. Survey Protocols

Twelve survey protocols were designed to ask different levels of personal information offering different types (participants were given a choice between a cash prize and a gift certificate) and values of incentives. They are summarized in Table 4 and in the following explanations.

**Table 4. Summary of Survey Protocols** 

Protocols	Amount of	Level of Personal Information	Number of
	Incentive	Asked	Respondents
1-1	No Incentive	Easy to Reveal	50
1-2	No Incentive	Easy and Moderate to Reveal	50
1-3	No Incentive	Easy, Moderate, and Hard to Reveal	50
2-1	\$10	Easy to Reveal	53
2-2	\$10	Easy and Moderate to Reveal	43
2-3	\$10	Easy, Moderate, and Hard to Reveal	54
3-1	\$50	Easy to Reveal	39
3-2	\$50	Easy and Moderate to Reveal	49
3-3	\$50	Easy, Moderate, and Hard to Reveal	55
4-1	\$100	Easy to Reveal	50
4-2	\$100	Easy and Moderate to Reveal	50
4-3	\$100	Easy, Moderate, and Hard to Reveal	50

# Survey Protocol 1-1

Provided no incentive and asked "easy to reveal" personal information along with other survey questions.

# Survey Protocol 1-2

Provided no incentive and asked "easy" and "moderate to reveal" personal information along with other survey questions.

## Survey Protocol 1-3

Provided no incentive and asked "easy," "moderate," and "reluctant to reveal" personal information along with other survey questions.

# Survey Protocol 2-1

Provided a \$10 Gift Certificate of the participant's choice for Wingspan

Affiliated Merchants<sup>1</sup> or a \$10 Cash prize as an incentive and asked "easy to reveal" personal information along with other survey questions.

## Survey Protocol 2-2

Provided a \$10 Gift Certificate of the participant's choice for Wingspan

Affiliated Merchants or a \$10 Cash prize as an incentive and asked "easy" and

"moderate to reveal" personal information along with other survey questions.

## Survey Protocol 2-3

Provided a \$10 Gift Certificate of the participant's choice for Wingspan

Affiliated Merchants or a \$10 Cash prize as an incentive and asked "easy,"

"moderate," and "reluctant to reveal" personal information along with other survey questions.

<sup>&</sup>lt;sup>1</sup> There were six Wingspan Affiliated Merchants selected in this study for gift certificate incentives. They are Amazon.com, PaulFrederick.com, CDNOW.com, Reel.com, Dean-Deluca.com, and Garden.com (please refer to "Description of Incentives" in Appendices).

#### Survey Protocol 3-1

Provided a \$50 Gift Certificate of the participant's choice for Wingspan

Affiliated Merchants or a \$50 Cash prize as an incentive and asked "easy to
reveal" personal information along with other survey questions.

## Survey Protocol 3-2

Provided a \$50 Gift Certificate of the participant's choice for Wingspan

Affiliated Merchants or a \$50 Cash prize as an incentive and asked "easy" and

"moderate to reveal" personal information along with other survey questions.

# Survey Protocol 3-3

Provided a \$50 Gift Certificate of the participant's choice for Wingspan

Affiliated Merchants or a \$50 Cash prize as an incentive and asked "easy,"

"moderate," and "reluctant to reveal" personal information along with other survey questions.

## Survey Protocol 4-1

Provided a \$100 Gift Certificate of the participant's choice for Wingspan Affiliated Merchants or a \$100 Cash prize as an incentive and asked "easy to reveal" personal information along with other survey questions.

# Survey Protocol 4-2

Provided a \$100 Gift Certificate of the participant's choice for Wingspan Affiliated Merchants or a \$100 Cash prize as an incentive and asked "easy" and "moderate to reveal" personal information along with other survey questions.

# Survey Protocol 4-3

Provided a \$100 Gift Certificate of the participant's choice for Wingspan Affiliated Merchants or a \$100 Cash prize as an incentive and asked "easy," "moderate," and "reluctant to reveal" personal information along with other survey questions.

## **Chapter 5. ANALYSIS AND RESULTS**

In this chapter, analysis and results are organized into three sections. The first section provides a detailed explanation of the sample, the second section deals with the selection of analysis methods, and the third section corresponds to the nine sets of hypotheses and their statistical results. The third section also includes interpretation of results and the prediction analysis that was addressed in the research questions.

#### Section 5-1. Descriptions of the Sample

The list of frequency-based descriptions of the sample that follow are shown to help understand who the respondents were and what they described about their online experiences, commitment, and trusts (please refer to "Frequencies of Variables" in Appendices). The total number of respondents used in following descriptions are not identical throughout for two reasons. First, all the group comparisons were made based on the respondents who participated in four out of twelve survey protocol asking all three levels of personal information. Other analyses were performed based on the participants to all twelve survey protocols. Secondly, variations in sample size reflect the missing data or cases in which survey participants did not provide all answers requested. Since this study attempted an experimental approach that observes survey participants' voluntary responses, the missing data were an important result.

Table 5-1 summarizes the most relevant descriptions of the sample used in this study.

Table 5-1. Summary of Sample Descriptions

	ole 5-1. Summary of	Amount of Incentives Offered					
		None	\$10	\$50	\$100		
WingspanBank	No	23.9%	22.0%	25.8%	23.4%		
Customer	Yes		3.8%	.5%	.5%		
Freq. of Registration	Never	.5%	2.9%	2.4%	1.0%		
Incentives Exposure	Rarely	3.4%	3.4%	2.9%	1.0%		
in 6 mo.	Sometimes	10.6%	10.1%	8.7%	10.1%		
	Very Often	8.2%	8.2%	9.1%	9.6%		
	Always	1.0%	1.0%	1.4%	1.0%		
	Not in 6 mo.			.5%			
	Not Sure	.5%	.5%	1.0%	1.4%		
Intend in Net vs.	No Net Banking	3.3%	4.3%	1.9%	5.7%		
Trad. Banking	Net Banking by	7.7%	5.7%	8.1%	8.1%		
	Trad. Bank Only						
	Net Banking by	10.5%	9.1%	10.0%	5.3%		
	DotCom as						
	Addition						
	Net Banking by	2.4%	6.7%	6.2%	4.8%		
	DotCom Only						
Intended Freq. of	Never	2.9%	5.3%	1.4%	5.3%		
Net Banking	Less than Once a	1.4%	1.4%	1.4%			
	Month						

	1 - 3 a Month	6.7%	5.7%	8.6%	7.2%
	1 - 6 a Week	7.2%	7.2%	4.8%	6.7%
	Daily	2.4%	4.3%	7.2%	1.4%
	Not Sure	3.3%	1.9%	2.9%	3.3%
Net Purchase in 6	No	.5%	.5%	2.9%	2.4%
mo.	Yes	23.2%	25.6%	23.2%	21.7%
Freq. of Net	Once in 6 mo.		1.0%		
Purchase	2 - 5 in 6 mo.	5.1%	8.2%	4.1%	8.7%
	6 - 10 in 6 mo.	6.1%	3.6%	3.6%	3.6%
	More than 10 in 6.	13.8%	14.3%	17.3%	10.7%
	mo.				
Gender	Male	2.9%	8.2%	7.7%	5.8%
	Female	20.7%	17.8%	18.8%	18.3%
Purpose of Today's	Window Shopping	13.4%	12.9%	14.4%	15.3%
Visit to	Info. Need	2.4%	1.9%	1.9%	2.4%
WingspanBank	General Banking	8.1%	8.6%	7.2%	4.8%
	Insurance		1.0%		
	Loans		1.0%	1.0%	1.0%
	Investment		.5%	1.9%	.5%
Primary Concern in	Misuse	4.8%	6.8%	4.8%	4.3%
Registration	Distrust	1.0%	1.0%		3.4%
	Too Personal	1.4%	1.0%	2.9%	3.9%
	Time Consuming	5.3%	7.2%	3.9%	4.3%
	Unclear Benefits	2.4%	2.9%	1.4%	1.9%
	OK with Me	8.7%	7.2%	13.5%	5.8%
Selected Incentive	Amazon.com		21.4%	23.9%	16.4%
	CDNOW.com				.6%

	PaulFrederick.com				1.9%
	Dean-Deluca.com		.6%		.6%
	Garden.com		.6%	.6%	1.3%
	Cash		11.3%	10.1%	10.7%
Share Personal Info.	Never Share	1.0%		1.4%	
	Share if Necessary	11.0%	13.4%	12.4%	12.9%
	Share if Trust	8.1%	6.7%	6.2%	8.6%
	Share w/ Stranger	3.8%	5.7%	6.2%	2.4%

### Section 5-2. Selection of Statistical Analysis

To examine the significance of the differences in factors with the number of personal questions answered, a number of MANOVA tests were used. For next part of the analysis, Factor Analysis was performed to examine the adequacy of survey questions measuring a single factor, and it was followed by Reliability Tests to confirm the results from the Factor Analysis.

As the last part of analysis, Binary Logistic Regression was used to find out predictive value in identifying prospective customers and/or non-prospective customers. In early stage of analysis, Discriminant Analysis was also considered as an alternative. However, Logistic Regression was chosen over Discriminant Analysis for the following reasons. First, Discriminant Analysis requires certain normality

assumptions that logistic regression does not require. Discriminant Analysis also strictly requires all the predictor variables to be continuous while Logistic Regression includes procedures for generating the necessary dummy variables automatically. Third, the types of data gathered for this study match perfectly with Logistic Regression procedures in which categorical data can be entered in a statistically more sophisticated manner than Discriminant Analysis. Binary Logistic Regression Analysis is appropriate when the outcome (dependent variable) is dichotomous (e.g., no/yes), and when predictors are continuous or categorical data. For all the analyses in this study, significance level was set to be .05 in SPSS.

#### Section 5-3. Results

Test of H1: People who are cautious about trust are less likely to provide the personal information requested online than others.

For this hypothesis testing, MANOVA was used. Comparisons were made using the four protocols that asked all three levels of personal information (Protocol 1-3, 2-3, 3-3, and 4-3), and the result was significant.

Original data was not balanced in terms of its cell sizes, thus responses for this question were recoded as they are shown in Table 5-2 for better statistical analysis.

Table 5-2. Share Personal Info.

	Frequency	Percent	Valid	Cumulative
			Percent	Percent
Not Willing to Share in	109	52.2	52.2	52.2
Most Cases (NWS)				
Willing to Share, If Trust	62	29.7	29.7	81.8
(WST)				
Willing to Share with	38	18.2	18.2	100.0
Strangers (WSS)				
Total	209	100.0	100.0	

In this MANOVA analysis, "Share Personal Information" was used as a fixed factor. There were three groups of respondents compared: "Not Willing to Share in Most Cases (NWS)," "Willing to Share, If Trust (WST)," and "Willing to Share with Strangers (WSS)". Three dependent variables were "Total Number of Easy to Reveal Personal Questions Answered," "Total Number of Moderate to Reveal Personal Questions Answered," and "Total Number of Hard to Reveal Personal Questions Answered" (please refer to Table 5-3).

**Table 5-3. Descriptive Statistics** 

	Share Personal Info.	Mean	Std.	N
			Deviation	
Total No. of Easy	Not Willing to Share in Most Cases	3.94	.27	109
Q's Answered	Willing to Share, If Trust	3.97	.18	62
	Willing to Share with Strangers	4.00	.00	38
	Total	3.96	.22	209
Total No. of	Not Willing to Share in Most Cases	3.95	.25	109
Moderate Q's	Willing to Share, If Trust	3.87	.46	62
Answered	Willing to Share with Strangers	3.97	.16	38
	Total	3.93	.32	209
Total No. of Hard	Not Willing to Share in Most Cases	3.72	.68	109
Q's Answered	Willing to Share, If Trust	3.39	1.12	62
	Willing to Share with Strangers	3.87	.34	38
	Total	3.65	.81	209

The F test for Box's test was significant (p < .01). Therefore, the homogeneity hypothesis can be rejected, and it can be assumed that there were differences in the matrices. Such significant results may be due to the violation of the multivariate normality assumption for this test. However, note that violations of the normality assumption are usually not "fatal," meaning, that the resultant significance tests etc. are still considered "trustworthy" (please note that interpretation of Box's Test of Equality of Covariance Matrices for later hypothesis testings are not shown in this section since their interpretations are identical as above test).

The Wilks' Lambda of .937 was significant, F(6, 408) = 2.265 (p < .05), indicating that the population means on the dependent variables were not the same for the three levels of willingness to share personal information. The multivariate Eta Squared = .032 indicated that 3.2 percent of the multivariate variance of the dependent variables was associated with the group factor.

Table 5-4. Tests of Between-Subjects Effects

Source	Dependent	Type III Sum	df	Mean Square	F	Sig.	Eta Squared
	Variable	of Squares					
Share	Total No. of	.089	2	.044	.950	.389	.009
Personal	Easy Q's						
Info.	Answered						
	Total No. of	.350	2	.175	1.741	.178	.017
	Moderate Q's						
	Answered						
	Total No. of	6.707	2	3.354	5.282	.006	.049
	Hard Q's						
	Answered						

Table 5-4 shows that the univariate ANOVA for the total number of "hard" questions answered was significant, F(2, 206) = 5.282 (p < .01). The univariate ANOVA for the "easy" and the "moderate" ones were non significant because both .389 and .178 exceeded the required level of .025.

**Table 5-5. Multiple Comparisons** 

			-	Mean	Std. Error	Sig.	95% Cor	nfidence
				Difference			Inte	rval
			į	(I-J)				
Dependent		(I) Share	(J) Share				Lower	Upper
Variable		Personal	Personal				Bound	Bound
		Info.	Info.					
Total No.	Tukey	NWS	WST	02	.03	.785	10	.06
of Easy	HSD		WSS	06	.04	.366	15	.04
Q's		WST	NWS	.02	.03	.785	06	.10
Answered			WSS	03	.04	.749	14	.07
		WSS	NWS	.06	.04	.366	04	.15
			WST	.03	.04	.749	07	.14
Total No.	Tukey	NWS	WST	.08	.05	.225	04	.20
of	HSD		WSS	02	.06	.943	16	.12
Moderate		WST	NWS	08	.05	.225	20	.04
Q's			WSS	10	.07	.258	26	.05
Answered		WSS	NWS	.02	.06	.943	12	.16
			WST	.10	.07	.258	05	.26
Total No.	Tukey	NWS	WST	.34*	.13	.021	.04	.63
of Hard	HSD		WSS	14	.15	.604	50	.21
Q's		WST	NWS	34*	.13	.021	63	04
Answered			WSS	48*	.16	.009	87	10
		wss	NWS	.14	.15	.604	21	.50
			WST	.48*	.16	.009	.10	.87

<sup>\*</sup> The mean difference is significant at the .05 level.

As it is shown in Table 5-5, the result of the ANOVA (please note that some variables were renamed for simplicity and readability purposes) for the "easy" and "moderate" questions was not significant. However, from the pairwise comparisons for the "hard" to answer questions, two out of three comparisons were significant: "Not Willing to Share in Most Cases (NWS)" and "Willing to Share, If Trust (WST)" (p < .05), "Willing to Share, If Trust (WST)" and "Willing to Share with Strangers (WSS)" (p < .01).

Test of H2: The more satisfied Internet users are with the product/service offered online (as revealed by a constructed customer satisfaction index), the more likely they will respond to online requests for personal information.

This hypothesis was not supported. For this hypothesis testing, MANOVA was used to compare groups with different levels of satisfaction with product/service offered online to see if differences existed in the number of personal questions answered. No statistically significant results were found regarding this dimension.

Test of H3: The more active and frequent a respondent's Internet usage is (as revealed by frequency of email check and/or frequency of online purchase), the more likely that user will respond to online requests for personal information.

MANOVA was used to compare groups reporting different levels of frequency of email check and online purchase to see if differences existed in the number of personal questions answered. In the case of frequency of online purchases, although this hypothesis was not supported with statistical significance, the trends were in the expected direction when "easy" and "hard to reveal" questions were asked.

Test of H4: The more interest/relevance Internet users have for the product/service presented (as indicated by expressed interest in the category), the more likely they will respond to personal information requested.

This hypothesis was not supported. For this hypothesis testing, MANOVA was used to compare groups reporting different levels of interest for the product/service offered online to see if differences existed in the number of personal questions answered. Although the results did not attain statistical significance, the trends were in the expected direction except that the amount of responded personal information dropped when the number of interested products reached more than four.

Test of H5: The greater the intended use of the product/service (intend in online banking vs. traditional banking and/or intended frequency of using online banking), the more likely the Internet users will respond to personal information requested.

# Intend in Online Banking vs. Offline Banking

MANOVA analysis was used to compare two groups who identified themselves as "No Net Banking" and "Net Banking" to examine the differences in the number of personal questions answered. Comparisons were made using the four protocols that asked all three levels of personal information (Protocol 1-3, 2-3, 3-3, and 4-3), and the result for this MANOVA was significant.

The original responses for this question were recoded due to its unbalanced cell sizes. Table 5-6 shows the recoded responses which were used for this analysis. This recoded data was also used in later Binary Logistic Regression as a dependent variable.

Table 5-6. Intend in Net vs. Trad. Banking

	Frequency	Percent	Valid Percent	Cumulative Percent
No Net Banking	94	45.0	45.0	45.0
Net Banking	115	55.0	55.0	100.0
Total	209	100.0	100.0	

In this MANOVA analysis, "Intend in Online Banking VS. Offline Banking" was used as a fixed factor. The three dependent variables were "Total Number of Easy to Reveal Personal Questions Answered," "Total Number of Moderate to Reveal Personal Questions Answered," and "Total Number of Hard to Reveal Personal Questions Answered" (please refer to Table 5-7).

Table 5-7. Descriptive Statistics

	Intend in Net vs. Trad.	Mean	Std.	N
	Banking		Deviation	
Total No. of Easy Q's	No Net Banking	3.97	.18	94
Answered	Net Banking	3.96	.24	115
	Total	3.96	.22	209
Total No. of Moderate	No Net Banking	3.90	.39	94
Q's Answered	Net Banking	3.96	.24	115
	Total	3.93	.32	209
Total No. of Hard Q's	No Net Banking	3.46	1.02	94
Answered	Net Banking	3.81	.54	115
	Total	3.65	.81	209

The Wilks' Lambda of .945 was significant, F(3, 205) = 3.959 (p < .01), indicating that the population means on the dependent variables were not the same for the two levels of intend in online banking vs. traditional banking. The multivariate

Eta Squared = .055 indicated that 5.5 percent of the multivariate variance of the dependent variables was associated with the group factor.

Table 5-8. Tests of Between-Subjects Effects

Source	Dependent	Type III Sum	df	Mean Square	F	Sig.	Eta
	Variable	of Squares					Squared
Intend in	Total No. of	.007	1	.007	.148	.701	.001
Net vs.	Easy Q's						
Trad.	Answered	;					
Banking	Total No. of	.141	1	.141	1.398	.238	.007
	Moderate Q's						
	Answered						
	Total No. of	6.381	1	6.381	10.074	.002	.046
	Hard Q's						
	Answered						

Table 5-8 shows that the univariate ANOVA for the total number of "hard" questions answered was significant, F(1, 207) = 10.074 (p < .01), while the univariate ANOVA for the "easy" and "moderate" ones were non significant because both .701 and .238 exceeded the required level of .025. Further post hoc tests were not performed for intend in online banking vs. traditional banking because there were fewer than three groups.

# Intended Frequency of Online Banking

MANOVA was used in this analysis to compare groups with different frequency levels of intended online banking use to see if the differences existed in the number of personal questions answered. Comparisons were made using the four protocols that asked all three levels of personal information (Protocol 1-3, 2-3, 3-3, and 4-3), and result for this MANOVA was significant.

Original data was not balanced in terms of its cell sizes, thus responses for this question were recoded as they are shown in Table 5-9 for better statistical analysis.

Table 5-9. Intended Freq. of Net Banking

	Frequency	Percent	Valid Percent	Cumulative Percent
Never (NR)	31	14.8	14.8	14.8
Less than Once a Week (>1/WK)	68	32.5	32.5	47.4
1 - 6 Times a Week (1- 6/WK)	54	25.8	25.8	73.2
Daily (DY)	32	15.3	15.3	88.5
Not Sure (NS)	24	11.5	11.5	100.0
Total	209	100.0	100.0	

In this MANOVA analysis, "Intended Frequency of Online Banking" was used as a fixed factor. There were three groups of respondents compared: "Never (NR)," "Less than Once a Week (>1/WK)," "1 - 6 Times a Week (1-6/WK)," "Daily

(DY)," and "Not Sure (NS)". The three dependent variables were "Total Number of Easy to Reveal Personal Questions Answered," "Total Number of Moderate to Reveal Personal Questions Answered," and "Total Number of Hard to Reveal Personal Questions Answered" (please refer to Table 5-10).

Table 5-10. Descriptive Statistics

	Intended Freq. of Net Banking	Mean	Std. Deviation	N
Total No. of Easy Q's	Never	3.97	.18	31
Answered	Less than Once a Week	3.96	.27	68
	1 - 6 Times a Week	3.94	.23	54
	Daily	3.97	.18	32
	Not Sure	4.00	.00	24
	Total	3.96	.22	209
Total No. of Moderate	Never	3.97	.18	31
Q's Answered	Less than Once a Week	3.96	.27	68
	1 - 6 Times a Week	3.96	.19	54
	Daily	3.84	.57	32
	Not Sure	3.88	.34	24
	Total	a Week       3.96       .27         Veek       3.94       .23         3.97       .18         4.00       .00         3.96       .22         2       3.97         3.97       .18         4       3.96         3.96       .27         3.84       .57         3.88       .34         3.93       .32         3.13       1.15         4       3.72       .83         7eek       3.81       .39         3.54       .83	209	
Total No. of Hard Q's	Never	3.13	1.15	31
Answered	Less than Once a Week	3.72	.83	68
	1 - 6 Times a Week	3.81	.39	54
	Daily	3.81	.74	32
	Not Sure	3.54	.83	24
	Total	3.65	.81	209
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The Wilks' Lambda of .835 was significant, F(12, 534.733) = 3.136 (p < .01), indicating that the population means on the dependent variables were not the same for the five levels of intended frequency of online banking. The multivariate Eta Squared = .058 indicated that 5.8 percent of the multivariate variance of the dependent variables was associated with the group factor.

Table 5-11. Tests of Between-Subjects Effects

Source	Dependent	Type III Sum	df	Mean Square	F	Sig.	Eta
	Variable	of Squares					Squared
Intended	Total No. of	.056	4	.014	.298	.879	.006
Freq. of Net	Easy Q's						
Banking	Answered						
	Total No. of	.457	4	.114	1.131	.343	.022
	Moderate Q's						
	Answered						
	Total No. of	11.346	4	2.836	4.587	.001	.083
	Hard Q's						
	Answered						

Table 5-11 shows that the univariate ANOVA for the total number of "hard" questions answered was significant, F(4, 204) = 4.587, p < .01). The univariate ANOVA for the "easy" and "moderate" ones were non significant because both .879 and .343 exceeded the required level of .025.

**Table 5-12. Multiple Comparisons** 

		· · · · · · · · · · · · · · · · · · ·	<u>-</u>	Mean	Std.	Sig.	95% Co	nfidence
				Difference	Error	Ę	Inte	rval
				(I-J)				İ
Dependent		(I)	(J)				Lower	Upper
Variable		Intended	Intended				Bound	Bound
		Freq. of	Freq. of					
		Net	Net					
		Banking	Banking					
Total No.	Tukey	NR	<1/WK	.01	.05	.999	12	.14
of Easy Q's	HSD		1-6/WK	.02	.05	.990	11	.16
Answered			DY	.00	.05	1.000	15	.15
			NS	03	.06	.982	19	.13
		<1/WK	NR.	01	.05	.999	14	.12
			1-6/WK	.01	.04	.998	10	.12
			DY	01	.05	.999	14	.11
			NS	04	.05	.913	18	.10
		1-6/WK	NR	02	.05	.990	16	.11
			<1/WK	01	.04	.998	12	.10
			DY	02	.05	.987	16	.11
			NS	06	.05	.836	20	.09
		DY	NR	.00	.05	1.000	15	.15
			<1/WK	.01	.05	.999	11	.14
			1-6/WK	.02	.05	.987	11	.16
			NS	03	.06	.984	19	.13
		NS	Never	.03	.06	.982	13	.19
			<1/WK	.04	.05	.913	10	.18

			<del>,</del>					
			1-6/WK	.06	.05	.836	09	.20
			DY	.03	.06	.984	13	.19
Total No.	Tukey	NR	<1/WK	.01	.07	1.000	18	.20
of	HSD		1-6/WK	.00	.07	1.000	19	.20
Moderate	į		DY	.12	.08	.531	09	.34
Q's			NS	.09	.09	.820	14	.33
Answered		<1/WK	NR	01	.07	1.000	20	.18
			1-6/WK	01	.06	1.000	17	.15
			DY	.11	.07	.468	07	.30
			NS	.08	.08	.821	12	.29
		1-6/WK	NR	.00	.07	1.000	20	.19
			<1/WK	.01	.06	1.000	15	.17
			DY	.12	.07	.445	07	.31
			NS	.09	.08	.792	12	.30
		DY	NR	12	.08	.531	34	.09
			<1/WK	11	.07	.468	30	.07
			1-6/WK	12	.07	.445	31	.07
			NS	03	.09	.996	27	.20
		NS	NR	09	.09	.820	33	.14
			<1/WK	08	.08	.821	29	.12
			1-6/WK	09	.08	.792	30	.12
			DY	.03	.09	.996	20	.27
Total No.	Tukey	NR	<1/WK	59*	.17	.005	-1.06	13
of Hard Q's	HSD		1-6/WK	69*	.18	.001	-1.17	20
Answered			DY	68*	.20	.005	-1.22	14
			NS	41	.21	.301	-1.00	.17

<1/	WK NR	.59*	.17	.005	.13	1.06
	1-6/WK	09	.14	.965	49	.30
	DY	09	.17	.983	55	.37
	NS	.18	.19	.874	33	.69
1-6/	WK NR	.69*	.18	.001	.20	1.17
	<1/WK	.09	.14	.965	30	.49
	DY	.00	.18	1.000	48	.48
	NS	.27	.19	.617	25	.80
DY	NR	.68*	.20	.005	.14	1.22
	<1/WK	.09	.17	.983	37	.55
	1-6/WK	.00	.18	1.000	48	.48
	NS	.27	.21	.706	31	.85
NS	NR	.41	.21	.301	17	1.00
	<1/WK	18	.19	.874	69	.33
	1-6/WK	27	.19	.617	80	.25
	DY	27	.21	.706	85	.31

<sup>\*</sup> The mean difference is significant at the .05 level.

As it is shown in Table 5-12, the ANOVA for the "easy" and "moderate" questions were not significant (please note that some variables were renamed for simplicity and readability purposes). However, the result from the pairwise comparisons for the "hard" to answer questions indicated that two out of three comparisons for the "hard" to answer questions were significant: "Never (NR)" and "Less than Once a Week (<1 WK)" (p<.01), "Never (NR)" and "1-6 Times a Week (1-6/WK)" (p<.01), "Never (NR)" and "Daily (DY)" (p<.01).

# Test of H6: The more expensive the incentives are that are given to Internet users, the more likely they will provide personal information requested.

MANOVA was used to compare groups who were assigned to one of no incentive, \$10, \$50 and \$100 incentives to see if differences existed in the number of personal questions answered. Comparisons were made using the four protocols that asked all three levels of personal information (Protocol 1-3, 2-3, 3-3, and 4-3), and result for this MANOVA was significant.

Original data was well balanced in terms of its cell sizes as it is shown in Table 5-13. Therefore, it was not necessary to recode the original responses.

Table 5-13. Survey Protocol

	Frequency	Percent	Valid Percent	Cumulative Percent
\$0/Easy, Moderate, Hard	50	23.9	23.9	23.9
(\$0/EMH)				
\$10/Easy, Moderate, Hard	54	25.8	25.8	49.8
(\$10/EMH)				
\$50/Easy, Moderate, Hard	55	26.3	26.3	76.1
(\$50/EMH)				
\$100/Easy, Moderate, Hard	50	23.9	23.9	100.0
(\$100/EMH)				
Total	209	100.0	100.0	

In this MANOVA analysis, "Survey Protocol" was used as a fixed factor. The three dependent variables were "Total Number of Easy to Reveal Personal Questions

Answered," "Total Number of Moderate to Reveal Personal Questions Answered," and "Total Number of Hard to Reveal Personal Questions Answered" (please refer to Table 5-14).

**Table 5-14. Descriptive Statistics** 

	Survey Protocol	Mean	Std.	N
			Deviation	
Total No. of Easy Q's	\$0/Easy, Moderate, Hard	3.88	.39	50
Answered	\$10/Easy, Moderate, Hard	3.98	.14	54
	\$50/Easy, Moderate, Hard	4.00	.00	55
	\$100/Easy, Moderate, Hard	3.98	.14	50
	Total	3.96	.22	209
Total No. of Moderate	\$0/Easy, Moderate, Hard	3.94	.31	50
Q's Answered	\$10/Easy, Moderate, Hard	3.94	.23	54
	\$50/Easy, Moderate, Hard	3.93	.42	55
	\$100/Easy, Moderate, Hard	3.92	.27	50
	Total	3.93	.32	209
Total No. of Hard Q's	\$0/Easy, Moderate, Hard	3.54	.95	50
Answered	\$10/Easy, Moderate, Hard	3.78	.66	54
	\$50/Easy, Moderate, Hard	3.84	.60	55
	\$100/Easy, Moderate, Hard	3.42	.95	50
	Total	3.65	.81	209

The Wilks' Lambda of .897 was significant, F(9, 494.199) = 2.497 (p < .01), indicating that the population means on the dependent variables were not the same for

the four levels of incentive amount. The multivariate Eta Squared = .035 indicated that 3.5 percent of the multivariate variance of the dependent variables was associated with the group factor.

Table 5-15. Tests of Between-Subjects Effects

Source	Dependent	Type III Sum	df	Mean	F	Sig.	Eta
	Variable	of Squares		Square			Squared
Survey	Total No. of	.452	3	.151	3.344	.020	.047
Protocol	Easy Q's						
	Answered						
	Total No. of	.020	3	.007	.064	.979	.001
	Moderate Q's						
	Answered						
	Total No. of	6.042	3	2.014	3.141	.026	.044
	Hard Q's						
	Answered						

Table 5-15 shows that the univariate ANOVA for the total number of "easy" questions answered was significant, F(3, 205) = 3.344, (p < .05). Also, the univariate ANOVA for the total number of "hard" questions answered was significant, F(3, 205) = 3.141, (p < .05). On the other hand, the univariate ANOVA for the "moderate" one was non significant because .979 exceeded the required level of .025.

Table 5-16. Multiple Comparisons

			<del></del>	Mean	Std.	Sig.	95% Co	nfidence
				Difference	Error		Inte	rval
				(I <b>-</b> J)				
Dependent		(I) Survey	(J) Survey				Lower	Upper
Variable		Protocol	Protocol				Bound	Bound
Total No.	Tukey	\$0/EMH	\$10/EMH	10	.04	.071	21	.01
of Easy Q's	HSD		\$50/EMH	12*	.04	.020	23	01
Answered			\$100/EMH	10	.04	.086	21	.01
		\$10/EMH	\$0/EMH	.10	.04	.071	01	.21
			\$50/EMH	02	.04	.969	12	.09
			\$100/EMH	.00	.04	1.000	11	.11
		\$50/EMH	\$0/EMH	.12*	.04	.020	.01	.23
			\$10/EMH	.02	.04	.969	09	.12
			\$100/EMH	.02	.04	.963	09	.13
		\$100/EMH	\$0/EMH	.10	.04	.086	01	.21
			\$10/EMH	.00	.04	1.000	11	.11
			\$50/EMH	02	.04	.963	13	.09
Total No.	Tukey	\$0/EMH	\$10/EMH	.00	.06	1.000	17	.16
of	HSD		\$50/EMH	.01	.06	.997	15	.17
Moderate			\$100/EMH	.02	.06	.989	14	.18
Q's		\$10/EMH	\$0/EMH	.00	.06	1.000	16	.17
Answered			\$50/EMH	.02	.06	.992	14	.17
			\$100/EMH	.02	.06	.980	14	.19
	:	\$50/EMH	\$0/EMH	01	.06	.997	17	.15
			\$10/EMH	02	.06	.992	17	.14
			\$100/EMH	.01	.06	.999	15	.17

		\$100/EMH	\$0/EMH	02	.06	.989	18	.14
			\$10/EMH	02	.06	.980	19	.14
			\$50/EMH	01	.06	.999	17	.15
Total No.	Tukey	\$0/EMH	\$10/EMH	24	.16	.430	64	.17
of Hard Q's	HSD		\$50/EMH	30	.16	.231	70	.11
Answered			\$100/EMH	.12	.16	.877	29	.53
		\$10/EMH	\$0/EMH	.24	.16	.430	17	.64
			\$50/EMH	06	.15	.981	45	.34
			\$100/EMH	.36	.16	.104	05	.76
		\$50/EMH	\$0/EMH	.30	.16	.231	11	.70
			\$10/EMH	.06	.15	.981	34	.45
			\$100/EMH	.42*	.16	.039	.01	.82
	}	\$100/EMH	\$0/EMH	12	.16	.877	53	.29
			\$10/EMH	36	.16	.104	76	.05
			\$50/EMH	42*	.16	.039	82	01

<sup>\*.</sup> The mean difference is significant at the .05 level.

Table 5-16 shows that the ANOVA for the "moderate" questions was not significant (please note that some variables were renamed for simplicity and readability purposes). However, the results from the pairwise comparisons for the "easy" and "hard" to answer questions were found to be significant. One out of six comparisons for the "easy" to answer questions was significant: "\$0/Easy, Moderate, Hard (\$0/EMH)" and "\$50/Easy, Moderate, Hard (\$50/EMH)" (p < .05). And one out of six comparisons for the "hard" to answer questions was significant: "\$50/Easy,

Moderate, Hard (\$50/EMH)" and "\$100/Easy, Moderate, Hard (\$100/EMH)" (p < .05).

Test of H7: The more Internet users have been exposed to incentives for providing their personal information (as indicated by respondents' self report of frequency of registration incentive exposure in past 6 months), the more likely they will respond to online request for personal information.

This hypothesis was not supported. For this hypothesis testing, MANOVA was used to compare groups with different frequency levels of registration incentive exposure to see if differences existed in the number of personal questions answered. No statistically significant results were found regarding this dimension.

Test of H8: The more Internet users are open to disclosure of their personal information (categorized openness total), the more likely they will respond to personal information requested.

This hypothesis was not supported. As the first step in this analysis, Factor Analysis and reliability test were performed. After confirming the adequacy of questions, MANOVA was used for testing the hypothesis. Although the result of

MANOVA analysis was not significant, the trends were in the expected direction when "hard to reveal" questions were asked.

# Factor Analysis

**Table 5-17. Descriptive Statistics** 

	Mean	Std. Deviation <sup>a</sup>	Analysis Na	Missing N
Enjoy Talking (ET)	5.36	1.53	209	1
Comfy w/ People (CwP)	5.07	1.58	209	0
Start Conversation (SC)	4.51	1.75	209	0
Talk w/ Many (TwM)	4.42	1.79	209	1
Storyteller (S)	4.38	1.61	209	1
Draw Attention (DA)	3.49	1.81	209	1
Center of Attention (CA)	4.07	1.87	209	0
Good w/ Strangers (GwS)	4.16	1.77	209	2

a For each variable, missing values are replaced with the variable mean.

Factor Analysis was performed in order to examine whether selected questions in personal trait will be adequate in measuring the openness. There were eight questions used in the survey as they are described in Table 5-17 (please refer to "Survey Questionnaire" in Appendices).

**Table 5-18. Correlation Matrix** 

	ET	CwP	SC	TwM	S	DA	CA
CwP	.813						
SC	.661	.795					
TwM	.629	.748	.781			-	
S	.545	.620	.642	.632			
DA	.465	.505	.538	.600	.560		
CA	.548	.551	.544	.575	.551	.782	
Gws	.372	.396	.485	.419	.276	.347	.351

All questions asked were highly associated with each other as shown in Table 5-18 (please note that each variable was renamed for simplicity and readability purposes). Therefore, they all can be considered to be measuring the same factor (openness). Determinant shows that it is greater than .0001 and it means that the collinearity is low.

The Kaiser-Meyer-Olkin Measure of Sampling Adequacy was .878 which is greater than .70. Also the significant (p) was .000 which is less than .05. Therefore, again, the questions were adequate in measuring openness.

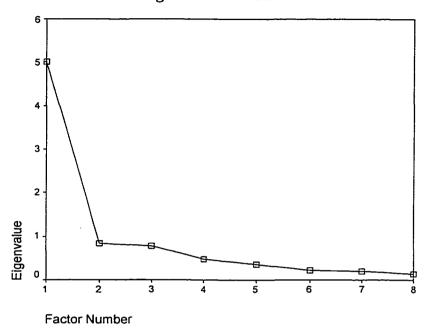
Table 5-19. Total Variance Explained

	Ir	nitial Eigenva	lues	Extraction Sums of Squared			
					Loadings		
Factor	Total	Percent of	Cumulative	Total	Percent of	Cumulative	
		Variance	Percent		Variance	Percent	
1	5.003	62.536	62.536	4.595	57.433	57.433	
2	.841	10.510	73.046			-	
3	.766	9.574	82.621				
4	.476	5.950	88.570				
5	.361	4.516	93.087				
6	.214	2.671	95.758		-		
7	.198	2.474	98.232				
8	.141	1.768	100.000				

Extraction Method: Maximum Likelihood.

Results shown in Table 5-19 also support this adequacy. Table 5-19 indicates that only the first factor has eigenvalue that is greater than one. About 57.4 percent of variance was accounted for this first factor. Scree plot shown in Figure 5 shows a clear visual evidence of this adequacy.

Figure 5. Scree Plot



# Reliability Test

Table 5-20. Item-total Statistics

	Scale Mean	Scale	Corrected	Squared	Alpha if
:	if Item	Variance if	Item-Total	Multiple	Item
	Deleted	Item Deleted	Correlation	Correlation	Deleted
Openness 1	30.0887	92.8337	.7332	.6794	.8982
Openness 2	30.3842	90.1190	.8071	.7900	.8920
Openness 3	30.9606	86.8301	.8115	.7383	.8903
Openness 4	31.0296	86.4546	.8050	.6975	.8908
Openness 5	31.0690	92.3715	.6878	.5148	.9012
Openness 6	31.9606	89.1866	.6975	.6641	.9006
Openness 7	31.3842	87.7328	.7130	.6666	.8994
Openness 8	31.3300	96.9252	.4699	.2669	.9198

All the correlations were high (e.g., .40+), therefore they all make good components of a summated rating scale as shown in Table 5-20. From the results, the high reliability (Cronbach's alpha = .9108) was confirmed.

Although it was successful proving the adequacy of questions measuring openness, the result of the MANOVA analysis for testing this hypothesis was not significant. MANOVA was used to compare groups with different levels of openness to see if differences existed in the number of personal questions answered.

Test of H9: The trust-related concerns during online user registration will moderate probability of becoming a prospect customer.

#### Logistic Regression Analysis

Binary Logistic Regression Analysis was performed to serve two different purposes. First, it was used to test the last hypothesis stated above. Second, for more practical application of the study, it was used to create a prediction model that suggested systematical method to determine whether or not an individual visitor would intend to open an online bank account. All six categorical predictors were entered as indicators in order to indicate the present and absence of a characteristic using dummy variables.

There were 558 valid cases included in this analysis with 35 missing cases.

The dependent variable was dichotomous as participants classified themselves as either one of "has intention to use online banking" and "have no intention to use online banking."

Selected six predictors included three "easy to reveal" personal information and three other factors such as level of openness, purpose of visit, and primary concern in registration (shown in Table 5-21). Three "easy to reveal" personal information factors including gender, age, and education, were selected since they were considered to takes less effort to acquire than "moderate" or "hard to reveal" information. They were considered as the information that could be easier to acquire in initial stage of online relationship relative to higher levels of personal information. Since this prediction model would have its practical value by detecting the intended use of online banking in early stage of the relationship, "easy to reveal" information factors were selected. Besides the three factors mentioned above, additional three variables were entered into the analysis: trust in online registration, purpose of the visit, and openness as an extraneous variable to the incentives. In other words, questions such as "does a visitor has concern in registering his/her personal information during online registration?" "why did a visitor come to the site today?" and "how open a visitor's personality is regarding the disclosure of personal information?" were addressed in the analysis and how they affect visitors in opening an online bank account.

**Table 5-21. Coding of Categorical Variables** 

		Frequency	Parameter coding			
			(1)	(2)	(3)	
Education	High School Grad or	87	1.000	.000	.000	
	Less (EHS)					
	Some College (ESC)	208	.000	1.000	.000	
	Bachelor Degree	170	.000	.000	1.000	
	(EBD)					
	Master/Ph. D. Degree	93	.000	.000	.000	
	(EMP)					
Age	Under 29 (AUT)	202	1.000	.000		
	30 – 39 (ATT)	210	.000	1.000	<del></del>	
	Over 40 (AOF)	146	.000	.000		
Purpose of	Accidental Visit (PAV)	252	1.000	.000		
Visit	General Banking	182	.000	1.000		
	Activities (PGB)					
	Other Financial Info.	124	.000	.000		
	Need (POF)					
Primary	Can't Trust (PCT)	202	1.000	.000		
Concern in	Not Beneficial (PNB)	174	.000	1.000		
Registration	OK with Me (POM)	182	.000	.000		
Openness	Close (OCL)	142	1.000			
	Open (OOP)	416	.000			
Gender	Male (GMA)	205	1.000			
	Female (GFE)	353	.000			

Original responses for most predictor variables were not balanced in terms of its cell sizes. Therefore, responses for such questions were recoded for better statistical analysis. Each recoded variable shown in Table 5-21 is described in Table 5-22 through Table 5-26 (please note that recoding of dependent variable is not included in following tables since it was described earlier in Table 5-6).

Table 5-22. Education

	Frequency	Percent	Valid Percent	Cumulative Percent
High School Grad or Less	42	20.1	20.2	20.2
Some College	89	42.6	42.8	63.0
Bachelor Degree	51	24.4	24.5	87.5
Master/Ph.D. Degree	26	12.4	12.5	100.0
Total	208	99.5	100.0	
System Missing	1	.5		
Grand Total	209	100.0		

Table 5-23. Age

	Frequency	Percent	Valid Percent	Cumulative Percent
Under 29	67	32.1	32.4	32.4
30 - 39	89	42.6	43.0	75.4
Over 40	51	24.4	24.6	100.0
Total	207	99.0	100.0	-
System Missing	2	1.0		
Grand Total	209	100.0		

Table 5-24. Purpose of Today's Visit to WingspanBank

	Frequency	Percent	Valid Percent	Cumulative Percent
Accidental Visit	117	56.0	57.6	57.6
Intended Visit	86	41.1	42.4	100.0
Total	203	97.1	100.0	
System Missing	6	2.9		
Grand Total	209	100.0		

Table 5-25. Primary Concern in Registration

	Frequency	Percent	Valid Percent	Cumulative Percent
Can't Trust	73	34.9	35.3	35.3
Not Beneficial	61	29.2	29.5	64.7
OK with Me	73	34.9	35.3	100.0
Total	207	99.0	100.0	
System Missing	2	1.0		
Grand Total	209	100.0		

Table 5-26. Openness

	Frequency	Percent	Valid Percent	Cumulative Percent
Close	57	27.3	27.3	27.3
Open	152	72.7	72.7	100.0
Total	209	100.0	100.0	

The Hosmer and Lemeshow goodness-of-fit test statistic was greater than .05, thus, failed to reject the null hypothesis that there is no difference between the observed and model-predicted values of the dependent. It implies that the model's estimates fit the data at an acceptable level.

Table 5-27. Classification Table

Observed		Predicted			
		Intend in Ne	Intend in Net vs. Trad.		
		Bank	Banking		
		No Net	Net Banking		
		Banking			
	No Net Banking	85	98	46.4	
Trad. Banking	Net Banking	54	321	85.6	
Overall Percentage				72.8	

Table 5-27 shows that 72.8 percent (overall) of the participants was predicted correctly. The independent/covariate variables were better at helping us predict who would be a prospect online banking customer (85.6% correct) than at who would not be the one (46.4% correct). Table 5-28 shows the predictor variables and coefficients and odds ratios (please note that each variable was renamed for simplicity and readability purposes).

Table 5-28. Variables in the Equation

	В	S.E.	Wald	df	Sig.	Exp(B)
GMA	.576	.226	6.475	1	.011	1.779
EMP			10.582	3	.014	
EHS	-1.151	.365	9.972	1	.002	.316
ESC	618	.318	3.768	1	.052	.539
EBD	443	.327	1.831	1	.176	.642
AOF			3.273	2	.195	
AUT	337	.261	1.666	1	.197	.714
ATT	.085	.249	.117	ī	.733	1.089
OCL	287	.225	1.621	1	.203	.751
POF			45.153	2	.000	
PAV	418	.241	2.992	1	.084	.659
PGB	1.447	.313	21.347	1	.000	4.250
POM			8.459	2	.015	
PCT	703	.248	8.014	1	.005	.495
PNB	263	.260	1.022	1	.312	.769
Constant	1.457	.395	13.563	1	.000	4.291

#### Chapter 6. DISCUSSION

This chapter begins with an overall summary of the statistically significant results, and then the implications of these results are discussed followed by a section in which some conclusions are offered. Also included in this chapter are some comments on the limitations of the study and suggested directions for future research.

The discussion of the results of this study is comprehensive in that the full data set is included. Thus, not only those analyses that resulted in statistically significant findings are reviewed but some of the comparisons that failed to reach that level of significance are also discussed. This latter group of findings is included because they are at least suggestive of some of the dynamics that help understand the relationship of consumers to commercial websites and because they support, in part, some of the more theoretical behavioral constructs covered in the literature review. Thus, in reading the discussion the reader will, at times be presented with some new or collateral findings that relate to the primary results presented in the preceding section. Yet, they are generally more speculative and are included in the discussion to enhance the descriptiveness of this real world experiment. The inclusiveness of this approach - - both primary findings of statistical and operational significance as well as collateral findings that are suggestive and supportive of the theoretical constructs - - will, the writer hopes, help frame the context and value of the present investigation.

#### Section 6-1. Overall Summary of the Results

Statistically significant results from the previous chapter can be summarized as following.

# Test of H1: People who are cautious about trust are less likely to provide the personal information requested online than others.

Total numbers of hard to reveal questions answered by three groups ("Not Willing to Share in Most Cases," "Willing to Share, If Trust," and "Willing to Share with Strangers") were significantly different (p < .01).

# Test of H5: The greater the intended use of the product/service, the more likely the Internet users will respond to personal information requested.

## 1) Intend in Online Banking vs. Offline Banking

Total numbers of moderate and hard to reveal questions answered by two groups ("No Net Banking" and "Net Banking") were significantly different (p < .01).

### 2) Intended Frequency of Online Banking

Total numbers of hard to reveal questions answered by five groups ("Never," "Less than Once a Week," "1 - 6 Times a Week," "Daily," and "Not Sure") were significantly different (p < .01).

Test of H6: The more expensive the incentives are that are given to Internet users, the more likely they will provide personal information requested.

Total numbers of easy and hard to reveal questions answered by four groups ("\$0/Easy, Moderate, Hard," "\$10/Easy, Moderate, Hard," "\$50/Easy, Moderate, Hard," "\$100/Easy, Moderate, Hard") were significantly different (p < .05). It was found that, up to \$50 value, the more expensive the incentives were, the more likely Internet users provided personal information requested.

Test of H9: The trust-related concerns during online user registration will moderate probability of becoming a prospect customer.

The trust-related concerns during online user registration will moderate probability of becoming a prospect customer (p < .01).

## Section 6-2. Implications of the Results

Although some of the findings were not statistically significant, they were included in this section. The decision to include those findings was based on the realization that there has been no prior academic research similar to this study and the

descriptive trends found here may have value for both theoretical and commercial purposes. Please note that all the statistically significant level of personal information were marked using a bold typeface in the box of each figure shown in this section.

## Willingness to Share Personal Information and Trust

The total number of "hard to reveal" questions answered by the three groups were significantly different. Those three groups represented people with different levels of willingness to share personal information according to the role they claimed trust plays when they made the decision to provide their information. Such significant difference (p < .01) was found to be based on two sets of comparisons: the comparison between "Not Willing to Share in Most Cases" and "Willing to Share, If Trust" (p < .05), and the comparison between "Willing to Share, If Trust" and "Willing to Share with Strangers" (p < .01).

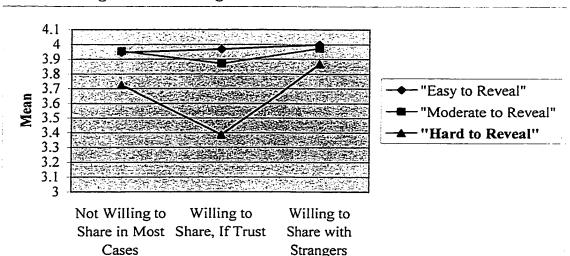


Figure 6-1. Willingness to Share Personal Information

Figure 6-1 indicated an overall trend that trust becomes a critical factor when the level of questions asked becomes "hard to reveal." As the levels of personal information asked were harder to reveal, respondents who stated that they were willing to share information only if they trusted the communicating party became more reluctant to provide their information. It was also found that the number of answers dropped rather dramatically as the questions became "harder (i.e., "more personal" in nature) to reveal."

Level of Willingness

In cases where "hard to reveal" questions were asked, it became significant that those who were cautious about trust were (as one might expect) the most reluctant to provide their personal information online. They were even more reluctant than the people who said they were willing to share their information with strangers.

Therefore, this finding supports the first hypothesis statement (people who are cautious about trust are less likely to provide the personal information requested online than others) when "hard to reveal" questions are asked.

Above findings confirms that there is a strong negative relationship between trust and concern (Milne & Boza, 1998). The results indicated that trust has a positive effect on the willingness to share personal information whereas concern in trust showed a negative effect.

There were two factors that might have affected the willingness to provide personal information in this study. First, since the participants were notified that the study was conducted by a doctoral candidate not by a WingspanBank.com, it could make people to ease the concern regarding a commercial misuse of their personal information and thus became more cooperative helping academic research. Second, because the participants were drawn from the online banking site where the personal information is considered to be more securely handled and relevant to give out, this pre-perception of participant could have affected the amount of personal information they provided. Either ways, this study possibly showed less definite differences between the three levels of personal information tested. If the study had been conducted in different settings than above, the difference among the levels could have been more distinct.

## Active and Frequent Internet Usage

Although the significance level of Wilks' Lambda (p > .05) for frequency of online purchase means that the multivariate test may not be accountable for its significant statistical inference (p < .05 for "Total No. of Hard Q's Answered"), there was an interesting pattern found as shown in Figure 6-2.

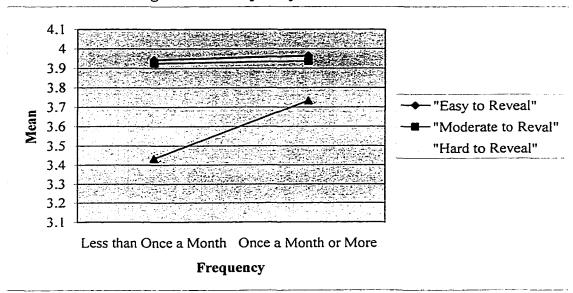


Figure 6-2. Frequency of Online Purchase

When either the "easy to reveal" personal information or the "hard to reveal" information was asked, people who identified themselves as an active online shopper tended to be more willing to provide their personal information. This suggests that frequency of online purchasing serves to make respondents less sensitive/concerned about revealing personal information. However, for the "moderate to reveal"

questions, there was no difference found in the number of questions answered between more active shoppers and less active shoppers.

## Interest for the Product/Service

Although the significance level of Wilks' Lambda (p > .05) for categorized interest total means that multivariate test may not accountable for its significant statistical inference (p < .05 for "Total No. of Moderate Q's Answered," and p < .05 for "Total No. of Hard Q's Answered"), there were some interesting patterns found as shown in Figure 6-3.

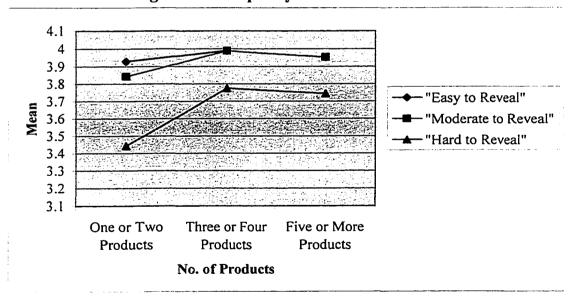


Figure 6-3. Frequency of Online Purchase

Figure 6-3 indicated an identical pattern. They showed that people who were interested in three or four products provided highest number of answers than the ones who indicated their interests in lesser (1 or 2 products) or more (5 or more) number of products.

### Intended Use of the Product/Service

As expected, there was a significant relationship between intended use of the product/service and the number of personal information answered online.

## Intend in Online Banking vs. Offline Banking

Total numbers of "moderate" and "hard to reveal" questions answered by two groups were significantly different (p < .01). Two groups tested here represented the prospect customers who have intention to use online banking and non-prospect customers who have no intention to use online banking.

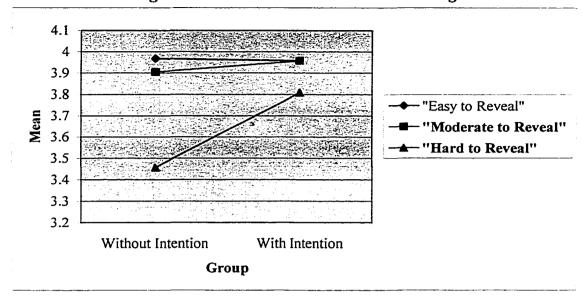


Figure 6-4. Intention to Use Online Banking

Figure 6-4 indicated an overall trend suggesting that people intending to use online banking are more willing to provide their personal information online when the level of information requested gets "harder to reveal."

For "moderate" and "hard" questions that were statically significant, people with intention to use online banking tended to provide more answers including personal information than those respondents with no intention to use online banking.

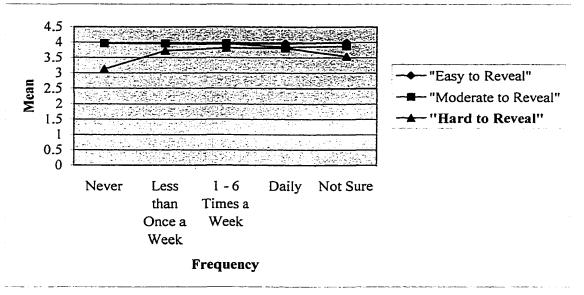
It was also found that the number of answers increased rather dramatically compared to the number of answers provided by ones with no intention to use online banking when the questions became "hard to reveal." On the other hand, there was no difference in the number of questions answered between those two groups when "easy" questions were asked.

The theoretical implication of above findings can be related to the fact that there is a positive effect from the intention to use the product/service to attitude formation. While intention to perform behavior is determined by the individual's attitude toward the performing the behavior and subjective norm held by the individual, this study confirms that intention (to use online banking) also has a positive effect on attitude (to engage in personal information exchange with an online bank).

## Intended Frequency of Online Banking

Total numbers of "hard to reveal" questions answered by five groups were significantly different. Three groups tested here represented people with different intended frequency levels to use online banking. Such significant difference (p < .01) was found to be based on comparisons of "Never" and "Less than Once a Week" (p < .01), "Never" and "1 - 6 Times a Week" (p < .01), "Never" and "Daily" (p < .01).

Figure 6-5. Intended Frequency of Online Banking



Although Figure 6-5 did not indicate an identical pattern, there is an important implication that can be drawn from the result of the "hard to reveal" questions. When the "hard to reveal" questions were asked, the number of answers by people with all three frequency level of interaction ("< Once a Week," "I - 6 times a Week," and "Daily") with online banking seemed to be willing to pro vide their personal information. However, people who said that they never intend to interact with online banking services provided significantly fewer. Therefore, those respondents who planned on using online banking, and who could conceptualize their frequency of interacting with the site, showed that they were more likely to provide answers than those who had no intention or were uncertain.

In this study, "intended frequency of trying" was being measured instead of "frequency of past trying" considering the fact that only 12.7 percent of online population is actively engaged in online banking account (Jamieson, 2000). The above findings suggest that "intention to try (online banking)" and "intended frequency of trying (online banking)" may also positively affect "attitude toward trying."

The results from the two MANOVA tests mentioned above (Intend in Online Banking vs. Offline Banking and Intended Frequency of Online Banking) supported the sixth hypothesis stated earlier (the greater the intended use of the product/service, the more likely the Internet users will respond to personal information requested) when "hard to reveal" questions are asked online. Also the second MANOVA test results supported the hypothesis when "moderate to reveal" questions are asked online.

Above findings confirm that commitment, measured by intended use of product/service in this study, is an essential element in relationship (Morgan & Hunt, 1994) that enables companies to acquire the maximum amount of their customer's personal information. People with higher commitment levels tend to be more willing to provide their personal information than others.

## Amount of Incentives

The total numbers of "easy" and "hard to reveal" questions answered by the four groups showed a statistically significant difference. The four groups tested here represented online users receiving different amounts of incentive and asked to provide their information. Such significant differences (p < .05) in the total number of "easy to reveal" questions answered was based on the comparison of two protocols: "\$0/Easy, Moderate, Hard (No Incentive)" and "\$50/Easy, Moderate, Hard (50 Dollar)" (p < .05). In case of the total number of "hard to reveal" questions answered (p < .05), its significance came from the comparison of "\$50/Easy, Moderate, Hard (50 Dollar)" and "\$100/Easy, Moderate, Hard (100 Dollar)" (p < .05).

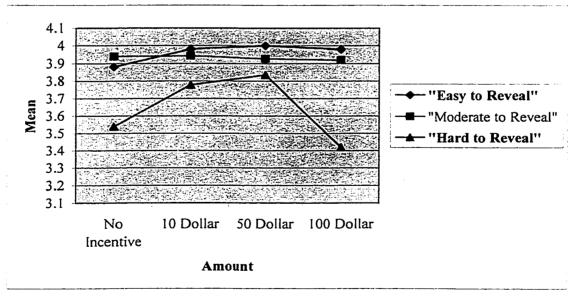


Figure 6-6. Amount of Incentives

As shown in Figure 6-6, generally this study shows that the larger the incentive given to Internet user, the more likely they will provide personal information requested. The exception appears to involve the \$100 incentives. In other words, up to \$50, the amount of responses increased but dropped when \$100 incentives were offered. This finding may reflect a conventional wisdom that says "if it is too good to be true, it isn't." In other words, the \$100 may have appeared too generous and respondents became suspicious of some ulterior purpose.

Above findings confirms that offering tangible rewards for information exchange have positive impact on website visitors' willingness to provide their personal information (Mena, 1999). However, when the amount of incentives reached a certain point, the willingness to share personal information started to decrease due to increased perceived risk. In other words, respondents, when the highest amount of incentive was offered, became suspicious of the offer. Therefore, it is important to find the optimum level of incentives that is perceived to be a fair information exchange in consumers' minds without going overboard.

Three practical suggestions of cost-effective use of incentives can be made in acquiring different levels of personal information. First, in order to acquire the maximum number of "easy to reveal" personal information, the most effective amount of incentive seems to be \$10. Using more than \$10 up to \$50 may increase the number of acquired questions slightly. Second, the most effective amount of incentive seems to be giving no incentive in acquiring the maximum number of

"moderate to reveal" personal information. Using more than \$0 up to \$10 may increase the number of acquired questions slightly (please note that "moderate" one was not significant thus this is more of descriptive suggestion). Third, in order to acquire the maximum number of "hard to reveal" personal information, the most effective amount of incentive seems to be \$10. Using more than \$10 up to \$50 may increase the number of acquired questions slightly.

It is important to note that there is a clear distinction between acquiring personal information and acquiring a customer. For example, many financial sites now offer \$50, \$75 or \$100 deposits when a visitor opens a new account. The result from this study does not imply that \$10 will be more effective than using \$50, \$75 or \$100 luring visitors to open an account. Offering such incentive may stimulate a visitor who has already determined a set of sites to open an account and if the incentive-offering site is one of them. However, if a visitor is in information gathering stage and not ready to open an account, offering \$50, \$75 or \$100 would not be so effective except for the visitors who want to take the money but do not intend to use the account actively.

For deeper practical implication of the study, acquisition of each personal information category was further analyzed separately. First, as shown in Figure 6-7, in order to acquire the maximum amount of "easy to reveal" information, it was found that either asking "easy" and "moderate to reveal" questions with a \$10 incentive, or asking "easy," "moderate," and "hard to reveal" questions with a \$50

incentive seemed to be the most effective methods. On the other hand, asking "easy to reveal" questions with no incentive seemed to be the most ineffective.

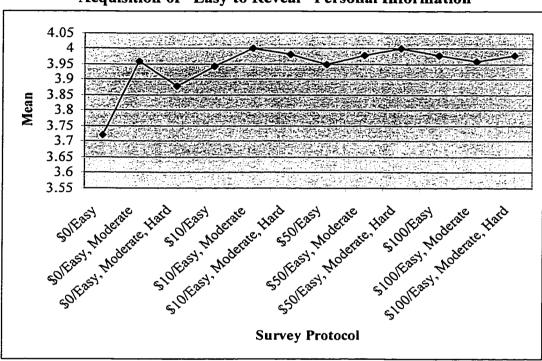
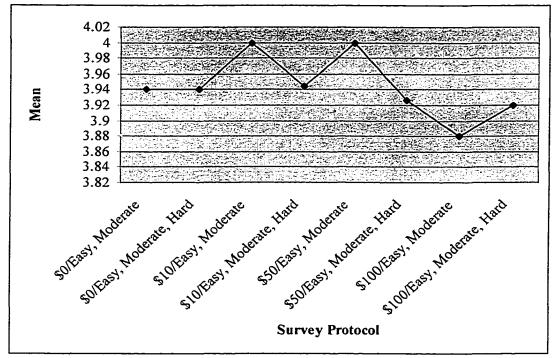


Figure 6-7. Effectiveness of Survey Protocols – Acquisition of "Easy to Reveal" Personal Information

Second, as shown in Figure 6-8, in order to acquire the maximum amount of "moderate to reveal" information, it was found that asking "easy" and "moderate to reveal" questions with either a \$10 or a \$50 incentive seemed to be the most effective methods. On the other hand, asking "easy" and "moderate to reveal" questions with a \$100 incentive seemed to be the most ineffective.

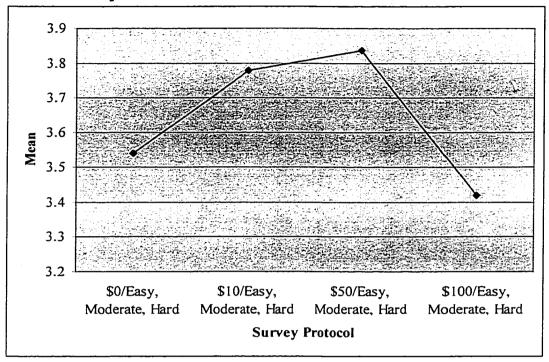
Figure 6-8. Effectiveness of Survey Protocols – Acquisition of "Moderate to Reveal" Personal Information



Third, as shown in Figure 6-9 (which was also illustrated in Figure 6-6), in order to acquire the maximum amount of "hard to reveal" information, it was found that asking "easy," "moderate," and "hard to reveal" questions with a \$50 incentive seemed to be the most effective method. On the other hand, asking "easy," "moderate," and "hard to reveal" questions with a \$100 incentive seemed to be the most ineffective.

Figure 6-9. Effectiveness of Survey Protocols

- Acquisition of "Hard to Reveal" Personal Information



This study was based on gradual approach of trust-building process rather than quick customer acquisition. Strong online relationship between a company and a customer cannot be built without trust-building process, and this particular result of the study implies how a company can use incentives as a rewarding tool to elevate the relationship to the next level. By knowing the most effective level of incentive for different stages in relationship, a customer will be more willing to provide his/her personal information and a company will be able to provide highly relevant and customized contents to individual customers. It is a continuum of beneficial relationship for both parties. The customer gets happier with the financial and

customized contents, and the company enhances its opportunity to turn him/her into a loyal customer.

## Incentive Exposure

There was no significant result found in the number of personal questions answered comparing groups with different frequency levels of registration incentive exposure. Although Figure 6-10 did not indicate an identical pattern, there was an interesting pattern to be discussed.

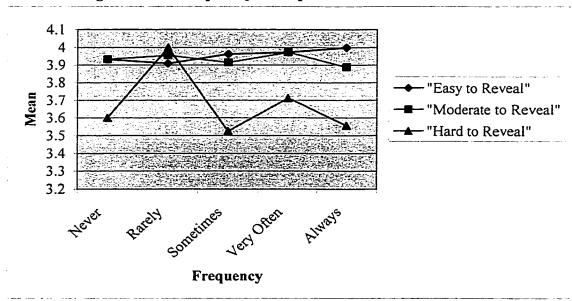


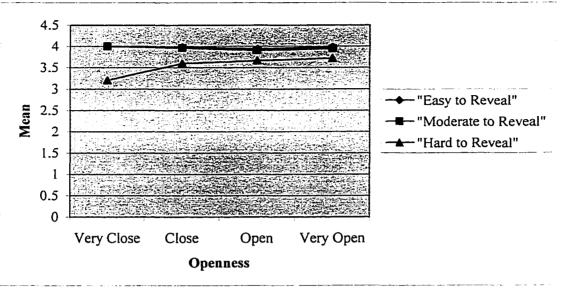
Figure 6-10. Frequency of Exposure to Online Incentives

When "easy to reveal" questions were asked, the more frequently people were exposed to the registration incentives, the more likely they would provide their personal information. This could imply that people became less sensitive or less cautious in providing their personal information online as the frequency of registration incentive exposure increased. It is also possible to assume that providing personal information for an incentive is being considered a reasonable or fair exchange. On the other hand, there was no meaningful pattern found when either "moderate" or "hard to reveal" questions were asked.

## **Openness**

Although there was no significant result found in the number of personal questions answered when comparing groups with different levels of openness, Figure 6-11 showed some interesting patterns that need to be addressed.

Figure 6-11. Openness to Others



There was an identical pattern found from "easy" and "moderate to reveal" questions. In both cases, people who have stated that they are not open to others tend to provide higher number of answers online. It is probably due to the fact that Internet enables people to be more active socializing with others since they do not need to fully reveal their identity. Online interaction may also help people with less social skills in face-to-face communication to be more relaxed and courageous with others online.

When "hard to reveal" questions were asked, the pattern mentioned above changed dramatically. People with higher levels of openness provided higher numbers of answers than those with lower levels of openness. It seemed that

openness affects the number of answers offered positively when the questions become more personal.

#### Predicting Prospective Customer

"Easy to reveal" personal information and other factors such as personal traits, purpose of visit, and primary concern in registration can make a model that predicts intention of using online banking.

From the results of the Binary Logistic Analysis, the last hypothesis (the trust-related concerns during online user registration will moderate probability of becoming a prospect customer) was supported (p < .01). This finding implies that trust issues in registration is an essential element in building an online relationship with customers by acquiring their personal information. Lack of trust will make customers more reluctant and skeptical in providing their personal information online, and without such information, companies will not be able to understand their customers' individual needs thus, sophisticated customization cannot be executed.

Besides the testing hypothesis stated, Binary Logistic Regression Analysis was performed in order to predict whether or not visitors would intend to open an account using six predictor variables. The logistic model for the probability of becoming a prospect customer for *i*th visitor was estimated as:  $\pi_i = \exp(g) / (1+\exp(g))$ , where g is the logit calculated as the outcome of following equation:  $Z = \exp(g) / (1+\exp(g))$ 

 $g_i = b_0 + b_1 X_{1i} + ... + b_k X_{ki}$ , where each X represents another of the k independent variables.

Given the previous coefficients, the logistic regression equation can be written as following. Please note that EMP, AOF, POF, and POM were excluded in the equation since they were all coded as zero.

For an example of practical use of this prediction equation, let's take an example of a college-graduated male, who is the *n*th visitor to a site. Let us assume that he is 31 years old, and he has visited the site accidentally. He has a concern with online registration because of the trust issue, and a personality inventory might reveal that he has some trouble socializing with others.

$$Z = g_n = 1.457 + .576*GMA - 1.151*EHS - .618*ESC - .443*EBD - .337*AUT + .085*ATT - .287*OCL - .418*PAV + 1.447*PGB - .703*PCT - .263*PNB$$

$$= 1.457 - .443*EBD + .085*ATT - .287*OCL - .418*PAV - .703*PCT$$

$$= 1.457 - .443 + .085 - .287 - .418 - .703$$

$$= - .309$$

Furthermore, both the Probability Equation and the Log Odds Equation can be used to predict if he will be a prospective online customer.

odds = 
$$e^z = e^{-.309} = .734181$$

This means that the odds of him being a prospect customer decrease since .73 is less than 1. When the odds ratio is less than 1, the odds are decreased. On the other hand, if the odds ratio is greater than 1, the odds are increased. An odds ratio of 1 leaves the odds unchanged.

prob = odds / 
$$(1+odds) = 1 / 1 + e^{-z} = 1 / 1 + e^{-(-309)} = 1 / 1 + 1.36206 = .423359$$

Since the result of the above probability calculation is approximately .42, this 31 year old has less than a 50/50 chance of becoming a customer.

Let's take another example of a female high school graduate. Let us assume that she is 56 years old, and she has visited the site to get specific information regarding refinancing her mortgage. She has no concern with online registration, and a personality inventory might reveal that she has no trouble socializing with others.

$$Z = g_n = 1.457 + .576*GMA - 1.151*EHS - .618*ESC - .443*EBD - .337*AUT + .085*ATT - .287*OCL - .418*PAV + 1.447*PGB - .703*PCT - .263*PNB$$

$$= 1.457 - 1.151 *EHS$$

$$= 1.457 - 1.151$$

$$= .306$$

odds = 
$$e^z = e^{.306} = 1.357982$$

This means that the odds of her being a prospect customer increase since 1.36 is greater than 1.

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prob = odds / 
$$(1+odds) = 1 / 1 + e^{-z} = 1 / 1 + e^{-(.306)} = 1 / 1 + .73639 = .575907$$

Since the result of the above probability calculation is approximately .58, this 56 year old female has greater than a 50/50 chance of becoming a customer.

### Section 6-3. Conclusions

In studying the role of trust in relationship marketing, buyer trust is the willingness to rely on an exchange partner in whom the buyer has confidence (Moorman, Zaltman & Deshpande, 1992; Morgan & Hunt, 1994). Therefore, it is possible that buyers have different levels of trust, based upon their confidence in the relationship.

Trust is essential for establishing long term buyer-seller relationship as stated by Spekman (1988), and more recently by Morgan and Hunt (1994). When a buyer enters into negotiations with a vendor, a level of trust, based on knowledge and comfort must exist on the part of both communicating parties as well as trust that there will be no unexpected disappointment once an agreement is reached. The outcome of trust between a buyer and seller is the positive actions taken by the buyer

(Anderson & Narus, 1984). Therefore trust influences the actions taken by buyers towards sellers as well as their overall attitude.

The present study also demonstrates the importance of trust as an infrastructural variable in establishing a commercial relationship. At the outset, willingness to trust affects the likelihood of providing personal information which, in turn, can reinforce the interaction and build a deeper trusting relationship between the site and the user. The data also support, as Mena (1999) and others have suggested, that tangible rewards can - - under some circumstances - - encourage the user to provide the personal information requested. In that act, the Website strategy employed appears to commodatize privacy, i.e., for some expected return (e.g., service, money) users are willing to give the enterprise data they would normally withhold. Figure 6-12 uses the model to describe this development. First, it suggests that commitment to product /service and trust are the crucial elements that help companies acquire their consumers' personal information. Commitment enables companies to acquire the maximum number of their customer's personal information. People with higher commitment levels tend to be more willing to provide their personal information than others. Second, offering tangible incentives for information exchange has a positive impact on website visitors' willingness to provide their personal information when they perceive the incentives as a fair exchange. Third, the results indicated that trust has a positive effect on the

willingness to share personal information whereas concern in trust showed a negative effect.

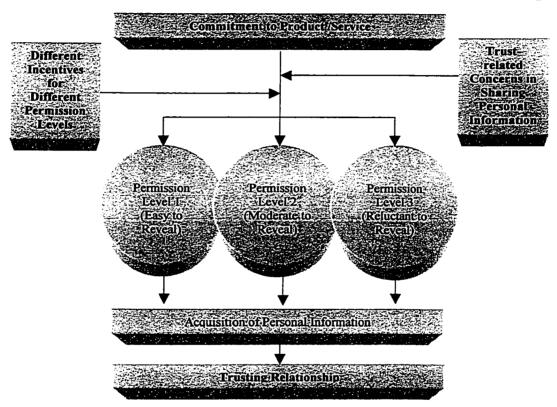


Figure 6-12. Summary of Significant Factors in Online Trust-building

By adapting the customer-provided data into a format that is reconfigured and clearly useful to the customer - - e.g. by customizing the content delivered online - - the relationship deepens. The following statements summarize the most important achievements of this study.

- The intention of the respondent - e.g., having a clear interest in the product or service and planning to buy - affects the number of questions respondents are willing to answer online. Those respondents with an intention to use online banking tended to be more willing to provide "hard to reveal" personal information online.
- When harder to reveal personal information was requested of the respondents,
   those who stated they were willing to share information only if they trusted
   the communicating party became more reluctant to provide their information.
- The size of incentive offered affected the willingness to share personal information online, and the study determined that the most cost-effective use of incentives as a ten-dollar incentive. This incentive for "easy" and "hard to reveal" information, and no incentive for "moderate to reveal" information were found to be the most effective in collecting customers' personal information.
- Finally, in an attempt to apply the results of this study, a prediction model using six factors was developed. This model showed an accuracy of 72.8 percent of overall correct prediction rate if an individual visitor to a site was a prospective customer. The results indicated that the trust-related concerns during online user registration influenced the probability of becoming a prospective customer.

At its best, customization is based on customer behavior - what a customer actually does, what he or she accesses, chooses, rejects, and buys. Earlier forms of customization, required that customers specify, in advance, what they like and dislike, what their interests are, and what, for example, their price range might be for particular types of products.

As a more advanced form of customization, automated environments enabled the online merchant or content provider to detect the patterns in anonymous customer behavior in real time and then transmitted recommendations that appeared within the web site's existing pages. By executing this systematic customization, companies are able to gain positive customer satisfaction which may - - along with other factors - - turn visitors to loyal customers. The key to the successful execution greatly depends on 1) real-time tracking and customization capability, 2) proper analysis of collected registration data, and 3) customized rewards for fair exchange of information.

Through the tracking of customer behavior either through anonymous clicks or log in identifications, management can better understand which material appeals most to which audience. By presenting targeted offers and information only to these customers who are likely to find them interesting or useful, companies can increase the value of their business practices and give customers a reason to return again and again.

As stated previously, this study was planned and executed with the support from one of the leading online banking companies, WingspanBank.com. This

research study was significant in that a relatively large sample was collected through WingspanBank.com's web site. As such, the survey data was collected from visitors – WingspanBank.com customers and browsers - - who came to the site for their own purposes. It was a real world environment with actual cash incentives or equivalent being offered. The visitor's decision to participate in the survey was voluntary although the level of participation was influenced by the incentive protocol to which they were exposed. The findings of this study not only confirmed the factors influencing an online trust-building relationship, but also suggested practical strategies of how companies can more effectively use online incentives in order to acquire the maximum amount of customer personal information.

#### Section 6-4. Limitations of the Study

Due to the research methodology used in this study, the implications and conclusions for the study need to be considered within the following four limitations.

First, the sampling from the single online banking site used in this study clearly limits the generalizability of the findings. Given the characteristics of financial products/services that WingspanBank.com offers to its visitors, the results can be generalized to the online financial market. However, it might have been more

appropriate to include several other online financial sites than to sample only from one financial website. Furthermore, replication of this study will be necessary to properly generalize the results to an even broader online market, or the entire e-commerce universe.

Second, the sampling method used in this study was not entirely based on random selection. The exposure of the invitation was executed randomly, but the actual participation in the survey was determined entirely by voluntarily basis.

However, such limitation exists in most Internet-based researches since the direct response from the respondents can be granted only when the permission is given.

When the permission is granted, that already implies that the respondent is willing to participate in the survey, and thus they may not be assumed to represent the population of those not willing to participate. If this study had used a random selection method that essentially forced visitors to an actual survey site (without providing visitors a choice), it would be subject to criticism as an intrusive study. Equally important, WingspanBank.com would feel that such a process would harm its reputation. Unless the study used log-based tracking data in which participants were not aware of (or not cautious about) the fact that their clicking behaviors are constantly being recorded and analyzed, Internet-based survey data collection will tend to be limited in generalizing its findings to broader population.

Third, the study design did not control for order effects of the questions. In this study, questions asking personal information were listed in the order of "easy to reveal," "moderate to reveal," and "hard to reveal." It is possible that different results could occur if the order of the questions had been varied.

Finally, the selection of independent variables in building a prediction model in this study could be improved if there were tracking data that could be integrated with each respondent. However, in order to respect the privacy issues in e-commerce and financial affairs in particular, it was agreed with WingspanBank.com that no cookie or any other tracking device would be used for the study. The use of such tracking data would have enabled a more effective prediction model in its practical implementation since it could allow use of a real-time data to instantly customize the content based on the prediction model.

#### Section 6-5. Suggestions for Future Research

Several directions for future research emerged from this study. As was mentioned earlier, this study was conducted solely with a sample who visited only one of many financial services/banking sites that exist online - - WingspanBank.com. Therefore, statistically speaking, the results from this study are limited and cannot confidently be generalized to broader financial customers. Such limitation, however,

could be resolved if the study were to be replicated with a larger number of financial sites.

In terms of measuring effectiveness of different monetary values of incentives, this study could narrow the effective range; future research will be able to use incentive amounts with smaller increments. For example, effectiveness of no incentive, \$5, \$10, and \$15 could be examined in future studies.

Further development of the prediction model should be considered using two criteria. First, further research needs to find a way to use decrease the number of predictors so that we may reduce the number of questions asked to site visitors.

Secondly, as an alternative for companies to implement such a prediction model more effectively, researchers need to include Web log data in the model. This will result in a more valuable predictor in a sense that companies can use the model in a real-time basis eliminating complicated and long process of survey implementation.

#### **APPENDICES**

## **Leading Online Marketing/Consulting Companies**

The selections were made from ads in major e-commerce related magazines including Business 2.0, Fast Company, The Industry Standard, etc. They are listed by an alphabetical order.

• Aspect: www.aspect.com

Aspect integrates enterprise resources, coordinates customer transactions, and manages end-to-end business processes.

• Brightware: www.brightware.com

Brightware provides end-to-end customer assistance solution engages customers when they visit Web sites and ensures that they receive rapid, accurate responses to their e-mail inquiries.

• Cyber Dialogue: www.cyberdialogue.com

Cyber Dialogue provides a hosted technology platform allowing businesses to collect, clean and analyze large amounts of customer data from both Internet and traditional offline sources.

#### • <u>Digital Impact</u>: www.digitalimpact.com

Digital Impact customizes e-mail marketing to help companies increase the lifetime value of their online customers by tailoring e-mail content and format based on each customer's preferences and profiles.

## • eGain: www.egain.com

eGain provides applications based on an integrated Web-native platform that provides customers and personalizes customer interactions across the Internet and telephone.

#### • eWare: www.eware.com

With its family of Wireless and Internet front office solutions, eWare provides instant, everywhere access to sales, marketing and customer care teams.

#### • <u>FaceTime</u>: www.facetime.com

Face Time offers services that include instant messaging and e-mail management.

## • FirePond: www.firepond.com

FirePond offers an application suite that is the integrated e-business, sales and marketing software system. It can create tailored experiences for customers and various units in a company can share the information gathered from those interactions throughout the sites.

## • <u>flycast</u>: www.flycast.com

flycast network's opt-in e-mail service enables companies to custom-pick the combination of readers you require from a wide variety of specific interest categories, and matches company's offers to customers with demonstrated interests.

# • <u>Hyperion</u>: www.hyperion.com

Hyperion offers a family of market analytic application software products and services that speed the calculation of key business metrics, planning and forecasting functions, and enable analysis.

#### L90: www.l90.com

L90 provides a data-driven research tool and rewards program helping companies to develop detailed profiles of consumers by providing them with special promotions and rewards in return for sharing insight into their behaviors and interests.

# • <u>LifeMinders</u>: www.lifeminders.com

LifeMinder provides timely e-mail messages according to voluntarily submitted unique consumer profiles.

## • <u>LivePerson</u>: www.liveperson.com

LivePerson provides live text dialogue and text-based messaging system to enable companies to interact with their site visitors at critical moments during their visit.

#### • Lucent: www.lucentcrm.com

Lucent provides call management systems and customer relationship management applications that enable enterprises to profitably acquire, retain, and develop customer relationships.

## • MessageMedia: www.messagemedia.com

MessageMedia provides messaging systems and services for Internet commerce using relationship-based e-mail.

#### • MicroStrategy: www.microstrategy.com

MicroStrategy helps companies use technology and personal preferences to build oneto-one relationships with their customers via web, wireless, and voice.

### • Netcentives: www.netcentives.com

Netcentives offers online rewards and loyalty programs for e-commerce companies to enhance the consumer-merchant relationship.

## • OnlineOpinion: www.o-pinion.com

OnlineOpinion provides a web-based system that enables clients to collect page-specific, quantifiable feedback from visitors to their sites. Users are given the opportunity to provide simple, anonymous demographics that add considerable value to their feedback.

#### • Onyx: www.onyx.com

Onyx provides a suite of Customer-Centric e-Business products that help companies achieve a competitive advantage by providing access to relevant customer information.

# • PeopleSupport: www.peoplesupport.com

PeopleSupport offers a suite of customer care solutions including live text chat, personalized e-mail reply, and interactive self-help.

## • Pivotal: www.pivotal.com

Pivotal helps companies manage customers efficiently by providing XML-based demand chain networks.

## <u>PostMasterDirect</u>: www.postmasterdirect.com

PostMasterDirect offers an opt-in e-mail marketing which is voluntary basis signingup to receive commercial e-mail messages about topics of personal interest.

# • <u>Primus</u>: www.primus.com

Primus enables companies to effectively manage all points of contact with their customers by providing self-service and assisted service through a single integrated system.

#### Rainmaker: www.rmkr.com

Rainmaker specializes in outsourced, Internet-enabled sales and marketing services for technology companies.

## • Remedy: www.remedy.com

Remedy strengthens customer relationships by automating important sales, marketing, customer support, engineering, and quality assurance processes across your organization.

#### RightNow: www.cyberdialogue.com

RightNow offers Web-based tools to support Web site operations with fully automated, online customer service, plus tools for online surveys, data analysis, and marketing.

#### • Talisma: www.talisma.com

Talisma's relationship management solutions allow service, marketing, and sales departments to be more personal, responsive, and productive when dealing with large volumes of electronic communications.

#### • <u>TeleTech</u>: www.teletech.com

TeleTech blends customer contact channels into a single integrated platform. It allows eCustomer Reps to seamlessly serve customers across any media.

#### • TriVida: www.trivida.com

TriVida helps companies to discover the patterns in online activity, then uses them to generate customer-specific recommendations that can profitably improve each customer's online experience.

#### • WebLine: www.webline.com

WebLine provides an integrated framework implementing a customer interaction strategy satisfying the needs of customers by blending multiple communication channels (such as Web, phone, voice-over-IP, text chat, e-mail and fax) for customer interaction.

#### • Worldtrak: www.worldtrak.com

Worldtrak offers a suite of products that covers the complete range of Customer Relationship Management functions based on Microsoft technology platforms.

## • Xchange: www.xchange.com

Xchange provides software and services solution that enables companies to customize offers based on profile information, synchronize offers across all customer channels in real-time, and track the responses.

#### • YOUcentric: www.youcentric.com

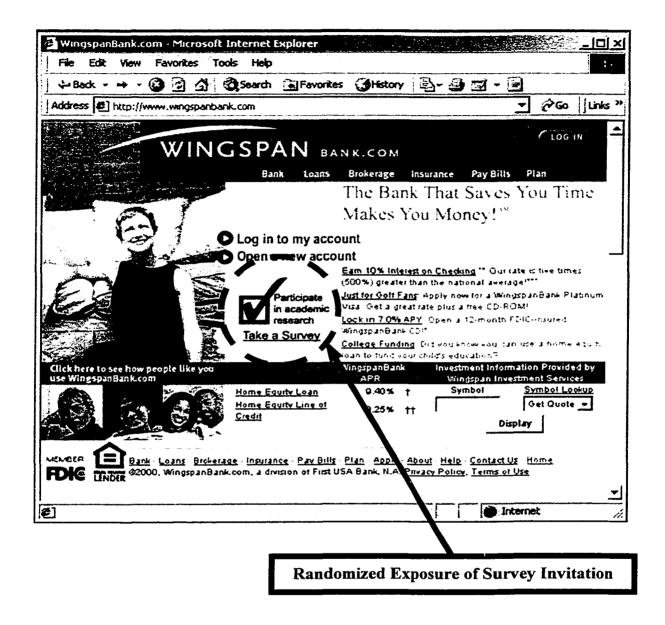
YOUcentric allows businesses to manage information and interactions among customers, sales partners, employees, and suppliers in real time using the web.

• Zamba: www.zambasolutions.com

Zamba delivering solutions involves a combination of four principal services:

Customer Care Strategy, Initiative Planning, Implementation and Support.

#### **Online Survey Invitation**



About WingspanBank.com

WingspanBank.com - www.wingspanbank.com

3 Christina Centre, 201 N. Walnut St.

Wilmington, DE, 19801

Phone: 302-594-4000

Fax: 302-985-7168

Launched in 1999, Wingspan is the Internet-only offering from Chicago-based

banking heavyweight Bank One. Wingspan offers brokerage, insurance and banking

services via a competently designed interface. Consumers can apply for multiple

accounts (checking, credit cards, brokerage etc.) simultaneously online via a slick

form that automatically checks for input errors. Customers can also pay, and in some

cases, view their bills online via the new "e-bills" feature. E-bill allows customers to

receive electronic bills from a list of participating billers (individuals can still "pay

anyone" regardless of whether the person or company is participating in the e-bill

service). Additionally, Wingspan deserves note for being one of few banks that

allows customers to electronically sign all documents needed to open a checking

account. Account applications for the bank's full line of deposit and loan accounts

are easy to use, multiple products can be applied for simultaneously, and the bank

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promises to inform credit card applicants within 30 seconds if they qualify for a card. Wingspan was ranked 5th for overall rating by Gomez in summer of 2000.

Source: Hoover's Online & Gomez.com

#### Survey Invitation/Privacy Policy

Welcome to Online Survey!

The following survey will be used for academic purposes. Specifically, a Ph.D. candidate at a major university located in Texas wrote this survey, and will compile the answers to this survey.

The server will transmit your answers directly to the student in a nonsecure format. As such, WingspanBank's Privacy Policy does not apply to this survey.

WingspanBank.com did not write the survey questions, and we do not have access to individual answers. We do, however, look forward to reading the aggregate results, the doctoral dissertation, and the conclusions the student makes about marketing on the web.

Does this survey collect personal information?

Yes, this survey collects personal information. However, it is your right to have your information remain private. The survey asks for your e-mail address and demographic information such as gender, age range, occupation, education level, income, marital status, zip code, etc. during the survey. The choice to provide the requested information is up to you. However, your e-mail address is necessary to verify the uniqueness of respondents and in order

to send a follow-up information regarding your claim for incentives. If the email address is not submitted, incentives cannot be given.

How will my personal information be used?

This survey is conducted by an academic third party, not by WingspanBank.com. Therefore, you do not have to have a current account with WingspanBank.com to participate in this survey. However, WingspanBank.com agreed to provide the random survey invitation link on their site and to sponsor the study by providing incentives for the study. Since the survey is conducted strictly for academic purpose, the survey data will be used only for academic publishing and will not be used in any commercial purpose. Your identifiable personal information to others will not be revealed, sold, or published. The opinions of online consumers gathered in the surveys will be compiled into academic research reports that provide insights about the current trends in the world of e-commerce. After data analysis, the original data files will be destroyed.

What are cookies?

In the simplest of terms, "cookies" are small pieces of information that are stored by your browser on your computer's hard drive. Does this survey use cookies?

No, this survey does not use cookies. This survey is one-time based survey which no follow-up data collection will be done.

What is IP (Internet Protocol) Address?

In the most widely installed level of the Internet Protocol (IP) today, an IP address is a 32-bit number that identifies each sender or receiver of information that is sent in packets across the Internet. When you request an HTML page or send e-mail, the Internet Protocol part of TCP/IP includes your IP address in the message (actually, in each of the packets if more than one is required) and sends it to the IP address that is obtained by looking up the domain name in the URL you requested or in the e-mail address you're sending a note to. At the other end, the recipient can see the IP address of the Web page requester or the e-mail sender and can respond by sending another message using the IP address it received.

Does this survey collect "IP Address" information?

No, this survey does not collect IP Address of any participant.

#### Terms of rules:

Incentives for the survey participation will be limited to only one per person, per household. This survey is limited to legal US residents. Duplicated submissions by the same respondent will not be rewarded with incentives for more than once, and the first submission will be counted as a valid one. Follow-up e-mail regarding the incentives will be sent out after the completion of data collection. It may take up to 4-6 weeks to receive the follow-up e-mail after your submission.

#### **Survey Questionnaire**

# Please select the one response below that best describes your personality in terms of openness to others sharing your personal information.

- I am willing to share my personal information to a stranger.
- I will share my personal information only to the ones I trust.
- I will share my personal information only when it is required.
- I will never reveal my personal information with anyone under any circumstance.

# Please rate each of following statements based on their accuracies.
I enjoy talking with people.
Highly inaccurate O O O O O O O Highly accurate

I feel comfortable around people.
 Highly inaccurate O O O O O O Highly accurate

I am usually the one who starts conversations.
 Highly inaccurate O O O O O O Highly accurate

• I talk to a lot of different people at parties.

Highly inaccurate O O O O O O Highly accurate

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•	I often have a lot of interesting stories to share with others.								re with others.	
	Hi	ghly inaccurate	O	O	O	О	О	O	o	Highly accurate
•	I li	ke to draw atten	tion	to:	mys	elf.				
	Hi	ghly inaccurate	О	0	0	0	0	0	0	Highly accurate
•	I d	o not mind being	g th	e ce	nter	of	atte	ntio	n.	
	Hi	ghly inaccurate	O	0	0	0	0	O	O	Highly accurate
•	I a	m quiet around s	strai	nger	s.					
	Hi	ghly inaccurate	0	0	0	Ο	0	0	Ο	Highly accurate
# V	Vhe	re do you access	s the	Int	ern	et m	ost	frec	quer	ntly?
	•	At home								
	•	At work								
	•	At school								
	•	At public librar	У							
	•	Other (					)			
# F	łow	often do you ch	eck	yo	ur e	mai	1?			
	• Have an e-mail account but don't use it at all									

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More than once a day Don't have an e-mail account # Have you made a purchase online in the last 6 months? Yes No # If YES, how often? Once 2 to 5 times 6 to 10 times More than 10 times # Does your bank offer PC Banking (i.e., Direct dial-up to a bank using provided software)? Yes No Don't know 146

Less than once a week

1-7 times a week

• Yes											
No (PLEASE SKIP NEXT TWO QUESTIONS)											
Don't know (PLEASE SKIP NEXT TWO QUESTIONS)											
# If so, have you used your bank's Web site for online banking?											
• Yes											
No (PLEASE SKIP NEXT QUESTION)											
# Please select your satisfaction level for online banking experience in each of the											
following.											
Variety of Banking Products Offered											
Highly unsatisfied O O O O O O Highly satisfied											
Interest Rates offered											
Highly unsatisfied O O O O O O Highly satisfied											
Ease of Navigation (easy to find information on the site)											
Highly unsatisfied O O O O O O Highly satisfied											

# Does your bank currently provide online banking via its Web site?

•	Clear Instructions (easy to understand how to use the site)								
	Highly unsatisfied	O	О	О	О	O	О	O	Highly satisfied
•	Download Speed Highly unsatisfied	0	0	0	0	0	0	0	Highly satisfied
•	Relevancy of Information	mat	ion (	(bas	ed o	on y	our	inte	erest)
	Highly unsatisfied	О	O	О	О	О	Ο	О	Highly satisfied
•	Customer Service (	incl	udir	ng p	rom	ıpt f	eed	bac	k)
	Highly unsatisfied	Ο	О	Ο	Ο	Ο	Ο	Ο	Highly satisfied
# If you are not currently using online banking, what is the likelihood that you would consider using one in the next 12 months? (PLEASE SKIP THIS QUESTION IF									
YC	U ARE CURREN	ΓL	Y U	SIN	G	INC	LIN	EΒ	ANKING)
	Highly unlikely	0	0	0	O	O	Ο	0	Highly likely
# S	ite registration anno	ys 1	ne b	eca	use,	, (Pl	leas	e ch	neck only one.)
	Don't know how it will be used								
	• Can't trust the s	ite							
	• Too personal								
						1	48		

- Takes too much time
- Not clear what benefits I receive
- Site registration does not annoy me

# In the last 6 months, how often have you received incentives for providing your personal information while registering with a site?

- Never
- Rarely
- Sometimes
- Very often
- Always
- Have not registered in the last 6 months
- Not Sure

# What brought you to the WingspanBank.com site today?

- Window Shopping
- Needed Information
- Interest in General Banking (including Checking, Savings, and Pay Bills)
- Home owners/auto Insurance
- Loans
- Retirement/ Insurance Plans

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• Investment Opportunities

•	investment Opportunities
# Plea	ase select all services that you are using with your traditional bank.
•	Checking
•	Savings/Money Market Savings
•	Credit Card
•	CD
•	Mortgages
•	Other Secure Loans
•	Non-Secure Loans
•	Investment
•	Debit Card
•	Overdraft Protection
•	None
•	Other ( )
# Plea	se select the one response below that best describes your intended use of online
bankii	ng.
•	I only want to use online banking service provided by my traditional bank
•	I want to have a new online bank account with an online exclusive bank as an
	addition to my existing traditional accounts
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•	I think I will eventually close my existing brick-and-mortar bank accounts and
	use only online banking provided by an online exclusive bank

• I do not intend to use online banking

# Please select the one response below that best describes your anticipated frequency of your online banking interaction.

- Never
- Less than once a month
- 1-3 times a month
- 1-6 times a week
- Daily
- Not sure

# Do you have a current account with WingspanBank.com? (WingspanBank account is not required for participation.)

- Yes
- No

# May we have your first name? ( )

# You	r gender?
•	Male
•	Female
# You	r age?
•	Under 20
•	20-29
•	30-39
•	40-49
•	50-65
•	Over 65
# Whi	ch of following best describes your education?
•	Some high school
•	High school graduate
•	Some college
•	Bachelor degree
•	Master/Ph.D. degree
# Wha	t is your email address? ( )

# Wha	nt is your approximate Annual Ho	usehold Income (US \$) before taxes?
•	Under \$20K	
•	\$20K - \$49K	
•	\$50K - \$74K	
•	\$75K - \$99K	
•	\$100K - \$149K	
•	Over \$150K	
# Wha	it is your occupation?	
•	Government Employee/Military	
•	Computer/Tech	
•	Homemaker	
•	Management/Professional	
•	Retired	
•	Self-employed	
•	Student	
•	Other ( )	
# You	r marital status?	
•	Never married/single	
•	Married	153
		100

• Divo	orced/separated	
• Wido	owed	
# Please prov	ovide city and state you live in:	
City:	:( )	
State	e: ( )	
# Please prov	evide the last 2 digits of your home phone number: (	)
# Please prov	ovide the last 2 digits of your Social Security Number:	( )
# Please sele	ect a credit card you use most frequently, then provide	e its last two digits.
• VISA	A - Last 2 digits: ( )	
• Maste	terCard - Last 2 digits: ( )	
• Amer	erican Express - Last 2 digits: ( )	
• Disco	over - Last 2 digits: ( )	
• Other	er: Last 2 digits: ( )	
# If you have	e children or teens living at home, please check all ag	e groups that apply
• Child	dren under age 2 present	
• Age 2		
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•	Age 6-11
•	Age 12-17
# Do y	ou own or rent your current residence?
•	Own a house
•	Rent a house/apt.
•	Other ( )
# How	long have you lived in a current address?
	( ) Year(s), ( ) Month(s)
# Is yo	our household a single or dual income residence?
•	Single
•	Dual

# Five years from now do you expect financially to be?

- A lot worse off
- Somewhat worse off
- About the same
- Somewhat better off
- A lot better off

•	Weekday daytime		
•	Weekday evening		
•	Weekends		
•	Whenever it fits my s	chedule	
•	Don't do it myself		
# How	long, in average, does	s your visit	at a bank take?
•	Less than 15 minutes		
•	16 to 30 minutes		
•	31 minutes to an hour	r	
•	More than an hour		
# Wha	t is your primary sourc	e to gather	financial information?
•	Traditional bank		
•	Internet		
•	Mail-in brochures		
•	Financial magazines		
•	Financial newspaper		
•	Other (	)	
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			·

# When do you usually take care of paying bills?

## Frequencies of Variables

# Availability of PC Banking

	Frequency	Percent	Valid Percent	Cumulative Percent
No	60	28.7	28.7	28.7
Yes	86	41.1	41.1	69.9
Don't Know	63	30.1	30.1	100.0
Total	209	100.0	100.0	

# Availability of Net Banking

	Frequency	Percent	Valid Percent	Cumulative Percent
No	55	26.3	26.3	26.3
Yes	104	49.8	49.8	76.1
Don't Know	50	23.9	23.9	100.0
Total	209	100.0	100.0	

# WingspanBank Customer

	Frequency	Percent	Valid Percent	Cumulative Percent
No	199	95.2	95.2	95.2
Yes	10	4.8	4.8	100.0
Total	209	100.0	100.0	

# Children under 2 yrs.

	Frequency	Percent	Valid Percent	Cumulative Percent
Yes	40	6.7	100.0	100.0
System Missing	553	93.3		
Total	593	100.0		

# Children 2 - 5 yrs.

	Frequency	Percent	Valid Percent	Cumulative Percent
Yes	75	12.6	100.0	100.0
System Missing	518	87.4		
Total	593	100.0		

# Children 6 - 11 yrs.

	Frequency	Percent	Valid Percent	Cumulative Percent
Yes	63	10.6	100.0	100.0
System Missing	530	89.4		
Total	593	100.0		

# Children 12 - 17 yrs.

	Frequency	Percent	Valid Percent	Cumulative Percent
Yes	60	10.1	100.0	100.0
System Missing	533	89.9		
Total	593	100.0		

# Residence Type

	Frequency	Percent	Valid Percent	Cumulative Percent
Own House	192	32.4	50.8	50.8
Rent House/APT.	164	27.7	43.4	94.2
Other	22	3.7	5.8	100.0
Total	378	63.7	100.0	
System Missing	215	36.3		
Grand Total	593	100.0		

# **Income Type**

	Frequency	Percent	Valid Percent	Cumulative Percent
Single	231	39.0	61.1	61.1
Dual	147	24.8	38.9	100.0
Total	378	63.7	100.0	
System Missing	215	36.3		
Grand Total	593	100.0		

# Financial Outlook

	Frequency	Percent	Valid Percent	Cumulative Percent
Somewhat Worse off	5	.8	2.6	2.6
About the Same	18	3.0	9.4	12.0
Somewhat Better off	65	11.0	33.9	45.8
A Lot Better off	104	17.5	54.2	100.0
Total	192	32.4	100.0	
System Missing	401	67.6		-
Grand Total	593	100.0		

# Bill Pay

	Frequency	Percent	Valid Percent	Cumulative Percent
Weekday Daytime	23	3.9	12.0	12.0
Weekday Evening	46	7.8	24.1	36.1
Weekends	24	4.0	12.6	48.7
Whenever It Fits My	90	15.2	47.1	95.8
Schedule			·	
Don't Do It Myself	8	1.3	4.2	100.0
Total	191	32.2	100.0	
System Missing	402	67.8		
Grand Total	593	100.0		

Trad. Bank Visit Time

	Frequency	Percent	Valid Percent	Cumulative Percent
Less than 15 Minutes	150	25.3	78.9	78.9
16 to 30 Minutes	32	5.4	16.8	95.8
31 Minutes to an Hour	6	1.0	3.2	98.9
More than an Hour	2	.3	1.1	100.0
Total	190	32.0	100.0	
System Missing	403	68.0		
Grand Total	593	100.0		

# Financial Info. Source

	Frequency	Percent	Valid Percent	Cumulative Percent
Trad. Bank	36	6.1	19.0	19.0
Internet	124	20.9	65.6	84.7
Financial Magazines	10	1.7	5.3	89.9
Financial Newspaper	10	1.7	5.3	95.2
Other	9	1.5	4.8	100.0
Total	189	31.9	100.0	
System Missing	404	68.1	<u>.</u>	
Grand Total	593	100.0		

Freq. of Registration Incentives Exposure in 6 mo.

	Frequency	Percent	Valid Percent	Cumulative Percent
Never	14	6.7	6.7	6.7
Rarely	22	10.5	10.6	17.3
Sometimes	82	39.2	39.4	56.7
Very Often	73	34.9	35.1	91.8
Always	9	4.3	4.3	96.2
Not Registered in 6 mo.	1	.5	.5	96.6
Not Sure	7	3.3	3.4	100.0
Total	208	99.5	100.0	
System Missing	1	.5		
Grand Total	209	100.0		

# Intended Freq. of Net Banking

	Frequency	Percent	Valid Percent	Cumulative Percent
Never	31	14.8	14.8	14.8
Less than Once a Month	9	4.3	4.3	19.1
1 - 3 a Month	59	28.2	28.2	47.4
1 - 6 a Week	54	25.8	25.8	73.2
Daily	32	15.3	15.3	88.5
Not Sure	24	11.5	11.5	100.0
Total	209	100.0	100.0	

# Intend in Net vs. Trad. Banking

	Frequency	Percent	Valid Percent	Cumulative Percent
No Net Banking	32	15.3	15.3	15.3
Net Banking by Trad.	62	29.7	29.7	45.0
Bank Only				
Net Banking by DotCom	73	34.9	34.9	79.9
as Addition				
Net Banking by DotCom	42	20.1	20.1	100.0
Only				
Total	209	100.0	100.0	-

# Net Banking Use Intention in 12 mo.

	Frequency	Percent	Valid Percent	Cumulative Percent
Degree1	14	6.7	10.1	10.1
Degree2	12	5.7	8.7	18.8
Degree3	9	4.3	6.5	25.4
Degree4	27	12.9	19.6	44.9
Degree5	31	14.8	22.5	67.4
Degree6	26	12.4	18.8	86.2
Degree7	19	9.1	13.8	100.0
Total	138	66.0	100.0	
System Missing	71	34.0		
Grand Total	209	100.0		

### Interest in Checking

	Frequency	Percent	Valid Percent	Cumulative Percent
Yes	194	92.8	100.0	100.0
System Missing	15	7.2		
Total	209	100.0		

### Interest in Savings/Money Market Savings

	Frequency	Percent	Valid Percent	Cumulative Percent
Yes	123	58.9	100.0	100.0
System Missing	86	41.1		
Total	209	100.0		

#### Interest in Credit Card

	Frequency	Percent	Valid Percent	Cumulative Percent
Yes	72	34.4	100.0	100.0
System Missing	137	65.6		
Total	209	100.0		

#### **Interest in CD**

	Frequency	Percent	Valid Percent	Cumulative Percent
Yes	33	15.8	100.0	100.0
System Missing	176	84.2		
Total	209	100.0		

### Interest in Mortgages

	Frequency	Percent	Valid Percent	Cumulative Percent
Yes	39	18.7	100.0	100.0
System Missing	170	81.3		
Total	209	100.0	_	

#### Interest in Other Secure Loans

	Frequency	Percent	Valid Percent	Cumulative Percent
Yes	13	6.2	100.0	100.0
System Missing	196	93.8		
Total	209	100.0		

#### Interest in Non-Secure Loans

	Frequency	Percent	Valid Percent	Cumulative Percent
Yes	9	4.3	100.0	100.0
System Missing	200	95.7		
Total	209	100.0		

#### **Interest in Investment**

	Frequency	Percent	Valid Percent	Cumulative Percent
Yes	14	6.7	100.0	100.0
System Missing	195	93.3		
Total	209	100.0		

#### **Interest in Debit Card**

	Frequency	Percent	Valid Percent	Cumulative Percent
Yes	120	57.4	100.0	100.0
System Missing	89	42.6		
Total	209	100.0		

#### **Interest in Overdraft Protection**

	Frequency	Percent	Valid Percent	Cumulative Percent
Yes	46	22.0	100.0	100.0
System Missing	163	78.0		
Total	209	100.0		

### **Primary Net Access Place**

	Frequency	Percent	Valid Percent	Cumulative Percent
Home	180	86.1	86.1	86.1
Work	25	12.0	12.0	98.1
School	1	.5	.5	98.6
Library	1	.5	.5	99.0
Other	2	1.0	1.0	100.0
Total	209	100.0	100.0	

# Freq. of Email Check

	Frequency	Percent	Valid Percent	Cumulative Percent
Don't Check	2	1.0	1.0	1.0
Less than Once a Week	3	1.4	1.4	2.4
1-7 a Week	21	10.0	10.0	12.4
More than Once a Day	183	87.6	87.6	100.0
Total	209	100.0	100.0	

## Freq. of Net Purchase

-	Frequency	Percent	Valid Percent	Cumulative Percent
Once in 6 mo.	2	1.0	1.0	1.0
2 - 5 in 6 mo.	51	24.4	26.0	27.0
6 - 10 in 6 mo.	33	15.8	16.8	43.9
More than 10 in 6 mo.	110	52.6	56.1	100.0
Total	196	93.8	100.0	
System Missing	13	6.2		
Grand Total	209	100.0		

### Net Purchase in 6 mo.

	Frequency	Percent	Valid Percent	Cumulative Percent
No	13	6.2	6.3	6.3
Yes	194	92.8	93.7	100.0
Total	207	99.0	100.0	
System Missing	2	1.0		
Grand Total	209	100.0		

# **Enjoy Talking**

	Frequency	Percent	Valid Percent	Cumulative Percent
Degree1	4	1.9	1.9	1.9
Degree2	6	2.9	2.9	4.8
Degree3	14	6.7	6.7	11.5
Degree4	37	17.7	17.8	29.3
Degree5	36	17.2	17.3	46.6
Degree6	48	23.0	23.1	69.7
Degree7	63	30.1	30.3	100.0
Total	208	99.5	100.0	
System Missing	1	.5	_	
Grand Total	209	100.0		

## Comfy w/ People

	Frequency	Percent	Valid Percent	Cumulative Percent
Degree 1	5	2.4	2.4	2.4
Degree2	12	5.7	5.7	8.1
Degree3	14	6.7	6.7	14.8
Degree4	42	20.1	20.1	34.9
Degree5	42	20.1	20.1	55.0
Degree6	48	23.0	23.0	78.0
Degree7	46	22.0	22.0	100.0
Total	209	100.0	100.0	

#### **Start Conversation**

	Frequency	Percent	Valid Percent	Cumulative Percent
Degree1	13	6.2	6.2	6.2
Degree2	20	9.6	9.6	15.8
Degree3	22	10.5	10.5	26.3
Degree4	46	22.0	22.0	48.3
Degree5	43	20.6	20.6	68.9
Degree6	31	14.8	14.8	83.7
Degree7	34	16.3	16.3	100.0
Total	209	100.0	100.0	

# Talk w/ Many

	Frequency	Percent	Valid Percent	Cumulative Percent
Degree1	7	3.3	3.4	3.4
Degree2	34	16.3	16.3	19.7
Degree3	28	13.4	13.5	33.2
Degree4	36	17.2	17.3	50.5
Degree5	35	16.7	16.8	67.3
Degree6	34	16.3	16.3	83.7
Degree7	34	16.3	16.3	100.0
Total	208	99.5	100.0	
System Missing	1	.5		
Grand Total	209	100.0		

# Storyteller

	Frequency	Percent	Valid Percent	Cumulative Percent
Degreel	8	3.8	3.8	3.8
Degree2	25	12.0	12.0	15.9
Degree3	24	11.5	11.5	27.4
Degree4	50	23.9	24.0	51.4
Degree5	47	22.5	22.6	74.0
Degree6	32	15.3	15.4	89.4
Degree7	22	10.5	10.6	100.0
Total	208	99.5	100.0	
System Missing	1	.5		
Grand Total	209	100.0		

#### **Draw Attention**

	Frequency	Percent	Valid Percent	Cumulative Percent
Degree1	33	15.8	15.9	15.9
Degree2	44	21.1	21.2	37.0
Degree3	27	12.9	13.0	50.0
Degree4	46	22.0	22.1	72.1
Degree5	24	11.5	11.5	83.7
Degree6	19	9.1	9.1	92.8
Degree7	15	7.2	7.2	100.0
Total	208	99.5	100.0	
System Missing	1	.5		
Grand Total	209	100.0		

### Center of Attention

	Frequency	Percent	Valid Percent	Cumulative Percent
Degree1	20	9.6	9.6	9.6
Degree2	34	16.3	16.3	25.8
Degree3	29	13.9	13.9	39.7
Degree4	37	17.7	17.7	57.4
Degree5	32	15.3	15.3	72.7
Degree6	32	15.3	15.3	88.0
Degree7	25	12.0	12.0	100.0
Total	209	100.0	100.0	

## Good w/ Strangers

	Frequency	Percent	Valid Percent	Cumulative Percent
Degree 1	18	8.6	8.7	8.7
Degree2	25	12.0	12.1	20.8
Degree3	30	14.4	14.5	35.3
Degree4	43	20.6	20.8	56.0
Degree5	37	17.7	17.9	73.9
Degree6	32	15.3	15.5	89.4
Degree7	22	10.5	10.6	100.0
Total	207	99.0	100.0	
System Missing	2	1.0		
Grand Total	209	100.0		

### Name

	Frequency	Percent	Valid Percent	Cumulative Percent
Yes	204	97.6	100.0	100.0
System Missing	5	2.4	<del>-</del>	
Total	209	100.0		

## Gender

	Frequency	Percent	Valid Percent	Cumulative Percent
Male	51	24.4	24.5	24.5
Female	157	75.1	75.5	100.0
Total	208	99.5	100.0	<u> </u>
System Missing	1	.5		-
Grand Total	209	100.0		_

## Age

	Frequency	Percent	Valid Percent	Cumulative Percent
Under 20	6	2.9	2.9	2.9
20 - 29	61	29.2	29.5	32.4
30 - 39	89	42.6	43.0	75.4
40 - 49	34	16.3	16.4	91.8
50 - 65	16	7.7	7.7	99.5
Over 65	1	.5	.5	100.0
Total	207	99.0	100.0	
System Missing	2	1.0		
Grand Total	209	100.0		

### Education

	Frequency	Percent	Valid Percent	Cumulative Percent
Some High School	2	1.0	1.0	1.0
High School Grad	40	19.1	19.2	20.2
Some College	89	42.6	42.8	63.0
Bachelor Degree	51	24.4	24.5	87.5
Master/Ph.D. Degree	26	12.4	12.5	100.0
Total	208	99.5	100.0	
System Missing	1	.5		
Grand Total	209	100.0		

#### **Email**

	Frequency	Percent	Valid Percent	Cumulative Percent
Yes	208	99.5	100.0	100.0
System Missing	1	.5		
Total	209	100.0		

#### Income

	Frequency	Percent	Valid Percent	Cumulative Percent
Under \$20K	18	8.6	9.0	9.0
\$20K - \$49K	82	39.2	40.8	49.8
\$50K - \$74K	63	30.1	31.3	81.1
\$75K - \$99K	20	9.6	10.0	91.0
\$100K - \$149K	16	7.7	8.0	99.0
Over \$150K	2	1.0	1.0	100.0
Total	201	96.2	100.0	
System Missing	8	3.8		
Grand Total	209	100.0		

# Occupation

	Frequency	Percent	Valid Percent	Cumulative Percent
Government/Military	10	4.8	4.8	4.8
Computer/Tech	24	11.5	11.6	16.4
Homemaker	59	28.2	28.5	44.9
Management/	38	18.2	18.4	63.3
Professional				
Retired	4	1.9	1.9	65.2
Self-Employed	21	10.0	10.1	75.4
Student	16	7.7	7.7	83.1
Other	35	16.7	16.9	100.0
Total	207	99.0	100.0	
System Missing	2	1.0	-	
Grand Total	209	100.0		

#### **Marital Status**

	Frequency	Percent	Valid Percent	Cumulative Percent
Never Married/Single	41	19.6	19.8	19.8
Married	144	68.9	69.6	89.4
Divorced/Separated	20	9.6	9.7	99.0
Widowed	2	1.0	1.0	100.0
Total	207	99.0	100.0	
System Missing	2	1.0		
Grand Total	209	100.0		

### Address

	Frequency	Percent	Valid Percent	Cumulative Percent
Yes	201	96.2	100.0	100.0
System Missing	8	3.8		
Total	209	100.0		

#### Phone

	Frequency	Percent	Valid Percent	Cumulative Percent
Yes	195	93.3	100.0	100.0
System Missing	14	6.7		
Total	209	100.0		

### **Social Security**

	Frequency	Percent	Valid Percent	Cumulative Percent
Yes	189	90.4	100.0	100.0
System Missing	20	9.6		·
Total	209	100.0		

#### **Credit Card**

-	Frequency	Percent	Valid Percent	Cumulative Percent
Visa	100	47.8	56.2	56.2
Master	52	24.9	29.2	85.4
AMEX	8	3.8	4.5	89.9
Discover	15	7.2	8.4	98.3
Other	3	1.4	1.7	100.0
Total	178	85.2	100.0	
System Missing	31	14.8		
Grand Total	209	100.0		

## **Survey Protocol**

	Frequency	Percent	Valid Percent	Cumulative Percent
\$0/Easy, Moderate, Hard	50	23.9	23.9	23.9
\$10/Easy, Moderate, Hard	54	25.8	25.8	49.8
\$50/Easy, Moderate, Hard	55	26.3	26.3	76.1
\$100/Easy, Moderate, Hard	50	23.9	23.9	100.0
Total	209	100.0	100.0	

### Purpose of Today's Visit to WingspanBank

	Frequency	Percent	Valid Percent	Cumulative Percent
Window Shopping	117	56.0	56.0	56.0
Info. Need	18	8.6	8.6	64.6
General Banking	60	28.7	28.7	93.3
Insurance	2	1.0	1.0	94.3
Loans	6	2.9	2.9	97.1
Investment	6	2.9	2.9	100.0
Total	209	100.0	100.0	

## **Primary Concern in Registration**

	Frequency	Percent	Valid Percent	Cumulative Percent
Misuse	43	20.6	20.8	20.8
Distrust	11	5.3	5.3	26.1
Too Personal	19	9.1	9.2	35.3
Time Consuming	43	20.6	20.8	56.0
Unclear Benefits	18	8.6	8.7	64.7
OK with Me	73	34.9	35.3	100.0
Total	207	99.0	100.0	
System Missing	2	1.0		
Grand Total	209	100.0		

#### **Satisfaction in Products**

	Frequency	Percent	Valid Percent	Cumulative Percent
Degree1	2	1.0	2.7	2.7
Degree2	4	1.9	5.4	8.1
Degree3	4	1.9	5.4	13.5
Degree4	9	4.3	12.2	25.7
Degree5	20	9.6	27.0	52.7
Degree6	17	8.1	23.0	75.7
Degree7	18	8.6	24.3	100.0
Total	74	35.4	100.0	
System Missing	135	64.6		
Grand Total	209	100.0		

#### Satisfaction in Rates

	Frequency	Percent	Valid Percent	Cumulative Percent
Degree 1	5	2.4	6.9	6.9
Degree2	6	2.9	8.3	15.3
Degree3	11	5.3	15.3	30.6
Degree4	19	9.1	26.4	56.9
Degree5	10	4.8	13.9	70.8
Degree6	12	5.7	16.7	87.5
Degree7	9	4.3	12.5	100.0
Total	72	34.4	100.0	
System Missing	137	65.6		
Grand Total	209	100.0		

### Satisfaction in Navigation

	Frequency	Percent	Valid Percent	Cumulative Percent
Degree1	1	.5	1.4	1.4
Degree2	7	3.3	9.7	11.1
Degree3	8	3.8	11.1	22.2
Degree4	12	5.7	16.7	38.9
Degree5	11	5.3	15.3	54.2
Degree6	15	7.2	20.8	75.0
Degree7	18	8.6	25.0	100.0
Total	72	34.4	100.0	
System Missing	137	65.6		
Grand Total	209	100.0		

### Satisfaction in Instruction

	Frequency	Percent	Valid Percent	Cumulative Percent
Degree1	1	.5	1.4	1.4
Degree2	4	1.9	5.6	6.9
Degree3	6	2.9	8.3	15.3
Degree4	12	5.7	16.7	31.9
Degree5	14	6.7	19.4	51.4
Degree6	18	8.6	25.0	76.4
Degree7	17	8.1	23.6	100.0
Total	72	34.4	100.0	
System Missing	137	65.6		
Grand Total	209	100.0		

### Satisfaction in Speed

	Frequency	Percent	Valid Percent	Cumulative Percent
Degree1	3	1.4	4.2	4.2
Degree2	1	.5	1.4	5.6
Degree3	8	3.8	11.1	16.7
Degree4	15	7.2	20.8	37.5
Degree5	19	9.1	26.4	63.9
Degree6	15	7.2	20.8	84.7
Degree7	11	5.3	15.3	100.0
Total	72	34.4	100.0	
System Missing	137	65.6		
Grand Total	209	100.0		

# Satisfaction in Info. Relevancy

	Frequency	Percent	Valid Percent	Cumulative Percent
Degree2	2	1.0	2.8	2.8
Degree3	6	2.9	8.3	11.1
Degree4	21	10.0	29.2	40.3
Degree5	12	5.7	16.7	56.9
Degree6	14	6.7	19.4	76.4
Degree7	17	8.1	23.6	100.0
Total	72	34.4	100.0	-
System Missing	137	65.6		
Grand Total	209	100.0		

#### Satisfaction in Customer Service

	Frequency	Percent	Valid Percent	Cumulative Percent
Degree1	4	1.9	5.6	5.6
Degree2	8	3.8	11.1	16.7
Degree3	5	2.4	6.9	23.6
Degree4	15	7.2	20.8	44.4
Degree5	11	5.3	15.3	59.7
Degree6	12	5.7	16.7	76.4
Degree7	17	8.1	23.6	100.0
Total	72	34.4	100.0	
System Missing	137	65.6		-
Grand Total	209	100.0	-	

#### **Categorized - Satisfaction Total**

	Frequency	Percent	Valid Percent	Cumulative Percent
Degree2	1	.5	1.4	1.4
Degree3	3	1.4	4.2	5.6
Degree4	16	7.7	22.2	27.8
Degree5	20	9.6	27.8	55.6
Degree6	16	7.7	22.2	77.8
Degree7	16	7.7	22.2	100.0
Total	72	34.4	100.0	
System Missing	137	65.6		·
Grand Total	209	100.0		

#### **Selected Incentive**

	Frequency	Percent	Valid Percent	Cumulative Percent
Amazon.com	98	46.9	61.6	61.6
CDNOW.com	1	.5	.6	62.3
PaulFrederick.com	3	1.4	1.9	64.2
Dean-Deluca.com	2	1.0	1.3	65.4
Garden.com	4	1.9	2.5	67.9
Cash	51	24.4	32.1	100.0
Total	159	76.1	100.0	
System Missing	50	23.9		
Grand Total	209	100.0	·	

## Share Personal Info.

	Frequency	Percent	Valid Percent	Cumulative Percent
Never Share	5	2.4	2.4	2.4
Share if Necessary	104	49.8	49.8	52.2
Share if Trust	62	29.7	29.7	81.8
Share w/ Stranger	38	18.2	18.2	100.0
Total	209	100.0	100.0	

#### **Description of Incentives**

Type of Incentives: choice of gift certificate or cash

Values: \$10, \$50, \$100 based on survey protocols given

Wingspan affiliated merchant listed for gift certificate:

- Amazon.com main sections include actions, books, computer/video games,
   DVD, electronics, health/beauty, kitchen, lawn/patio, music, new cars,
   software, tools/hardware, toys/games, video, and zShops (specialty shops).
- PaulFrederick.com specializes in men's clothing.
- CDNOW.com main sections include music, video, gifts, etc.
- Reel.com offers shops (DVD, Videos, etc.) theater information, movierelated news, rental guide, and DVD reviews.
- Dean-Deluca.com offers foods, kitchenware, wine, and gift.
- Garden.com sells plants, trees, shrubs, garden furniture/décor, tools/lawn care, seeds, flowers, etc.

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