

A MODEL FOR BUILDING TRUSTWORTHINESS IN ONLINE STORES

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DISSERTATION ABSTRACT

A MODEL FOR BUILDING TRUSTWORTHINESS IN ONLINE STORES

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More and more research is being done everyday in the world of e-commerce as consumers and merchants alike realize how powerful a selling tool the internet has become. Research shows that trust is key to the success of electronic commerce [14] [21] [87] [35]. However, the question of how trust is obtained and sustained online has yet to be answered. What is it that makes an online store trustworthy to consumers? A conceptual model for trustworthiness in online stores was developed from the current literature and then enhanced by an observational study of consumers making *actual* purchases. The conceptual model identified the situation needed for trustworthiness to be of issue when shopping online, the factors that affect the trustworthiness of an online store, and indicators or outcomes of consumers perceiving an online store to be trustworthy. A questionnaire was conducted and validated the conceptual model. The questionnaire focused on the trustor and trustee characteristics of the model, their relationships with each other, and the relative importance of trustee characteristics. This combination of both qualitative and quantitative data has provided insight into the online shopping experience, which can be built upon to create guidelines.

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CHAPTER 1

INTRODUCTION

Research shows that trust is key to the success of electronic commerce [14] [21] [87] [35]. A study conducted by Consumer WebWatch [14] between May 2005 and June of 2005 found that over 20 percent of internet users did not trust online stores and 25 percent stopped shopping online altogether. This lack of trust has been identified as a key element of consumers hesitating in making online transactions [2] [41]. As Ang et al. [1] report, many e-commerce sites are indeed not trustworthy, i.e., it is not just a perception problem.

This research aims to answer the question of what makes online stores trustworthy to consumers and how can this trustworthiness be obtained and sustained? Understanding the nature of trust seems like a logical first step. Too often, this step is not taken seriously enough, resulting in naive and faulty notions of trust. Understanding the concept of trust in other areas, such as psychology and sociology, will give insight into understanding what facilitates trustworthiness online. Applying this understanding to e-commerce will help in developing a model for building trustworthiness in online stores.

1.1 Work Done

A literature review was conducted of trustworthiness in an online setting as well as trust in other areas such as psychology, sociology, and marketing. An observational study was conducted along with a questionnaire regarding trustworthiness and its role when shopping online. Using the data obtained from both the study and the questionnaire, a model for building trustworthiness online has been developed.

1.2 General Area of Research

More and more research is being done everyday in the world of e-commerce as consumers and merchants alike realize how powerful of a selling tool the internet has become. E-commerce has become a research area in itself. However, my research also deals with Human-Computer Interaction as well as cognitive science with regards to understanding the decision-making process of consumers shopping online. Designing interfaces with trust in mind is a concern for HCI [71].

1.3 The Need for Research

Despite the increase in research, the online shopping experience is still lacking; at times creating a scary and frustrating experience for consumers. Both personal experience as well as formal studies show the need for improvement [14] [78]. The study of trust online is lacking [46] [92] [2] [3] and of the work that has been done, there is little agreement [17] on how trust is created, sustained and lost online. Egger points out that “the discipline of HCI currently lacks substantive knowledge about how trust is formed, maintained and lost in the electronically-mediated buyer-seller relationship” [20]. What authors have agreed on is that trust is important and research now needs to focus more on how it can be developed online [79]. It is evident that there is still room for improvement in e-commerce.

1.4 Approach Used

An observational study was conducted involving participants shopping online. The key value of this study is that the participants made actual purchases online: they spent their own money. Unlike a mock purchase study [76] [53] [22], where participants are asked to

either pretend to shop at a fake or dummy store or asked to say what they *would* buy or how they *would* feel if they were to make a purchase, this study was of the real thing and provided more insight. The observational study provided valuable qualitative data, aiding in understanding not only the process of how consumers shop online but the role that trust and trustworthiness play in that process.

After completing the observational study, a questionnaire was developed. This questionnaire contained questions created from the data found in the observational study as well as knowledge obtained from the literature review. Because of the amount of time involved in observations, interviews, and transcription, a large number of participants would not have been feasible in the observational study. However, the questionnaire was short and concise, and as such, was given to well over 200 participants. Many past questionnaires are not thoroughly thought out [77] [75] [14] and it was a goal to create a questionnaire that provided solid and informative quantitative data.

Reviewing both the qualitative data from the observational study and quantitative data from the questionnaire, a conceptual model was created for building trustworthiness online. This conceptual model expresses the main factors of shopping online and their relationships with respect to their impact of trustworthiness in an online store. This conceptual model could be further utilized to develop guidelines for trustworthiness in e-commerce.

CHAPTER 2

LITERATURE REVIEW

Recently, more and more research is being focused on the role of trustworthiness online. From reviewing the current literature of trustworthiness online, it is seen that understanding how trust is developed and maintained in everyday relationships is a step that is often overlooked. This literature review explores not only work regarding trustworthiness online in relation to e-commerce, but research of trust in itself, as in other areas such as psychology and sociology.

2.1 Trust

Trust is an important issue in personal relationships [10] [58] and in (offline) commerce [81]. However, the issue of trust online is also important [54] [31] [73] [69] [87] [36] [29]. Trust has been characterized as not only the “foundation” of commerce [88] but that trust is “essential” for commerce [81] as well. Salam et al. [75] state that trust “...plays a key role in many such transactions that occur over the Internet” and Jones et al. [42] state that trust in technology is “an increasingly important issue”. Many authors point out how critical trust is to e-commerce [68] [3] [15] [9] [92]. Others look at the idea of distrust, rather than just a lack of trust, as being a barrier online [13] [55]. Often, however, the focus of e-commerce generally tends to be on technology [40]. Trust online is a more important issue for e-commerce than technology [43] [44]. Many feel that the more trustworthy an online store, the more successful it will be [83] [31] [12] [74].

It seems clear that it is in agreement that trust is important, but what exactly is trust? Unfortunately, the popular literature seems to assume that everyone knows what trust means and therefore, there is no need to provide some kind of definition. From reviewing the research literature it has been seen that on the occasion when trust is defined, most authors do not agree on one and the same definition.

2.1.1 Definition of Trust

In the majority of literature dealing with trust, whether it be offline or online, there is no consensus on the true definition of trust [15]. The lack of an agreement on one definition could stem from the idea that trust is a multifaceted concept [79] [15].

Authors do agree that trust is a difficult concept to define [33] [37] [35]. This difficulty is due in part to our daily vernacular, interchanging terms like trustworthiness and trust, or entrusting and trusting. Barber states that “in both serious social thought and everyday discourse, it is assumed that the meaning of trust, and of its many apparent synonyms, is so well known that it can be left undefined or to contextual implications” and that “vagueness is apparent also in the multiple meanings given to trust” [5]. Hardin agrees that “we often tend to suppose that our quick, even sloppy intuitions or insights are foundational, not merely casual” [37].

Some believe trust deals with behaviors [9] [61]. Nielsen states that “true trust comes from a company’s actual behavior towards customers...” [62]. Olson states that “people learn to trust others by noting their behaviors” [63]. Others feel trust is a cognitive choice [51] [71]. Lewis et al. state that “we cognitively choose whom we will trust in which

respects and under which circumstances, and we base the choice on what we take to be ‘good reasons,’ constituting evidence of trustworthiness” [51].

Trust evolves over time, but exactly how is not so clear. The literature has conflicting views on whether trust is hard or slow to build over time [88] [62] or whether trust is built quickly in the beginning [6]. However, it is in agreement that trust in a merchant is a good thing [90] [2], but as to exactly how this trust works is not yet completely understood [90].

2.1.2 Intentions and Competence

We have expectations when we place trust in someone. Govier states that expectations of trust relationships have two dimensions: motivation and competence [33]. One can be motivated to be trustworthy by self-interest, by what he or she gets out of being trustworthy. Or, one can be motivated by the interests of the person who is placing the trust. Hardin claims that trust is an issue only when the trusted party has concern for fulfilling the other party’s interest and not his own [37]. Govier states that “to trust people is to expect that they will act well, that they will take our interests into account and not harm us” [33] and similarly, Barber describes a trustworthy person as someone who places “others interests before their own” [5]. The intentions of a trusted party affect his or her level of trustworthiness [79] [61] [19] [74].

Not only do we want a trusted party to be concerned about our interests, we want him to be competent as well [56] [74] [67]. “Technical competence” is an important facet of trust [5]. If a person feels someone lacks ability necessary for the relationship, this person will not place trust in that someone. Basso et al. [6] state that trust “. . . can be based upon the rational appraisal of a partner’s reliability and competence.”

2.1.3 Cooperation, Expectations, and Confidence

When attempting to define trust authors mention trust with respect to cooperation, expectations, and confidence. Trust promotes or causes cooperative behavior [78] [28] [10] as Friedman states that “a climate of trust eases cooperation among people...” [27]. One may assume that two people who cooperate must trust each other to a certain degree. This is Govier’s view who makes a direct association between interaction and trust [33]. However, Hardin [37] points out that this is not necessarily the case. A person can engage in cooperation not because she trusts someone but because she has no alternatives.

Also, a person may trust someone but never have the opportunity to act on that trust. Therefore, it is important to draw a clear distinction between trust and action. According to Hardin [37], “trust is thus inherently a matter of knowledge or belief” and it is important to note that there is no risk in trusting alone, the risk is in acting on trust.

Many feel trust is about expectations [31] [9] [79] [92] [39], expectations about the honesty [28] [31] [56], reliability [3] [15] [46] [30] [2] [39] [93], dependability [26] [56] [79], predictability [15] [7] [74], availability [39] and credibility [10] [9] [19] of another. However, Friedman makes a distinction between relying on and trusting [27].

Many believe that having confidence in someone indicates trust [26] [49] [7] [30] [61]. Ferraro defines trust as “. . . one in which confidence is place” [24]. Cassell et al. states agree stating that “trust among humans depends on . . . confidence in one another’s judgment. . .” [10].

2.1.4 Uncertainty, Risk, and Vulnerability

Trust is also thought as one dealing with overcoming risk [75] [42] [86] [35], vulnerability [27] [63] [11] [31] [15], and uncertainty [34] [65]. Bickmore et al. state that “trust is a prerequisite for actions involving another agent in which one may suffer physical, financial, or psychological harm...” [9].

Trust is only an issue if there is some amount of uncertainty involved. Moorman et al. state that trust involves “vulnerability and uncertainty on the part of the trustor” [61]. One must have enough confidence in someone to overcome this uncertainty. Trusting someone means taking a risk or, as Govier puts it “trust is risky” [33]. As discussed in the previous section, Hardin would likely feel that she should have said instead that *acting* on trust is risky [37].

Trust involves choice, i.e., the concept of trust is meaningless in a deterministic world [37]. The concept of trust is one that is used to “decrease complexity” [15]. Rieglsberger et al. agrees stating that trust “helps to reduce...complexity - it is a shortcut for a detailed, laborious evaluation of the relevant risks and benefits” [71]. This idea may be equivalent to the statement that “E-Commerce trust begins in chaos and ends in trustworthiness” [12] in that trust reduces the complexity and makes order out of something chaotic.

2.1.5 Balance

As mentioned previously, shopping online can be risky for consumers and can put the consumer in a vulnerable position. In order for trustworthiness to be obtained online, a balance must be reached between the needs of the consumer and the needs of the online merchant as Egger states, “for users to adopt Business-to-Consumer (B2C) e-commerce, it

is imperative that the benefits of using this new commercial medium significantly outweigh the potential risks and inconveniences” [20].

If the balance of power is shifted from the online merchant towards the consumer, the consumer will feel more in control and more likely to trust the site [18] [38]. The lack of control consumers can feel is a hurdle for creating trustworthiness online [38].

Tan et al. takes on a different view stating that “. . . the more there is of trust, the less there is of control and vice versa” [87], meaning the more trust a consumer holds, the less the need for outside control mechanisms.

2.1.6 Security and Privacy

Many discuss the issues of security and privacy when speaking of trustworthiness online [21] [50] [16] [57] [67] [93] [29]. Security concerns can be a major barrier in getting consumers to shop online [64] [47] as well as a concern of privacy [24] [86] [39]. Araujo et al. state “the lack of faith on the security and privacy of transactions accomplished on the Internet is a significant obstacle for an extensive use of electronic commerce among Internet users” [3]. Yoon states that sites will have to demonstrate “their trustworthiness through the state-of-the-art technology” [92].

Even though security is an important issue for trust, having a secure online store is not enough. Even if there were a “perfect system” for completely secure transactions, consumers will not necessarily shop online [23]. Salam et al. agree saying, “. . . we believe that secure technological infrastructure is only a necessary foundation and by itself not sufficient for creating the level of trust needed for spontaneous electronic transactions over the Internet” [75].

Much of the literature states that privacy issues are more of a concern than security issues [11] [8]. That is, consumers are more worried about how a company will handle their personal information such as email addresses and phone numbers, etc., than what type of encryption is being used for transactions, etc. Petre et al. state that consumers use privacy policies as a cue to a online store's trustworthiness [66].

2.1.7 Context

Context is important when discussing trust [5] [33] [37] [67]. Rarely do we trust a person with everything, rather we trust people in a specific context only. Trust is different in different contexts or situations. Davenport states the " 'locus of trust' is likely to be diverse in any given situation" [17]. This can imply that trustworthiness with regards to shopping online is different than trustworthiness in shopping in brick-and-mortar due to the different context of online or offline.

Often context is not discussed but implicitly assumed [33] [37]. This leads to an obvious problem: the meaning of trust differs from author to author and people less aware of this problem will simply ignore the context altogether. Hardin states that this "... is an inherent problem with the use of ordinary notions in such discussions. It often requires deliberate effort to avoid falling into vernacular usage and, hence, into drawing the wrong implications" [37]. Based on Govier's insights [33], we may feel fine having a certain person fix our computer but would be uncomfortable relying on the same person delivering an important parcel. Therefore, behavioral measures, to be meaningful and generalizable, have to be associated with a particular context [37].

Marsh et al. state that "...it is clear that in fact trust is a situational phenomenon - the trusting decisions we make are based on the situation we find ourselves in, and the context we derive that from" [54]. Grabner-Kraeuter believe that noting context is "critical to the understanding of trust" [34].

Context can also apply to different types of products being sold online [35]. Certain products sell more easily online than others. Ang et al. report that "it is worth noting that the experience to date clearly suggests that certain product categories are more amenable to Internet transactions. For example, CDs, software and books are the three most popular products bought on the Internet" [2]. The authors suggest that the reasoning behind this fact is the ability to easily provide more precise and accurate descriptions of these products.

2.1.8 Length of Relationship

The longer the relationship, the more trustworthy parties become [33] [37]. If trust had declined over time, the relationship would have been discontinued. Thus, a long relationship generally implies strong trust that extends into the future [33]. Hardin states that "it is primarily those with whom we have ongoing relationships that we trust. And the richer the ongoing relationship and the more valuable it is to us, the more trusting and trustworthy we are likely to be" [37].

2.1.9 Credibility, Brands, and Reputation

Trustworthiness is a key component to credibility [26]. A positive reputation is also a result of trustworthy behavior [34] [47]. A merchant's reputation can have an effect on a consumer's view of trust of the merchant [56] [39] [93] and affect how willing the consumer is to make a purchase [34]. Hardin describes reputation as perceived trustworthiness

[37]. Reputation can be created via word-of-mouth, upon which consumers tend to rely heavily [21]. New relationships with other people and organizations are often based on recommendations from other sources.

Brands are associated with reputation and credibility. Fang et al. state, “Brand name is one of the major factors, probably the most important one, that has an impact on shopper’s trust in an e-commerce Web site” [23]. Cheskin Research state “. . . one key aspect of establishing trust with consumers is the reputation of a brand. . .” [12]. The popularity of a brand name can be “considered as an essential ingredient for garnering trust toward online web sites” [92]. Ang et al. have termed how consumers are more likely to buy from popular brands as the “brand equity effect” [2].

2.1.10 Design

Many authors feel that the design of the interface (in this case the website) can influence trustworthiness of an online store [23] [82] [29]. The manipulation of visual elements in the interface can produce feelings of trustworthiness [45] [15] [20] [85]. The quality of the website, whether the site has typos, grammatical errors, broken links, etc., has an effect on trustworthiness [23] [21] [93].

Consumers draw on cues from the interface to determine their vulnerabilities as well as the store’s intentions [27] [71]. Olson et al. state that “the design of the interface needs to recognize the kind of experience and social cues people need to be able to feel trust. . .” [63].

Having an interface that exudes trust will aid in the success of E-commerce. Marsh states “. . .designing interfaces which take trust into account and reason using trust will

result in more effective, comfortable interactions for the user” [54]; while Lee et al. state that “one of the critical requirements for the success of electronic commerce is the appropriate customer interface...” [49]. The importance of a trustworthy interface to an online store is a point made by Bauer who states “customers apparently take a critical view towards information presented to them via the Internet” [7].

The relative ease of use is an important determinate of trust online [21] [41] [47] [67] [39] [93]. Ease of use online can make consumers feel more secure [18] which intern could promote trustworthiness.

It is important to design the interface around good content [70] and for it to have strong navigation and effective navigation [14]. The eCommerce Trust Study conducted by Cheskin Research states that “effective navigation is generally a precondition to communicating e-commerce trust and the perception that sites meet customer needs...” [12].

Marsh et al. state, “...designing interfaces which take trust into account and reason using trust will result in more effective, comfortable interactions for the user” [54]. Understanding trust will allow us to create better interfaces to online stores. D’Hertefelt states that “only from an understanding of the causes of trust on the internet can we derive design guidelines that will allow us to build websites where people feel safe” [18].

2.1.11 Trustmarks

There are various third-party trustmarks available today, such as TRUSTe, VeriSign and BBBOnline. These trustmarks are “meant to instill trust in the online consumer by verifying the Web site has a policy about its collection and use of personally identifiable information” [60].

Current literature investigates the effectiveness of these trustmarks on their ability to enable online stores to give the impression of trustworthiness. Tang et al. state that trustmarks “appear to enhance confidence for online transactions” [88]. Benassi suggest that trustmarks improve trust online stating that TRUSTe is “accelerating the growth of the Internet” [8]. Rieglsberger states that trustmarks show that the merchant shows “rational interest - and also the ability - to act as promised” [71]. Cheskin Research reported that “web-based seals of approval matter more than credit card brands in communicating trustworthiness ...” [12]. Petre et al. state that trustmarks should be used as a “... cues to enhance trustworthiness” [66].

However, McKnight et al. offer a different take on trustmarks stating “there is little empirical evidence that [trustmarks] do, in fact, increase consumer trust” [56]. Consumer WebWatch found that trustmarks seals of approvals are not that important for consumers [14]. Many consumers do not recognize trustmarks and are unaware of what an online store must to do obtain a trustmark [59]. Sisson et al. make the important point of explicitly saying one is trustworthy is not usually needed for a trustworthy individual or organization. Sisson states, “ecommerce sites seem to shout the message that they are trustworthy, that users need have no trepidation over purchasing from these sites, but trust derives not from assertions but rather from experience and judgment” [80].

Atif takes the idea of trustmarks even further by suggesting trust can be built online with the use of a third party referred to as a “trust service provider (TSP)” [4]. The TSP acts as an “...Internet-based intermediary that assumes responsibility for a smooth transaction” [4]. One obvious drawback to this type of solution is how one promotes trust in the trusted service provider.

2.1.12 User Characteristics

All consumers are different. Many authors point out how these differences can affect a consumer's trust online [30] [52] [35] [29]. Friedman et al. note that "... people can engage in virtually identical online interactions, yet reach widely disparate judgments about whether the interactions are trustworthy" [27]. Trust is an issue that is of different importance to different people [83]. We all possess individual characteristics that affect our decision to trust [34][56] and these characteristics can include the age, experience, occupation, and disposition to trust of the consumer [82] [93], as well as gender [84]. Sisson states that "Trust is a subjective judgment that must be made by every user for any site, because individual goals vary and definitions of trust are unlikely to be consistent" [80]. Tan et al. agree stating, "Just as we said the level of trust considered sufficient is different for each individual, the level of trust a person has in a certain situation is different for each person" [87].

Authors tend to point out two major determinants of user characteristics: consumer disposition or propensity to trust [20] [56][14] [93] and a consumer's experience [93]. Some people and some cultures tend to be more trusting than others [63]. Some feel trust is learned during childhood and that we learn trust from our parents [90]. Grabner-Kraeuter state "The effect of the measures to develop and maintain trust in e-commerce is increased or decreased by several other - person-specific and situational - factors that cannot be controlled by the online retailer" [34] while McKnight et al. tend to disagree stating, "We posit that when consumers have experienced a web site, individual disposition to trust, while still an important influence, will not directly affect trusting beliefs or trusting intention.

Rather the impact of this variable will be full mediated through institution-based trust and perceived site-quality” [56].

Experience online and in previous trusting situations can affect a consumer’s propensity to trust online [41] [25]. The more informed a consumer is the higher the expectations that consumer has about the online shopping experience [78]. Fogg et al. point out how the level of education obtained by a consumer can even affect his or her judgment of trustworthiness online [26]. Jarvenpaa et al. state that the more experience a consumer has online, the less likely they are to trust an online merchant. Hoffman et al. state that, “In essence, the more experience one acquires online, the less important are the functional barriers to online shopping and the more important are concerns of control over personal information” [38]. Egger agrees pointing out that as users become more experienced they are less concerned about IT difficulties and more concerned about company policies [21]. Moorman et al. state that, “Users with lower levels of experience are expected to be more willing to trust researchers because of their lack of company, marketing, or research knowledge. Experienced users, in contrast, are likely to have more knowledge and confidence in their own ability to use research and to manage relationships” [61]. While the Consumer WebWatch group found the contrary, “the most experienced Internet users generally trust people more than novice users” [14].

Authors tend to categorize consumers into different groups. Strader et al. grouped consumers as “price-sensitive” and “trust-sensitive” individuals [83]. Lee et al. stated, “Visitors to a web site can be classified into two broad categories, low involvement surfers and high-involvement surfers” [49]. Sisson states that consumers have different ways of evaluating levels of trust; they either have “strict measures” or “rely on a more subjective

‘feel’ for determining whether to trust somebody” [80]. He goes on to state, “The path people take to a level of trust can vary greatly, because some people work from the premise that trust must be earned, and some from the premise that trust is assumed be can be lost” [80]. Uslander states that, “Going online does not make people either more or less trusting, though trust shapes how people interact with each other” [90] while the Consumer Web Watch group on the contrary claim that one is more likely to be a “trusting person” if he or she shopped online [14].

2.2 How My Research is Different

My research is different due to my concentration on first reviewing trust literature, and then applying this knowledge to an online setting. Understanding the concept of trust in relationships outside of commerce can provide valuable insight to trust online. More importantly, my research is different in that I conducted a unique study of actual purchases, which provided insight that no mock purchase study can provide. What people say they do or will do rarely is that same as what they *actually* do. Many studies have been conducted using interviews and questionnaires and observations based on mock purchases [23] [6] [11] [31] [92] [22] [91]. It is important to observe actual purchases because consumers can not be expected to give accurate responses regarding actual shopping experiences while in a virtual or pretend setting. Sisson agrees, stating that consumers pick up on “implicit cues, *often without realizing it*, and it is to these implicit messages that commerce sites should pay particular attention” [80]. Grabner-Kraeuter also agree, commenting on the intricate nature of trust stating “. . . trust is a complex and dynamic phenomenon that can not simply

be 'produced' by applying adequate instruments. Expectations and actions based on trust result from a delicate, situational interplay of different factors" [34].

CHAPTER 3

STATEMENT OF THE PROBLEM

Trust continues to be a challenge online [63]. The lack of trust online has been cited as an “impediment” to the growth of e-commerce [88] as well as a “major inhibitor of online transactions” [92]. With sites receiving low trust ratings [14], online shoppers are still feeling insecure [88] and there is little agreement of how trust works online [17]. It is evident that the perceived trustworthiness of online stores needs improvement [72].

Research discussing the relationship between trustworthiness of an online store and online shopping characteristics (such as context, store design, company policies, etc.) as well as people characteristics (such as one’s propensity to trust, experience shopping online, etc.) is lacking. A validated concrete conceptual model for developing trustworthiness online has yet to be developed. Being able to model this relationship will allow guidelines to be drawn. My research aims to solidify the relationship of trustworthiness and online shopping.

I will propose answers to the following questions of “How is trustworthiness online developed?”, “How do the issues of user characteristics, design of the online store, and company policies affect the online store’s trustworthiness?”, and “Once trustworthiness is developed online, how can it be sustained?”. Finding the answers to these questions involves understanding the process by which people make a purchase online. The answers to these questions will allow online merchants to improve trustworthiness in their online stores.

CHAPTER 4
GENERAL TRUST MODEL

Based on the literature reviewed, the following model of trust has been developed.

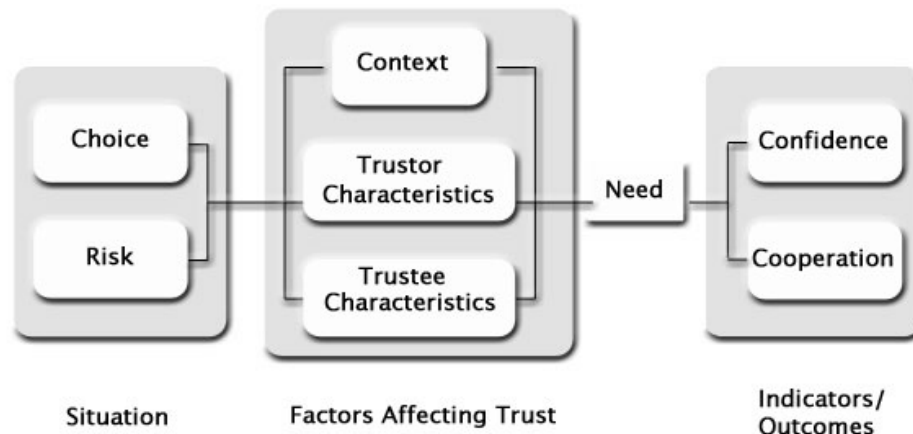


Figure 4.1: General Trust Model

4.1 Situation

The left section of the model entitled “Situation” contains the items necessary for trust. There should be a choice of whom to trust. In other words, there should be more than one possible trustee. As Hardin states, “. . . trust has no meaning in a fully deterministic setting” [37]. If there were only one option or trustee then the trustor would be forced to use the trustee whenever the need arose.

Secondly, there needs to be some risk involved for the trustor [75] [42]. If there is no risk involved then trust is not an issue. Trust is a way of handling or overcoming risk.

4.2 Factors Affecting Trust

The next section of the model contains items that affect trust. These are the factors that will determine whether an individual will trust another. This section contains three main items: context, trustor characteristics, and trustee characteristics.

Context is an important factor that can affect trust [5] [33] [37]. We trust people in a specific context, rather than trust someone in all situations. For example, we may have a trusted car mechanic but would not trust that same individual to babysit.

Trustor characteristics refer to individual characteristics of a person placing her trust in another. Trustor characteristics include the trustor's disposition to trust [20] [56][14] and past experience [41].

Trustee characteristics refer to individual characteristics of one whom trust is being placed upon. An ideal trustworthy individual has good intentions, is competent, has a good reputation, is predictable, honest, credible, reliable, and dependable.

4.3 Need

In order for an individual to act on trust, there has to be a need. Trust is a matter of knowledge or belief and is a separate entity from action. It is entirely possible to place trust in many different individuals but never have the occasion to act on that trust.

4.4 Indicators/Outcomes

Indicators or outcomes from acting on trust are shown on the right hand side of the model and are cooperation and confidence. It should be noted that cooperation does not always imply trust. It is possible to cooperate because of no other alternatives. But in the case of the model, choice is a requirement in the “Situation” section. Considering there is a choice, cooperation is an outcome of trust.

The following table summarizes the model giving references to the literature review.

Situation	
Choice	Trust involves choice. Hardin – 2001, Corritore et al. – 2001, Riegelsberger et al. – 2003
Risk	Trust is thought as one dealing with overcoming risk. Salam et al. – 2003, Jones et al. – 2000, Govier 1998.
Factors Affecting Trust	
Context	We trust people in a specific context. Barber – 1983, Hardin – 2001, Govier – 1998, Davenport – 2000, Marsh & Meech – 2000, Grabner-Kraeuter – 2002
Trustor Characteristics	
- Disposition to Trust	Trusting disposition of the trustor is important. Egger – 2001, Grabner-Kraeuter – 2002
- Past Experience	Past experiences can affect trust. Uslaner – 2000, Grabner-Kraeuter – 2002
Trustee Characteristics	
- Intentions	The intentions of a trusted party affect his or her level of trustworthiness. Govier – 1998, Sirdeshmukh et al. – 2002, Moorman et al. – 1993, Dooney & Cannon – 1997, Hardin – 2001, Barber – 1983
- Competence	Competence is a dimension of trust. Govier – 1998, McKnight et al. – 2000, Barber – 1983, Basso et al. – 2001, Hardin – 2001
- Reputation	Reputation can affect trust. Hardin – 2001, Grabner-Kraeuter – 2002
- Predictability	Predictability is a component of trust. Bauer et al. – 2002, Corritore et al. – 2001
- Credibility	Credibility is a component of trust. Cassell & Bickmore – 2000, Benassi – 1999, Doney & Cannon – 1997, Fogg et al. – 2001
- Honesty	Honesty is a component of trust. Fukuyama – 1995, Gefen – 2002, McKnight et al. – 2000
- Reliability	Reliability is a component of trust. Araujo & Araujo – 2003, Ang & Lee – 2000, Garbarino & Johnson – 1999, Corritore et al. – 2001, Kim & Prabhakar – 2000
- Dependability	Dependability is a component of trust. Fogg et al. – 2001, McKnight et al. – 2000, Sirdshmukh et al. – 2002
Need	
	One may trust an individual but never have the occasion to act on that trust. Hardin – 2001
Indicators/Outcomes	
Cooperation	Trust can cause cooperative behavior. Shneiderman – 2000, Fukuyama – 1995, Cassell & Bickmore – 2000, Govier – 1998
Confidence	Having confidence in someone indicates trust. Fogg et al. – 2001, Lee et al. – 2000, Bauer et al. – 2002, Garbarino & Johnson – 1999, Moorman et al. – 1993

Table 4.1: General Trust Model - References to Literature

CHAPTER 5
OBSERVATIONAL STUDY

5.1 Methodology

The observational study was designed in two parts. The first part consisted of the observation of participants shopping online. The second part consisted of an interview containing open-ended questions, with a portion of the questions arising from the observation in part one. Using methodological triangulation by reviewing the observations and interviews, codes and themes were generated.

5.2 Participants

Before the study was conducted, a consent form was obtained from Auburn University's institutional review board, human subjects office. The consent form assured participants that all information obtained from them in connection with this study would remain anonymous with the use of pseudonyms.

A total of nine participants participated in the study. Because of the amount of time involved in observing, interviewing, and transcribing, a very large number of participants would not have been feasible. However, this study is followed by a questionnaire given with a large number of participants. The participants had varying computer backgrounds, but all had had at least one previous experience shopping online. All participants were over the age of nineteen and consisted of five females and four males.

5.3 Data Collection

Convenience and snowball sampling were used to obtain participants. An email was sent out to the Computer Science and Software Engineering department asking for volunteers. It was also hoped that participants would refer others to volunteer.

The participants were not asked to perform a specific task, such as “find the best deal for . . . at your choice of these sites” or “here is a fake credit card number, pretend to buy at the following sites”. These types of scenarios were contemplated, but it was realized that these types of tasks would yield less authentic data. This observational study examines a thought process, and the role of trust within that thought process. To understand this process of consumers’ making purchases online, observations and studies should be conducted of consumers actually doing so. In order to achieve more useful data, the participants were asked to participate only if they were already planning on making a purchase online.

Participants were observed and recorded shopping online using the software program “SnagIt” (<http://www.techsmith.com>). The software recorded all views of the monitor and voice of the participants. The observations were started by explaining the purpose of the study and then asking participants to use the “think-aloud” protocol, which had the participants speak their thoughts as they were shopping online. At times, questions were asked during the observation if clarification was needed from the participant, or if the participant remained quiet for an extended period of time. All participants were observed shopping online at the same machine, at the same location, with the same connection speed.

After the observation of each participant, a semi-structured interview containing open-ended questions was conducted. The interview consisted of predetermined questions regarding their experience of online shopping in general, this particular shopping experience,

and questions that arose from the observation. The length of time for each participant's observation/interview varied, depending on the participant's task, with ranges from under ten minutes to over a half-hour.

5.4 Pilot Study

A pilot study was previously conducted testing the methodology presented above [48]. The study addressed the issue of shopping cart abandonment - consumers adding products to their online shopping cart yet not following through with a purchase. The study consisted of three subjects, two male and one female, and was conducted during the summer of 2001. The pilot study found the following results:

- Having to log-on to sites frustrates consumers.
- Online forms need improvement.
- Consumers shop online more with the intent of purchasing a particular product than browsing.
- Consumers are quick in shopping online.
- Reputation and Need are major factors for consumers purchasing online.
- Consumers want upfront pricing information.
- Consumers are driven by price.
- Some products are easier to buy online than others.
- Experienced online consumer's concentrate less on site design and more on product, price, and security, and policies.

The study provided a better understanding of the process by which people make a decision to buy online. The study showed that it is trust that in the end gives consumers the confidence to go through with a purchase.

5.5 Participant Shopping Experiences

The following is a brief description of each of the participant's experiences during the observation, followed by a discussion of common findings found from the study. A breakdown of the participants' shopping experience is shown in the following table.

Participant									
Number	1	2	3	4	5	6	7	8	9
Gender	Male	Male	Female	Female	Male	Female	Female	Female	Male
Age Range	20-25	26-30	20-25	20-25	30-35	40-45	30 - 35	20-25	20-25
Item									
Item	JVC Microphone	Game Joystick / Dean Martin	Dog tracking collar	Slippers	Magazine Subscription	Jeans	Jewelry Box	Phone Card	Audiovox Cell Phone Cable
Purchase	NO	NO	YES	YES	YES	YES	NO	YES	YES
Mid Price	\$137	\$39.99 / \$9.95	\$135	n/a	\$15	\$46 per pair	\$47.88	\$20	\$34.95
Max Price	\$149	n/a	\$144	n/a	n/a	n/a	\$64	\$80	\$41
Lowest Price	\$125	n/a	\$125	n/a	n/a	n/a	\$37.98	\$18	\$13.95
Shopping									
Time to find product (1st)	0:58	2:30 / 0:44	1:45	7:14	1:31	1:43	0:48	0:28	4:50
Time before purchase	n/a	n/a	8:03	20:39	1:31	3:36	4:58	5:05	8:15
Time to make purchase	n/a	n/a	3:10	8:58	2:19	4:07	N/A	1:15	1:45
Overall shopping time	11:55	2:49	11:27	6:30	4:18	18:21	22:25	7:05	10:00
Purchase price	n/a	n/a	\$155.75	\$23.95	\$15	\$104	N/A	\$18.14	\$46.40
Driven by	Price - Details	Need / price	Need	Need / price	Need / Price	Need / price	Price	Price	Details - Price
Sites									
Number of sites visited	12	16	6	2	1	2	11	1	7
Number of pages visited	33	53	32	86	16	70	45	15	17
Started w/ search engine	Yes	No	No	No	No	No	Yes	No	Yes
Used search engine	Yes	Yes	Yes	No	No	No	Yes	No	Yes
Used comparison shopping site	Yes,	No	No	No	No	No	Yes,	No	No
Security window popups	Yes, privacy msg about cookies	Yes, security warning - flash install	No	No	No	No	Yes, Problem with site's security certificate	No	Yes, problems with displaying page properly

Table 5.1: Participant Shopping Experience

5.5.1 Participant 1 - Bob

Bob is a graduate student in the Computer Science and Software Engineering department and was shopping for a JVC brand microphone for his JVC digital camera. The JVC list price for this microphone was \$149, a relatively expensive item. Bob previously researched various microphones and decided on purchasing this particular JVC microphone.

Bob was a comparison shopper and was driven by price for the majority of his shopping experience. He knew he could purchase the microphone directly from JVC but felt he could get the same product elsewhere for a cheaper price.

At first things went smoothly for Bob. He looked up the model number from the JVC website and then searched for it in two different search engines, each giving what seemed like promising results. It took Bob less than a minute after searching for the microphone to find it for \$20 cheaper at a site for the company B & H Photo.

However, for numerous reasons, including lack of product details, reputation, and poor navigation at various sites, Bob did not make a purchase.

5.5.2 Participant 2 - Jack

Jack is a graduate student in the Computer Science and Software Engineering department. He shopped for two Christmas presents - a Nintendo joystick for his brother and a set of Dean Martin Variety Show DVDs for his father.

Jack's shopping experience was challenging due to the fact that the Nintendo joystick was sold out at every site he visited, making him unable to follow through with the purchase. Jack also ended up not making the Dean Martin DVD purchase as well. Jack wanted to buy the set of DVDs but the site he found was a subscription based site where the first DVD is purchased and the subsequent DVDs are then mailed periodically for purchase. Jack was unaware of this and did not want to do a subscription.

Jack did try eBay for both gifts when he could not find them at non-auction sites. eBay did have a result for the set of DVDs, but they were too expensive for Jack.

Jack was determined to find both products. When they were unavailable, he did try to think of alternative gifts ideas but the sites he visited did not make any suggestions to him for similar items. In the end, Jack gave up his search for both items.

5.5.3 Participant 3 - Jan

Jan is a graduate student of the Computer Science and Software Engineering department. She shopped for a Christmas present for her boyfriend, a hunting dog tracking collar.

The site Jan had intended to purchase from, Johnson's Telemetry, was down. Jan did a Google search and clicked on a link taking her to a site that looked very amateurish and unprofessional. Jan was focused on getting this Christmas present off her list and was willing to make a purchase from this site until the site needed her to either phone, fax, or email her credit card information.

Jan did not feel comfortable emailing her credit card information and then remembered another site she was familiar with, WICK Outdoor Works. However, Jan did not remember the URL and it took her several minutes and several searches to finally find the site. Unfortunately, WICK Outdoor Works also needed her to phone in her order for the dog collar. Jan did not want to do that.

After searching Google again, Jan finally found a site that would let her complete her order all online. The site had a similar product with a different brand. This site, Vetvax.com (Discount Pet Supply Plus Dog Supply Vet-Vax, Inc.) was also very poorly designed. Jan did not seem to mind and made her purchase here for almost \$160.

She did not have too many issues during checkout except she was confused by the “order instructions” box and she also hit the “Continue Shopping” button instead of the “Checkout” button.

Overall, Jan did not care about the site design at all, as long as she could complete her order online. Jan’s shopping experience was driven by her need for a Christmas gift. She was determined to make the purchase regardless of price or site design.

5.5.4 Participant 4 - Marsha

Marsha is an undergraduate student in the English department. She was shopping for a Christmas present for her boyfriend’s younger sister. During her shopping experience she stated this was her first purchase from an online store. Her only previous shopping experience was a few times with eBay, buying CDs and a jacket.

Marsha did not have a product in mind and only visited sites, Delias.com and eBay.com. She went to Delia’s first and had no problem navigating the site viewing different products. To say her shopping experience was challenging would be an understatement. One of her main struggles while shopping was she was unsure of a suitable present for a pre-teen girl.

At Delia’s, she found a couple of items, a purse and a pair of slippers, and added them to her cart. She then went to eBay, hoping maybe to find a small jewelry box. However, she simply searched for jewelry and thousands of auctions were displayed making it difficult for her to find what she was looking for. She never thought to narrow her search.

After consulting her boyfriend she decided to purchase the slippers at Delia's. Checking out was extremely difficult and frustrating for her. This being her first online store shopping experience, she simply did not know how to check out and called upon her boyfriend repeatedly for help.

On her own she was not able to change the size of the slippers once they were in her cart, in which she ended up with two pairs. When she corrected this (which was actually the only task she was able to do on her own - remove item) she was disappointed to find that the size slippers she wanted were out of stock.

After a discussion with her boyfriend she decided to go with the delayed delivery and purchase the slippers anyways. The checkout form was difficult for her to fill out. It did not state which fields were required, causing her to get angry after she submitted the form and was told in red she was required to fill out certain fields. One of the fields she did not understand was why she needed to supply an email address. I assumed this was so the site could send her an order confirmation email, but the site did not tell her this.

Marsha also did not understand the billing process. She did not realize that the billing address on her credit card had to match the address she was inputting into the form. The site should have explained this to her. All the checkout pages were overwhelmed with unnecessary information, making it challenging for Marsha to check and see if her order was correct.

It seems Marsha was competent in navigating sites to look for products, but when it came to follow through with the purchase, she just did not know how to check out.

5.5.5 Participant 5 - Chuck

Chuck is an undergraduate student in the Computer Science and Software Engineering department. Chuck was purchasing a magazine subscription to Gourmet Magazine for his father. He chose to do so at Amazon.com. Chuck is a big fan of Amazon and overall his shopping experience went smoothly.

The only problem he encountered was in the beginning he wanted to log in and there was not a place for him to do so. Chuck had no problems searching for the magazine, adding it to his cart, and checking out with a purchase price of \$15.

Chuck was very price oriented, constantly reading the promotional offers displayed. Even though Chuck was a loyal customer to Amazon.com, when it came time for him to follow through with the purchase he was very hesitant and took extra time reviewing all the information for his order.

5.5.6 Participant 6 - Cindy

Cindy is a graduate student in the Computer Science and Software Engineering department. Cindy needed to purchase tall-sized jeans. Normally she cannot find jeans long enough to fit her in the stores around town. Cindy visited one of her favorite sites, Long Elegant Legs, where she had shopped numerous times before. Cindy quickly found two pairs of jeans and decided to make a purchase for a total price of \$104.

When it came time to checkout Cindy could not find a way to log in so she would not have to reenter all of her personal information. Cindy ended up reentering her information and checked out. At the end of the checkout the page prompted her to save her information

for checking out in the future, which frustrated Cindy even more since she could not log in to the site to begin with.

After her quick purchase, Cindy shopped around at the current site as well as another clothing site, Newport News, to see if there was anything else she might want. However, due to poor site structure and product description, Cindy was not compelled to make any unplanned purchases.

5.5.7 Participant 7 - Sue

Sue is an employee of Auburn University and shopped for a jewelry box. Sue's shopping experience was the worst of the study. She had a particular jewelry box in mind and searched a few sites for the cheapest price.

She found a great deal on the jewelry box for under \$40 at a site called Dakmart, but when she went to check out a security warning popped up and scared her away. She found the next cheapest for under \$50 at another site, Catalog City, and proceeded to check out. When she started to check out the form asked her to register at the site which she did not want to do and proceeded to check out without registering. She entered in her information and submitted the form.

Unfortunately, something went wrong. The site loaded a standard page - no confirmation number, no end of purchase page. Neither Sue nor myself knew exactly what went wrong. Sue was frantic. She had no idea if the order went through or not. There was no phone number to call and the only way she could contact them was through a contact form. She kept checking her email for a confirmation notice, but nothing arrived. Sue was

very upset not knowing if she would be charged for the jewelry box and ended her shopping experience. Days later I spoke with Sue and found out luckily the order did not go through.

5.5.8 Participant 8 - Tina

Tina is a graduate student in the Computer Science and Software Engineering department. She shopped for an international phone card to Asia. She shopped at the site First Phone Card, where she has been ordering phone cards from for three years. A friend introduced her to the site.

She had specific criteria for her phone card. She needed one that expired no sooner than 180 days, charged about two cents a minute, and cost twenty dollars. She browsed the site looking at various cards and after about five minutes found a card that met her criteria. She mentioned this site offered discounts for return customers and logged in.

The checkout procedure was very basic and had an amateur look to it - bright blue background with table formatting and a flashing image touting the security of the form. Tina logged in as a returning customer and received a 4.5% discount on her purchase. Tina did not mind the look of the site and was happy with her purchase.

5.5.9 Participant 9 - Greg

Greg is a graduate student in the Computer Science and Software Engineering department. He shopped for an Audiovox cell phone cable. Greg was driven by need more than price. He needed the cable soon, so he was willing to pay a little more at a more reliable site.

His main requirement was that he had to have a driver come with the cable. At all the sites he visited it was difficult for him to tell if the cable came with the driver or not. The

product description was not clear. In the end, based on his need to have the cable, Greg took a chance and purchased the cable at Cell Phone Mall for \$35, still unsure if the driver software was included.

5.6 Data Analysis

Both the observations and interviews were transcribed. The transcriptions were read and re-read several times. Themes and codes were generated by analyzing the transcriptions with Glaser and Strauss' (1967) [32] grounded theory for qualitative data.

5.7 Findings

Trust is an important factor in online shopping.

For many of the participants, trust played a big role in the decision process of whether or not to make a purchase at a store. Greg found the cheapest price for the Audiovox phone cable shopping at an eBay store. However, Greg did not trust the eBay store enough to follow through and decided to pay more elsewhere. “\$13.95, buy it now! ... This looks good. I don't know. I've never bought anything from an eBay store. I don't know what its like compared to buying from an eBay bid. And I'm not interested in trying that out right now because I definitely need whatever I do tonight to be reliable because it is for my business.”

Sue found the jewelry box she was looking for at a great price. She had never heard of the site before and was hesitant, but decided to buy it anyway. When she went to checkout, a security warning popped up and she abandoned the site stating, “... There is a problem with the security certificate? Oh no! I don't think I'm going buy it from here. Since there

is a security alert, you know? Yeah, its a good price, but not worth...getting in trouble.”

The more product information, the more trustworthy the online store will be perceived.

Searching for a good deal on a JVC microphone for his video camera, Bob comparison-shopped and found the product for \$20 cheaper than the JVC list price at an online store he had never visited before. This particular online store, B & H Photo, had a professional layout, a 1-800 contact number, a live help link, and touted itself as the “professional source” for photo, audio, and visual equipment. However, Bob did not feel comfortable making a purchase there. Why? Mainly due to lack of product information; the site only displayed the model number, a picture, and a one-line description of the microphone. Bob had done prior research and already knew all the product information about the microphone. When asked why the store’s lack of information prevented him from making a purchase even though he already knew the product information, Bob replied, “Yeah, I knew the product details already, but the fact that they don’t even know the details...they might just ship me any old thing.”

Thorough product information gives the perception of competence and knowledge. The more competent and knowledgeable the online store, the more trustworthy it is perceived to be. This agrees with the current literature stating competence promotes trust. Bob also stated that he did not feel comfortable spending a lot of money at B & H Photo. When given the scenario of his microphone only costing \$10 at the store, Bob stated, “I still wouldn’t get it from [B & H Photo].” Because of the lack of product details, Bob felt the online store lacked the competence and knowledge to send him the correct microphone.

Greg shopped online for an Audiovox cell phone transfer cable. The majority of the sites displayed a picture and model number for the cable, but Greg became frustrated due to the sites he visited not explicitly stating whether his purchase included driver software.

Design and usability are not high trust factors online.

Literature has stressed the important of design and usability when it comes to the trustworthiness and success of an online store. This study, on the contrary, found consumers place less importance on site design and usability and more on other aspects of shopping online, such as product details, contact information, and price.

As Tina stated regarding the site she purchased her international phone card, "... this website, I don't like its layout, but ... I always use this one. I trust this one, so I don't care." And as Sue stated, "I think if it is something I need or want, it doesnt matter if the page looks good. ... Of course, aesthetics make things look easier and better or whatever, but if it is something I know I really want or need, I'm gonna buy it anyways..." When asked how he felt usability affects a stores trustworthiness, Greg stated "... I'm not sure if I can decide whether or not to trust a site based on its usability at all."

Of course, an online store has to be usable enough for consumers to be able to make a purchase. Jan purchased her dog-tracking collar at a site with extremely poor site design having a very dated and unattractive look. However, Jan did not seem to mind. The site had what she was looking for and was usable just enough for her to follow through with the purchase. When asked if she trusted the site she purchased from, Jan replied, "Yeah, more so than some of the other ones... because they are pretty much 'ma and pa' shops.

Typically, the type of people that have [dog tracking collars]... are not the type that I think either have the ability to or would try to take advantage of the situation.”

It is possible for poor usability to have a negative affect on trustworthiness if the consumer cannot figure out all the details of their purchase. Jack stated, “If I can’t find out shipping really easily, that would concern me because if something would go wrong I imagine I would get the runaround if I tried to phone them. If I could even find their number on the website.” As long as the consumer can do what he/she wants to do, anything more than that seems like “icing on the cake”. For example, its unlikely that a consumer really cares if it takes five clicks versus two clicks to find a product.

First impressions last.

If an online store makes consumers happy the first time around, the consumers are likely to come back. Even if when they do come back they have a bad experience, consumers are likely to be more forgiving than of a store they are experiencing for the first time.

During Bob’s product search for a JVC microphone, he visited a preferred site J R Music World. He had been to the physical store and also made a purchase from online. Bob went on and on at how great the customer service was at the store and how they have all kinds of brands of electronics. However, Bob could not find the microphone on the site. The site had changed since he last visited and Bob was unable to navigate the store. Trying the sites search function yielded no results either. Bob spent several minutes of frustration trying to find the microphone on the site. When asked in the interview about his experience at his preferred site, Bob stated, “...I know there was a section where you could list products by brand stores, I think they have JVC, Sony, etc., but I couldnt find

it. But I have no idea if they are no longer doing that thing anymore or if they were. But I already bought something from them, so its okay.”

Cindy shopped at her preferred site for jeans for tall women. Her site frustrated her during navigation and checkout. She wanted to be able to log in and have the site already have her information from her previous purchases. She could not find the link and had to re-enter all of her information. Cindy did not mind too much though because she had shopped there before and was satisfied with their service and products. This study’s findings give the impression that trust can be built quickly and is easily sustained in the future if the consumer has a positive first time shopping experience.

Context matters.

The study was consistent with the literature regarding context and trust. Some products are simply easier to buy online than others. The quickest and easiest shopping experience was Chuck’s. He purchased a magazine subscription at a popular online bookstore that he had previous positive experience with. His product was the cheapest of all of the participants and had an extremely low risk factor.

Consumer characteristics impact the consumers view of a store’s trustworthiness.

Consumer characteristics affect consumers’ view of a store’s trustworthiness. Jan, who purchased a \$150 dog-tracking collar at a small online store, characterized herself as a trusting person. Marsha, however, was the opposite. Her shopping experience was full of hesitations regarding how to check out, if her credit card information was safe, if the

shipping price and dates were feasible. Marsha’s previous online shopping experience only consisted of a few eBay purchases. Marsha said the main reason she has not shopped online much in the past was because she is a suspicious person by nature.

Another consumer characteristic aspect of the study was participants were either very price-oriented or need-oriented. The price factor correlates with the literature involving risk and trust. The less the product costs, the less risk the consumer is taking. Participants tried to minimize their risk by shopping for the product with the cheapest price.

When participants were also driven by need, they seem to do whatever it took to make the purchase. This study was conducted in November and December and many participants were buying holiday gifts. Because of their need of a gift, many were willing to place a purchase even if they did not trust the site. This verifies the literature that states cooperation does not necessarily imply trust. Conversely, during the interview, participants were asked if they could think of an online store they trusted, but could never see themselves making a purchase from. Many could, which is consistent with the literature regarding the distinction between knowledge and action. An online store could be extremely trustworthy, but this does not necessarily mean it will be successful.

5.8 The Importance of Observation

“The obvious isn’t always apparent” - Paco Underhill [89]. Many times during this study participants did one thing and then said another. It is extremely important to observe participants in a natural setting as opposed to simply asking them what they would do or think in a mock situation. Some of the participants were graduate students in the Computer Science and Software Engineering department and as such, responded with what they might

have felt were the “correct” answers during their interviews, reciting what they have learned in their courses of Human-Computer Interaction.

For example, during Bob’s interview he expressed the importance of third-party endorsements of the Better Business Bureau on online stores, yet observing him shop, he did not seem to notice any third-party endorsements. Bob stated he did not trust online stores that change formats which would cause him difficulty in finding products. Yet at his preferred online store, J & R Music World, the site had changed, making it impossible for him to find the JVC microphone. Also, earlier in the interview, Bob contradicted himself by stating that he would not trust a store if “over time the site looks the same for example, that gets me, I mean are they even changing inventory or anything?” When Tina checked out at her favorite phone card site, there was a flashing animation at the top of the screen touting the site’s security. During Tina’s interview, however, Tina stated that a website that had animations would not be trustworthy to her.

In Paco Underhill’s book *Why We Buy*, he states, “There are surveys that do ask customers for information about what they saw and did inside a store, but the answers are often suspect. Sometimes people just don’t remember every little thing they saw or did in a store - they weren’t shopping with the thought that they’d have to recall it all later” [89]. If I went by interviews or questionnaires alone, I would have missed out on vital clues into the real online shopping experience.

CHAPTER 6

A MODEL OF TRUSTWORTHINESS ONLINE

Using the qualitative data from the observational study, the general trust model presented in Chapter 4, shown below, can now be applied and modified for business-to-consumer e-commerce.

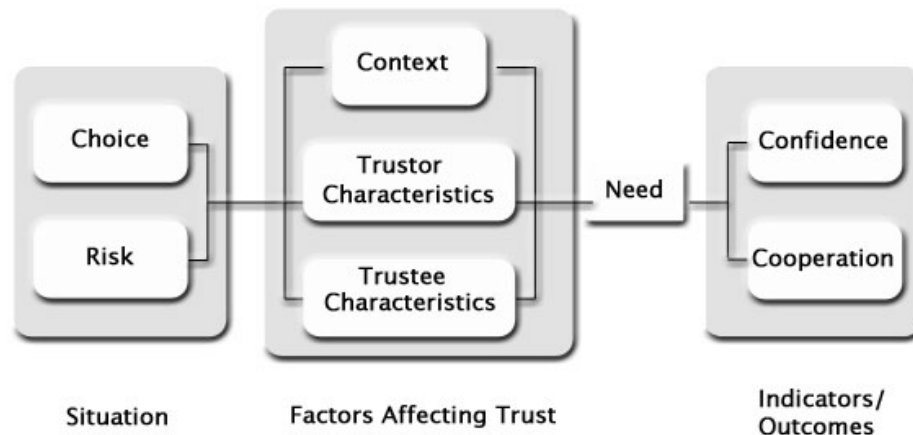


Figure 6.1: General Trust Model

The situation for trust is present in online shopping. Regarding choice, there are millions of online stores on the web consumers can choose from. Along with numerous choices of online stores, there are also several risks associated with buying online. Some of the risks include late arrival of an item, not receiving the item purchased at all, inaccurate

product description, being overcharged for an item, as well as having personal information and credit card information compromised.

The observational study has shown that context matters when shopping online. Based on the type of item being purchased, the issue of trust varied amongst the participants. Trust was more of an issue with Bob purchasing an expensive JVC microphone than with Chuck who purchased a \$15 magazine subscription.

Trustor characteristics, disposition to trust and past experience, were shown to play a part in shopping online. As expected, consumers with higher dispositions towards trust were more trusting online. If a consumer has previous experience at a particular online store this will affect his or her decision to return to the store. Past experience shopping online in general can affect trust. Lack of experience can lead to more hesitation and more surprises which can have a negative impact on the perceived trustworthiness of an online merchant. Jan described herself as a trusting person, had substantial previous online shopping experience, and stated that she had not had a bad experience buying online. On the other hand, Marsha had a less disposition to trust and little experience shopping online. Marsha's online shopping experience was full of hesitations and questions, while Jan seemed largely focused on just finding her product. It took Marsha over 30 minutes to purchase a \$24 item at a larger, well-known store, while it only took Jan just over 11 minutes to purchase a \$155 item at small unknown store.

Trustee characteristics are correlated to characteristics of an online merchant. The observational study can equate the items in the original model to elements of the online shopping experience.

The intentions of an online merchant can be seen through the prices of products displayed. If the merchant's prices are unusually high, then consumers are likely to feel that the merchant is concerned more about his own intentions, rather than the consumers'. Also, displaying upfront shipping costs, having specials or deals, and providing savings or discounts for return customers show the merchant is concerned about the consumer which can have a positive impact on the merchant's perceived trustworthiness. One of Tina's comments regarding her favorite site for purchasing phone cards was that the site had good prices and gave returning customers discounts. Chuck stated he trusted Amazon and raved about all the deals and promotions they offer. Price was a major factor for almost all the participants in the observational study.

Having accurate and substantial product information is an indicator of competence of an online merchant. This observational study has shown that even if the consumer is already familiar with the product he or she still wants to see the product information to verify the product is indeed the product in question. Detailed product information shows the merchant is familiar with the product. Bob did not trust B & H Photo due to their lack of product information for a JVC microphone, and as such, Bob refused to make a purchase there.

As one would expect, a positive reputation has a positive effect on a merchant's perceived trustworthiness. Marsha's main reason for trusting the online store she purchased was because of its reputation, "...they are a big national chain, everybody's heard of them...they have too much exposure to be doing something underhanded". However, lack of a reputation was not detrimental as in preventing an online merchant from being perceived as

trustworthy. Jan purchased a dog-tracking collar at a store she had never heard of, but the store carried the product she was looking for and was in her price-range.

Predictability, reliability, and dependability are all related and can be correlated to online shopping as matching the expectations of the consumer with the actions of the online merchant. This can mean product follow-through as well as clicking a button and having the website display what is expected. This can be related to usability of a website.

Credibility can be correlated to the professional look of a website, i.e., the design of the site. Jack stated stores that looked “professional” and “like they sell stuff all the time” were perceived as trustworthy.

Honesty can be projected from the site by having high visibility of contact information including a physical address and phone number. Accurate product information and unbiased customer reviews can also be an indicator of an honest merchant.

Many consumers will and have the need to purchase an item or service. As seen in the observation, at times this need was so heavy that not much else mattered. All of the participants stated that there were online stores they trusted but never needed to make a purchase at. While it is possible to have trust in an individual and never need to the act on that trust, the converse can be said as well. It is possible that a need is so great that cooperation, in this case, an online transaction, can take place even if the consumer does not trust the online merchant. During Greg’s search for an Audiovox cell phone cable, he was frustrated not being able to find an online store that gave him enough product information. When asked if he trusted the online store he finally made a purchase from (still not sure if the product was exactly what he was looking for) Greg replied, “I trust it enough.” Greg needed the cable and took a chance.

The cooperation element of the general trust model is correlated to the actual transaction taking place online. Once the transaction is complete, a level of confidence is created. As seen in the observational study, if a first time transaction goes well, this will be a lasting first impression on the consumer. If the transaction goes well, then the consumer will likely have an increased amount of confidence in the merchant and vice versa.

The following table summarizes the elements of the trust model applied to e-commerce.

Situation	
Choice	Thousands of merchants and retailers online
Risk	Financial loss, possible loss of privacy, identity theft, late arrival of merchandise, inaccurate product descriptions
Factors Affecting Trust	
Context	Certain products involve a lesser degree of trust when purchasing online than others. Example: books and cds are easier to purchase online than clothing, more expensive items involve more risk than less expensive items.
Truster Characteristics	
- Disposition to Trust	A high disposition to trust is more likely to perceive online merchants as trustworthy than a consumer with a lower disposition to trust.
- Past Experience	More online experience can affect the perceived trustworthiness of an online merchant. Also, previous experiences with online shopping will affect future perceptions.
Trustee Characteristics	
- Intentions	Shown by the price of products for sale. Discounts, specials, unbiased product reviews give the consumer the feeling that the merchant has good intentions and is concerned about the consumer.
- Competence	Displayed by the merchant by providing detailed and accurate product descriptions.
- Reputation	Other consumer experiences can affect a merchant's perceived trustworthiness.
- Predictability - Reliability - Dependability	All can be tied to the usability of an online merchant.
- Honesty	Portrayed by providing accurate product descriptions and unbiased product reviews.
- Credibility	Shown by the professional look of the website of the online merchant.
Need	
	If the need for an item is so great, this need may overshadow the importance of the trustworthiness of an online merchant. Also, an online merchant may be trustworthy, but consumers may never have a need to purchase a product from that merchant.
Indicators/Outcomes	
Cooperation	Consumer pays for an item and the merchant supplies the item.
Confidence	Once a transaction takes place between a consumer and an online merchant, that consumer now has a level of confidence in the merchant based on that experience.

Table 6.1: Elements of E-Commerce Trust Model

CHAPTER 7

QUESTIONNAIRE

The conceptual model for trustworthiness in online stores identified trustor and trustee characteristics as factors affecting trust. A questionnaire was developed to identify the relationships, if any, between these elements of the trustor (the online consumer), and the trustee (the online store). Do certain elements of the conceptual model have more impact on the trustworthiness of an online store than others? How do consumer characteristics have an effect on what elements of a online store are important in determining trustworthiness? Answers to these questions will aid in enhancing the conceptual model.

7.1 Methodology

The questionnaire was designed in a way to make it as short and as concise as possible. Long questionnaires yield less accurate data. Participants are likely to rush in answering the questions of a questionnaire several pages long in order to save time. The questionnaire in this study consisted of 3 pages containing 32 multiple-choice questions and took approximately 3-5 minutes to fill out. The questionnaire contained demographic questions, questions pertaining to the participant's disposition towards trust, and questions regarding online use and shopping experiences. Question 5, which asked participants if most people could be trusted was obtained from the questionnaire created by the Consumer Reports Web Watch group in October of 2005 [14]. The questionnaire also contained questions that gave the choice between two trustworthiness elements in the conceptual model and had the participant select which was more important.

7.2 Participants

Before the questionnaire was conducted, consent was obtained from Auburn University's Institutional Review Board, Human Subjects Office. Participants were assured that all information obtained from them in connection to the study would remain anonymous. All participants were 19 years of age or older. A total of 229 questionnaires were obtained with 2 incomplete questionnaires thrown out.

7.3 Data Collection

Participants included both students and employees of Auburn University, as well as persons not directly affiliated with the university. Participants were wanted with varying backgrounds, differing in age, education, and computer experience. Participants were obtained by using convenience and snowball sampling. When on Auburn University's campus, the questionnaire was conducted during daylight hours. Individuals were approached asking if they would like to participate in the study by filling out a short questionnaire. If they agreed, participants were given a information letter describing the purpose of the study. Participants were not compensated for their participation in the study. Participants filled out the questionnaire on paper, rather than online. This was done to eliminate a possible bias towards a participant's computer use.

7.4 Data Analysis

The following displays the questionnaire in its entirety along with the raw data given by the participants. For questions not totaling to 227, not all of participants answered those questions.

1. What is your gender?

107 Male

120 Female

2. What is your age?

93 19-29

89 30-49

38 50-59

4 60 and older

3. What is the last grade or class you completed in school?

0 Grade 11 and under

29 High school graduate

73 Some college

93 College graduate

30 Post-graduate

4. What is your current total household income before taxes?

36 \$10,000 or less

26 \$25,000 or less

47 \$50,000 or less

27 \$75,000 or less

15 \$100,000 or less

25 More than \$100,000

5. Generally speaking, would you say that most people can be trusted or that you can't be too careful in dealing with people?

106 Most people can be trusted

121 You can't be too careful

6. How often do you access the Internet or World Wide Web?

1 Never

20 Once a month

19 Once a week

47 Several times a week

20 Once a day

120 Several times a day

7. How long have you been accessing the Internet or World Wide Web?

19 A year or less

71 5 years or less

88 10 years or less

49 More than 10 years

8. How often do you browse online stores? (not including auction sites, such as eBay)

20 Never

76 Once a month

62 Once a week

42 Several times a week

12 Once a day

15 Several times a day

9. How often do you make a purchase at an online store (not including auction sites, such as eBay)

57 Never

141 Once a month

23 Once a week

5 Several times a week

1 Once a day

0 Several times a day

10. How much was the most expensive single item you purchased at an online store? (not including auction sites, such as eBay)

- 25 \$10 or less
- 39 \$50 or less
- 66 \$100 or less
- 55 \$500 or less
- 42 Over \$500

11. Would you say your overall online shopping experience has been a positive experience?

- 130 Yes, definitely
- 75 Somewhat
- 12 No, not at all

12. For each of the following **pairs of items**, select the item that is more important to you when determining the trustworthiness of an online store.

- a. 151 Reputation of the online store
 76 Detailed product information
- b. 91 Detailed product information
 136 Visibility of contact information, such as phone, email, physical address
- c. 136 Price of products for sale
 89 Detailed product information
- d. 116 Ease of use, such as product search, adding items to cart, checking out, etc.
 111 Price of products for sale
- e. 85 Professional look - aesthetically pleasing
 141 Detailed product information
- f. 88 Visibility of contact information, such as phone, email, physical address
 138 Reputation of the online store
- g. 102 Price of products for sale
 125 Visibility of contact information, such as phone, email, physical address
- h. 48 Professional look - aesthetically pleasing
 179 Reputation of the online store
- i. 130 Reputation of the online store
 97 Price of products for sale
- j. 120 Visibility of contact information, such as phone, email, physical address
 107 Ease of use, such as product search, adding items to cart, checking out, etc.

- k. Ease of use, such as product search, adding items to cart, checking out, etc.
 Professional look - aesthetically pleasing
- l. Price of products for sale
 Professional look - aesthetically pleasing
- m. Detailed product information
 Ease of use, such as product search, adding items to cart, checking out, etc.
- n. Professional look - aesthetically pleasing
 Visibility of contact information, such as phone, email, physical address
- o. Ease of use, such as product search, adding items to cart, checking out, etc.
 Reputation of the online store
13. For each of the following **pairs of items**, select the item that is more important to you when shopping online.
- a. How badly you need to purchase a product (ex. - hard to find, upcoming gift)
 Price of products for sale
- b. Ease of use, such as product search, adding items to cart, checking out, etc.
 How badly you need to purchase a product (ex. - hard to find, upcoming gift)
- c. How badly you need to purchase a product (ex. - hard to find, upcoming gift)
 Reputation of the online store
- d. Professional look - aesthetically pleasing
 How badly you need to purchase a product (ex. - hard to find, upcoming gift)
- e. Visibility of contact information, such as phone, email, physical address
 How badly you need to purchase a product (ex. - hard to find, upcoming gift)
- f. Detailed product information
 How badly you need to purchase a product (ex. - hard to find, upcoming gift)

Because the data obtained in the questionnaire was categorical, rather than numerical, the chi-square statistic was used in data analysis. The chi-square statistic is a probability distribution used to test the independence of two nominal variables. The chi square statistic compares the counts of categorical responses between two or more independent groups and with the use of contingency tables and the chi-square goodness-of-fit test it can be determined if results are statistically significant.

This questionnaire was used to investigate the relationship between consumer characteristics and preferences of one element of shopping online in determining a store’s trustworthiness over another. Contingency tables were generated for each question 1-11 (consumer characteristics) with questions 12 and 13 (element preference).

For example, question 5 asked participants if they felt, generally speaking, people could be trusted. One hundred six participants felt most people can be trusted, while 121 participants felt you can’t be too careful. Question 12L asked participants which was more important when determining the trustworthiness of an online store, the price of products for sale or the professional look of the store. A contingency table was created to help determine if there is any association between being a trusting person and a preference between price and professional look. The following shows the 2 x 2 contingency table for question 5 with question 12L.

Q5 - Q12L	Price	Professional Look	Totals
Trust	70	35	105
No Trust	96	22	118
Totals	166	57	223

Table 7.1: Q5 - Q12L Contingency Table

Of the 223 people in the study who answered both questions 5 and 12L, 166 participants, or 74.44%, prefer price over professional look and 57, or 25.56%, prefer professional look over price. The null hypothesis is that the categories of trust and of price versus professional look are independent from one another. If the null hypothesis is rejected, there is a relationship between the two categories. For questions 5 and 12L, if the null hypothesis were true,

74.44% of the 105 trusting people, or 78.16 people, should prefer price over professional look. Similarly, 25.56% of 105, or 26.84 people, should prefer professional look over price.

The same proportions should hold true for non-trusting participants. Thus, 74.44% of the 118 non-trusting participants, or 87.84 people, should prefer price over professional look and 25.56% of 118, or 30.16, should prefer professional look over price. These are the expected counts if the null hypothesis were true.

The chi-square test was used to determine whether the differences between the observed counts and the expected counts are statistically significant; in other words, not due to chance. The chi-square statistic is:

$$\chi^2 = \sum \frac{(Observed-Expected)^2}{Expected}$$

For the data obtained for questions 5 and 12L,

$$\chi^2 = \frac{(70-78.16)^2}{78.16} + \frac{(35-26.84)^2}{26.84} + \frac{(96-87.84)^2}{87.84} + \frac{(22-30.16)^2}{30.16} = 6.301$$

The number of degrees of freedom is computed by the number of columns in the contingency table minus one times the number of rows in the contingency table minus one. For questions 5 and 12L, this gives (2-1) x (2-1) = 1.

Using the chi-square distribution table with 1 df, the χ^2 value of 6.301 lies between 5.41 and 6.63. The corresponding probability falls between 0.01 and 0.02. This is above the significance level of 0.05 or 5%, so the null hypothesis is rejected. The following table displays the values calculated by Minitab.

Table Statistics - Trust and Q12I			
Observed Counts	Price	Prof. Look	
Trust	70	35	
No Trust	96	22	
Expected Counts	Price	Prof. Look	
Trust	78.16	26.84	
No Trust	87.84	30.16	
Test Statistics	Value	df	p-value
Pearson Chi-Square	6.301	1	0.012
Likelihood Ratio Chi-Square	6.322	1	0.012
Null Hypothesis (Ho) : No Trust difference for Q12I.			
The p-value is less than 0.05. Therefore REJECT the Ho.			

The exact p value is 0.012 which is less than 0.05. Therefore, there is strong evidence that the distribution of preference of price over professional look among trusting people is different from that among non-trusting people.

For questions 12 and 13, which asked the participant to select a preference of one element of online shopping over another, the chi-square goodness-of-fit test was used. The goodness-of-fit test states whether the results for each question were statistically significant.

For example, question 12G asked participants which was more important when determining the trustworthiness of an online store, the price of products for sale, or the visibility of contact information, such as phone, email, physical address. One hundred two of the

227 participants, or 44.93%, selected price and 125 of the 227, or 55.07%, selected contact information. If the probability of selecting one element over another followed the binomial distribution, the probability would be 0.5. The expected number for both price and contact information would be half of 227 or 113.5 participants.

Once again the chi-square statistic is

$$\chi^2 = \sum \frac{(\textit{Observed} - \textit{Expected})^2}{\textit{Expected}}$$

For question 12G, this gives a chi-square value of 2.33. Looking at the chi-square distribution table, for 1 df, 2.33 lies between 0.10 and 0.15 which is less than the chi-square of 3.84 for 0.5. Therefore, the null hypothesis cannot be rejected. There is no statistical difference between the preference of contact information over price. The following table summarizes the goodness-of-fit test for question 12G.

	Price	Contact Info	Total
Observed (O)	102	125	227
Expected (E)	113.5	113.5	227
(O - E)	-11.5	11.5	
(O - E)²	132.250	132.250	
(O - E)² / E	1.165	1.165	
Chi Squared Calculated		2.33	
Degrees of Freedom		1	
Chi Squared (0.05)		3.84	
<p>Since Chi Squared Calculated is less than 3.84</p> <p>Do NOT reject the Ho</p> <p>There is no difference between Price and Contact Info</p>			

Contingency tables and chi-square statistics for all questions can be found in the Appendix.

7.5 Findings

7.5.1 Consumer Characteristics

The gender of participants was almost split with 107 (47%) of the participants being male and 120 (53%) female. The majority of participants were under the age of 50 (93 participants or 41% were between the ages of 19 and 29; 89 participants or 39% were between the ages of 30 and 49).

All participants had at least graduated from high school with the majority, 196 (86%) having at least some college education. Participants had varying income levels. One hundred nine participants, 48%, made \$50,000 or less per year. The income question was the question most omitted. Fifty-one participants (22%) did not feel comfortable stating their income.

About half of the participants had a propensity towards trust. One hundred six (47%) of the participants stated most people can be trusted and 121 (53%) stated you can't be too careful. Over half of the participants (120 or 53%) access the internet several times a day, with 20 (9%) accessing the internet once a day, 47 (21%) several times a week and 40 (17%) accessing the internet less. The majority of participants, 137 (or 60%), have been accessing the internet for over 5 years.

One hundred thirty-one participants (58%) browse online stores at least once a week or more. The majority of participants, 141 (62%), make a purchase at an online store about once a month. For 130 participants (57%), the most expensive single item purchased online was \$100 or less. One hundred thirty participants (57%) felt their overall online shopping experience had been a positive one.

7.5.2 Consumer Characteristics and Online Shopping Experience

The following table shows the percentage of participants who have made a purchase online, made a purchase of \$100 or more online, and have had a positive online shopping experience with varying categories of the participants' age, income, online experience, and propensity towards trust.

	Purchased Online	Purchase Over \$100	Positive Experience
AGE			
19-29	63%	32%	52%
30-49	90%	48%	61%
50-59	74%	55%	67%
INCOME			
\$50,000 or less	68%	26%	50%
Over \$50,000	78%	54%	66%
EXPERIENCE			
5 years or less	66%	27%	52%
Over 5 years	80%	53%	61%
TRUST			
Trust	79%	36%	72%
No Trust	70%	49%	45%

For participants aging 30 to 49, almost all (90%) had made at least one purchase online. The older a participant, the more likely to make a purchase over \$100 and have a positive online shopping experience.

Participants with a higher yearly income were more likely to make a purchase online, more likely to spend at least \$100, and more likely to have a positive online shopping experience. The same holds true for the more online experience a participant had.

The more trusting the participant, the more likely was the participant to make a purchase and have a positive experience online shopping experience. Interesting to note that more non-trusting participants made more expensive purchases than trusting participants.

7.5.3 Consumer Characteristics and Elements of Online Shopping

Data analysis identified relationships between consumer characteristics, questions 2 - 11, and the preference of one trustworthiness element of an online store over another, questions 12e, 12f, and 12h through 12n; as well as the preference of need or an online element, questions 13a through 13f. These identified relationships are displayed below.

Q2: AGE		
12n	Prof. Look	vs. Contact Info

Q7: LENGTH ONLINE		
12f	Contact Info	vs. Reputation
13c	Need	vs. Reputation
13d	Prof. Look	vs. Need
13e	Contact Info	vs. Need
13f	Product Info	vs. Need

Q3: EDUCATION		
12f	Contact Info	vs. Reputation
12h	Prof. Look	vs. Reputation
12k	Ease of Use	vs. Prof. Look
13b	Ease of Use	vs. Need
13c	Need	vs. Reputation
13d	Prof. Look	vs. Need
13e	Contact Info	vs. Need

Q8: BROWSE		
12i	Reputation	vs. Price

Q4: INCOME		
13e	Contact Info	vs. Need

Q9: PURCHASE		
12k	Ease of Use	vs. Prof. Look

Q5: TRUST		
12l	Price	vs. Prof. Look
12n	Prof. Look	vs. Contact Info
13c	Need	vs. Reputation

Q10: MOST EXPENSIVE PURCHASE		
12j	Contact Info	vs. Ease of Use
13e	Contact Info	vs. Need

Q6: FREQUENCY ONLINE		
12m	Product Info	vs. Ease of Use
13b	Ease of Use	vs. Need
13c	Need	vs. Reputation
13d	Prof. Look	vs. Need
13e	Contact Info	vs. Need

Q11: POSITIVE ONLINE EXPERIENCE		
12e	Prof. Look	vs. Product Info
12k	Ease of Use	vs. Prof. Look
12m	Product Info	vs. Ease of Use
13a	Need	vs. Price

No Consumer Char. Relationship		
12a	Reputation	vs. Product Info
12b	Product Info	vs. Contact Info
12c	Price	vs. Product Info
12d	Ease of Use	vs. Price
12g	Price	vs. Contact Info
12o	Ease of Use	vs. Reputation

There was no statistical difference in the answers to questions 12 and 13 (preference of elements of online shopping) in relationship to gender (question 1). Also, the “No Consumer Char. Relationship” table above identifies questions 12 and 13 that did not have a relationship with any of the questions 2-11 (consumer characteristics).

Age

The results showed that there was a relationship between age (if 60 and older was excluded) and the choice of professional look versus visibility of contact information (12n). In all age groups, more participants preferred contact information over professional look. However, for participants in the 30-49 age group, more than expected (if there was no relationship between age and question 12n) preferred professional look over contact information.

Education

Question 3, which asked participants their level of education, was found to be related to the way 7 questions were answered, questions 12f, 12h, 12k, and 13b through 13e. For question 12f, those with some college education were unlike the rest of the participants with either less or more education. More participants with some college education than expected preferred contact information over reputation.

In all education categories, more participants preferred reputation over professional look (question 12h). However, only in the some college education category did more participants than expected prefer professional look over reputation.

Overall, in question 12k, participants with at least some college education preferred ease of use over professional look. But those who did not have a college degree preferred professional look more than expected.

All education categories preferred need over ease of use (question 13b). Those with some college education and those with a college degree preferred ease of use more than expected. While high school graduates and post graduates answered very similarly in their majority preference of need.

For question 13c, all education groups preferred reputation over need. Those without a college degree preferred need over reputation more than expected. For question 13d, all groups preferred need over professional look. Those without a college degree preferred professional look more than expected.

Those participants without a college degree preferred contact information over need (question 13e) more than expected. While those participants with a degree preferred need more than expected.

Income

Income only showed a relationship in the way question 13e was answered by the participants. All income groups, except the \$75,000 or less and over \$100,000 preferred contact information over need.

Trust

For both trusting and non-trusting participants, the majority selected price of products over the professional look of an online store (question 12l). However, more than expected trusting participants preferred professional look, while more than expected non-trusting participants preferred price.

Both trusting and non-trusting participants preferred contact information over professional look (question 12n). However, more trusting participants than expected preferred

professional look and more non-trusting participants than expected preferred contact information.

Both trusting and non-trusting participants preferred reputation over need (question 13c). But, more trusting participants than expected preferred need while more non-trusting participants than expected preferred reputation.

Frequency Online

Data analysis identified relationships between how often a participant gets online to how questions 12m and 13b through 13e were answered. For question 12m, those participants who accessed the internet several times a week or more preferred product information over ease of use.

For those participants who accessed the internet at least once a day, more than expected preferred need over ease of use (question 13b), reputation (question 13c), and professional look (question 13d).

Only those participants who accessed the web several times a day preferred need over contact info more than expected (question 13e).

Online History

When looking at how long participants have been using the internet, there was a clear division between participants who had been online for 5 years or less and those online for over 5 years. For those participants who have been accessing the internet for over 5 years, more than expected preferred reputation over contact info (question 12f).

For questions 13c through 13f, those participants who have been accessing the internet for over 5 years, selected need more than expected over reputation, professional look, contact information and product information.

Browsing Online

Question 12i asked participants which element of online shopping was more important in determining the trustworthiness of an online store: price of products or reputation of the online store. For participants who browsed online several times a week or more, more than expected preferred price over reputation.

Buying Online

For those who bought products online about once a week, more than expected preferred professional look over ease of use (question 12k). For those who bought about once a month, more than expected preferred ease of use.

Most Expensive Online Purchase

Those participants whose most expensive item was over \$100, more than expected preferred ease of use over contact information (question 12j). Also, those same participants whose most expensive item was over \$100, more than expected preferred need over contact information (question 13e).

Online Experience

For those participants who had a positive online shopping experience, more than expected preferred professional look over product information (question 12e) and more than

expected preferred need over price (question 13a). While those who did not, more than expected preferred both product information over professional look and price over need.

For all participants, more preferred ease of use over professional look. For those who stated somewhat, more than expected preferred professional look over ease of use. For the rest of the participants, more than expected preferred ease of use (question 12k). Also, those participants who answered somewhat, more than expected preferred ease of use over product information. While the rest of the participants, more than expected preferred product information (question 12m).

7.5.4 Relative Importance of Elements of Online Shopping

From the chi-square goodness-of-fit tests done on questions 12a-12o, the null hypothesis that there was no difference between the two choices was rejected for all questions except 12d, 12g, and 12j. There was no statistical difference between ease of use and price (12d), between price and contact information (12g), and between contact information and ease of use (12j).

Also, from the chi-square goodness-of-fit tests done on questions 13a-13f, the null hypothesis that there was no difference between the two choices was rejected for all questions except 13a, 13e, and 13f. There was no statistical difference between need and price (13a), between contact information and need (13e), and between product information and need (13f).

Question 13 was created based on the observational study, where it was seen if a participant needed an item online, not much else mattered. It was expected that the majority of questionnaire participants would select need over the other elements of online

shopping. Even though this was not the case for all parts of question 13, results from data analysis already presented have shown consumer characteristics affect how question 13 was answered. It may be that the participants' characteristics in the observational study were those where need was more important.

The professional look of an online store was the least important element of determining the trustworthiness of an online store when compared to all the other elements. Ease of use was more important than professional look and not as important as product information and store reputation. This is consistent with what was seen in the observational study.

Detailed product information was more important than the professional look and ease of use of an online store. Detailed product information was less important in determining the trustworthiness of an online store than price, contact information, and reputation. Reputation was the most important element in determining the trustworthiness of an online store followed by contact information. There was no statistical difference between price and ease of use, price and contact information, and contact information and ease of use.

Need of a product was more important than ease of use and professional look of an online store, but not as important as the reputation of an online store. There was no statistical difference between need and price, need and contact information, and need and product information.

The questionnaire has shown that consumer characteristics play a large part in what elements of an online store are important in determining its trustworthiness. Some of the results of the questionnaire were in conflict with what was observed in the observational study. This is likely due to the observational study's participants' characteristics.

The results of the questionnaire have also helped order the general importance of online shopping elements of trustworthiness. This ordering will enhance the conceptual model.

CHAPTER 8

CONCEPTUAL MODEL OF TRUSTWORTHINESS ONLINE REVISITED

The conceptual model of trustworthiness online was developed from the current literature and then enhanced by the observational study. The conceptual model identified the situation needed for trustworthiness to be of issue when shopping online, the factors that affect the trustworthiness of an online store, and indicators or outcomes of consumers perceiving an online store to be trustworthy.

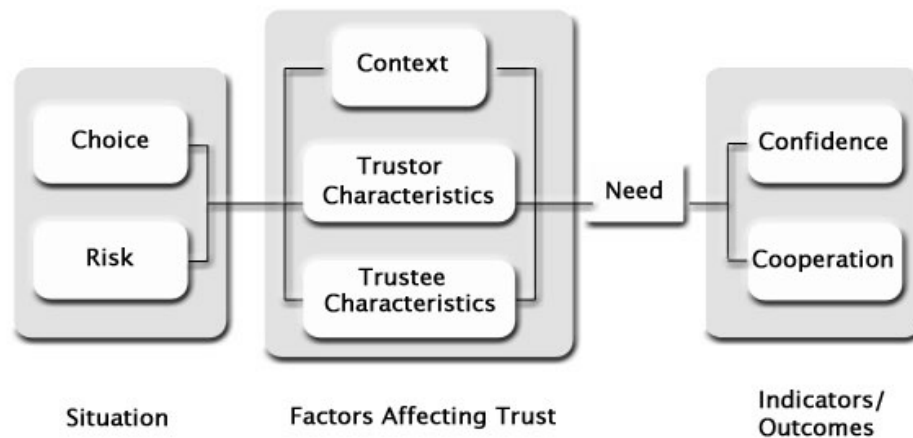


Figure 8.1: Conceptual Model of Trustworthiness Online

The questionnaire conducted validated the conceptual model. It focused on the trustor and trustee characteristics of the model, their relationships with each other, and the relative importance of trustee characteristics.

The questionnaire proved that trustor characteristics affect the perceived trustworthiness of an online store. Based on what type of consumer an online store is targeting, different elements of the online store will be more important in instilling a sense of trustworthiness. Age, education, income, and online experience were trustor (consumer) characteristics that affect an online store's perceived trustworthiness.

Past online experience can be broken down into how often a consumer is online, how long the consumer has been using the internet, how often the consumer browses online, how often the consumer makes a purchase online, the most expensive item a consumer has purchased online, and overall past online experience. This emphasizes to online merchants how important it is to know their customers. Age, education, and income may be the easiest to gauge of consumers purchasing a particular type of product, while the other elements may be difficult to learn. One way is to have customers fill out a demographic survey. Knowing what type of consumer the online merchant wants to target can help the merchant in tailoring his online store. Even if a merchant does not have a specific target audience of consumers, just knowing that these characteristics have a relationship to perceived trustworthiness of an online store is important.

The questionnaire identified the relative importance of different trustee or online merchant characteristics. The most important element of trustworthiness is the reputation of an online store. The second most important element was visibility of contact information on the online store's website. Honesty of an online merchant can be shown through the ability to contact and converse with the merchant, be it via email, phone, or at a physical location.

The least important element was the professional look of the online store. While this is not to say that a professional look is not important, having the most aesthetically pleasing website is the least effective way to exude trustworthiness to consumers. Ease of use was the second least important element. Consumers definitely need to be able to navigate an online store, search and find products, and be able to checkout. As long as the website is functional, anything else extra usability-wise is just that, extra.

Price and product info are also very important and fell somewhere between contact information and usability. Although, the observational study found that product information was more important than price.

The questionnaire also looked at the need element of the conceptual model. The questionnaire identified an additional relationship between trustor characteristics and the need of a product. Based on consumer characteristics, it is possible that the need of an item is so great that none of the trustee characteristics are as important.

The following table summarizes the elements of the conceptual model for trustworthiness in online stores.

Situation	
Choice	Thousands of merchants and retailers online
Risk	Financial loss, possible loss of privacy, identity theft, late arrival of merchandise, inaccurate product descriptions
Factors Affecting Trust	
Context	Certain products involve a lesser degree of trust when purchasing online than others. Example: books and cds are easier to purchase online than clothing, more expensive items involve more risk than less expensive items.
Trustor Characteristics	
- Demographics	Age, education, and income affect a consumer's perception of an online store's trustworthiness.
- Disposition to Trust	A high disposition to trust is more likely to perceive online merchants as trustworthy than a consumer with a lower disposition to trust.
- Past Experience	Online experience can affect the perceived trustworthiness of an online merchant. Also, previous experiences with online shopping will affect future perceptions.
Trustee Characteristics	
- Reputation	Other consumer experiences can affect a merchant's perceived trustworthiness. Reputation is the most important element of trustworthiness of an online store.
- Honesty	Portrayed by providing accurate product descriptions and unbiased product reviews and by visibility of contact information. Visibility of contact information is the second most important element of trustworthiness of an online store.
- Intentions	Shown by the price of products for sale. Discounts, specials, unbiased product reviews give the consumer the feeling that the merchant has good intentions and is concerned about the consumer.
- Competence	Displayed by the merchant by providing detailed and accurate product descriptions.
- Predictability - Reliability - Dependability	All can be tied to the usability of an online merchant. Usability is the second least important element of trustworthiness of an online store.
- Credibility	Shown by the professional look of the website of the online merchant. Professional look of the website is the least most important element of trustworthiness of an online store.
Need	
	If the need for an item is so great, this need may overshadow the importance of the trustworthiness of an online merchant. Also, an online merchant may be trustworthy, but consumers may never have a need to purchase a product from that merchant.
Indicators/Outcomes	
Cooperation	Consumer pays for an item and the merchant supplies the item.
Confidence	Once a transaction takes place between a consumer and an online merchant, that consumer now has a level of confidence in the merchant based on that experience.

Figure 8.2: Elements of Trustworthiness Online

CHAPTER 9

CONCLUSIONS AND FUTURE WORK

This research defined a conceptual model for trustworthiness in online stores. This conceptual model was developed from the current literature and validated by both an observational study and a questionnaire. The combination of both qualitative and quantitative data provided insight into the online shopping experience, identifying relationships between consumers and elements of online shopping.

With the use of the observational study, for the first time, real consumers were observed making real purchases online. This new methodology can be used in future research of e-commerce.

A large amount of data was obtained during both the observational and questionnaire study. Future work can include taking a deeper look at interface elements of each online store visited during the observational study. Also, a “where are they now” look can take the design of the online stores visited during the observational study and comparing and contrasting it to the current design of stores today. The study could be run looking at the online shopping experience in general and results could be used to make online shopping more enjoyable and make online shopping easier for consumers. In retrospect, when conducted again, the study should keep in contact with the observational study participants and interview them after their item arrives, giving a full and complete view of the purchase experience from start to finish. Finally, using the conceptual model presented here, guidelines can be created for merchants in creating online stores perceived trustworthy by consumers.

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APPENDIX A

TABLE STATISTICS

A.1 Gender

Gender and Q12a

Observed Counts	Reputation	Product Info	
Male	68	39	
Female	83	37	
Expected Counts	Reputation	Product Info	
Male	71.18	35.82	
Female	79.82	40.18	
Test Statistics	Value	df	p-value
Pearson Chi-Square	0.801	1	0.371
Likelihood Ratio Chi-Square	0.800	1	0.371
Null Hypothesis (Ho) : No Gender difference for Q12a.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Gender and Q12b

Observed Counts	Product Info	Contact Info	
Male	39	68	
Female	52	68	
Expected Counts	Product Info	Contact Info	
Male	42.89	64.11	
Female	48.11	71.89	
Test Statistics	Value	df	p-value
Pearson Chi-Square	1.116	1	0.291
Likelihood Ratio Chi-Square	1.119	1	0.290
Null Hypothesis (Ho) : No Gender difference for Q12b.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Gender and Q12c

Observed Counts	Price	Product Info	
Male	61	44	
Female	75	45	
Expected Counts	Price	Product Info	
Male	63.47	41.53	
Female	72.53	47.47	
Test Statistics	Value	df	p-value
Pearson Chi-Square	0.454	1	0.500
Likelihood Ratio Chi-Square	0.454	1	0.500
Null Hypothesis (Ho) : No Gender difference for Q12c.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Gender and Q12d

Observed Counts	Ease of Use	Price	
Male	54	53	
Female	62	58	
Expected Counts	Ease of Use	Price	
Male	54.68	52.32	
Female	61.32	58.68	
Test Statistics	Value	df	p-value
Pearson Chi-Square	0.033	1	0.857
Likelihood Ratio Chi-Square	0.033	1	0.857
Null Hypothesis (Ho) : No Gender difference for Q12d.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Gender and Q12e

Observed Counts	Prof. Look	Product Info	
Male	44	62	
Female	41	79	
Expected Counts	Prof. Look	Product Info	
Male	39.87	66.13	
Female	45.13	74.87	
Test Statistics	Value	df	p-value
Pearson Chi-Square	1.293	1	0.255
Likelihood Ratio Chi-Square	1.293	1	0.256
Null Hypothesis (Ho) : No Gender difference for Q12e.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Gender and Q12f

Observed Counts	Contact Info	Reputation	
Male	39	68	
Female	49	70	
Expected Counts	Contact Info	Reputation	
Male	41.66	65.34	
Female	46.34	72.66	
Test Statistics	Value	df	p-value
Pearson Chi-Square	0.530	1	0.467
Likelihood Ratio Chi-Square	0.530	1	0.466
Null Hypothesis (Ho) : No Gender difference for Q12f.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Gender and Q12g

Observed Counts	Price	Contact Info	
Male	45	62	
Female	57	63	
Expected Counts	Price	Contact Info	
Male	48.08	58.92	
Female	53.92	66.08	
Test Statistics	Value	df	p-value
Pearson Chi-Square	0.677	1	0.410
Likelihood Ratio Chi-Square	0.678	1	0.410
Null Hypothesis (Ho) : No Gender difference for Q12g.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Gender and Q12h

Observed Counts	Prof. Look	Reputation	
Male	24	83	
Female	24	96	
Expected Counts	Prof. Look	Reputation	
Male	22.63	84.37	
Female	25.37	94.63	
Test Statistics	Value	df	p-value
Pearson Chi-Square	0.200	1	0.654
Likelihood Ratio Chi-Square	0.200	1	0.655
Null Hypothesis (Ho) : No Gender difference for Q12h.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Gender and Q12i

Observed Counts	Reputation	Price	
Male	62	45	
Female	68	52	
Expected Counts	Reputation	Price	
Male	61.28	45.72	
Female	68.72	51.28	
Test Statistics	Value	df	p-value
Pearson Chi-Square	0.038	1	0.846
Likelihood Ratio Chi-Square	0.038	1	0.846
Null Hypothesis (Ho) : No Gender difference for Q12i.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Gender and Q12j

Observed Counts	Contact Info	Ease of Use	
Male	58	49	
Female	62	58	
Expected Counts	Contact Info	Ease of Use	
Male	56.56	50.44	
Female	63.44	56.56	
Test Statistics	Value	df	p-value
Pearson Chi-Square	0.146	1	0.702
Likelihood Ratio Chi-Square	0.146	1	0.702
Null Hypothesis (Ho) : No Gender difference for Q12j.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Gender and Q12k

Observed Counts	Ease of Use	Prof. Look	
Male	69	38	
Female	82	38	
Expected Counts	Ease of Use	Prof. Look	
Male	71.18	35.82	
Female	79.82	40.18	
Test Statistics	Value	df	p-value
Pearson Chi-Square	0.376	1	0.540
Likelihood Ratio Chi-Square	0.376	1	0.540
Null Hypothesis (Ho) : No Gender difference for Q12k.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Gender and Q12I

Observed Counts	Price	Prof. Look	
Male	76	30	
Female	91	27	
Expected Counts	Price	Prof. Look	
Male	79.03	26.97	
Female	87.97	30.03	
Test Statistics	Value	df	p-value
Pearson Chi-Square	0.865	1	0.352
Likelihood Ratio Chi-Square	0.864	1	0.353
Null Hypothesis (Ho) : No Gender difference for Q12I.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Gender and Q12m

Observed Counts	Product Info	Ease of Use	
Male	68	39	
Female	72	48	
Expected Counts	Product Info	Ease of Use	
Male	65.99	41.01	
Female	74.01	45.99	
Test Statistics	Value	df	p-value
Pearson Chi-Square	0.302	1	0.583
Likelihood Ratio Chi-Square	0.302	1	0.583
Null Hypothesis (Ho) : No Gender difference for Q12m.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Gender and Q12n

Observed Counts	Prof. Look	Contact Info	
Male	40	67	
Female	35	85	
Expected Counts	Prof. Look	Contact Info	
Male	35.35	71.65	
Female	39.65	80.35	
Test Statistics	Value	df	p-value
Pearson Chi-Square	1.726	1	0.189
Likelihood Ratio Chi-Square	1.725	1	0.189
Null Hypothesis (Ho) : No Gender difference for Q12n.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Gender and Q12o

Observed Counts	Ease of Use	Reputation	
Male	29	78	
Female	38	82	
Expected Counts	Ease of Use	Reputation	
Male	31.58	75.42	
Female	35.42	84.58	
Test Statistics	Value	df	p-value
Pearson Chi-Square	0.566	1	0.452
Likelihood Ratio Chi-Square	0.568	1	0.452
Null Hypothesis (Ho) : No Gender difference for Q12o.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Gender and Q13a

Observed Counts	Need	Price	
Male	47	60	
Female	57	63	
Expected Counts	Need	Price	
Male	49.02	57.98	
Female	54.98	65.02	
Test Statistics	Value	df	p-value
Pearson Chi-Square	0.291	1	0.589
Likelihood Ratio Chi-Square	0.291	1	0.589
Null Hypothesis (Ho) : No Gender difference for Q13a.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Gender and Q13b

Observed Counts	Ease of Use	Need	
Male	42	65	
Female	49	70	
Expected Counts	Ease of Use	Need	
Male	43.08	63.92	
Female	47.92	71.08	
Test Statistics	Value	df	p-value
Pearson Chi-Square	0.087	1	0.768
Likelihood Ratio Chi-Square	0.087	1	0.768
Null Hypothesis (Ho) : No Gender difference for Q13b.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Gender and Q13c

Observed Counts	Need	Reputation	
Male	40	67	
Female	46	74	
Expected Counts	Need	Reputation	
Male	40.54	66.46	
Female	45.46	74.54	
Test Statistics	Value	df	p-value
Pearson Chi-Square	0.022	1	0.883
Likelihood Ratio Chi-Square	0.022	1	0.883
Null Hypothesis (Ho) : No Gender difference for Q13c.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Gender and Q13d

Observed Counts	Prof. Look	Need	
Male	38	69	
Female	39	81	
Expected Counts	Prof. Look	Need	
Male	36.30	70.70	
Female	40.70	79.30	
Test Statistics	Value	df	p-value
Pearson Chi-Square	0.229	1	0.632
Likelihood Ratio Chi-Square	0.229	1	0.632
Null Hypothesis (Ho) : No Gender difference for Q13d.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Gender and Q13e

Observed Counts	Contact Info	Need	
Male	59	48	
Female	65	55	
Expected Counts	Contact Info	Need	
Male	58.45	48.55	
Female	65.55	54.45	
Test Statistics	Value	df	p-value
Pearson Chi-Square	0.022	1	0.883
Likelihood Ratio Chi-Square	0.022	1	0.883
Null Hypothesis (Ho) : No Gender difference for Q13e.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Gender and Q13f

Observed Counts	Product Info	Need	
Male	65	42	
Female	59	61	
Expected Counts	Product Info	Need	
Male	58.45	48.55	
Female	65.55	54.45	
Test Statistics	Value	df	p-value
Pearson Chi-Square	3.061	1	0.080
Likelihood Ratio Chi-Square	3.071	1	0.080
Null Hypothesis (Ho) : No Gender difference for Q13f.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

A.2 Age

Age and Q12a

Observed Counts	Reputation	Product Info	
19-29	56	37	
30-49	60	29	
50-59	30	8	
Expected Counts	Reputation	Product Info	
19-29	61.72	31.28	
30-49	59.06	29.94	
50-59	25.22	12.78	
Test Statistics	Value	df	p-value
Pearson Chi-Square	4.315	2	0.116
Likelihood Ratio Chi-Square	4.499	2	0.105
Null Hypothesis (Ho) : No Age difference for Q12a.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Age and Q12b

Observed Counts	Product Info	Contact Info	
19-29	37	56	
30-49	37	52	
50-59	13	25	
Expected Counts	Product Info	Contact Info	
19-29	36.78	56.22	
30-49	35.20	53.80	
50-59	15.03	22.97	
Test Statistics	Value	df	p-value
Pearson Chi-Square	0.608	2	0.738
Likelihood Ratio Chi-Square	0.615	2	0.735
Null Hypothesis (Ho) : No Age difference for Q12b.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Age and Q12c

Observed Counts	Price	Product Info	
19-29	57	35	
30-49	51	38	
50-59	24	13	
Expected Counts	Price	Product Info	
19-29	55.71	36.29	
30-49	53.89	35.11	
50-59	22.40	14.60	
Test Statistics	Value	df	p-value
Pearson Chi-Square	0.757	2	0.685
Likelihood Ratio Chi-Square	0.758	2	0.684
Null Hypothesis (Ho) : No Age difference for Q12c.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Age and Q12d

Observed Counts	Ease of Use	Price	
19-29	45	48	
30-49	50	39	
50-59	17	21	
Expected Counts	Ease of Use	Price	
19-29	47.35	45.65	
30-49	45.31	43.69	
50-59	19.35	18.65	
Test Statistics	Value	df	p-value
Pearson Chi-Square	1.805	2	0.406
Likelihood Ratio Chi-Square	1.809	2	0.405
Null Hypothesis (Ho) : No Age difference for Q12d.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Age and Q12e

Observed Counts	Prof. Look	Product Info	
19-29	37	56	
30-49	35	53	
50-59	11	27	
Expected Counts	Prof. Look	Product Info	
19-29	35.25	57.75	
30-49	33.35	54.65	
50-59	14.40	23.60	
Test Statistics	Value	df	p-value
Pearson Chi-Square	1.566	2	0.457
Likelihood Ratio Chi-Square	1.614	2	0.446
Null Hypothesis (Ho) : No Age difference for Q12e.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Age and Q12f

Observed Counts	Contact Info	Reputation	
19-29	35	57	
30-49	36	53	
50-59	14	24	
Expected Counts	Contact Info	Reputation	
19-29	35.71	56.29	
30-49	34.54	54.46	
50-59	14.75	23.25	
Test Statistics	Value	df	p-value
Pearson Chi-Square	0.185	2	0.911
Likelihood Ratio Chi-Square	0.185	2	0.911
Null Hypothesis (Ho) : No Age difference for Q12f.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Age and Q12g

Observed Counts	Price	Contact Info	
19-29	36	57	
30-49	43	46	
50-59	19	19	
Expected Counts	Price	Contact Info	
19-29	41.43	51.57	
30-49	39.65	49.35	
50-59	16.93	21.07	
Test Statistics	Value	df	p-value
Pearson Chi-Square	2.252	2	0.324
Likelihood Ratio Chi-Square	2.261	2	0.323
Null Hypothesis (Ho) : No Age difference for Q12g.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Age and Q12h

Observed Counts	Prof. Look	Reputation	
19-29	22	71	
30-49	18	71	
50-59	7	31	
Expected Counts	Prof. Look	Reputation	
19-29	19.87	73.13	
30-49	19.01	69.99	
50-59	8.12	29.88	
Test Statistics	Value	df	p-value
Pearson Chi-Square	0.555	2	0.758
Likelihood Ratio Chi-Square	0.556	2	0.757
Null Hypothesis (Ho) : No Age difference for Q12h.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Age and Q12i

Observed Counts	Reputation	Price	
19-29	51	42	
30-49	55	34	
50-59	19	19	
Expected Counts	Reputation	Price	
19-29	52.84	40.16	
30-49	50.57	38.43	
50-59	21.59	16.41	
Test Statistics	Value	df	p-value
Pearson Chi-Square	1.768	2	0.413
Likelihood Ratio Chi-Square	1.771	2	0.413
Null Hypothesis (Ho) : No Age difference for Q12i.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Age and Q12j

Observed Counts	Contact Info	Price	
19-29	57	36	
30-49	43	46	
50-59	17	21	
Expected Counts	Contact Info	Price	
19-29	49.46	43.54	
30-49	47.33	41.67	
50-59	20.21	17.79	
Test Statistics	Value	df	p-value
Pearson Chi-Square	4.391	2	0.111
Likelihood Ratio Chi-Square	4.415	2	0.110
Null Hypothesis (Ho) : No Age difference for Q12j.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Age and Q12k

Observed Counts	Ease of Use	Prof. Look	
19-29	54	39	
30-49	63	26	
50-59	28	10	
Expected Counts	Ease of Use	Prof. Look	
19-29	61.30	31.70	
30-49	58.66	30.34	
50-59	25.05	12.95	
Test Statistics	Value	df	p-value
Pearson Chi-Square	4.512	2	0.105
Likelihood Ratio Chi-Square	4.502	2	0.105
Null Hypothesis (Ho) : No Age difference for Q12k.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Age and Q12l

Observed Counts	Price	Prof. Look	
19-29	69	22	
30-49	62	26	
50-59	31	7	
Expected Counts	Price	Prof. Look	
19-29	67.94	23.06	
30-49	65.70	22.30	
50-59	28.37	9.63	
Test Statistics	Value	df	p-value
Pearson Chi-Square	1.849	2	0.397
Likelihood Ratio Chi-Square	1.892	2	0.388
Null Hypothesis (Ho) : No Age difference for Q12l.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Age and Q12m

Observed Counts	Product Info	Ease of Use	
19-29	58	35	
30-49	58	31	
50-59	20	18	
Expected Counts	Product Info	Ease of Use	
19-29	57.49	35.51	
30-49	55.02	33.98	
50-59	23.49	14.51	
Test Statistics	Value	df	p-value
Pearson Chi-Square	1.794	2	0.408
Likelihood Ratio Chi-Square	1.766	2	0.413
Null Hypothesis (Ho) : No Age difference for Q12m.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Age and Q12n

Observed Counts	Prof. Look	Contact Info	
19-29	28	65	
30-49	36	53	
50-59	7	31	
Expected Counts	Prof. Look	Contact Info	
19-29	30.01	62.99	
30-49	28.72	60.28	
50-59	12.26	25.74	
Test Statistics	Value	df	p-value
Pearson Chi-Square	6.258	2	0.044
Likelihood Ratio Chi-Square	6.510	2	0.039
Null Hypothesis (Ho) : No Age difference for Q12n.			
The p-value is less than 0.05. Therefore REJECT the Ho.			

Age and Q12o

Observed Counts	Ease of Use	Reputation	
19-29	27	66	
30-49	28	61	
50-59	11	27	
Expected Counts	Ease of Use	Reputation	
19-29	27.90	65.10	
30-49	26.70	62.30	
50-59	11.40	26.60	
Test Statistics	Value	df	p-value
Pearson Chi-Square	0.152	2	0.927
Likelihood Ratio Chi-Square	0.152	2	0.927
Null Hypothesis (Ho) : No Age difference for Q12o.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Age and Q13a

Observed Counts	Need	Price	
19-29	43	50	
30-49	40	49	
50-59	19	19	
Expected Counts	Need	Price	
19-29	43.12	49.88	
30-49	41.26	47.74	
50-59	17.62	20.38	
Test Statistics	Value	df	p-value
Pearson Chi-Square	0.275	2	0.872
Likelihood Ratio Chi-Square	0.274	2	0.872
Null Hypothesis (Ho) : No Age difference for Q13a.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Age and Q13b

Observed Counts	Ease of Use	Need	
19-29	31	61	
30-49	44	45	
50-59	13	25	
Expected Counts	Ease of Use	Need	
19-29	36.97	55.03	
30-49	35.76	53.24	
50-59	15.27	22.73	
Test Statistics	Value	df	p-value
Pearson Chi-Square	5.347	2	0.069
Likelihood Ratio Chi-Square	5.332	2	0.070
Null Hypothesis (Ho) : No Age difference for Q13b.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Age and Q13c

Observed Counts	Need	Reputation	
19-29	34	59	
30-49	35	54	
50-59	16	22	
Expected Counts	Need	Reputation	
19-29	35.93	57.07	
30-49	34.39	54.61	
50-59	14.68	23.32	
Test Statistics	Value	df	p-value
Pearson Chi-Square	0.380	2	0.827
Likelihood Ratio Chi-Square	0.379	2	0.827
Null Hypothesis (Ho) : No Age difference for Q13c.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Age and Q13d

Observed Counts	Prof. Look	Need	
19-29	33	60	
30-49	30	59	
50-59	9	29	
Expected Counts	Prof. Look	Need	
19-29	30.44	62.56	
30-49	29.13	59.87	
50-59	12.44	25.56	
Test Statistics	Value	df	p-value
Pearson Chi-Square	1.771	2	0.412
Likelihood Ratio Chi-Square	1.849	2	0.397
Null Hypothesis (Ho) : No Age difference for Q13d.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Age and Q13e

Observed Counts	Contact Info	Need	
19-29	53	40	
30-49	46	43	
50-59	20	18	
Expected Counts	Contact Info	Need	
19-29	50.30	42.70	
30-49	48.14	40.86	
50-59	20.55	17.45	
Test Statistics	Value	df	p-value
Pearson Chi-Square	0.555	2	0.758
Likelihood Ratio Chi-Square	0.555	2	0.758
Null Hypothesis (Ho) : No Age difference for Q13e.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Age and Q13f

Observed Counts	Product Info	Need	
19-29	55	38	
30-49	46	43	
50-59	17	21	
Expected Counts	Product Info	Need	
19-29	49.88	43.12	
30-49	47.74	41.26	
50-59	20.38	17.62	
Test Statistics	Value	df	p-value
Pearson Chi-Square	2.479	2	0.290
Likelihood Ratio Chi-Square	2.483	2	0.289
Null Hypothesis (Ho) : No Age difference for Q13f.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

A.3 Education

Education and Q12a

Observed Counts	Reputation	Product Info	
High School Graduate	18	11	
Some College	44	29	
Post College	65	28	
Post Graduate	22	8	
Expected Counts	Reputation	Product Info	
High School Graduate	19.20	9.80	
Some College	48.34	24.66	
Post College	61.59	31.41	
Post Graduate	19.87	10.13	
Test Statistics	Value	df	p-value
Pearson Chi-Square	2.617	3	0.455
Likelihood Ratio Chi-Square	2.622	3	0.454
Null Hypothesis (Ho) : No Education difference for Q12a.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Education and Q12b

Observed Counts	Product Info	Contact Info	
High School Graduate	12	17	
Some College	26	47	
Post College	42	51	
Post Graduate	10	20	
Expected Counts	Product Info	Contact Info	
High School Graduate	11.60	17.40	
Some College	29.20	43.80	
Post College	37.20	55.80	
Post Graduate	12.00	18.00	
Test Statistics	Value	df	p-value
Pearson Chi-Square	2.195	3	0.533
Likelihood Ratio Chi-Square	2.203	3	0.531
Null Hypothesis (Ho) : No Education difference for Q12b.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Education and Q12c

Observed Counts	Price	Product Info	
High School Graduate	16	13	
Some College	42	30	
Post College	59	33	
Post Graduate	18	12	
Expected Counts	Price	Product Info	
High School Graduate	17.56	11.44	
Some College	43.59	28.41	
Post College	55.70	36.30	
Post Graduate	18.16	11.84	
Test Statistics	Value	df	p-value
Pearson Chi-Square	0.997	3	0.802
Likelihood Ratio Chi-Square	0.997	3	0.802
Null Hypothesis (Ho) : No Education difference for Q12c.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Education and Q12d

Observed Counts	Ease of Use	Price	
High School Graduate	11	18	
Some College	41	32	
Post College	48	45	
Post Graduate	15	15	
Expected Counts	Ease of Use	Price	
High School Graduate	14.82	14.18	
Some College	37.31	35.69	
Post College	47.53	45.47	
Post Graduate	15.33	14.67	
Test Statistics	Value	df	p-value
Pearson Chi-Square	2.786	3	0.426
Likelihood Ratio Chi-Square	2.805	3	0.423
Null Hypothesis (Ho) : No Education difference for Q12d.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Education and Q12e

Observed Counts	Prof. Look	Product Info	
High School Graduate	7	22	
Some College	32	40	
Post College	33	60	
Post Graduate	11	19	
Expected Counts	Prof. Look	Product Info	
High School Graduate	10.75	18.25	
Some College	26.68	45.32	
Post College	34.46	58.24	
Post Graduate	11.12	18.88	
Test Statistics	Value	df	p-value
Pearson Chi-Square	3.861	3	0.277
Likelihood Ratio Chi-Square	3.960	3	0.266
Null Hypothesis (Ho) : No Education difference for Q12e.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Education and Q12f

Observed Counts	Contact Info	Reputation	
High School Graduate	11	18	
Some College	39	34	
Post College	30	62	
Post Graduate	7	23	
Expected Counts	Contact Info	Reputation	
High School Graduate	11.26	17.74	
Some College	28.35	44.65	
Post College	35.73	56.27	
Post Graduate	11.65	18.35	
Test Statistics	Value	df	p-value
Pearson Chi-Square	11.088	3	0.011
Likelihood Ratio Chi-Square	11.153	3	0.011
Null Hypothesis (Ho) : No Education difference for Q12f.			
The p-value is less than 0.05. Therefore REJECT the Ho.			

Education and Q12g

Observed Counts	Price	Contact Info	
High School Graduate	12	17	
Some College	31	42	
Post College	44	49	
Post Graduate	14	16	
Expected Counts	Price	Contact Info	
High School Graduate	13.02	15.98	
Some College	32.77	40.23	
Post College	41.75	51.25	
Post Graduate	13.47	16.53	
Test Statistics	Value	df	p-value
Pearson Chi-Square	0.577	3	0.902
Likelihood Ratio Chi-Square	0.577	3	0.902
Null Hypothesis (Ho) : No Education difference for Q12g.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Education and Q12h

Observed Counts	Prof. Look	Reputation	
High School Graduate	6	23	
Some College	23	50	
Post College	17	76	
Post Graduate	2	28	
Expected Counts	Prof. Look	Reputation	
High School Graduate	6.19	22.81	
Some College	15.57	57.43	
Post College	19.84	73.16	
Post Graduate	6.40	23.60	
Test Statistics	Value	df	p-value
Pearson Chi-Square	8.871	3	0.031
Likelihood Ratio Chi-Square	9.553	3	0.023
Null Hypothesis (Ho) : No Education difference for Q12h.			
The p-value is less than 0.05. Therefore REJECT the Ho.			

Education and Q12i

Observed Counts	Reputation	Price	
High School Graduate	16	13	
Some College	40	33	
Post College	52	41	
Post Graduate	21	9	
Expected Counts	Reputation	Price	
High School Graduate	16.63	12.37	
Some College	41.85	31.15	
Post College	53.32	39.68	
Post Graduate	17.20	12.80	
Test Statistics	Value	df	p-value
Pearson Chi-Square	2.292	3	0.514
Likelihood Ratio Chi-Square	2.367	3	0.500
Null Hypothesis (Ho) : No Education difference for Q12i.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Education and Q12j

Observed Counts	Contact Info	Price	
High School Graduate	18	11	
Some College	40	33	
Post College	46	47	
Post Graduate	15	15	
Expected Counts	Contact Info	Price	
High School Graduate	15.34	13.66	
Some College	38.61	34.39	
Post College	49.19	43.81	
Post Graduate	15.87	14.13	
Test Statistics	Value	df	p-value
Pearson Chi-Square	1.626	3	0.654
Likelihood Ratio Chi-Square	1.638	3	0.651
Null Hypothesis (Ho) : No Education difference for Q12j.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Education and Q12k

Observed Counts	Ease of Use	Prof. Look	
High School Graduate	14	15	
Some College	44	29	
Post College	68	25	
Post Graduate	24	6	
Expected Counts	Ease of Use	Prof. Look	
High School Graduate	19.33	9.67	
Some College	48.67	24.33	
Post College	62.00	31.00	
Post Graduate	20.00	10.00	
Test Statistics	Value	df	p-value
Pearson Chi-Square	9.898	3	0.019
Likelihood Ratio Chi-Square	9.877	3	0.020
Null Hypothesis (Ho) : No Education difference for Q12k.			
The p-value is less than 0.05. Therefore REJECT the Ho.			

Education and Q121

Observed Counts	Price	Prof. Look	
High School Graduate	20	8	
Some College	53	19	
Post College	70	22	
Post Graduate	23	7	
Expected Counts	Price	Prof. Look	
High School Graduate	20.94	7.06	
Some College	53.84	18.16	
Post College	68.79	23.21	
Post Graduate	22.43	7.57	
Test Statistics	Value	df	p-value
Pearson Chi-Square	0.359	3	0.949
Likelihood Ratio Chi-Square	0.356	3	0.949
Null Hypothesis (Ho) : No Education difference for Q121.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Education and Q12m

Observed Counts	Product Info	Ease of Use	
High School Graduate	20	9	
Some College	40	33	
Post College	60	33	
Post Graduate	20	10	
Expected Counts	Product Info	Ease of Use	
High School Graduate	18.04	10.96	
Some College	45.42	27.58	
Post College	57.87	35.13	
Post Graduate	18.67	11.33	
Test Statistics	Value	df	p-value
Pearson Chi-Square	2.735	3	0.434
Likelihood Ratio Chi-Square	2.720	3	0.437
Null Hypothesis (Ho) : No Education difference for Q12m.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Education and Q12n

Observed Counts	Prof. Look	Contact Info	
High School Graduate	8	21	
Some College	22	51	
Post College	37	56	
Post Graduate	6	24	
Expected Counts	Prof. Look	Contact Info	
High School Graduate	9.41	19.59	
Some College	23.68	49.32	
Post College	30.17	62.83	
Post Graduate	9.73	20.27	
Test Statistics	Value	df	p-value
Pearson Chi-Square	4.896	3	0.180
Likelihood Ratio Chi-Square	5.021	3	0.170
Null Hypothesis (Ho) : No Education difference for Q12n.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Education and Q12o

Observed Counts	Ease of Use	Reputation	
High School Graduate	7	22	
Some College	24	49	
Post College	29	64	
Post Graduate	7	23	
Expected Counts	Ease of Use	Reputation	
High School Graduate	8.64	20.36	
Some College	21.74	51.26	
Post College	27.69	65.31	
Post Graduate	8.93	21.07	
Test Statistics	Value	df	p-value
Pearson Chi-Square	1.460	3	0.692
Likelihood Ratio Chi-Square	1.500	3	0.682
Null Hypothesis (Ho) : No Education difference for Q12o.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Education and Q13a

Observed Counts	Need	Price	
High School Graduate	10	19	
Some College	30	43	
Post College	47	46	
Post Graduate	16	14	
Expected Counts	Need	Price	
High School Graduate	13.28	15.72	
Some College	33.42	39.58	
Post College	42.57	50.43	
Post Graduate	13.73	16.27	
Test Statistics	Value	df	p-value
Pearson Chi-Square	3.674	3	0.299
Likelihood Ratio Chi-Square	3.705	3	0.295
Null Hypothesis (Ho) : No Education difference for Q13a.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Education and 13b

Observed Counts	Ease of Use	Need	
High School Graduate	6	23	
Some College	32	40	
Post College	44	49	
Post Graduate	7	23	
Expected Counts	Ease of Use	Need	
High School Graduate	11.52	17.48	
Some College	28.61	43.39	
Post College	36.95	56.05	
Post Graduate	11.92	18.08	
Test Statistics	Value	df	p-value
Pearson Chi-Square	10.660	3	0.014
Likelihood Ratio Chi-Square	11.271	3	0.010
Null Hypothesis (Ho) : No Education difference for Q13b.			
The p-value is less than 0.05. Therefore REJECT the Ho.			

Education and Q13c

Observed Counts	Need	Reputation	
High School Graduate	8	21	
Some College	22	51	
Post College	37	56	
Post Graduate	18	12	
Expected Counts	Need	Reputation	
High School Graduate	10.96	18.04	
Some College	27.58	45.42	
Post College	35.13	57.87	
Post Graduate	11.33	18.67	
Test Statistics	Value	df	p-value
Pearson Chi-Square	9.556	3	0.023
Likelihood Ratio Chi-Square	9.421	3	0.024
Null Hypothesis (Ho) : No Education difference for Q13c.			
The p-value is less than 0.05. Therefore REJECT the Ho.			

Education and Q13d

Observed Counts	Prof. Look	Need	
High School Graduate	10	19	
Some College	33	40	
Post College	29	64	
Post Graduate	4	26	
Expected Counts	Prof. Look	Need	
High School Graduate	9.80	19.20	
Some College	24.66	48.34	
Post College	31.41	61.59	
Post Graduate	10.13	19.87	
Test Statistics	Value	df	p-value
Pearson Chi-Square	10.154	3	0.017
Likelihood Ratio Chi-Square	10.924	3	0.012
Null Hypothesis (Ho) : No Education difference for Q13d.			
The p-value is less than 0.05. Therefore REJECT the Ho.			

Education and 13e

Observed Counts	Contact Info	Need	
High School Graduate	18	11	
Some College	48	25	
Post College	45	48	
Post Graduate	12	18	
Expected Counts	Contact Info	Need	
High School Graduate	15.85	13.15	
Some College	39.91	33.09	
Post College	50.84	42.16	
Post Graduate	16.40	13.60	
Test Statistics	Value	df	p-value
Pearson Chi-Square	8.346	3	0.039
Likelihood Ratio Chi-Square	8.420	3	0.038
Null Hypothesis (Ho) : No Education difference for Q13e.			
The p-value is less than 0.05. Therefore REJECT the Ho.			

Education and Q13f

Observed Counts	Product Info	Need	
High School Graduate	19	10	
Some College	44	29	
Post College	46	47	
Post Graduate	13	17	
Expected Counts	Product Info	Need	
High School Graduate	15.72	13.28	
Some College	39.58	33.42	
Post College	50.43	42.57	
Post Graduate	16.27	13.73	
Test Statistics	Value	df	p-value
Pearson Chi-Square	4.850	3	0.183
Likelihood Ratio Chi-Square	4.883	3	0.181
Null Hypothesis (Ho) : No Education difference for Q13f.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

A.4 Income

Income and Q12a

Observed Counts	Reputation	Product Info	
\$10,000 or less	24	12	
\$25,000 or less	14	12	
\$50,000 or less	26	21	
\$75,000 or less	18	9	
\$100,000 or less	10	5	
More than \$100,000	19	6	
Expected Counts	Reputation	Product Info	
\$10,000 or less	22.70	13.30	
\$25,000 or less	16.40	9.60	
\$50,000 or less	29.64	17.36	
\$75,000 or less	17.03	9.97	
\$100,000 or less	9.46	5.54	
More than \$100,000	15.77	9.23	
Test Statistics	Value	df	p-value
Pearson Chi-Square	4.390	5	0.495
Likelihood Ratio Chi-Square	4.462	5	0.485
Null Hypothesis (Ho) : No Income difference for Q12a.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Income and Q12b

Observed Counts	Product Info	Contact Info	
\$10,000 or less	11	25	
\$25,000 or less	10	16	
\$50,000 or less	21	26	
\$75,000 or less	10	17	
\$100,000 or less	6	9	
More than \$100,000	15	10	
Expected Counts	Product Info	Contact Info	
\$10,000 or less	14.93	21.07	
\$25,000 or less	10.78	15.22	
\$50,000 or less	19.49	27.51	
\$75,000 or less	11.20	15.80	
\$100,000 or less	6.22	8.78	
More than \$100,000	10.37	14.63	
Test Statistics	Value	df	p-value
Pearson Chi-Square	5.832	5	0.323
Likelihood Ratio Chi-Square	5.829	5	0.323
Null Hypothesis (Ho) : No Income difference for Q12b.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Income and Q12c

Observed Counts	Price	Product Info	
\$10,000 or less	20	15	
\$25,000 or less	16	10	
\$50,000 or less	23	24	
\$75,000 or less	22	5	
\$100,000 or less	8	7	
More than \$100,000	13	12	
Expected Counts	Price	Product Info	
\$10,000 or less	20.40	14.60	
\$25,000 or less	15.15	10.85	
\$50,000 or less	27.39	19.61	
\$75,000 or less	15.74	11.26	
\$100,000 or less	8.74	6.26	
More than \$100,000	14.57	10.43	
Test Statistics	Value	df	p-value
Pearson Chi-Square	8.354	5	0.138
Likelihood Ratio Chi-Square	8.969	5	0.110
Null Hypothesis (Ho) : No Income difference for Q12c.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Income and Q12d

Observed Counts	Ease of Use	Price	
\$10,000 or less	19	17	
\$25,000 or less	12	14	
\$50,000 or less	27	20	
\$75,000 or less	14	13	
\$100,000 or less	6	9	
More than \$100,000	9	16	
Expected Counts	Ease of Use	Price	
\$10,000 or less	17.80	18.20	
\$25,000 or less	12.85	13.15	
\$50,000 or less	23.23	23.77	
\$75,000 or less	13.35	13.65	
\$100,000 or less	7.41	7.59	
More than \$100,000	12.36	12.64	
Test Statistics	Value	df	p-value
Pearson Chi-Square	3.882	5	0.566
Likelihood Ratio Chi-Square	3.916	5	0.562
Null Hypothesis (Ho) : No Income difference for Q12d.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Income and Q12e

Observed Counts	Prof. Look	Product Info	
\$10,000 or less	16	20	
\$25,000 or less	7	19	
\$50,000 or less	16	31	
\$75,000 or less	11	16	
\$100,000 or less	6	9	
More than \$100,000	9	15	
Expected Counts	Prof. Look	Product Info	
\$10,000 or less	13.37	22.63	
\$25,000 or less	9.66	16.34	
\$50,000 or less	17.46	29.54	
\$75,000 or less	10.03	16.97	
\$100,000 or less	5.57	9.43	
More than \$100,000	8.91	15.09	
Test Statistics	Value	df	p-value
Pearson Chi-Square	2.382	5	0.794
Likelihood Ratio Chi-Square	2.420	5	0.788
Null Hypothesis (Ho) : No Income difference for Q12e.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Income and Q12f

Observed Counts	Contact Info	Reputation	
\$10,000 or less	16	20	
\$25,000 or less	11	15	
\$50,000 or less	24	22	
\$75,000 or less	9	18	
\$100,000 or less	3	12	
More than \$100,000	7	18	
Expected Counts	Contact Info	Reputation	
\$10,000 or less	14.40	21.60	
\$25,000 or less	10.40	15.60	
\$50,000 or less	18.40	27.60	
\$75,000 or less	10.80	16.20	
\$100,000 or less	6.00	9.00	
More than \$100,000	10.00	15.00	
Test Statistics	Value	df	p-value
Pearson Chi-Square	7.695	5	0.174
Likelihood Ratio Chi-Square	7.953	5	0.159
Null Hypothesis (Ho) : No Income difference for Q12f.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Income and Q12g

Observed Counts	Price	Contact Info	
\$10,000 or less	14	22	
\$25,000 or less	11	15	
\$50,000 or less	23	24	
\$75,000 or less	15	12	
\$100,000 or less	7	8	
More than \$100,000	12	13	
Expected Counts	Price	Contact Info	
\$10,000 or less	16.77	19.23	
\$25,000 or less	12.11	13.89	
\$50,000 or less	21.90	25.10	
\$75,000 or less	12.58	14.42	
\$100,000 or less	6.99	8.01	
More than \$100,000	11.65	13.35	
Test Statistics	Value	df	p-value
Pearson Chi-Square	2.046	5	0.843
Likelihood Ratio Chi-Square	2.054	5	0.842
Null Hypothesis (Ho) : No Income difference for Q12g.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Income and Q12h

Observed Counts	Prof. Look	Reputation	
\$10,000 or less	8	28	
\$25,000 or less	3	23	
\$50,000 or less	13	34	
\$75,000 or less	8	19	
\$100,000 or less	2	13	
More than \$100,000	5	20	
Expected Counts	Prof. Look	Reputation	
\$10,000 or less	7.98	28.02	
\$25,000 or less	5.76	20.24	
\$50,000 or less	10.41	36.59	
\$75,000 or less	5.98	21.02	
\$100,000 or less	3.32	11.68	
More than \$100,000	5.54	19.46	
Test Statistics	Value	df	p-value
Pearson Chi-Square	4.143	5	0.529
Likelihood Ratio Chi-Square	4.394	5	0.494
Null Hypothesis (Ho) : No Income difference for Q12h.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Income and Q12i

Observed Counts	Reputation	Price	
\$10,000 or less	21	15	
\$25,000 or less	10	16	
\$50,000 or less	28	19	
\$75,000 or less	13	14	
\$100,000 or less	8	7	
More than \$100,000	17	8	
Expected Counts	Reputation	Price	
\$10,000 or less	19.84	16.16	
\$25,000 or less	14.33	11.67	
\$50,000 or less	25.90	21.10	
\$75,000 or less	14.88	12.12	
\$100,000 or less	8.27	6.73	
More than \$100,000	13.78	11.22	
Test Statistics	Value	df	p-value
Pearson Chi-Square	5.670	5	0.340
Likelihood Ratio Chi-Square	5.709	5	0.336
Null Hypothesis (Ho) : No Income difference for Q12i.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Income and Q12j

Observed Counts	Contact Info	Ease of Use	
\$10,000 or less	25	11	
\$25,000 or less	14	12	
\$50,000 or less	27	20	
\$75,000 or less	14	13	
\$100,000 or less	5	10	
More than \$100,000	12	13	
Expected Counts	Contact Info	Ease of Use	
\$10,000 or less	19.84	16.16	
\$25,000 or less	14.33	11.67	
\$50,000 or less	25.90	21.10	
\$75,000 or less	14.88	12.12	
\$100,000 or less	8.27	6.73	
More than \$100,000	13.78	11.22	
Test Statistics	Value	df	p-value
Pearson Chi-Square	6.613	5	0.251
Likelihood Ratio Chi-Square	6.723	5	0.242
Null Hypothesis (Ho) : No Income difference for Q12j.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Income and Q12k

Observed Counts	Ease of Use	Prof. Look	
\$10,000 or less	19	17	
\$25,000 or less	12	14	
\$50,000 or less	29	18	
\$75,000 or less	21	6	
\$100,000 or less	10	5	
More than \$100,000	17	8	
Expected Counts	Ease of Use	Prof. Look	
\$10,000 or less	22.06	13.91	
\$25,000 or less	15.95	10.05	
\$50,000 or less	28.84	18.16	
\$75,000 or less	16.57	10.43	
\$100,000 or less	9.20	5.80	
More than \$100,000	15.34	9.66	
Test Statistics	Value	df	p-value
Pearson Chi-Square	7.369	5	0.195
Likelihood Ratio Chi-Square	7.532	5	0.184
Null Hypothesis (Ho) : No Income difference for Q12k.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Income and Q121

Observed Counts	Price	Prof. Look	
\$10,000 or less	26	10	
\$25,000 or less	16	10	
\$50,000 or less	34	10	
\$75,000 or less	23	4	
\$100,000 or less	8	7	
More than \$100,000	17	8	
Expected Counts	Price	Prof. Look	
\$10,000 or less	25.80	10.20	
\$25,000 or less	18.64	7.36	
\$50,000 or less	31.54	12.46	
\$75,000 or less	19.35	7.65	
\$100,000 or less	10.75	4.25	
More than \$100,000	17.92	7.08	
Test Statistics	Value	df	p-value
Pearson Chi-Square	7.080	5	0.215
Likelihood Ratio Chi-Square	7.136	5	0.211
Null Hypothesis (Ho) : No Income difference for Q121.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Income and Q12m

Observed Counts	Product Info	Ease of Use	
\$10,000 or less	26	10	
\$25,000 or less	11	15	
\$50,000 or less	30	17	
\$75,000 or less	16	11	
\$100,000 or less	6	9	
More than \$100,000	17	8	
Expected Counts	Product Info	Ease of Use	
\$10,000 or less	21.68	14.32	
\$25,000 or less	15.66	10.34	
\$50,000 or less	28.31	18.69	
\$75,000 or less	16.26	10.74	
\$100,000 or less	9.03	5.97	
More than \$100,000	15.06	9.94	
Test Statistics	Value	df	p-value
Pearson Chi-Square	9.105	5	0.105
Likelihood Ratio Chi-Square	9.060	5	0.107
Null Hypothesis (Ho) : No Income difference for Q12m.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Income and Q12n

Observed Counts	Prof. Look	Contact Info	
\$10,000 or less	11	25	
\$25,000 or less	8	18	
\$50,000 or less	21	26	
\$75,000 or less	9	18	
\$100,000 or less	5	10	
More than \$100,000	10	15	
Expected Counts	Prof. Look	Contact Info	
\$10,000 or less	13.09	22.91	
\$25,000 or less	9.45	16.55	
\$50,000 or less	17.09	29.91	
\$75,000 or less	9.82	17.18	
\$100,000 or less	5.45	9.55	
More than \$100,000	9.09	15.91	
Test Statistics	Value	df	p-value
Pearson Chi-Square	2.591	5	0.763
Likelihood Ratio Chi-Square	2.576	5	0.765
Null Hypothesis (Ho) : No Income difference for Q12n.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Income and Q12o

Observed Counts	Ease of Use	Reputation	
\$10,000 or less	9	27	
\$25,000 or less	6	20	
\$50,000 or less	16	31	
\$75,000 or less	11	16	
\$100,000 or less	2	13	
More than \$100,000	10	16	
Expected Counts	Ease of Use	Reputation	
\$10,000 or less	11.05	24.95	
\$25,000 or less	7.98	18.02	
\$50,000 or less	14.42	32.58	
\$75,000 or less	8.28	18.72	
\$100,000 or less	4.60	10.40	
More than \$100,000	7.67	17.33	
Test Statistics	Value	df	p-value
Pearson Chi-Square	5.931	5	0.313
Likelihood Ratio Chi-Square	6.227	5	0.285
Null Hypothesis (Ho) : No Income difference for Q12o.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Income and Q13a

Observed Counts	Need	Price	
\$10,000 or less	14	22	
\$25,000 or less	8	18	
\$50,000 or less	18	29	
\$75,000 or less	13	14	
\$100,000 or less	5	10	
More than \$100,000	16	9	
Expected Counts	Need	Price	
\$10,000 or less	15.14	20.86	
\$25,000 or less	10.93	15.07	
\$50,000 or less	19.76	27.24	
\$75,000 or less	11.35	15.65	
\$100,000 or less	6.31	8.69	
More than \$100,000	10.51	14.49	
Test Statistics	Value	df	p-value
Pearson Chi-Square	7.600	5	0.180
Likelihood Ratio Chi-Square	7.587	5	0.180
Null Hypothesis (Ho) : No Income difference for Q13a.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Income and Q13b

Observed Counts	Ease of Use	Need	
\$10,000 or less	14	22	
\$25,000 or less	10	16	
\$50,000 or less	23	23	
\$75,000 or less	12	15	
\$100,000 or less	4	11	
More than \$100,000	5	20	
Expected Counts	Ease of use	Need	
\$10,000 or less	13.99	22.01	
\$25,000 or less	10.10	15.90	
\$50,000 or less	17.87	28.13	
\$75,000 or less	10.49	16.51	
\$100,000 or less	5.83	9.17	
More than \$100,000	9.71	15.29	
Test Statistics	Value	df	p-value
Pearson Chi-Square	7.440	5	0.190
Likelihood Ratio Chi-Square	7.793	5	0.168
Null Hypothesis (Ho) : No Income difference for Q13b.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Income and Q13c

Observed Counts	Need	Reputation	
\$10,000 or less	12	24	
\$25,000 or less	5	21	
\$50,000 or less	18	29	
\$75,000 or less	10	17	
\$100,000 or less	4	11	
More than \$100,000	15	10	
Expected Counts	Need	Reputation	
\$10,000 or less	13.09	22.91	
\$25,000 or less	9.45	16.55	
\$50,000 or less	17.09	29.91	
\$75,000 or less	9.82	17.18	
\$100,000 or less	5.45	9.55	
More than \$100,000	9.09	15.91	
Test Statistics	Value	df	p-value
Pearson Chi-Square	10.167	5	0.071
Likelihood Ratio Chi-Square	10.244	5	0.069
Null Hypothesis (Ho) : No Income difference for Q13c.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Income and Q13d

Observed Counts	Prof. Look	Need	
\$10,000 or less	12	24	
\$25,000 or less	12	14	
\$50,000 or less	19	28	
\$75,000 or less	12	15	
\$100,000 or less	8	7	
More than \$100,000	5	20	
Expected Counts	Prof. Look	Need	
\$10,000 or less	13.91	22.09	
\$25,000 or less	10.05	15.95	
\$50,000 or less	18.16	28.84	
\$75,000 or less	10.43	16.57	
\$100,000 or less	5.80	9.20	
More than \$100,000	9.66	15.34	
Test Statistics	Value	df	p-value
Pearson Chi-Square	6.523	5	0.259
Likelihood Ratio Chi-Square	6.833	5	0.233
Null Hypothesis (Ho) : No Income difference for Q13d.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Income and Q13e

Observed Counts	Contact Info	Need	
\$10,000 or less	25	11	
\$25,000 or less	18	8	
\$50,000 or less	28	19	
\$75,000 or less	13	14	
\$100,000 or less	9	6	
More than \$100,000	8	17	
Expected Counts	Contact Info	Need	
\$10,000 or less	20.66	15.34	
\$25,000 or less	14.92	11.08	
\$50,000 or less	26.97	20.03	
\$75,000 or less	15.49	11.51	
\$100,000 or less	8.61	6.39	
More than \$100,000	14.35	10.65	
Test Statistics	Value	df	p-value
Pearson Chi-Square	11.297	5	0.046
Likelihood Ratio Chi-Square	11.372	5	0.044
Null Hypothesis (Ho) : No Income difference for Q13e.			
The p-value is less than 0.05. Therefore REJECT the Ho.			

Income and Q13f

Observed Counts	Product Info	Need	
\$10,000 or less	23	13	
\$25,000 or less	16	10	
\$50,000 or less	28	19	
\$75,000 or less	10	17	
\$100,000 or less	9	6	
More than \$100,000	13	12	
Expected Counts	Product Info	Need	
\$10,000 or less	20.25	15.75	
\$25,000 or less	14.63	11.38	
\$50,000 or less	26.44	20.56	
\$75,000 or less	15.19	11.81	
\$100,000 or less	8.44	6.56	
More than \$100,000	14.06	10.94	
Test Statistics	Value	df	p-value
Pearson Chi-Square	5.679	5	0.339
Likelihood Ratio Chi-Square	5.669	5	0.340
Null Hypothesis (Ho) : No Income difference for Q13f.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

A.5 Trust

Trust and Q12a

Observed Counts	Reputation	Product Info	
Trust	69	37	
No Trust	82	38	
Expected Counts	Reputation	Product Info	
Trust	70.82	35.18	
No Trust	80.18	39.82	
Test Statistics	Value	df	p-value
Pearson Chi-Square	0.266	1	0.606
Likelihood Ratio Chi-Square	0.266	1	0.606
Null Hypothesis (Ho) : No Trust difference for Q12a.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Trust and Q12b

Observed Counts	Product Info	Contact Info	
Trust	42	64	
No Trust	48	72	
Expected Counts	Product Info	Contact Info	
Trust	42.21	63.79	
No Trust	47.79	72.21	
Test Statistics	Value	df	p-value
Pearson Chi-Square	0.003	1	0.954
Likelihood Ratio Chi-Square	0.003	1	0.954
Null Hypothesis (Ho) : No Trust difference for Q12b.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Trust and Q12c

Observed Counts	Price	Product Info	
Trust	60	45	
No Trust	76	43	
Expected Counts	Price	Product Info	
Trust	63.75	41.25	
No Trust	72.25	46.75	
Test Statistics	Value	df	p-value
Pearson Chi-Square	1.057	1	0.304
Likelihood Ratio Chi-Square	1.057	1	0.304
Null Hypothesis (Ho) : No Trust difference for Q12c.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Trust and Q12d

Observed Counts	Ease of Use	Price	
Trust	58	48	
No Trust	58	62	
Expected Counts	Ease of Use	Price	
Trust	54.41	51.59	
No Trust	61.59	58.41	
Test Statistics	Value	df	p-value
Pearson Chi-Square	0.918	1	0.338
Likelihood Ratio Chi-Square	0.919	1	0.338
Null Hypothesis (Ho) : No Trust difference for Q12d.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Trust and Q12e

Observed Counts	Prof. Look	Product Info	
Trust	47	59	
No Trust	38	81	
Expected Counts	Prof. Look	Product Info	
Trust	40.04	65.96	
No Trust	44.96	74.04	
Test Statistics	Value	df	p-value
Pearson Chi-Square	3.671	1	0.055
Likelihood Ratio Chi-Square		1	0.055
Null Hypothesis (Ho) : No Trust difference for Q12e.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Trust and Q12f

Observed Counts	Contact Info	Reputation	
Trust	42	63	
No Trust	45	75	
Expected Counts	Contact Info	Reputation	
Trust	40.60	64.40	
No Trust	46.40	73.60	
Test Statistics	Value	df	p-value
Pearson Chi-Square	0.148	1	0.701
Likelihood Ratio Chi-Square	0.148	1	0.701
Null Hypothesis (Ho) : No Trust difference for Q12f.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Trust and Q12g

Observed Counts	Price	Contact Info	
Trust	53	53	
No Trust	48	72	
Expected Counts	Price	Contact Info	
Trust	47.37	58.63	
No Trust	53.63	66.37	
Test Statistics	Value	df	p-value
Pearson Chi-Square	2.277	1	0.131
Likelihood Ratio Chi-Square	2.279	1	0.131
Null Hypothesis (Ho) : No Trust difference for Q12g.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Trust and Q12h

Observed Counts	Prof. Look	Reputation	
Trust	22	84	
No Trust	26	94	
Expected Counts	Prof. Look	Reputation	
Trust	22.51	83.49	
No Trust	25.49	94.51	
Test Statistics	Value	df	p-value
Pearson Chi-Square	0.028	1	0.867
Likelihood Ratio Chi-Square	0.028	1	0.867
Null Hypothesis (Ho) : No Trust difference for Q12h.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Trust and Q12i

Observed Counts	Reputation	Price	
Trust	59	47	
No Trust	71	49	
Expected Counts	Reputation	Price	
Trust	60.97	45.03	
No Trust	69.03	50.97	
Test Statistics	Value	df	p-value
Pearson Chi-Square	0.283	1	0.595
Likelihood Ratio Chi-Square	0.283	1	0.595
Null Hypothesis (Ho) : No Trust difference for Q12i.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Trust and Q12j

Observed Counts	Contact Info	Ease of Use	
Trust	59	47	
No Trust	60	60	
Expected Counts	Contact Info	Ease of Use	
Trust	55.81	50.19	
No Trust	63.19	56.81	
Test Statistics	Value	df	p-value
Pearson Chi-Square	0.723	1	0.395
Likelihood Ratio Chi-Square	0.724	1	0.395
Null Hypothesis (Ho) : No Trust difference for Q12j.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Trust and Q12k

Observed Counts	Ease of Use	Prof. Look	
Trust	67	39	
No Trust	83	37	
Expected Counts			
Trust	70.35	35.65	
No Trust	79.65	40.35	
Test Statistics	Value	df	p-value
Pearson Chi-Square	0.895	1	0.344
Likelihood Ratio Chi-Square	0.895	1	0.344
Null Hypothesis (Ho) : No Trust difference for Q12k.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Trust and Q12l

Observed Counts	Price	Prof. Look	
Trust	70	35	
No Trust	96	22	
Expected Counts	Price	Prof. Look	
Trust	78.16	26.84	
No Trust	87.84	30.16	
Test Statistics	Value	df	p-value
Pearson Chi-Square	6.301	1	0.012
Likelihood Ratio Chi-Square	6.322	1	0.012
Null Hypothesis (Ho) : No Trust difference for Q12l.			
The p-value is less than 0.05. Therefore REJECT the Ho.			

Trust and Q12m

Observed Counts	Product Info	Ease of Use	
Trust	66	40	
No Trust	73	47	
Expected Counts	Product Info	Ease of Use	
Trust	65.19	40.81	
No Trust	73.81	46.19	
Test Statistics	Value	df	p-value
Pearson Chi-Square	0.049	1	0.825
Likelihood Ratio Chi-Square	0.049	1	0.825
Null Hypothesis (Ho) : No Trust difference for Q12m.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Trust and Q12n

Observed Counts	Prof. Look	Contact Info	
Trust	43	63	
No Trust	32	88	
Expected Counts	Prof. Look	Contact Info	
Trust	35.18	70.82	
No Trust	39.82	80.18	
Test Statistics	Value	df	p-value
Pearson Chi-Square	4.904	1	0.027
Likelihood Ratio Chi-Square	4.904	1	0.027
Null Hypothesis (Ho) : No Trust difference for Q12n.			
The p-value is less than 0.05. Therefore REJECT the Ho.			

Trust and Q12o

Observed Counts	Ease of Use	Reputation	
Trust	35	71	
No Trust	32	88	
Expected Counts	Ease of Use	Reputation	
Trust	31.42	74.58	
No Trust	35.58	84.42	
Test Statistics	Value	df	p-value
Pearson Chi-Square	1.089	1	0.297
Likelihood Ratio Chi-Square	1.088	1	0.297
Null Hypothesis (Ho) : No Trust difference for Q12o.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Trust and Q13a

Observed Counts	Need	Price	
Trust	51	55	
No Trust	53	67	
Expected Counts	Need	Price	
Trust	48.78	57.22	
No Trust	55.22	64.78	
Test Statistics	Value	df	p-value
Pearson Chi-Square	0.353	1	0.552
Likelihood Ratio Chi-Square	0.353	1	0.552
Null Hypothesis (Ho) : No Trust difference for Q13a.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Trust and Q13b

Observed Counts	Ease of Use	Need	
Trust	45	61	
No Trust	46	73	
Expected Counts	Ease of Use	Need	
Trust	42.87	63.13	
No Trust	48.13	70.87	
Test Statistics	Value	df	p-value
Pearson Chi-Square	0.336	1	0.562
Likelihood Ratio Chi-Square	0.336	1	0.562
Null Hypothesis (Ho) : No Trust difference for Q13b.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Trust and Q13c

Observed Counts	Need	Reputation	
Trust	47	59	
No Trust	38	82	
Expected Counts	Need	Reputation	
Trust	39.87	66.13	
No Trust	45.13	74.87	
Test Statistics	Value	df	p-value
Pearson Chi-Square	3.852	1	0.050
Likelihood Ratio Chi-Square	3.856	1	0.050
Null Hypothesis (Ho) : No Trust difference for Q13c.			
The p-value is equal to 0.05. Therefore REJECT the Ho.			

Trust and Q13d

Observed Counts	Prof. Look	Need	
Trust	38	68	
No Trust	39	81	
Expected Counts	Prof. Look	Need	
Trust	36.12	69.88	
No Trust	40.88	79.12	
Test Statistics	Value	df	p-value
Pearson Chi-Square	0.281	1	0.596
Likelihood Ratio Chi-Square	0.281	1	0.596
Null Hypothesis (Ho) : No Trust difference for Q13d.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Trust and Q13e

Observed Counts	Contact Info	Need	
Trust	60	46	
No Trust	64	56	
Expected Counts	Contact Info	Need	
Trust	58.16	47.84	
No Trust	65.84	54.16	
Test Statistics	Value	df	p-value
Pearson Chi-Square	0.243	1	0.622
Likelihood Ratio Chi-Square	0.243	1	0.622
Null Hypothesis (Ho) : No Trust difference for Q13e.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Trust and Q13f

Observed Counts	Product Info	Need	
Trust	57	49	
No Trust	67	53	
Expected Counts	Product Info	Need	
Trust	58.16	47.84	
No Trust	65.84	54.16	
Test Statistics	Value	df	p-value
Pearson Chi-Square	0.096	1	0.756
Likelihood Ratio Chi-Square	0.096	1	0.756
Null Hypothesis (Ho) : No Trust difference for Q13f.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

A.6 Freq. Web

Freq. Web and Q12a

Observed Counts	Reputation	Product Info	
Once a month	15	5	
Once a week	16	3	
Several times a week	29	18	
Once a day	9	11	
Several times a day	82	38	
Expected Counts	Reputation	Product Info	
Once a month	13.36	6.64	
Once a week	12.69	6.31	
Several times a week	31.40	15.60	
Once a day	13.36	6.64	
Several times a day	80.18	39.82	
Test Statistics	Value	df	p-value
Pearson Chi-Square	8.169	4	0.086
Likelihood Ratio Chi-Square	8.250	4	0.083
Null Hypothesis (Ho) : No Freq. Web difference for Q12a.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Freq. Web and Q12b

Observed Counts	Product Info	Contact Info	
Once a month	6	14	
Once a week	11	8	
Several times a week	18	29	
Once a day	8	12	
Several times a day	47	73	
Expected Counts	Product Info	Contact Info	
Once a month	7.96	12.04	
Once a week	7.57	11.43	
Several times a week	18.72	28.28	
Once a day	7.96	12.04	
Several times a day	47.79	72.21	
Test Statistics	Value	df	p-value
Pearson Chi-Square	3.462	4	0.484
Likelihood Ratio Chi-Square	3.421	4	0.490
Null Hypothesis (Ho) : No Freq. Web difference for Q12b.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Freq. Web and Q12c

Observed Counts	Price	Product Info	
Once a month	12	7	
Once a week	10	9	
Several times a week	24	22	
Once a day	13	7	
Several times a day	76	44	
Expected Counts	Price	Product Info	
Once a month	11.45	7.55	
Once a week	11.45	7.55	
Several times a week	27.72	18.28	
Once a day	12.05	7.95	
Several times a day	72.32	47.68	
Test Statistics	Value	df	p-value
Pearson Chi-Square	2.445	4	0.654
Likelihood Ratio Chi-Square	2.423	4	0.659
Null Hypothesis (Ho) : No Freq. Web difference for Q12c.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Freq. Web and Q12d

Observed Counts	Ease of Use	Price	
Once a month	11	9	
Once a week	11	8	
Several times a week	24	23	
Once a day	9	11	
Several times a day	61	59	
Expected Counts	Ease of Use	Price	
Once a month	10.27	9.73	
Once a week	9.75	9.25	
Several times a week	24.12	22.88	
Once a day	10.27	9.73	
Several times a day	61.59	58.41	
Test Statistics	Value	df	p-value
Pearson Chi-Square	0.770	4	0.942
Likelihood Ratio Chi-Square	0.772	4	0.942
Null Hypothesis (Ho) : No Freq. Web difference for Q12d.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Freq. Web and Q12e

Observed Counts	Prof. Look	Product Info	
Once a month	10	10	
Once a week	8	11	
Several times a week	18	28	
Once a day	6	14	
Several times a day	43	77	
Expected Counts	Prof. Look	Product Info	
Once a month	7.56	12.44	
Once a week	7.18	11.82	
Several times a week	17.38	28.62	
Once a day	7.56	12.44	
Several times a day	45.33	74.67	
Test Statistics	Value	df	p-value
Pearson Chi-Square	2.166	4	0.705
Likelihood Ratio Chi-Square	2.143	4	0.709
Null Hypothesis (Ho) : No Freq. Web difference for Q12e.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Freq. Web and Q12f

Observed Counts	Contact Info	Reputation	
Once a month	10	10	
Once a week	11	8	
Several times a week	15	32	
Once a day	8	12	
Several times a day	44	75	
Expected Counts	Contact Info	Reputation	
Once a month	7.82	12.18	
Once a week	7.43	11.57	
Several times a week	18.38	28.62	
Once a day	7.82	12.18	
Several times a day	46.54	72.46	
Test Statistics	Value	df	p-value
Pearson Chi-Square	5.067	4	0.280
Likelihood Ratio Chi-Square	4.984	4	0.289
Null Hypothesis (Ho) : No Freq. Web difference for Q12f.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Freq. Web and Q12g

Observed Counts	Price	Contact Info	
Once a month	10	10	
Once a week	6	13	
Several times a week	17	30	
Once a day	7	13	
Several times a day	61	59	
Expected Counts	Price	Contact Info	
Once a month	8.94	11.06	
Once a week	8.49	10.51	
Several times a week	21.00	26.00	
Once a day	8.94	11.06	
Several times a day	53.63	66.37	
Test Statistics	Value	df	p-value
Pearson Chi-Square	5.522	4	0.238
Likelihood Ratio Chi-Square	5.592	4	0.232
Null Hypothesis (Ho) : No Freq. Web difference for Q12g.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Freq. Web and Q12h

Observed Counts	Prof. Look	Reputation	
Once a month	7	13	
Once a week	3	16	
Several times a week	12	35	
Once a day	7	13	
Several times a day	19	101	
Expected Counts	Prof. Look	Reputation	
Once a month	4.25	15.75	
Once a week	4.04	14.96	
Several times a week	9.98	37.02	
Once a day	4.25	15.75	
Several times a day	25.49	94.51	
Test Statistics	Value	df	p-value
Pearson Chi-Square	7.479	4	0.113
Likelihood Ratio Chi-Square	7.105	4	0.130
Null Hypothesis (Ho) : No Freq. Web difference for Q12h.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Freq. Web and Q12i

Observed Counts	Reputation	Price	
Once a month	12	8	
Once a week	10	9	
Several times a week	26	21	
Once a day	12	8	
Several times a day	70	50	
Expected Counts	Reputation	Price	
Once a month	11.50	8.50	
Once a week	10.93	8.07	
Several times a week	27.04	19.96	
Once a day	11.50	8.50	
Several times a day	69.03	50.97	
Test Statistics	Value	df	p-value
Pearson Chi-Square	0.412	4	0.981
Likelihood Ratio Chi-Square	0.411	4	0.982
Null Hypothesis (Ho) : No Freq. Web difference for Q12i.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Freq. Web and Q12j

Observed Counts	Contact Info	Ease of Use	
Once a month	12	8	
Once a week	8	11	
Several times a week	32	15	
Once a day	9	11	
Several times a day	59	61	
Expected Counts	Contact Info	Ease of Use	
Once a month	10.62	9.38	
Once a week	10.09	8.91	
Several times a week	24.96	22.04	
Once a day	10.62	9.38	
Several times a day	63.72	56.28	
Test Statistics	Value	df	p-value
Pearson Chi-Square	6.815	4	0.146
Likelihood Ratio Chi-Square	6.938	4	0.139
Null Hypothesis (Ho) : No Freq. Web difference for Q12j.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Freq. Web and Q12k

Observed Counts	Ease of Use	Prof. Look	
Once a month	11	9	
Once a week	12	7	
Several times a week	25	22	
Once a day	13	7	
Several times a day	89	31	
Expected Counts	Ease of Use	Prof. Look	
Once a month	13.27	6.73	
Once a week	12.61	6.39	
Several times a week	31.19	15.81	
Once a day	13.27	6.73	
Several times a day	79.65	40.35	
Test Statistics	Value	df	p-value
Pearson Chi-Square	8.188	4	0.085
Likelihood Ratio Chi-Square	8.110	4	0.088
Null Hypothesis (Ho) : No Freq. Web difference for Q12k.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Freq. Web and Q12l

Observed Counts	Price	Prof. Look	
Once a month	15	5	
Once a week	13	5	
Several times a week	29	17	
Once a day	14	6	
Several times a day	95	24	
Expected Counts	Price	Prof. Look	
Once a month	14.89	5.11	
Once a week	13.40	4.60	
Several times a week	34.24	11.76	
Once a day	14.89	5.11	
Several times a day	88.58	30.42	
Test Statistics	Value	df	p-value
Pearson Chi-Square	5.215	4	0.266
Likelihood Ratio Chi-Square	5.062	4	0.281
Null Hypothesis (Ho) : No Freq. Web difference for Q12l.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Freq. Web and Q12m

Observed Counts	Product Info	Ease of Use	
Once a month	10	10	
Once a week	5	14	
Several times a week	35	12	
Once a day	11	9	
Several times a day	79	41	
Expected Counts	Product Info	Ease of Use	
Once a month	12.39	7.61	
Once a week	11.77	7.23	
Several times a week	29.12	17.88	
Once a day	12.39	7.61	
Several times a day	74.34	45.66	
Test Statistics	Value	df	p-value
Pearson Chi-Square	15.748	4	0.003
Likelihood Ratio Chi-Square	15.608	4	0.004
Null Hypothesis (Ho) : No Freq. Web difference for Q12m.			
The p-value is less than 0.05. Therefore REJECT the Ho.			

Freq. Web and Q12n

Observed Counts	Prof. Look	Contact Info	
Once a month	9	11	
Once a week	8	11	
Several times a week	16	31	
Once a day	6	14	
Several times a day	36	84	
Expected Counts	Prof. Look	Contact Info	
Once a month	6.64	13.36	
Once a week	6.31	12.69	
Several times a week	15.60	31.40	
Once a day	6.64	13.36	
Several times a day	39.82	80.18	
Test Statistics	Value	df	p-value
Pearson Chi-Square	2.597	4	0.627
Likelihood Ratio Chi-Square	2.525	4	0.640
Null Hypothesis (Ho) : No Freq. Web difference for Q12n.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Freq. Web and Q12o

Observed Counts	Ease of Use	Reputation	
Once a month	7	13	
Once a week	4	15	
Several times a week	15	32	
Once a day	8	12	
Several times a day	33	87	
Expected Counts	Ease of Use	Reputation	
Once a month	5.93	14.07	
Once a week	5.63	13.37	
Several times a week	13.93	33.07	
Once a day	5.93	14.07	
Several times a day	35.58	84.42	
Test Statistics	Value	df	p-value
Pearson Chi-Square	2.357	4	0.670
Likelihood Ratio Chi-Square	2.341	4	0.673
Null Hypothesis (Ho) : No Freq. Web difference for Q12o.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Freq. Web and Q13a

Observed Counts	Need	Price	
Once a month	9	11	
Once a week	7	12	
Several times a week	20	27	
Once a day	14	6	
Several times a day	54	66	
Expected Counts	Need	Price	
Once a month	9.20	10.80	
Once a week	8.74	10.26	
Several times a week	21.63	25.37	
Once a day	9.20	10.80	
Several times a day	55.22	64.78	
Test Statistics	Value	df	p-value
Pearson Chi-Square	5.560	4	0.235
Likelihood Ratio Chi-Square	5.636	4	0.228
Null Hypothesis (Ho) : No Freq. Web difference for Q13a.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Freq. Web and Q13b

Observed Counts	Ease of Use	Need	
Once a month	12	8	
Once a week	8	11	
Several times a week	28	18	
Once a day	6	14	
Several times a day	37	83	
Expected Counts	Ease of Use	Need	
Once a month	8.09	11.91	
Once a week	7.68	11.32	
Several times a week	18.60	27.40	
Once a day	8.09	11.91	
Several times a day	48.53	71.47	
Test Statistics	Value	df	p-value
Pearson Chi-Square	16.672	4	0.002
Likelihood Ratio Chi-Square	16.588	4	0.002
Null Hypothesis (Ho) : No Freq. Web difference for Q13b.			
The p-value is less than 0.05. Therefore REJECT the Ho.			

Freq. Web and Q13c

Observed Counts	Need	Reputation	
Once a month	5	15	
Once a week	3	16	
Several times a week	11	36	
Once a day	10	10	
Several times a day	57	63	
Expected Counts	Need	Reputation	
Once a month	7.61	12.39	
Once a week	7.23	11.77	
Several times a week	17.88	29.12	
Once a day	7.61	12.39	
Several times a day	45.66	74.34	
Test Statistics	Value	df	p-value
Pearson Chi-Square	15.473	4	0.004
Likelihood Ratio Chi-Square	16.279	4	0.003
Null Hypothesis (Ho) : No Freq. Web difference for Q13c.			
The p-value is less than 0.05. Therefore REJECT the Ho.			

Freq. Web and Q13d

Observed Counts	Prof. Look	Need	
Once a month	11	9	
Once a week	7	12	
Several times a week	28	19	
Once a day	6	14	
Several times a day	25	95	
Expected Counts	Prof. Look	Need	
Once a month	6.81	13.19	
Once a week	6.47	12.53	
Several times a week	16.01	30.99	
Once a day	6.81	13.19	
Several times a day	40.88	79.12	
Test Statistics	Value	df	p-value
Pearson Chi-Square	27.083	4	0.000
Likelihood Ratio Chi-Square	26.752	4	0.000
Null Hypothesis (Ho) : No Freq. Web difference for Q13d.			
The p-value is less than 0.05. Therefore do REJECT the Ho.			

Freq. Web and Q13e

Observed Counts	Contact Info	Need	
Once a month	15	5	
Once a week	13	6	
Several times a week	33	14	
Once a day	11	9	
Several times a day	52	68	
Expected Counts	Contact Info	Need	
Once a month	10.97	9.03	
Once a week	10.42	8.58	
Several times a week	25.79	21.21	
Once a day	10.97	9.03	
Several times a day	65.84	54.16	
Test Statistics	Value	df	p-value
Pearson Chi-Square	15.599	4	0.004
Likelihood Ratio Chi-Square	15.973	4	0.003
Null Hypothesis (Ho) : No Freq. Web difference for Q13e.			
The p-value is less than 0.05. Therefore REJECT the Ho.			

Freq. Web and Q13f

Observed Counts	Product Info	Need	
Once a month	14	6	
Once a week	9	10	
Several times a week	32	15	
Once a day	9	11	
Several times a day	60	60	
Expected Counts	Product Info	Need	
Once a month	10.97	9.03	
Once a week	10.42	8.58	
Several times a week	25.79	21.21	
Once a day	10.97	9.03	
Several times a day	65.84	54.16	
Test Statistics	Value	df	p-value
Pearson Chi-Square	7.531	4	0.110
Likelihood Ratio Chi-Square	7.690	4	0.104
Null Hypothesis (Ho) : No Freq. Web difference for Q13f.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

A.7 History

History and Q12a

Observed Counts	Reputation	Product Info	
A year or less	11	8	
5 years or less	52	19	
10 years or less	61	27	
More than 10 years	27	22	
Expected Counts	Reputation	Product Info	
A year or less	12.64	6.36	
5 years or less	47.23	23.77	
10 years or less	58.54	29.46	
More than 10 years	32.59	16.41	
Test Statistics	Value	df	p-value
Pearson Chi-Square	5.252	3	0.154
Likelihood Ratio Chi-Square	5.164	3	0.160
Null Hypothesis (Ho) : No History difference for Q12a.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

History and Q12b

Observed Counts	Product Info	Contact Info	
A year or less	9	10	
5 years or less	26	45	
10 years or less	37	51	
More than 10 years	19	30	
Expected Counts	Product Info	Contact Info	
A year or less	7.62	11.38	
5 years or less	28.46	42.54	
10 years or less	35.28	52.72	
More than 10 years	19.64	29.36	
Test Statistics	Value	df	p-value
Pearson Chi-Square	0.950	3	0.813
Likelihood Ratio Chi-Square	0.947	3	0.814
Null Hypothesis (Ho) : No History difference for Q12b.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

History and Q12c

Observed Counts	Price	Product Info	
A year or less	12	7	
5 years or less	35	34	
10 years or less	59	29	
More than 10 years	30	19	
Expected Counts	Price	Product Info	
A year or less	11.48	7.52	
5 years or less	41.71	27.29	
10 years or less	53.19	34.81	
More than 10 years	29.62	19.38	
Test Statistics	Value	df	p-value
Pearson Chi-Square	4.401	3	0.221
Likelihood Ratio Chi-Square	4.381	3	0.223
Null Hypothesis (Ho) : No History difference for Q12c.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

History and Q12d

Observed Counts	Ease of Use	Price	
A year or less	10	9	
5 years or less	37	34	
10 years or less	49	39	
More than 10 years	20	29	
Expected Counts	Ease of Use	Price	
A year or less	9.71	9.29	
5 years or less	36.28	34.72	
10 years or less	44.67	43.03	
More than 10 years	25.04	23.96	
Test Statistics	Value	df	p-value
Pearson Chi-Square	2.860	3	0.414
Likelihood Ratio Chi-Square	2.871	3	0.412
Null Hypothesis (Ho) : No History difference for Q12d.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

History and Q12e

Observed Counts	Prof. Look	Product Info	
A year or less	8	11	
5 years or less	27	43	
10 years or less	31	57	
More than 10 years	19	30	
Expected Counts	Prof. Look	Product Info	
A year or less	7.15	11.85	
5 years or less	26.33	43.67	
10 years or less	33.10	54.90	
More than 10 years	18.43	30.57	
Test Statistics	Value	df	p-value
Pearson Chi-Square	0.432	3	0.933
Likelihood Ratio Chi-Square	0.432	3	0.934
Null Hypothesis (Ho) : No History difference for Q12e.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

History and Q12f

Observed Counts	Contact Info	Reputation	
A year or less	8	11	
5 years or less	37	33	
10 years or less	25	63	
More than 10 years	18	31	
Expected Counts	Contact Info	Reputation	
A year or less	7.40	11.60	
5 years or less	27.26	42.74	
10 years or less	34.27	53.73	
More than 10 years	19.08	29.92	
Test Statistics	Value	df	p-value
Pearson Chi-Square	9.987	3	0.019
Likelihood Ratio Chi-Square	10.002	3	0.019
Null Hypothesis (Ho) : No History difference for Q12f.			
The p-value is less than 0.05. Therefore REJECT the Ho.			

History and Q12g

Observed Counts	Price	Contact Info	
A year or less	7	12	
5 years or less	26	45	
10 years or less	41	47	
More than 10 years	28	21	
Expected Counts	Price	Contact Info	
A year or less	8.54	10.46	
5 years or less	31.90	39.10	
10 years or less	39.54	48.46	
More than 10 years	22.02	26.98	
Test Statistics	Value	df	p-value
Pearson Chi-Square	5.536	3	0.137
Likelihood Ratio Chi-Square	5.557	3	0.135
Null Hypothesis (Ho) : No History difference for Q12g.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

History and Q12h

Observed Counts	Prof. Look	Reputation	
A year or less	8	11	
5 years or less	14	57	
10 years or less	14	74	
More than 10 years	12	37	
Expected Counts	Prof. Look	Reputation	
A year or less	4.02	14.98	
5 years or less	15.01	55.99	
10 years or less	18.61	69.39	
More than 10 years	10.36	38.64	
Test Statistics	Value	df	p-value
Pearson Chi-Square	6.868	3	0.076
Likelihood Ratio Chi-Square	6.176	3	0.103
Null Hypothesis (Ho) : No History difference for Q12h.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

History and Q12i

Observed Counts	Reputation	Price	
A year or less	9	10	
5 years or less	48	23	
10 years or less	45	43	
More than 10 years	28	21	
Expected Counts	Reputation	Price	
A year or less	10.88	8.12	
5 years or less	40.66	30.34	
10 years or less	50.40	37.60	
More than 10 years	28.06	20.94	
Test Statistics	Value	df	p-value
Pearson Chi-Square	5.214	3	0.157
Likelihood Ratio Chi-Square	5.282	3	0.152
Null Hypothesis (Ho) : No History difference for Q12i.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

History and Q12j

Observed Counts	Contact Info	Ease of Use	
A year or less	12	7	
5 years or less	37	34	
10 years or less	49	39	
More than 10 years	22	27	
Expected Counts	Contact Info	Ease of Use	
A year or less	10.04	8.96	
5 years or less	37.53	33.47	
10 years or less	46.52	41.48	
More than 10 years	25.90	23.10	
Test Statistics	Value	df	p-value
Pearson Chi-Square	2.352	3	0.503
Likelihood Ratio Chi-Square	2.363	3	0.501
Null Hypothesis (Ho) : No History difference for Q12j.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

History and Q12k

Observed Counts	Ease of Use	Prof. Look	
A year or less	10	9	
5 years or less	43	28	
10 years or less	63	25	
More than 10 years	35	14	
Expected Counts	Ease of Use	Prof. Look	
A year or less	12.64	6.36	
5 years or less	47.23	23.77	
10 years or less	58.54	29.46	
More than 10 years	32.59	16.41	
Test Statistics	Value	df	p-value
Pearson Chi-Square	4.323	3	0.229
Likelihood Ratio Chi-Square	4.254	3	0.235
Null Hypothesis (Ho) : No History difference for Q12k.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

History and Q12l

Observed Counts	Price	Prof. Look	
A year or less	12	7	
5 years or less	52	17	
10 years or less	65	23	
More than 10 years	38	10	
Expected Counts	Price	Prof. Look	
A year or less	14.17	4.83	
5 years or less	51.44	17.56	
10 years or less	65.61	22.39	
More than 10 years	35.79	12.21	
Test Statistics	Value	df	p-value
Pearson Chi-Square	1.885	3	0.597
Likelihood Ratio Chi-Square	1.808	3	0.613
Null Hypothesis (Ho) : No History difference for Q12l.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

History and Q12m

Observed Counts	Product Info	Ease of Use	
A year or less	12	7	
5 years or less	41	30	
10 years or less	54	34	
More than 10 years	33	16	
Expected Counts	Product Info	Ease of Use	
A year or less	11.72	7.28	
5 years or less	43.79	27.21	
10 years or less	54.27	33.73	
More than 10 years	30.22	18.78	
Test Statistics	Value	df	p-value
Pearson Chi-Square	1.152	3	0.765
Likelihood Ratio Chi-Square	1.161	3	0.762
Null Hypothesis (Ho) : No History difference for Q12m.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

History and Q12n

Observed Counts	Prof. Look	Contact Info	
A year or less	9	10	
5 years or less	25	46	
10 years or less	21	67	
More than 10 years	20	29	
Expected Counts	Prof. Look	Contact Info	
A year or less	6.28	12.72	
5 years or less	23.46	47.54	
10 years or less	29.07	28.93	
More than 10 years	16.19	32.81	
Test Statistics	Value	df	p-value
Pearson Chi-Square	6.603	3	0.086
Likelihood Ratio Chi-Square	6.657	3	0.084
Null Hypothesis (Ho) : No History difference for Q12n.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

History and Q12o

Observed Counts	Ease of Use	Reputation	
A year or less	6	13	
5 years or less	18	53	
10 years or less	27	61	
More than 10 years	16	33	
Expected Counts	Ease of Use	Reputation	
A year or less	5.61	13.39	
5 years or less	20.96	50.04	
10 years or less	25.97	62.03	
More than 10 years	14.46	34.54	
Test Statistics	Value	df	p-value
Pearson Chi-Square	0.920	3	0.821
Likelihood Ratio Chi-Square	0.932	3	0.818
Null Hypothesis (Ho) : No History difference for Q12o.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

History and Q13a

Observed Counts	Need	Price	
A year or less	8	11	
5 years or less	27	44	
10 years or less	44	44	
More than 10 years	25	24	
Expected Counts	Need	Price	
A year or less	8.70	10.30	
5 years or less	32.53	38.47	
10 years or less	40.32	47.68	
More than 10 years	22.45	26.55	
Test Statistics	Value	df	p-value
Pearson Chi-Square	2.995	3	0.392
Likelihood Ratio Chi-Square	3.014	3	0.389
Null Hypothesis (Ho) : No History difference for Q13a.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

History and Q13b

Observed Counts	Ease of Use	Need	
A year or less	10	9	
5 years or less	36	35	
10 years or less	31	56	
More than 10 years	14	35	
Expected Counts	Ease of Use	Need	
A year or less	7.65	11.35	
5 years or less	28.59	42.41	
10 years or less	35.03	51.97	
More than 10 years	19.73	29.27	
Test Statistics	Value	df	p-value
Pearson Chi-Square	7.987	3	0.046
Likelihood Ratio Chi-Square	8.030	3	0.045
Null Hypothesis (Ho) : No History difference for Q13b.			
The p-value is less than 0.05. Therefore do REJECT the Ho.			

History and Q13c

Observed Counts	Need	Reputation	
A year or less	6	13	
5 years or less	20	51	
10 years or less	34	54	
More than 10 years	26	23	
Expected Counts	Need	Reputation	
A year or less	7.20	11.80	
5 years or less	26.90	44.10	
10 years or less	33.34	54.66	
More than 10 years	18.56	30.44	
Test Statistics	Value	df	p-value
Pearson Chi-Square	7.986	3	0.046
Likelihood Ratio Chi-Square	7.952	3	0.047
Null Hypothesis (Ho) : No History difference for Q13c.			
The p-value is less than 0.05. Therefore REJECT the Ho.			

History and Q13d

Observed Counts	Prof. Look	Need	
A year or less	9	10	
5 years or less	32	39	
10 years or less	27	61	
More than 10 years	9	40	
Expected Counts	Prof. Look	Need	
A year or less	6.44	12.56	
5 years or less	24.08	46.92	
10 years or less	29.85	58.15	
More than 10 years	16.62	32.38	
Test Statistics	Value	df	p-value
Pearson Chi-Square	11.171	3	0.011
Likelihood Ratio Chi-Square	11.521	3	0.009
Null Hypothesis (Ho) : No History difference for Q13d.			
The p-value is less than 0.05. Therefore REJECT the Ho.			

History and Q13e

Observed Counts	Contact Info	Need	
A year or less	14	5	
5 years or less	46	25	
10 years or less	47	41	
More than 10 years	17	32	
Expected Counts	Contact Info	Need	
A year or less	10.38	8.62	
5 years or less	38.78	32.22	
10 years or less	48.07	39.93	
More than 10 years	26.77	22.23	
Test Statistics	Value	df	p-value
Pearson Chi-Square	13.649	3	0.003
Likelihood Ratio Chi-Square	13.874	3	0.003
Null Hypothesis (Ho) : No History difference for Q13e.			
The p-value is less than 0.05. Therefore do REJECT the Ho.			

History and Q13f

Observed Counts	Product Info	Need	
A year or less	12	7	
5 years or less	48	23	
10 years or less	45	43	
More than 10 years	19	30	
Expected Counts	Product Info	Need	
A year or less	10.38	8.62	
5 years or less	38.78	32.22	
10 years or less	48.07	39.93	
More than 10 years	26.77	22.23	
Test Statistics	Value	df	p-value
Pearson Chi-Square	10.783	3	0.013
Likelihood Ratio Chi-Square	10.916	3	0.012
Null Hypothesis (Ho) : No History difference for Q13f.			
The p-value is less than 0.05. Therefore do REJECT the Ho.			

A.8 Browse

Browse and Q12a

Observed Counts	Reputation	Product Info	
Never	12	8	
Once a month	52	24	
Once a week	48	14	
Several times a week	25	17	
Once a day	6	6	
Several times a day	8	7	
Expected Counts	Reputation	Product Info	
Never	13.30	6.70	
Once a month	50.56	25.44	
Once a week	41.24	20.76	
Several times a week	27.94	14.06	
Once a day	7.98	4.02	
Several times a day	9.98	5.02	
Test Statistics	Value	df	p-value
Pearson Chi-Square	7.377	5	0.194
Likelihood Ratio Chi-Square	7.431	5	0.190
Null Hypothesis (Ho) : No Browse difference for Q12a.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Browse and Q12b

Observed Counts	Product Info	Contact Info	
Never	9	11	
Once a month	31	45	
Once a week	20	42	
Several times a week	20	22	
Once a day	5	7	
Several times a day	6	9	
Expected Counts	Product Info	Contact Info	
Never	8.02	11.98	
Once a month	30.47	45.53	
Once a week	24.85	37.15	
Several times a week	16.84	25.16	
Once a day	4.81	7.19	
Several times a day	6.01	8.99	
Test Statistics	Value	df	p-value
Pearson Chi-Square	2.803	5	0.730
Likelihood Ratio Chi-Square	2.827	5	0.727
Null Hypothesis (Ho) : No Browse difference for Q12b.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Browse and Q12c

Observed Counts	Price	Product Info	
Never	12	8	
Once a month	46	29	
Once a week	34	27	
Several times a week	29	13	
Once a day	7	5	
Several times a day	8	7	
Expected Counts	Price	Product Info	
Never	12.09	7.91	
Once a month	45.33	29.67	
Once a week	36.87	24.13	
Several times a week	25.39	16.61	
Once a day	7.25	4.75	
Several times a day	9.07	5.93	
Test Statistics	Value	df	p-value
Pearson Chi-Square	2.231	5	0.816
Likelihood Ratio Chi-Square	2.261	5	0.812
Null Hypothesis (Ho) : No Browse difference for Q12c.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Browse and Q12d

Observed Counts	Ease of Use	Price	
Never	10	10	
Once a month	42	34	
Once a week	35	27	
Several times a week	17	25	
Once a day	6	6	
Several times a day	6	9	
Expected Counts	Ease of Use	Price	
Never	10.22	9.78	
Once a month	38.84	37.16	
Once a week	31.68	30.32	
Several times a week	21.46	20.54	
Once a day	6.13	5.87	
Several times a day	7.67	7.33	
Test Statistics	Value	df	p-value
Pearson Chi-Square	3.890	5	0.565
Likelihood Ratio Chi-Square	3.906	5	0.563
Null Hypothesis (Ho) : No Browse difference for Q12d.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Browse and Q12e

Observed Counts	Prof. Look	Product Info	
Never	6	14	
Once a month	27	49	
Once a week	27	34	
Several times a week	18	24	
Once a day	2	10	
Several times a day	5	10	
Expected Counts	Prof. Look	Product Info	
Never	7.52	12.48	
Once a month	28.58	47.42	
Once a week	22.94	38.06	
Several times a week	15.80	26.20	
Once a day	4.51	7.49	
Several times a day	5.64	9.36	
Test Statistics	Value	df	p-value
Pearson Chi-Square	4.637	5	0.462
Likelihood Ratio Chi-Square	4.916	5	0.426
Null Hypothesis (Ho) : No Browse difference for Q12e.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Browse and Q12f

Observed Counts	Contact Info	Reputation	
Never	8	12	
Once a month	32	44	
Once a week	18	44	
Several times a week	17	25	
Once a day	3	8	
Several times a day	10	5	
Expected Counts	Contact Info	Reputation	
Never	7.79	12.21	
Once a month	29.59	46.41	
Once a week	24.14	37.86	
Several times a week	16.35	25.65	
Once a day	4.28	6.72	
Several times a day	5.84	9.16	
Test Statistics	Value	df	p-value
Pearson Chi-Square	8.411	5	0.135
Likelihood Ratio Chi-Square	8.392	5	0.136
Null Hypothesis (Ho) : No Browse difference for Q12f.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Browse and Q12g

Observed Counts	Price	Contact Info	
Never	7	13	
Once a month	36	40	
Once a week	24	38	
Several times a week	23	19	
Once a day	7	5	
Several times a day	5	10	
Expected Counts	Price	Contact Info	
Never	8.99	11.01	
Once a month	34.15	41.85	
Once a week	27.86	34.14	
Several times a week	18.87	23.13	
Once a day	5.39	6.61	
Several times a day	6.74	8.26	
Test Statistics	Value	df	p-value
Pearson Chi-Square	5.277	5	0.383
Likelihood Ratio Chi-Square	5.308	5	0.379
Null Hypothesis (Ho) : No Browse difference for Q12g.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Browse and Q12h

Observed Counts	Prof. Look	Reputation	
Never	5	15	
Once a month	18	58	
Once a week	8	54	
Several times a week	10	32	
Once a day	4	8	
Several times a day	3	12	
Expected Counts	Prof. Look	Reputation	
Never	4.23	15.77	
Once a month	16.07	59.93	
Once a week	13.11	48.89	
Several times a week	8.88	33.12	
Once a day	2.54	9.46	
Several times a day	3.17	11.83	
Test Statistics	Value	df	p-value
Pearson Chi-Square	4.258	5	0.513
Likelihood Ratio Chi-Square	4.431	5	0.489
Null Hypothesis (Ho) : No Browse difference for Q12h.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Browse and 12i

Observed Counts	Reputation	Price	
Never	12	8	
Once a month	39	37	
Once a week	45	17	
Several times a week	24	18	
Once a day	3	9	
Several times a day	7	8	
Expected Counts	Reputation	Price	
Never	11.45	8.55	
Once a month	43.52	32.48	
Once a week	35.51	26.49	
Several times a week	24.05	17.95	
Once a day	6.87	5.13	
Several times a day	8.59	6.41	
Test Statistics	Value	df	p-value
Pearson Chi-Square	12.897	5	0.024
Likelihood Ratio Chi-Square	13.224	5	0.021
Null Hypothesis (Ho) : No Browse difference for Q12i.			
The p-value is less than 0.05. Therefore REJECT the Ho.			

Browse and Q12j

Observed Counts	Contact Info	Price	
Never	11	9	
Once a month	43	33	
Once a week	31	31	
Several times a week	20	22	
Once a day	5	7	
Several times a day	10	5	
Expected Counts	Contact Info	Price	
Never	10.57	9.43	
Once a month	40.18	35.82	
Once a week	32.78	29.22	
Several times a week	22.20	19.80	
Once a day	6.34	5.66	
Several times a day	7.93	7.07	
Test Statistics	Value	df	p-value
Pearson Chi-Square	2.876	5	0.719
Likelihood Ratio Chi-Square	2.904	5	0.715
Null Hypothesis (Ho) : No Browse difference for Q12j.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Browse and Q12k

Observed Counts	Ease of Use	Prof. Look	
Never	11	9	
Once a month	49	27	
Once a week	47	15	
Several times a week	30	12	
Once a day	6	6	
Several times a day	8	7	
Expected Counts	Ease of Use	Prof. Look	
Never	13.30	6.70	
Once a month	50.56	25.44	
Once a week	41.24	20.76	
Several times a week	27.94	14.06	
Once a day	7.98	4.02	
Several times a day	9.98	5.02	
Test Statistics	Value	df	p-value
Pearson Chi-Square	6.832	5	0.233
Likelihood Ratio Chi-Square	6.787	5	0.237
Null Hypothesis (Ho) : No Browse difference for Q12k.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Browse and Q121

Observed Counts	Price	Prof. Look	
Never	16	4	
Once a month	59	17	
Once a week	39	21	
Several times a week	35	7	
Once a day	8	3	
Several times a day	10	5	
Expected Counts	Price	Prof. Look	
Never	14.91	5.09	
Once a month	55.66	19.34	
Once a week	44.73	15.27	
Several times a week	31.31	10.69	
Once a day	8.20	2.80	
Several times a day	11.18	3.82	
Test Statistics	Value	df	p-value
Pearson Chi-Square	5.797	5	0.327
Likelihood Ratio Chi-Square	5.764	5	0.330
Null Hypothesis (Ho) : No Browse difference for Q121.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Browse and Q12m

Observed Counts	Product Info	Ease of Use	
Never	11	9	
Once a month	48	28	
Once a week	35	27	
Several times a week	27	15	
Once a day	7	5	
Several times a day	12	3	
Expected Counts	Product Info	Ease of Use	
Never	12.33	7.67	
Once a month	46.87	29.13	
Once a week	38.24	23.76	
Several times a week	25.90	16.10	
Once a day	7.40	4.60	
Several times a day	9.25	5.75	
Test Statistics	Value	df	p-value
Pearson Chi-Square	3.472	5	0.628
Likelihood Ratio Chi-Square	3.666	5	0.598
Null Hypothesis (Ho) : No Browse difference for Q12m.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Browse and Q12n

Observed Counts	Prof. Look	Contact Info	
Never	4	16	
Once a month	21	55	
Once a week	23	39	
Several times a week	18	24	
Once a day	5	7	
Several times a day	4	11	
Expected Counts	Prof. Look	Contact Info	
Never	6.61	13.39	
Once a month	25.11	50.89	
Once a week	20.48	41.52	
Several times a week	13.88	28.12	
Once a day	3.96	8.04	
Several times a day	4.96	10.04	
Test Statistics	Value	df	p-value
Pearson Chi-Square	5.512	5	0.357
Likelihood Ratio Chi-Square	5.597	5	0.347
Null Hypothesis (Ho) : No Browse difference for Q12n.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Browse and Q12o

Observed Counts	Ease of Use	Reputation	
Never	5	15	
Once a month	23	53	
Once a week	14	48	
Several times a week	15	27	
Once a day	6	6	
Several times a day	4	11	
Expected Counts	Ease of Use	Reputation	
Never	5.90	14.10	
Once a month	22.43	53.57	
Once a week	18.30	43.70	
Several times a week	12.40	29.60	
Once a day	3.54	8.46	
Several times a day	4.43	10.57	
Test Statistics	Value	df	p-value
Pearson Chi-Square	4.904	5	0.428
Likelihood Ratio Chi-Square	4.745	5	0.448
Null Hypothesis (Ho) : No Browse difference for Q12o.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Browse and Q13a

Observed Counts	Need	Price	
Never	7	13	
Once a month	30	46	
Once a week	29	33	
Several times a week	25	17	
Once a day	5	7	
Several times a day	8	7	
Expected Counts	Need	Price	
Never	9.16	10.84	
Once a month	34.82	41.18	
Once a week	28.41	33.59	
Several times a week	19.24	22.76	
Once a day	5.50	6.50	
Several times a day	6.87	8.13	
Test Statistics	Value	df	p-value
Pearson Chi-Square	5.801	5	0.326
Likelihood Ratio Chi-Square	5.823	5	0.324
Null Hypothesis (Ho) : No Browse difference for Q13a.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Browse and Q13b

Observed Counts	Ease of Use	Need	
Never	7	13	
Once a month	38	38	
Once a week	25	37	
Several times a week	14	28	
Once a day	2	9	
Several times a day	5	10	
Expected Counts	Ease of Use	Need	
Never	8.05	11.95	
Once a month	30.60	45.40	
Once a week	24.96	37.04	
Several times a week	16.91	25.09	
Once a day	4.43	6.57	
Several times a day	6.04	8.96	
Test Statistics	Value	df	p-value
Pearson Chi-Square	6.594	5	0.253
Likelihood Ratio Chi-Square	6.818	5	0.235
Null Hypothesis (Ho) : No Browse difference for Q13b.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Browse and Q13c

Observed Counts	Need	Reputation	
Never	6	14	
Once a month	25	51	
Once a week	21	41	
Several times a week	23	19	
Once a day	4	8	
Several times a day	7	8	
Expected Counts	Need	Reputation	
Never	7.58	12.42	
Once a month	28.79	47.21	
Once a week	23.49	38.51	
Several times a week	15.91	26.09	
Once a day	4.55	7.45	
Several times a day	5.68	9.32	
Test Statistics	Value	df	p-value
Pearson Chi-Square	7.438	5	0.190
Likelihood Ratio Chi-Square	7.285	5	0.200
Null Hypothesis (Ho) : No Browse difference for Q13c.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Browse and Q13d

Observed Counts	Prof. Look	Need	
Never	7	13	
Once a month	27	49	
Once a week	21	41	
Several times a week	13	29	
Once a day	4	8	
Several times a day	5	10	
Expected Counts	Prof. Look	Need	
Never	6.78	13.22	
Once a month	25.78	50.22	
Once a week	21.03	40.97	
Several times a week	14.25	27.75	
Once a day	4.07	7.93	
Several times a day	5.09	9.91	
Test Statistics	Value	df	p-value
Pearson Chi-Square	0.267	5	0.998
Likelihood Ratio Chi-Square	0.269	5	0.998
Null Hypothesis (Ho) : No Browse difference for Q13d.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Browse and Q13e

Observed Counts	Contact Info	Need	
Never	10	10	
Once a month	50	26	
Once a week	34	28	
Several times a week	19	23	
Once a day	6	6	
Several times a day	5	10	
Expected Counts	Contact Info	Need	
Never	10.93	9.07	
Once a month	41.52	34.48	
Once a week	33.87	28.13	
Several times a week	22.94	19.06	
Once a day	6.56	5.44	
Several times a day	8.19	6.81	
Test Statistics	Value	df	p-value
Pearson Chi-Square	8.336	5	0.139
Likelihood Ratio Chi-Square	8.427	5	0.134
Null Hypothesis (Ho) : No Browse difference for Q13e.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Browse and Q13f

Observed Counts	Product Info	Need	
Never	13	7	
Once a month	46	30	
Once a week	34	28	
Several times a week	23	19	
Once a day	4	8	
Several times a day	4	11	
Expected Counts	Product Info	Need	
Never	10.93	9.07	
Once a month	41.52	34.48	
Once a week	33.87	28.13	
Several times a week	22.94	19.06	
Once a day	6.56	5.44	
Several times a day	8.19	6.81	
Test Statistics	Value	df	p-value
Pearson Chi-Square	8.863	5	0.115
Likelihood Ratio Chi-Square	8.996	5	0.109
Null Hypothesis (Ho) : No Browse difference for Q13f.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

A.9 Purchase

Purchase and Q12a

Observed Counts	Reputation	Product Info	
Never	36	21	
Once a month	95	46	
Once a week	17	6	
Expected Counts	Reputation	Product Info	
Never	38.17	18.83	
Once a month	94.43	46.57	
Once a week	15.40	7.60	
Test Statistics	Value	df	p-value
Pearson Chi-Square	0.886	2	0.642
Likelihood Ratio Chi-Square	0.900	2	0.637
Null Hypothesis (Ho) : No Purchase difference for Q12a.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Purchase and Q12b

Observed Counts	Product Info	Contact Info	
Never	20	37	
Once a month	58	83	
Once a week	9	14	
Expected Counts	Product Info	Contact Info	
Never	22.44	34.56	
Once a month	55.51	85.49	
Once a week	9.05	13.95	
Test Statistics	Value	df	p-value
Pearson Chi-Square	0.622	2	0.733
Likelihood Ratio Chi-Square	0.628	2	0.731
Null Hypothesis (Ho) : No Purchase difference for Q12b.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Purchase and Q12c

Observed Counts	Price	Product Info	
Never	39	18	
Once a month	84	56	
Once a week	12	10	
Expected Counts	Price	Product Info	
Never	35.14	21.86	
Once a month	86.30	53.70	
Once a week	13.56	8.44	
Test Statistics	Value	df	p-value
Pearson Chi-Square	1.736	2	0.420
Likelihood Ratio Chi-Square	1.756	2	0.416
Null Hypothesis (Ho) : No Purchase difference for Q12c.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Purchase and Q12d

Observed Counts	Ease of Use	Price	
Never	28	29	
Once a month	75	66	
Once a week	8	15	
Expected Counts	Ease of Use	Price	
Never	28.63	28.37	
Once a month	70.82	70.18	
Once a week	11.55	11.45	
Test Statistics	Value	df	p-value
Pearson Chi-Square	2.718	2	0.257
Likelihood Ratio Chi-Square	2.752	2	0.253
Null Hypothesis (Ho) : No Purchase difference for Q12d.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Purchase and Q12e

Observed Counts	Prof. Look	Product Info	
Never	16	41	
Once a month	56	85	
Once a week	10	12	
Expected Counts	Prof. Look	Product Info	
Never	21.25	35.75	
Once a month	52.55	88.45	
Once a week	8.20	13.80	
Test Statistics	Value	df	p-value
Pearson Chi-Square	3.055	2	0.217
Likelihood Ratio Chi-Square	3.123	2	0.210
Null Hypothesis (Ho) : No Purchase difference for Q12e.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Purchase and Q12f

Observed Counts	Contact Info	Reputation	
Never	26	31	
Once a month	48	92	
Once a week	10	13	
Expected Counts	Contact Info	Reputation	
Never	21.76	35.24	
Once a month	53.45	86.55	
Once a week	8.78	14.22	
Test Statistics	Value	df	p-value
Pearson Chi-Square	2.508	2	0.285
Likelihood Ratio Chi-Square	2.489	2	0.288
Null Hypothesis (Ho) : No Purchase difference for Q12f.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Purchase and Q12g

Observed Counts	Price	Contact Info	
Never	25	32	
Once a month	65	76	
Once a week	9	14	
Expected Counts	Price	Contact Info	
Never	25.53	31.47	
Once a month	63.16	77.84	
Once a week	10.30	12.70	
Test Statistics	Value	df	p-value
Pearson Chi-Square	0.416	2	0.812
Likelihood Ratio Chi-Square	0.419	2	0.811
Null Hypothesis (Ho) : No Purchase difference for Q12g.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Purchase and Q12h

Observed Counts	Prof. Look	Reputation	
Never	13	44	
Once a month	27	114	
Once a week	4	19	
Expected Counts	Prof. Look	Reputation	
Never	11.35	45.65	
Once a month	28.07	112.93	
Once a week	4.58	18.42	
Test Statistics	Value	df	p-value
Pearson Chi-Square	0.443	2	0.801
Likelihood Ratio Chi-Square	0.436	2	0.804
Null Hypothesis (Ho) : No Purchase difference for Q12h.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Purchase and Q12i

Observed Counts	Reputation	Price	
Never	28	29	
Once a month	84	57	
Once a week	15	8	
Expected Counts	Reputation	Price	
Never	32.76	24.24	
Once a month	81.03	59.97	
Once a week	13.22	9.78	
Test Statistics	Value	df	p-value
Pearson Chi-Square	2.445	2	0.294
Likelihood Ratio Chi-Square	2.438	2	0.295
Null Hypothesis (Ho) : No Purchase difference for Q12i.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Purchase and Q12j

Observed Counts	Contact Info	Ease of Use	
Never	33	24	
Once a month	73	68	
Once a week	10	13	
Expected Counts	Contact Info	Ease of Use	
Never	29.92	27.08	
Once a month	74.01	66.99	
Once a week	12.07	10.93	
Test Statistics	Value	df	p-value
Pearson Chi-Square	1.446	2	0.485
Likelihood Ratio Chi-Square	1.449	2	0.485
Null Hypothesis (Ho) : No Purchase difference for Q12j.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Purchase and Q12k

Observed Counts	Ease of Use	Prof. Look	
Never	31	26	
Once a month	104	37	
Once a week	11	12	
Expected Counts	Ease of Use	Prof. Look	
Never	37.66	19.34	
Once a month	93.15	47.85	
Once a week	15.19	7.81	
Test Statistics	Value	df	p-value
Pearson Chi-Square	10.603	2	0.005
Likelihood Ratio Chi-Square	10.422	2	0.005
Null Hypothesis (Ho) : No Purchase difference for Q12k.			
The p-value is less than 0.05. Therefore REJECT the Ho.			

Purchase and Q12l

Observed Counts	Price	Prof. Look	
Never	45	11	
Once a month	104	35	
Once a week	13	10	
Expected Counts	Price	Prof. Look	
Never	41.61	14.39	
Once a month	103.29	35.71	
Once a week	17.09	5.91	
Test Statistics	Value	df	p-value
Pearson Chi-Square	4.904	2	0.086
Likelihood Ratio Chi-Square	4.656	2	0.102
Null Hypothesis (Ho) : No Purchase difference for Q12l.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Purchase and Q12m

Observed Counts	Product Info	Ease of Use	
Never	29	28	
Once a month	95	46	
Once a week	13	10	
Expected Counts	Product Info	Ease of Use	
Never	35.33	21.67	
Once a month	87.41	53.59	
Once a week	14.26	8.74	
Test Statistics	Value	df	p-value
Pearson Chi-Square	5.015	2	0.081
Likelihood Ratio Chi-Square	4.964	2	0.084
Null Hypothesis (Ho) : No Purchase difference for Q12m.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Purchase and Q12n

Observed Counts	Prof. Look	Contact Info	
Never	14	43	
Once a month	46	95	
Once a week	11	12	
Expected Counts	Prof. Look	Contact Info	
Never	18.31	38.69	
Once a month	45.30	95.70	
Once a week	7.39	15.61	
Test Statistics	Value	df	p-value
Pearson Chi-Square	4.112	2	0.128
Likelihood Ratio Chi-Square	4.026	2	0.134
Null Hypothesis (Ho) : No Purchase difference for Q12n.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Purchase and Q12o

Observed Counts	Ease of Use	Reputation	
Never	18	39	
Once a month	36	105	
Once a week	7	16	
Expected Counts	Ease of Use	Reputation	
Never	15.73	41.27	
Once a month	38.92	102.08	
Once a week	6.35	16.65	
Test Statistics	Value	df	p-value
Pearson Chi-Square	0.846	2	0.655
Likelihood Ratio Chi-Square	0.837	2	0.658
Null Hypothesis (Ho) : No Purchase difference for Q12o.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Purchase and Q13a

Observed Counts	Need	Price	
Never	23	34	
Once a month	66	75	
Once a week	12	11	
Expected Counts	Need	Price	
Never	26.05	30.95	
Once a month	64.44	76.56	
Once a week	10.51	12.49	
Test Statistics	Value	df	p-value
Pearson Chi-Square	1.116	2	0.572
Likelihood Ratio Chi-Square	1.119	2	0.571
Null Hypothesis (Ho) : No Purchase difference for Q13a.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Purchase and Q13b

Observed Counts	Ease of Use	Need	
Never	19	38	
Once a month	60	80	
Once a week	9	14	
Expected Counts	Ease of Use	Need	
Never	22.80	34.20	
Once a month	56.00	84.00	
Once a week	9.20	13.80	
Test Statistics	Value	df	p-value
Pearson Chi-Square	1.539	2	0.463
Likelihood Ratio Chi-Square	1.559	2	0.459
Null Hypothesis (Ho) : No Purchase difference for Q13b.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Purchase and Q13c

Observed Counts	Need	Reputation	
Never	18	39	
Once a month	58	83	
Once a week	9	14	
Expected Counts			
Never	21.92	35.08	
Once a month	54.23	86.77	
Once a week	8.85	14.15	
Test Statistics	Value	df	p-value
Pearson Chi-Square	1.571	2	0.456
Likelihood Ratio Chi-Square	1.598	2	0.450
Null Hypothesis (Ho) : No Purchase difference for Q13c.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Purchase and Q13d

Observed Counts	Prof. Look	Need	
Never	22	35	
Once a month	39	102	
Once a week	11	12	
Expected Counts	Prof. Look	Need	
Never	18.57	38.43	
Once a month	45.94	95.06	
Once a week	7.49	15.51	
Test Statistics	Value	df	p-value
Pearson Chi-Square	4.927	2	0.085
Likelihood Ratio Chi-Square	4.805	2	0.090
Null Hypothesis (Ho) : No Purchase difference for Q13d.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Purchase and Q13e

Observed Counts	Contact Info	Need	
Never	32	25	
Once a month	75	66	
Once a week	12	11	
Expected Counts	Contact Info	Need	
Never	30.69	26.31	
Once a month	75.92	65.08	
Once a week	12.38	10.62	
Test Statistics	Value	df	p-value
Pearson Chi-Square	0.171	2	0.918
Likelihood Ratio Chi-Square	0.1717	2	0.918
Null Hypothesis (Ho) : No Purchase difference for Q13e.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Purchase and Q13f

Observed Counts	Product Info	Need	
Never	32	25	
Once a month	78	63	
Once a week	11	12	
Expected Counts	Product Info	Need	
Never	31.21	25.79	
Once a month	77.20	63.80	
Once a week	12.59	10.41	
Test Statistics	Value	df	p-value
Pearson Chi-Square	0.508	2	0.776
Likelihood Ratio Chi-Square	0.506	2	0.777
Null Hypothesis (Ho) : No Purchase difference for Q13f.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

A.10 Expensive

Expensive and Q12a

Observed Counts	Reputation	Product Info	
\$10 or less	13	12	
\$50 or less	27	12	
\$100 or less	44	22	
\$500 or less	42	13	
Over \$500	25	17	
Expected Counts	Reputation	Product Info	
\$10 or less	16.63	8.37	
\$50 or less	25.94	13.06	
\$100 or less	43.90	22.10	
\$500 or less	36.59	18.41	
Over \$500	27.94	14.06	
Test Statistics	Value	df	p-value
Pearson Chi-Square	5.812	4	0.214
Likelihood Ratio Chi-Square	5.810	4	0.214
Null Hypothesis (Ho) : No Expensive difference for Q12a.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Expensive and Q12b

Observed Counts	Product Info	Contact Info	
\$10 or less	9	16	
\$50 or less	15	24	
\$100 or less	24	42	
\$500 or less	24	31	
Over \$500	19	23	
Expected Counts	Product Info	Contact Info	
\$10 or less	10.02	14.98	
\$50 or less	15.63	23.37	
\$100 or less	26.46	39.54	
\$500 or less	22.05	32.95	
Over \$500	16.84	25.16	
Test Statistics	Value	df	p-value
Pearson Chi-Square	1.350	4	0.853
Likelihood Ratio Chi-Square	1.349	4	0.853
Null Hypothesis (Ho) : No Expensive difference for Q12b.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Expensive and Q12c

Observed Counts	Price	Product Info	
\$10 or less	15	10	
\$50 or less	25	13	
\$100 or less	35	31	
\$500 or less	34	20	
Over \$500	27	15	
Expected Counts	Price	Product Info	
\$10 or less	15.11	9.89	
\$50 or less	22.97	15.03	
\$100 or less	39.89	26.11	
\$500 or less	32.64	21.36	
Over \$500	25.39	16.61	
Test Statistics	Value	df	p-value
Pearson Chi-Square	2.376	4	0.667
Likelihood Ratio Chi-Square	2.362	4	0.669
Null Hypothesis (Ho) : No Expensive difference for Q12c.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Expensive and Q12d

Observed Counts	Ease of Use	Price	
\$10 or less	12	13	
\$50 or less	21	18	
\$100 or less	37	29	
\$500 or less	22	33	
Over \$500	24	18	
Expected Counts	Ease of Use	Price	
\$10 or less	12.78	12.22	
\$50 or less	19.93	19.07	
\$100 or less	33.73	32.27	
\$500 or less	28.11	26.89	
Over \$500	21.46	20.54	
Test Statistics	Value	df	p-value
Pearson Chi-Square	4.190	4	0.381
Likelihood Ratio Chi-Square	4.208	4	0.379
Null Hypothesis (Ho) : No Expensive difference for Q12d.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Expensive and Q12e

Observed Counts	Prof. Look	Product Info	
\$10 or less	10	15	
\$50 or less	10	29	
\$100 or less	30	36	
\$500 or less	20	35	
Over \$500	15	26	
Expected Counts	Prof. Look	Product Info	
\$10 or less	9.40	15.60	
\$50 or less	14.67	24.33	
\$100 or less	24.82	41.18	
\$500 or less	20.69	34.31	
Over \$500	15.42	25.58	
Test Statistics	Value	df	p-value
Pearson Chi-Square	4.227	4	0.376
Likelihood Ratio Chi-Square	4.325	4	0.364
Null Hypothesis (Ho) : No Expensive difference for Q12e.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Expensive and Q12f

Observed Counts	Contact Info	Reputation	
\$10 or less	13	12	
\$50 or less	16	23	
\$100 or less	26	40	
\$500 or less	19	35	
Over \$500	14	28	
Expected Counts	Contact Info	Reputation	
\$10 or less	9.73	15.27	
\$50 or less	15.19	23.81	
\$100 or less	25.70	40.30	
\$500 or less	21.03	32.97	
Over \$500	16.35	25.65	
Test Statistics	Value	df	p-value
Pearson Chi-Square	2.746	4	0.601
Likelihood Ratio Chi-Square	2.711	4	0.607
Null Hypothesis (Ho) : No Expensive difference for Q12f.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Expensive and Q12g

Observed Counts	Contact Info	Reputation	
\$10 or less	10	15	
\$50 or less	20	19	
\$100 or less	30	36	
\$500 or less	23	32	
Over \$500	19	23	
Expected Counts	Contact Info	Reputation	
\$10 or less	11.23	13.77	
\$50 or less	17.52	21.48	
\$100 or less	29.66	36.34	
\$500 or less	24.71	30.29	
Over \$500	18.87	23.13	
Test Statistics	Value	df	p-value
Pearson Chi-Square	1.106	4	0.893
Likelihood Ratio Chi-Square	1.105	4	0.893
Null Hypothesis (Ho) : No Expensive difference for Q12g.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Expensive and Q12h

Observed Counts	Prof. Look	Reputation	
\$10 or less	7	18	
\$50 or less	9	30	
\$100 or less	14	52	
\$500 or less	7	48	
Over \$500	11	31	
Expected Counts	Prof. Look	Reputation	
\$10 or less	5.29	19.71	
\$50 or less	8.25	30.75	
\$100 or less	13.96	52.04	
\$500 or less	11.63	43.37	
Over \$500	8.88	33.12	
Test Statistics	Value	df	p-value
Pearson Chi-Square	3.771	4	0.438
Likelihood Ratio Chi-Square	3.981	4	0.409
Null Hypothesis (Ho) : No Expensive difference for Q12h.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Expensive and Q12i

Observed Counts	Reputation	Price	
\$10 or less	14	11	
\$50 or less	20	19	
\$100 or less	36	30	
\$500 or less	37	18	
Over \$500	23	19	
Expected Counts	Reputation	Price	
\$10 or less	14.32	10.68	
\$50 or less	22.33	16.67	
\$100 or less	37.80	28.20	
\$500 or less	31.50	23.50	
Over \$500	24.05	17.95	
Test Statistics	Value	df	p-value
Pearson Chi-Square	3.145	4	0.534
Likelihood Ratio Chi-Square	3.201	4	0.525
Null Hypothesis (Ho) : No Expensive difference for Q12i.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Expensive and Q12j

Observed Counts	Contact Info	Price	
\$10 or less	19	6	
\$50 or less	23	16	
\$100 or less	36	30	
\$500 or less	23	32	
Over \$500	19	23	
Expected Counts	Contact Info	Price	
\$10 or less	13.22	11.78	
\$50 or less	20.62	18.38	
\$100 or less	34.89	31.11	
\$500 or less	29.07	25.93	
Over \$500	22.20	19.80	
Test Statistics	Value	df	p-value
Pearson Chi-Square	9.703	4	0.046
Likelihood Ratio Chi-Square	10.029	4	0.040
Null Hypothesis (Ho) : No Expensive difference for Q12j.			
The p-value is less than 0.05. Therefore do REJECT the Ho.			

Expensive and Q12k

Observed Counts	Ease of Use	Prof. Look	
\$10 or less	12	13	
\$50 or less	23	16	
\$100 or less	45	21	
\$500 or less	42	13	
Over \$500	29	13	
Expected Counts	Ease of Use	Prof. Look	
\$10 or less	16.63	8.37	
\$50 or less	25.94	13.06	
\$100 or less	43.90	22.10	
\$500 or less	36.59	18.41	
Over \$500	27.94	14.06	
Test Statistics	Value	df	p-value
Pearson Chi-Square	7.443	4	0.114
Likelihood Ratio Chi-Square	7.327	4	0.120
Null Hypothesis (Ho) : No Expensive difference for Q12k.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Expensive and Q121

Observed Counts	Price	Prof. Look	
N\$10 or less	21	3	
\$50 or less	28	11	
\$100 or less	43	23	
\$500 or less	45	8	
Over \$500	30	12	
Expected Counts	Price	Prof. Look	
\$10 or less	17.89	6.11	
\$50 or less	29.08	9.92	
\$100 or less	49.21	16.79	
\$500 or less	39.51	13.49	
Over \$500	31.31	10.69	
Test Statistics	Value	df	p-value
Pearson Chi-Square	8.562	4	0.073
Likelihood Ratio Chi-Square	9.041	4	0.060
Null Hypothesis (Ho) : No Expensive difference for Q121.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Expensive and Q12m

Observed Counts	Product Info	Ease of Use	
\$10 or less	18	7	
\$50 or less	22	17	
\$100 or less	38	28	
\$500 or less	33	22	
Over \$500	29	13	
Expected Counts	Product Info	Ease of Use	
\$10 or less	15.42	9.58	
\$50 or less	24.05	14.95	
\$100 or less	40.70	25.30	
\$500 or less	33.92	21.08	
Over \$500	25.90	16.10	
Test Statistics	Value	df	p-value
Pearson Chi-Square	3.085	4	0.544
Likelihood Ratio Chi-Square	3.151	4	0.533
Null Hypothesis (Ho) : No Expensive difference for Q12m.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Expensive and Q12n

Observed Counts	Prof. Look	Contact Info	
\$10 or less	3	22	
\$50 or less	14	25	
\$100 or less	23	43	
\$500 or less	17	38	
Over \$500	18	24	
Expected Counts	Prof. Look	Contact Info	
\$10 or less	8.26	16.74	
\$50 or less	12.89	26.11	
\$100 or less	21.81	44.19	
\$500 or less	18.17	36.83	
Over \$500	13.88	28.12	
Test Statistics	Value	df	p-value
Pearson Chi-Square	7.186	4	0.126
Likelihood Ratio Chi-Square	8.054	4	0.090
Null Hypothesis (Ho) : No Expensive difference for Q12n.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Expensive and Q12o

Observed Counts	Ease of Use	Reputation	
\$10 or less	7	18	
\$50 or less	10	29	
\$100 or less	21	45	
\$500 or less	14	41	
Over \$500	15	27	
Expected Counts	Ease of Use	Reputation	
\$10 or less	7.38	17.62	
\$50 or less	11.51	27.49	
\$100 or less	19.48	46.52	
\$500 or less	16.23	38.77	
Over \$500	12.40	29.60	
Test Statistics	Value	df	p-value
Pearson Chi-Square	1.689	4	0.793
Likelihood Ratio Chi-Square	1.680	4	0.794
Null Hypothesis (Ho) : No Expensive difference for Q12o.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Expensive and Q13a

Observed Counts	Need	Price	
\$10 or less	10	15	
\$50 or less	13	26	
\$100 or less	27	39	
\$500 or less	28	27	
Over \$500	26	16	
Expected Counts	Need	Price	
\$10 or less	11.45	13.55	
\$50 or less	17.87	21.13	
\$100 or less	30.24	35.76	
\$500 or less	25.20	29.80	
Over \$500	19.24	22.76	
Test Statistics	Value	df	p-value
Pearson Chi-Square	8.383	4	0.079
Likelihood Ratio Chi-Square	8.448	4	0.076
Null Hypothesis (Ho) : No Expensive difference for Q13a.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Expensive and Q13b

Observed Counts	Ease of Use	Need	
\$10 or less	10	15	
\$50 or less	16	23	
\$100 or less	26	39	
\$500 or less	23	32	
Over \$500	16	26	
Expected Counts	Ease of Use	Need	
\$10 or less	10.07	14.93	
\$50 or less	15.70	23.30	
\$100 or less	26.17	38.83	
\$500 or less	22.15	32.85	
Over \$500	16.91	25.09	
Test Statistics	Value	df	p-value
Pearson Chi-Square	0.149	4	0.997
Likelihood Ratio Chi-Square	0.150	4	0.997
Null Hypothesis (Ho) : No Expensive difference for Q13b.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Expensive and Q13c

Observed Counts	Need	Reputation	
\$10 or less	8	17	
\$50 or less	13	26	
\$100 or less	23	43	
\$500 or less	23	32	
Over \$500	19	23	
Expected Counts	Need	Reputation	
\$10 or less	9.47	15.53	
\$50 or less	14.78	24.22	
\$100 or less	25.00	41.00	
\$500 or less	20.84	34.16	
Over \$500	15.91	26.09	
Test Statistics	Value	df	p-value
Pearson Chi-Square	2.296	4	0.681
Likelihood Ratio Chi-Square	2.290	4	0.683
Null Hypothesis (Ho) : No Expensive difference for Q13c.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Expensive and Q13d

Observed Counts	Prof. Look	Need	
\$10 or less	9	16	
\$50 or less	17	22	
\$100 or less	23	43	
\$500 or less	16	39	
Over \$500	12	30	
Expected Counts	Prof. Look	Need	
\$10 or less	8.48	16.52	
\$50 or less	13.23	25.77	
\$100 or less	22.39	43.61	
\$500 or less	18.66	36.34	
Over \$500	14.25	27.75	
Test Statistics	Value	df	p-value
Pearson Chi-Square	2.809	4	0.590
Likelihood Ratio Chi-Square	2.778	4	0.596
Null Hypothesis (Ho) : No Expensive difference for Q13d.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Expensive and Q13e

Observed Counts	Contact Info	Need	
\$10 or less	14	11	
\$50 or less	29	10	
\$100 or less	37	29	
\$500 or less	28	27	
Over \$500	16	26	
Expected Counts	Contact Info	Need	
\$10 or less	13.66	11.34	
\$50 or less	21.30	17.70	
\$100 or less	36.05	29.95	
\$500 or less	30.04	24.96	
Over \$500	22.94	19.06	
Test Statistics	Value	df	p-value
Pearson Chi-Square	11.138	4	0.025
Likelihood Ratio Chi-Square	11.472	4	0.022
Null Hypothesis (Ho) : No Expensive difference for Q13e.			
The p-value is less than 0.05. Therefore REJECT the Ho.			

Expensive and Q13f

Observed Counts	Product Info	Need	
\$10 or less	14	11	
\$50 or less	27	12	
\$100 or less	29	37	
\$500 or less	33	22	
Over \$500	21	21	
Expected Counts	Product Info	Need	
\$10 or less	13.66	11.34	
\$50 or less	21.30	17.70	
\$100 or less	36.05	29.95	
\$500 or less	30.04	24.96	
Over \$500	22.94	19.06	
Test Statistics	Value	df	p-value
Pearson Chi-Square	7.420	4	0.115
Likelihood Ratio Chi-Square	7.523	4	0.111
Null Hypothesis (Ho) : No Expensive difference for Q13f.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

A.11 Experience

Experience and Q12a

Observed Counts	Reputation	Product Info	
Yes, definitely	91	39	
Somewhat	45	30	
No, not at all	6	6	
Expected Counts	Reputation	Product Info	
Yes, definitely	85.07	44.93	
Somewhat	49.08	25.92	
No, not at all	7.85	4.15	
Test Statistics	Value	df	p-value
Pearson Chi-Square	3.441	2	0.179
Likelihood Ratio Chi-Square	3.385	2	0.184
Null Hypothesis (Ho) : No Experience difference for Q12a.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Experience and Q12b

Observed Counts	Product Info	Contact Info	
Yes, definitely	48	82	
Somewhat	34	41	
No, not at all	6	6	
Expected Counts	Product Info	Contact Info	
Yes, definitely	52.72	77.28	
Somewhat	30.41	44.59	
No, not at all	4.87	7.13	
Test Statistics	Value	df	p-value
Pearson Chi-Square	1.866	2	0.393
Likelihood Ratio Chi-Square	1.858	2	0.395
Null Hypothesis (Ho) : No Experience difference for Q12b.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Experience and Q12c

Observed Counts	Price	Product Info	
Yes, definitely	77	53	
Somewhat	47	26	
No, not at all	6	6	
Expected Counts	Price	Product Info	
Yes, definitely	78.60	51.40	
Somewhat	44.14	28.86	
No, not at all	7.26	4.74	
Test Statistics	Value	df	p-value
Pearson Chi-Square	1.102	2	0.577
Likelihood Ratio Chi-Square	1.095	2	0.578
Null Hypothesis (Ho) : No Experience difference for Q12c.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Experience and Q12d

Observed Counts	Ease of Use	Price	
Yes, definitely	63	67	
Somewhat	37	38	
No, not at all	10	2	
Expected Counts	Ease of Use	Price	
Yes, definitely	65.90	64.10	
Somewhat	38.02	36.98	
No, not at all	6.08	5.92	
Test Statistics	Value	df	p-value
Pearson Chi-Square	5.429	2	0.066
Likelihood Ratio Chi-Square	5.917	2	0.052
Null Hypothesis (Ho) : No Experience difference for Q12d.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Experience and Q12e

Observed Counts	Prof. Look	Product Info	
Yes, definitely	61	69	
Somewhat	19	55	
No, not at all	2	10	
Expected Counts	Prof. Look	Product Info	
Yes, definitely	49.35	80.65	
Somewhat	28.09	45.91	
No, not at all	4.56	7.44	
Test Statistics	Value	df	p-value
Pearson Chi-Square	11.486	2	0.003
Likelihood Ratio Chi-Square	11.952	2	0.003
Null Hypothesis (Ho) : No Experience difference for Q12e.			
The p-value is less than 0.05. Therefore REJECT the Ho.			

Experience and Q12f

Observed Counts	Contact Info	Reputation	
Yes, definitely	48	82	
Somewhat	29	45	
No, not at all	8	4	
Expected Counts	Contact Info	Reputation	
Yes, definitely	51.16	78.84	
Somewhat	29.12	44.88	
No, not at all	4.72	7.28	
Test Statistics	Value	df	p-value
Pearson Chi-Square	4.074	2	0.130
Likelihood Ratio Chi-Square	3.971	2	0.137
Null Hypothesis (Ho) : No Experience difference for Q12f.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Experience and Q12g

Observed Counts	Price	Contact Info	
Yes, definitely	61	69	
Somewhat	36	39	
No, not at all	3	9	
Expected Counts	Price	Contact Info	
Yes, definitely	59.91	70.09	
Somewhat	34.56	40.44	
No, not at all	5.53	6.47	
Test Statistics	Value	df	p-value
Pearson Chi-Square	2.295	2	0.317
Likelihood Ratio Chi-Square	2.419	2	0.298
Null Hypothesis (Ho) : No Experience difference for Q12g.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Experience and Q12h

Observed Counts	Prof. Look	Reputation	
Yes, definitely	29	101	
Somewhat	14	61	
No, not at all	4	8	
Expected Counts	Prof. Look	Reputation	
Yes, definitely	28.16	101.84	
Somewhat	16.24	58.76	
No, not at all	2.60	9.40	
Test Statistics	Value	df	p-value
Pearson Chi-Square	1.392	2	0.499
Likelihood Ratio Chi-Square	1.309	2	0.520
Null Hypothesis (Ho) : No Experience difference for Q12h.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Experience and Q12i

Observed Counts	Reputation	Price	
Yes, definitely	80	50	
Somewhat	37	38	
No, not at all	6	6	
Expected Counts	Reputation	Price	
Yes, definitely	73.69	56.31	
Somewhat	42.51	32.49	
No, not at all	6.80	5.20	
Test Statistics	Value	df	p-value
Pearson Chi-Square	3.116	2	0.211
Likelihood Ratio Chi-Square	3.112	2	0.211
Null Hypothesis (Ho) : No Experience difference for Q12i.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Experience and Q12j

Observed Counts	Contact Info	Ease of Use	
Yes, definitely	68	62	
Somewhat	39	36	
No, not at all	7	5	
Expected Counts	Contact Info	Ease of Use	
Yes, definitely	68.29	61.71	
Somewhat	39.40	35.60	
No, not at all	6.30	5.70	
Test Statistics	Value	df	p-value
Pearson Chi-Square	0.173	2	0.917
Likelihood Ratio Chi-Square	0.174	2	0.917
Null Hypothesis (Ho) : No Experience difference for Q12j.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Experience and Q12k

Observed Counts	Ease of Use	Prof. Look	
Yes, definitely	93	37	
Somewhat	41	34	
No, not at all	11	1	
Expected Counts	Ease of Use	Prof. Look	
Yes, definitely	86.87	43.13	
Somewhat	50.12	24.88	
No, not at all	8.02	3.98	
Test Statistics	Value	df	p-value
Pearson Chi-Square	9.463	2	0.008
Likelihood Ratio Chi-Square	10.293	2	0.006
Null Hypothesis (Ho) : No Experience difference for Q12k.			
The p-value is less than 0.05. Therefore REJECT the Ho.			

Experience and Q12l

Observed Counts	Price	Prof. Look	
Yes, definitely	94	36	
Somewhat	52	20	
No, not at all	11	1	
Expected Counts	Price	Prof. Look	
Yes, definitely	95.37	34.63	
Somewhat	52.82	19.18	
No, not at all	8.80	3.20	
Test Statistics	Value	df	p-value
Pearson Chi-Square	2.179	2	0.336
Likelihood Ratio Chi-Square	2.697	2	0.260
Null Hypothesis (Ho) : No Experience difference for Q12l.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Experience and Q12m

Observed Counts	Product Info	Ease of Use	
Yes, definitely	88	42	
Somewhat	36	39	
No, not at all	8	4	
Expected Counts	Product Info	Ease of Use	
Yes, definitely	79.08	50.92	
Somewhat	45.62	29.38	
No, not at all	7.30	4.70	
Test Statistics	Value	df	p-value
Pearson Chi-Square	7.922	2	0.019
Likelihood Ratio Chi-Square	7.853	2	0.020
Null Hypothesis (Ho) : No Experience difference for Q12m.			
The p-value is less than 0.05. Therefore do REJECT the Ho.			

Experience and Q12n

Observed Counts	Prof. Look	Contact Info	
Yes, definitely	47	83	
Somewhat	26	49	
No, not at all	1	11	
Expected Counts	Prof. Look	Contact Info	
Yes, definitely	44.33	85.67	
Somewhat	25.58	49.42	
No, not at all	4.09	7.91	
Test Statistics	Value	df	p-value
Pearson Chi-Square	3.800	2	0.150
Likelihood Ratio Chi-Square	4.695	2	0.096
Null Hypothesis (Ho) : No Experience difference for Q12n.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Experience and Q12o

Observed Counts	Ease of Use	Reputation	
Yes, definitely	36	94	
Somewhat	27	48	
No, not at all	3	9	
Expected Counts	Ease of Use	Reputation	
Yes, definitely	39.54	90.46	
Somewhat	22.81	52.19	
No, not at all	3.65	8.35	
Test Statistics	Value	df	p-value
Pearson Chi-Square	1.727	2	0.422
Likelihood Ratio Chi-Square	1.708	2	0.426
Null Hypothesis (Ho) : No Experience difference for Q12o.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Experience and Q13a

Observed Counts	Need	Price	
Yes, definitely	70	60	
Somewhat	25	50	
No, not at all	3	9	
Expected Counts	Need	Price	
Yes, definitely	58.71	71.29	
Somewhat	33.87	41.13	
No, not at all	5.42	6.58	
Test Statistics	Value	df	p-value
Pearson Chi-Square	10.166	2	0.006
Likelihood Ratio Chi-Square	10.369	2	0.006
Null Hypothesis (Ho) : No Experience difference for Q13a.			
The p-value is less than 0.05. Therefore REJECT the Ho.			

Experience and Q13b

Observed Counts	Ease of Use	Need	
Yes, definitely	47	83	
Somewhat	35	39	
No, not at all	6	6	
Expected Counts	Ease of Use	Need	
Yes, definitely	52.96	77.04	
Somewhat	30.15	43.85	
No, not at all	4.89	7.11	
Test Statistics	Value	df	p-value
Pearson Chi-Square	2.877	2	0.237
Likelihood Ratio Chi-Square	2.867	2	0.239
Null Hypothesis (Ho) : No Experience difference for Q13b.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Experience and Q13c

Observed Counts	Need	Reputation	
Yes, definitely	54	76	
Somewhat	26	49	
No, not at all	4	8	
Expected Counts	Need	Reputation	
Yes, definitely	50.32	79.68	
Somewhat	29.03	45.97	
No, not at all	4.65	7.35	
Test Statistics	Value	df	p-value
Pearson Chi-Square	1.101	2	0.577
Likelihood Ratio Chi-Square	1.108	2	0.575
Null Hypothesis (Ho) : No Experience difference for Q13c.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Experience and Q13d

Observed Counts	Prof. Look	Need	
Yes, definitely	38	92	
Somewhat	29	46	
No, not at all	7	5	
Expected Counts	Prof. Look	Need	
Yes, definitely	44.33	85.67	
Somewhat	25.58	49.42	
No, not at all	4.09	7.91	
Test Statistics	Value	df	p-value
Pearson Chi-Square	5.203	2	0.074
Likelihood Ratio Chi-Square	5.021	2	0.081
Null Hypothesis (Ho) : No Experience difference for Q13d.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Experience and Q13e

Observed Counts	Contact Info	Need	
Yes, definitely	67	63	
Somewhat	42	33	
No, not at all	9	3	
Expected Counts	Contact Info	Need	
Yes, definitely	70.69	59.31	
Somewhat	40.78	34.22	
No, not at all	6.53	5.47	
Test Statistics	Value	df	p-value
Pearson Chi-Square	2.559	2	0.278
Likelihood Ratio Chi-Square	2.679	2	0.262
Null Hypothesis (Ho) : No Experience difference for Q13e.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

Experience and Q13f

Observed Counts	Product Info	Need	
Yes, definitely	65	65	
Somewhat	45	30	
No, not at all	8	4	
Expected Counts	Product Info	Need	
Yes, definitely	70.69	59.31	
Somewhat	40.78	34.22	
No, not at all	6.53	5.47	
Test Statistics	Value	df	p-value
Pearson Chi-Square	2.690	2	0.260
Likelihood Ratio Chi-Square	2.714	2	0.257
Null Hypothesis (Ho) : No Experience difference for Q13f.			
The p-value is greater than 0.05. Therefore do NOT reject the Ho.			

A.12 Contingency Tables

Question 12a

	Reputation	Product Info	Total
Observed (O)	151	76	227
Expected (E)	113.5	113.5	227
(O - E)	37.5	-37.5	
(O - E)²	1406.250	1406.250	
(O - E)² / E	12.390	12.390	
Chi Squared Calculated		24.78	
Degrees of Freedom		1	
Chi Squared (0.05)		3.84	
<p>Since Chi Squared Calculated is greater than 3.84</p> <p style="text-align: center;">REJECT the Ho</p> <p>There is a difference between Reputation and Product Info</p>			

Question 12b

	Product Info	Contact Info	Total
Observed (O)	91	136	227
Expected (E)	113.5	113.5	227
(O - E)	-22.5	22.5	
(O - E)²	506.250	506.250	
(O - E)² / E	4.460	4.460	
Chi Squared Calculated		8.92	
Degrees of Freedom		1	
Chi Squared (0.05)		3.84	
<p>Since Chi Squared Calculated is greater than 3.84</p> <p style="text-align: center;">REJECT the Ho</p> <p>There is a difference between Product Info and Contact Info</p>			

Question 12c

	Price	Product Info	Total
Observed (O)	136	89	225
Expected (E)	112.5	112.5	225
(O - E)	23.5	-23.5	
(O - E)²	552.250	552.250	
(O - E)² / E	4.909	4.909	
Chi Squared Calculated		9.82	
Degrees of Freedom		1	
Chi Squared (0.05)		3.84	
<p>Since Chi Squared Calculated is greater than 3.84</p> <p style="text-align: center;">REJECT the Ho</p> <p>There is a difference between Price and Product Info</p>			

Question 12d

	Ease of Use	Price	Total
Observed (O)	116	111	227
Expected (E)	113.5	113.5	
(O - E)	2.5	-2.5	
(O - E)²	6.250	6.250	
(O - E)² / E	0.055	0.055	
Chi Squared Calculated		0.11	
Degrees of Freedom		1	
Chi Squared (0.05)		3.84	
<p>Since Chi Squared Calculated is less than 3.84</p> <p>Do NOT reject the Ho</p> <p>There is no difference between Ease of Use and Price</p>			

Question 12e

	Prof. Look	Product Info	Total
Observed (O)	85	141	226
Expected (E)	113	113	226
(O - E)	-28	28	
(O - E)²	784.000	784.000	
(O - E)² / E	6.938	6.938	
Chi Squared Calculated		13.88	
Degrees of Freedom		1	
Chi Squared (0.05)		3.84	
<p>Since Chi Squared Calculated is greater than 3.84</p> <p style="text-align: center;">REJECT the Ho</p> <p>There is a difference between Prof. Look and Product Info</p>			

Question 12f

	Contact Info	Reputation	Total
Observed (O)	88	138	226
Expected (E)	113	113	226
(O - E)	-25	25	
(O - E)²	625.000	625.000	
(O - E)² / E	5.531	5.531	
Chi Squared Calculated		11.06	
Degrees of Freedom		1	
Chi Squared (0.05)		3.84	
<p>Since Chi Squared Calculated is greater than 3.84</p> <p style="text-align: center;">REJECT the Ho</p> <p>There is a difference between Contact Info and Reputation</p>			

Question 12g

	Price	Contact Info	Total
Observed (O)	102	125	227
Expected (E)	113.5	113.5	227
(O - E)	-11.5	11.5	
(O - E)²	132.250	132.250	
(O - E)² / E	1.165	1.165	
Chi Squared Calculated		2.33	
Degrees of Freedom		1	
Chi Squared (0.05)		3.84	
<p>Since Chi Squared Calculated is less than 3.84</p> <p>Do NOT reject the Ho</p> <p>There is no difference between Price and Contact Info</p>			

Question 12h

	Prof. Look	Reputation	Total
Observed (O)	48	179	227
Expected (E)	113.5	113.5	227
(O - E)	-65.5	65.5	
(O - E)²	4290.250	4290.250	
(O - E)² / E	37.800	37.800	
Chi Squared Calculated		75.60	
Degrees of Freedom		1	
Chi Squared (0.05)		3.84	
<p>Since Chi Squared Calculated is greater than 3.84</p> <p style="text-align: center;">REJECT the Ho</p> <p>There is a difference between Prof. Look and Reputation</p>			

Question 12i

	Reputation	Price	Total
Observed (O)	130	97	227
Expected (E)	113.5	113.5	227
(O - E)	16.5	-16.5	
(O - E)²	272.250	272.250	
(O - E)² / E	2.399	2.399	
Chi Squared Calculated		4.80	
Degrees of Freedom		1	
Chi Squared (0.05)		3.84	
<p>Since Chi Squared Calculated is greater than 3.84</p> <p style="text-align: center;">REJECT the Ho</p> <p>There is a difference between Reputation and Price</p>			

Question 12j

	Contact Info	Ease of Use	Total
Observed (O)	120	107	227
Expected (E)	113.5	113.5	227
(O - E)	6.5	-6.5	
(O - E)²	42.250	42.250	
(O - E)² / E	0.372	0.372	
Chi Squared Calculated		0.74	
Degrees of Freedom		1	
Chi Squared (0.05)		3.84	
<p>Since Chi Squared Calculated is less than 3.84</p> <p>Do NOT reject the Ho</p> <p>There is no difference between Contact Info and Ease of Use</p>			

Question 12k

	Ease of Use	Prof. Look	Total
Observed (O)	151	76	227
Expected (E)	113.5	113.5	227
(O - E)	37.5	-37.5	
(O - E)²	1406.250	1406.250	
(O - E)² / E	12.390	12.390	
Chi Squared Calculated		24.78	
Degrees of Freedom		1	
Chi Squared (0.05)		3.84	
<p>Since Chi Squared Calculated is greater than 3.84</p> <p style="text-align: center;">REJECT the Ho</p> <p>There is a difference between Ease of Use and Prof. Look</p>			

Question 121

	Price	Prof. Look	Total
Observed (O)	167	57	224
Expected (E)	112	112	
(O - E)	55	-55	
(O - E)²	3025.000	3025.000	
(O - E)² / E	27.009	27.009	
Chi Squared Calculated		54.02	
Degrees of Freedom		1	
Chi Squared (0.05)		3.84	
<p>Since Chi Squared Calculated is greater than 3.84 REJECT the Ho There is a difference between Price and Prof. Look</p>			

Question 12m

	Product Info	Ease of Use	Total
Observed (O)	140	87	227
Expected (E)	113.5	113.5	227
(O - E)	26.5	-26.5	
(O - E)²	702.250	702.250	
(O - E)² / E	6.187	6.187	
Chi Squared Calculated		12.37	
Degrees of Freedom		1	
Chi Squared (0.05)		3.84	
<p>Since Chi Squared Calculated is greater than 3.84</p> <p style="text-align: center;">REJECT the Ho</p> <p>There is a difference between Product Info and Ease of Use</p>			

Question 12n

	Prof. Look	Contact Info	Total
Observed (O)	75	152	227
Expected (E)	113.5	113.5	227
(O - E)	-38.5	38.5	
(O - E)²	1482.250	1482.250	
(O - E)² / E	13.059	13.059	
Chi Squared Calculated		26.12	
Degrees of Freedom		1	
Chi Squared (0.05)		3.84	
<p>Since Chi Squared Calculated is greater than 3.84</p> <p style="text-align: center;">REJECT the Ho</p> <p>There is a difference between Prof. Look and Contact Info</p>			

Question 12o

	Ease of Use	Reputation	Total
Observed (O)	67	160	227
Expected (E)	113.5	113.5	227
(O - E)	-46.5	46.5	
(O - E)²	2162.250	2162.250	
(O - E)² / E	19.051	19.051	
Chi Squared Calculated		38.10	
Degrees of Freedom		1	
Chi Squared (0.05)		3.84	
<p>Since Chi Squared Calculated is greater than 3.84</p> <p style="text-align: center;">REJECT the Ho</p> <p>There is a difference between Ease of Use and Reputation</p>			

Question 13a

	Need	Price	Total
Observed (O)	104	123	227
Expected (E)	113.5	113.5	227
(O - E)	-9.5	9.5	
(O - E)²	90.250	90.250	
(O - E)² / E	0.795	0.795	
Chi Squared Calculated	1.59		
Degrees of Freedom	1		
Chi Squared (0.05)	3.84		
<p>Since Chi Squared Calculated is less than 3.84</p> <p style="text-align: center;">Do NOT reject the Ho</p> <p>There is no difference between Need and Price</p>			

Question 13b

	Ease of Use	Need	Total
Observed (O)	91	135	226
Expected (E)	113	113	226
(O - E)	-22	22	
(O - E)²	484.000	484.000	
(O - E)² / E	4.283	4.283	
Chi Squared Calculated		8.57	
Degrees of Freedom		1	
Chi Squared (0.05)		3.84	
<p>Since Chi Squared Calculated is greater than 3.84 REJECT the Ho There is a difference between Ease of Use and Need</p>			

Question 13c

	Need	Reputation	Total
Observed (O)	86	141	227
Expected (E)	113.5	113.5	227
(O - E)	-27.5	27.5	
(O - E)²	756.250	756.250	
(O - E)² / E	6.663	6.663	
Chi Squared Calculated		13.33	
Degrees of Freedom		1	
Chi Squared (0.05)		3.84	
<p>Since Chi Squared Calculated is greater than 3.84 REJECT the Ho There is a difference between Need and Reputation</p>			

Question 13d

	Prof. Look	Need	Total
Observed (O)	77	150	227
Expected (E)	113.5	113.5	227
(O - E)	-36.5	36.5	
(O - E)²	1332.250	1332.250	
(O - E)² / E	11.738	11.738	
Chi Squared Calculated		23.48	
Degrees of Freedom		1	
Chi Squared (0.05)		3.84	
<p>Since Chi Squared Calculated is greater than 3.84</p> <p style="text-align: center;">REJECT the Ho</p> <p>There is a difference between Prof. Look and Need</p>			

Question 13e

	Contact Info	Need	Total
Observed (O)	124	103	227
Expected (E)	113.5	113.5	227
(O - E)	10.5	-10.5	
(O - E)²	110.250	110.250	
(O - E)² / E	0.971	0.971	
Chi Squared Calculated		1.94	
Degrees of Freedom		1	
Chi Squared (0.05)		3.84	
<p>Since Chi Squared Calculated is less than 3.84</p> <p>Do NOT reject the Ho</p> <p>There is no difference between Contact Info and Need</p>			

Question 13f

	Product Info	Need	Total
Observed (O)	124	103	227
Expected (E)	113.5	113.5	227
(O - E)	10.5	-10.5	
(O - E)²	110.250	110.250	
(O - E)² / E	0.971	0.971	
Chi Squared Calculated		1.94	
Degrees of Freedom		1	
Chi Squared (0.05)		3.84	
<p>Since Chi Squared Calculated is less than 3.84</p> <p>Do NOT reject the Ho</p> <p>There is no difference between Product Info and Need</p>			