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The emergence of online retail commerce and the influence of risk on its growth

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THE EMERGENCE OF ONLINE RETAIL COMMERCE AND THE

INFLUENCE OF RISK ON ITS GROWTH

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A Thesis

Presented to the

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In Partial Fulfillment

of the Requirements for the Degree

Master of Arts

in

Interdisciplinary Studies

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by

Thidaluk Thangkabutra
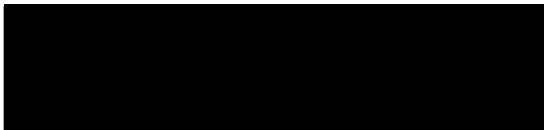
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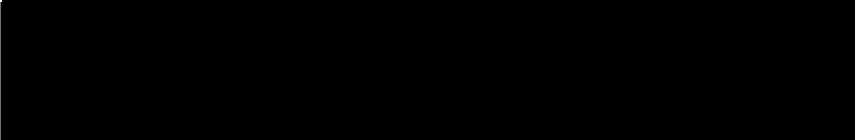THE EMERGENCE OF ONLINE RETAIL COMMERCE AND THE

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ABSTRACT

The thesis examines the role played by risk perception and risk-aversion in influencing the behavior of consumers who are considering making purchases online over the Internet. A survey instrument was used to solicit "Yes/No" responses from 278 consumers. Survey questions addressed frequency of Internet use, reasons for using or not using the Internet, experience using online means to buy, attitudes to risks of this method, overall satisfaction with online shopping. Research questions for the study consider the connection between age, education, fluency in English, computer skills, and experience with technology as factors that combine with risk perception to delay, hinder, or inhibit Internet use and online shopping. The study established that of the 278 respondents, 225 had become regular users of the Internet; further, that 85 of the 225 had made purchases online and that 77 out of the 85 – 27.7% of the original pool of 278 respondents – were pleased with the experience of making purchases online, and could thus be expected to become repeat users of this method. No statistical analysis was performed. The study concludes that online shoppers are well aware of risks, but that the convenience and benefits of online shopping are sufficient to outweigh all negative considerations.

ACKNOWLEDGEMENTS

Thank you, everyone!

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CHAPTER ONE

INTRODUCTION

Background

Computer technology has transformed the way in which
information is created, processed, recorded, stored,
accessed, used, shared and sold. In particular, the
personal computer has brought the full range of these data
capabilities into the individual household. An American
company, Apple Computers, Inc., introduced the
manufacturing of the first mass-produced personal
computers on the consumer market in the 1970s (Apple.com,
"Investor Relations," 2002, ¶ 1). In the two to three
decades since the personal computer first became
commercially available, it has become an increasingly
popular means by which merchandise is offered for
consumers to purchase. It has also allowed the development
of technological means for transacting purchases and
sales.

This new method and capability for buying and selling
is known as online retail commerce. Its viability depends
on the number of consumers willing and able to complete
their commercial transactions using the new technological
means. Consequently, the study of the prospects and

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outcomes of actual completed online sales transactions is of great interest to economists, merchants, entrepreneurs, government institutions and consumers.

On February 5, 2002, the National Telecommunications and Information Administration of the United States Department of Commerce published the results of one of the most authoritative studies yet conducted on the availability and popularity of the Internet. This study, titled "A Nation Online: How Americans Are Expanding Their Use of the Internet," was based on a survey of the current population conducted by the United States Bureau of the Census in September 2001. The survey compiled data on more than 57,000 households and more than 137,000 individuals living in the USA. According to the report on the findings of this Department of Commerce Study, "The rate of growth of Internet use in the United States is currently two million new Internet users per month… More than half the nation is now online. In September 2001, 143 million Americans (about 54 percent of the population) were using the Internet – an increase of 26 million in 13 months. In September 2001, 174 million people (or 66 percent of the Population) in the United States used computers. Internet use is increasing for people regardless of income, education, age, races, ethnicity, or gender. Among

Internet users, 39 percent of individuals are making

online purchases" (NTIA, 2002).

Online information sites, also known as "the

world-wide web," represent an interesting new marketing

opportunity for entities with something to sell. These

websites provide an additional high-speed means connecting

merchants and consumers that amplifies the effect of

previously adopted methods. The use of electronic websites

to offer merchandise and complete transactions is

generally recognized as an important addition to the art

and science of marketing communications. The NTIA's

authoritative 2002 report for the US Department of

Commerce summarizes the latest developments and offers

evidence for the optimistic view that e-commerce will

continue to grow in a healthy, profitable form, with

global reach capability.

In a discussion of Doug Henton's latest unpublished

white paper, "Next in Silicon Valley: Riding the Waves of

Innovation," Levy (2002) writes in <u>Newsweek</u>: "Obviously,

the ubiquity of the Internet provides a platform to

instantly propel new ideas into the marketplace" (Levy,

2002, p. 45). As much as new ideas, the Internet "provides

a platform to instantly propel" new products for sale.

An example of the attractiveness of the Internet as a selling and buying medium, as well as of its potential for growth, is offered by the eBay Company. In a recent in-depth profile of eBay by Adler (2002), the average number of completed transactions for this online company is given as approximately 500,000 per day. The eBay Company was founded in 1995 as a one-man operation for selling specialty collectibles over the Internet. By 2001, it was recording more than 170 million successful transactions per year, according to Adler. More than 50 million users from countries all over the world, working in over a dozen languages, were using the eBay website to list more than 11 million items in over 18,000 different categories. The total value of all 2001 transactions on eBay came to $9.3 billion, or about 1% of the $900 billion reported by the US Department of Commerce as the value of the total retail economy of the USA for that year (Adler, 2002, p. 53). Although the company initially began as an auction house, sales of items offered for a fixed price only, as in regular retail stores, makes up roughly one-fifth of all eBay transactions. Also notable is the fact that in addition to providing a connection directly to larger, older and more established US retailers such as Sears, eBay, which exists only as an Internet company, has

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become the umbrella company for over 200,000 separate registered smaller businesses which are transacting operations exclusively through their own eBay accounts, using eBay online resources as their only way of meeting and serving customers. Not surprisingly, in Adler's words, these facts make it possible to call the Internet "the perfect device for the second most important form of human convergence, the meeting of buyers and sellers" (Adler, 2002, p. 52).

The success of eBay illustrates many of the advantages of online commerce. But it also suggests a number of risks. According to Adler, eBay's chief of security, Rob Chestnut, acknowledges that "0.01 percent of all listings is fraud" – a rate of abuse he believes to be negligible. Nevertheless, the potential to cheat unsuspecting shoppers is greater when there is no face-to-face interaction, nothing but a picture and a description to go on. With so many millions of items being listed, a rate of "0.01 percent," even if it were taken at face value and remained constant over time, would still amount to many thousands of unfortunate events with potentially devastating consequences for trusting consumers or even eager sellers. Indeed, there have been reports of mischief which Adler also describes in passing,

and other publications have investigated at greater length
(Cohen, 2002). Law enforcement has frequently called
attention to cybercrime in the mass media; task forces
have been established to investigate and prosecute cases
of fraud involving a variety of online outlets, including
eBay as one of the most popular and best known sites
(Wirehed, 2002). It seems that there are certain types of
impulsive shopper and collector of rarities or obsolete
items that is particularly drawn to the ease of online
listings such as eBay's. The buying impulses and passions
for collecting of these consumers are well satisfied by
the Internet marketplace, but also make them especially
vulnerable to negative consequences. Even though at the
present time the incidence of fraud and criminal abuse is
relatively small, as it becomes increasingly widespread,
and publicized, the inhibiting effects of fraud will of
course exert an influence on the consuming public's
perception of risks associated with online shopping. Thus,
new marketing tools arrive with new risk factors. The
novelty of online shopping is matched by the "novelty" of
criminal schemes which the new technologies and their new
practices make possible. The dynamic conflict between
convenience factors on the one hand and risk factors on
the other hand make the marketing of merchandise over the

Internet a subject of uncertainty, complexity and
interest. This study focuses on this subject area which is
only beginning to be properly understood, and which will
need to be mastered by the marketing professionals who
hope to make effective use of new technologies to
penetrate more of the global market in the coming years.

Statement of the Problem

As with any new technology, especially complex
technology, there is always risk involved in the
introduction of new ways of accomplishing tasks. It takes
great financial investment on the part of manufacturers,
merchants, as well as consumers, to add online purchasing
technology to their repertoire. This expense creates an
inhibiting effect delaying each individual's, household's
or business's participation in the new buying and selling
method. Uncertainty about whether the new technology will
quickly pay for itself in terms of time or money saved
becomes expressed as an appreciation of the risk of
spending the necessary money. The problem of risk and its
role in inhibiting consumption will be specifically
addressed in this investigation.

Already in 1981, Quelch and Takeuchi addressed the
variety of socio-economic and competitive factors

occurring in the U.S. economy that influence retail

markets. These factors include: the availability and

fluctuation of disposable income among consumers, the

number of men and women entering and leaving the work

force, the demographics of households, the habits and

interests of an aging population, evolving fashion trends

and social values, the assertion of individualism as

opposed to identification with a larger group identity.

For online commerce to be successful, the marketing team

needs to consider these factors within the specific

context of web-based operations. Furthermore, other

factors unique and specific to online retailing must be

taken into account. Thus, in order to be able to access

online retail offerings and to complete a purchase, the

consumer must have convenient access to a computer

terminal with online capability, and a suitable method of

payment that can be executed electronically (The preferred

and most common method of payment is by credit or debit

card).

At this juncture, a difficulty arises. In order for

any purchase to take place, whether online or in the

brick-and-mortar world of commerce, the consumer must have

confidence in the process. The use of electronic

technology and cyberspace to purchase real goods creates a

novel situation, with its own unique process of steps and decisions, which every consumer must learn to execute correctly at least once, in order for the Internet to be a viable marketing tool for this individual consumer and/or his/her household.

Consumers must feel confident that transacting a purchase online, without the use of paper documentation (as in catalog shopping) or of a physical person (as in conventional shopping), will be equally effective, intelligent and acceptable as every other known method of purchase that consumer has experienced.

It is known that every adult exhibits a behavior of hesitation before adapting to a new technology, method or device. This adaptive period might vary in length, but it exists for everyone. It represents a psychological response to risk in the face of the unknown, and has an inhibiting effect on new behavior. In this case, the new behavior is online shopping.

Consumers must also confront the risk of being exposed to security failures in the process of online purchasing transactions. The use of credit cards and other personal data, even under encrypted and carefully protected conditions, creates exposure to hackers or other unauthorized persons. The problem of identity theft is a

growing problem (Brunker, 2002). Internet purchases are commonly viewed as a major venue for identity theft, and for making available credit card numbers linked to actual bank accounts which may then be raided or otherwise exploited by criminals.

In addition to the security risk, consumers shopping online must confront the risk of loss of privacy. Because an online sales transaction is conducted from a computer terminal, often the one available privately at home or at the workplace, the data generated by the transaction, including name and address, creates an indelible track which can be readily traced back to the specific terminal used in each case.

There is the danger that the company at the retail end (or the website host) may abuse its capability to exploit personal information generated by the transaction. There is also the added danger that outside observers not directly involved in the transaction, (including both authorities such as employers or government agencies, as well as private individuals, family members or other interested third parties, including criminals) may covertly or openly access the private sales transaction information.

With online sales transactions, the anonymity of
being able to walk into a new store, making a purchase and
walking out without anyone recording all the details of
the visit is completely absent. Moreover, if before an
individual could make a half-dozen such anonymous stops in
an hour of touring a mall, with online shopping, every
click of the mouse creates a permanent and indelible
record. It becomes possible to connect the person who buys
a specific book to the person who shops for a specific
pet, for example, and to analyze the information from both
events, entering the name and address of the consumer into
a database for "pet-loving book-lovers." Multiply the
process by every transaction performed online every day,
and after a period of time, it is possible to create a
very detailed dossier on the tastes and habits of a given
consumer. With determination, a hacker might also be able
to correlate that purchasing history against a user's
individual emails or other unprotected data stored within
the given computer terminal.

For persons who value privacy highly, the risk of
loss of privacy from conducting purchases online is a
significant further inhibitor to adopting this behavior.
It is common for persons who have ordered online and given
delivery information, as well as telephone numbers in case

of special delivery processing, to find themselves
bombarded later with intrusive offers, especially by
phone. Telemarketing companies purchase data banks from
online retailers. Most recently, credit card companies
have started their own intensive campaigns to push new
services and products over the phone. The net result for
the consumer who has created an online record of a product
preference or a purchasing event is loss of privacy
compounded by interference with activities (including the
inevitable loss of desirable opportunities for personal or
professional advancement) caused by intrusive
solicitations and an excess of offers.

Brondmo addresses this exact concern, devoting
several chapters of The Engaged Customer to the problem of
privacy in the Internet age: "The potential of all these
technologies is endless and so is the potential to abuse
it" (Brondmo, 2002, p. 230).

Other aspects inherent to online purchasing that
represent a disadvantage from the point of view of the
consumer are the difficulty of predicting the suitability
of an actual product until it arrives, usually some time
after payment has been processed. Returns or exchanges of
items purchased over the Internet involve considerably
more bother for the consumer. Because it is impossible to

simply drop in on the retailer and discuss the situation, it may be more difficult and time-consuming to obtain complete satisfaction with a transaction.

Balanced against these risks and negative factors are a number of important benefits from online commerce. There is no sales pressure from Internet shopping. It is possible to compare products and retailers without leaving the comfort of one's own home, struggling with transportation costs and disagreeable events (panhandlers, pickpockets, petitioners, parking fees, traffic accidents, traffic tickets, unwelcome observers, awkward or unwilling companions). It is easier to be private about the amount of money a shopper wishes to spend, the quality and quantity of goods to be purchased, and the categories of interest. Weather and time of day need not be considered by the online shopper. Nor is distance and the availability of transportation limiting the online shopper in any way. There are websites for retailers from all over the world which can be used regardless of where the consumer resides. This convenience is especially important for people who live in remote, rural or isolated areas, or who have a favorite store far away from home, or whose mobility is limited by age, health, family or career. In all of these important considerations, online shopping

provides significant benefits for both sellers and buyers of all categories, everywhere. Most importantly, these benefits save the consumer both time and money, freeing up more of these two precious resources for other needs – including more shopping and perhaps more buying.

Finally, there is the socio-economic factor to consider. Individuals who will shop online will need either to own a computer or have one conveniently accessible to them, for example in an academic or professional setting. That is highly suggestive of a higher income level than the average consumer in the community-at-large. Also, this individual will require having a skill level in using the computer that makes online shopping easy and convenient.

An additional socio-economic aspect of Internet use is the prevalence of English as the dominant language for websites aimed at consumers worldwide. Although an early ancestor of the Internet was the French Minitel terminal which linked French households to French businesses and services, its purpose was serving the population of France. It was only after the American innovators and entrepreneurs, Jobs and Wozniak, made the home-based personal computer a commercial reality that the possibility of networking for marketing purposes became an

international reality. The first developers of commercial websites were also Americans; their first natural audience was the English-speaking world. Other national cultures soon joined in, but just as English was the base language for most computer program design, so English was the base language for most online applications. English language ability is an important factor in enabling successful Internet browsing, or "surfing."

Also a factor in enabling online shopping is the personal comfort level around technology. There are numbers of consumers that still lack adequate technology adaptation. They associate keyboards with writing and suffer from performance anxiety about the need to compose even simple texts without making a mistake. They are not comfortable having to spell out many details using a keyboard, and feel clumsy and inhibited by the different keys and commands. They may also find the complicated, elaborate written instructions which often accompany the processing of a website order hard to absorb fully.

A successful online shopper will have to be able to comfortably use the language in which these transactions usually take place. English is by far the most common language of commercial websites, with French, German, Spanish, and Italian on the rise (Brondmo, 2002, p. 13).

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Even though there is considerable technological skill and purchasing power in some Asian and Middle Eastern societies, there is still a far lower volume of purchases being transacted in Japanese, Chinese, Hebrew, Arabic or Farsi as the exclusive language of commerce.

It is therefore a reasonable expectation that regular Internet buyers have a higher income and a greater degree of education that those that do not use the Internet to make purchases, and that a greater proportion of them will possess high English language proficiency.

Purpose of the Study

This study assesses the role played by risk and by aversion to risk in inhibiting the decision to complete purchases using the Internet as a method for executing the transaction. It relates concerns about the security of the transaction, concerns about privacy, socio-economic factors, age, education, access to appropriate equipment (terminals, network lines, etc.) and availability of computer skills to the ability to overcome perceived risks in order to take advantage of the convenience offered by online retailing.

Specifically, the study:

1. determined the socio-demographic characteristics of a group of consumers residing in Southern California;

2. determined the degree of perceived risk associated by these consumers with online purchases;

3. determined the degree of conscious risk-aversion explicitly identified by these consumers as a factor in preventing them from making online purchases;

4. examined the relationship between income, age and education as contributors to Internet purchasing behavior; and

5. considered the influence of computer skills and adaptation to technology, as well as English proficiency, on making a consumer more or less willing to overcome risk perceptions and to successfully complete purchasing transactions over the Internet.

Research Questions

The following research questions were tested:

[RQ1] Do individuals who decide to make purchases over the Internet require a period of time (from three months to as long as a year or more) in order to overcome their innate hesitation over using a new method to conduct a transaction involving the exchange of money for goods or services?

[RQ2] Is the most important perceived risk factor inhibiting online retail commerce is the security risk associated with potential exposure to identity theft?

[RQ3] Is the most important perceived risk factor inhibiting online retail commerce is the risk of loss of privacy?

[RQ4] Do individuals who make frequent purchases over the Internet (defined as more than one transaction per week, or more than $200 per month) have higher income than those who make fewer purchases?

[RQ5] Are individuals born after 1950 more likely to make purchases over the Internet than individuals born before 1950, and do individuals

born before 1950 have a longer adaptive period

before they feel comfortable making purchases on

the Internet, than individuals born after 1950?

[RQ6] In the United States, are individuals with a

college degree more likely to make purchases on

the Internet than individuals with less

education?

[RQ7] Do general computer literacy skills and

adaptation to technology correlate with

willingness to make purchases online and reduced

feeling of risk?

[RQ8] Does English proficiency correlate highly with

greater willingness to make purchases online and

reduced feeling of risk?

Limitations of the Study

The study was limited by the use of a population

sample drawn from a single area in Southern California. It

may not be representative of consumer behavior and beliefs

about risk in other areas because California is a leading

innovator and distributor of computers and Internet

technology. The study was further limited by relying on

the single-researcher method acting within a narrow

timeframe. A more comprehensive study would follow risk

attitudes over time and create test situations. A further
limitation of the study is to be found in the specific
questioning method used. Influences which cause people to
avoid taking steps, such as using the Internet as a
shopping resource, can be traced to more complex,
deep-seated beliefs, experiences and attitude. It was
beyond the scope of this study to probe deeply into past
shopping experience. As such, this study only identifies
and analyzes the responses of a set of randomly selected
consumers at a given point in time. There is no
independent method for verifying the accuracy of those
statements. The responses given speak only for the
specific individual respondent.

Definition of Terms

The following definitions were used in this study.

Access is the ability to easily locate and make use of a
computer terminal with existing Internet connections
allowing the user to reach, scan, study and interact
with existing websites.

Bricks-and-mortar is a term used to distinguish businesses
with physical premises open to the public from
businesses which are only available to the public by
using a computer terminal to reach them.

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Connected means linked through a network of technology
systems installed all over the world, which allow
users access to stored data, and to each other while
online.

Cybercrime is a term used in law enforcement and the media
to differentiate between criminal activity which
takes place using computer networks as a medium, and
criminal activity which takes place without using
computers. Cybercriminals are all those who rely on
computer networks to conduct schemes targeting
victims in violation of the law.

Cyberspace is a term for the combined content of all
active data systems linked by the network of computer
terminals at any given moment. It resembles a vast
encyclopedia of all the electronically encoded
information which exists anywhere and is available to
users.

Data is any form or piece of information (including
images, texts or sounds), that has been converted
into code for delivery to a user over a computer
terminal or other telecommunications device.

Debit card a small plastic card provided by banks to
account holders and encoded with their account

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information in such a way that it allows money to be automatically deducted from their account as payment.

Disposable income is the portion of income remaining after the payment of all obligations and basic living expenses which allows a consumer to make shopping decisions. High disposable income correlates strongly with high consumption patterns throughout an economic system. The reverse is also true.

Dot-com is the popular term for a company which exists in its public form as an Internet address only, instead of as a so-called "bricks-and-mortar" facility, located in a building with a street address, with access to the premises available to the public for business purposes.

E-commerce stands for "electronic commerce," and refers to the use of electronic communications media and the Internet to promote merchandise, services or products, and to enable the completion of sales transactions governing such merchandise, services and products.

Global reach means having the capacity to connect to just about any location anywhere on the planet.

Hackers are users with unusually high skills and capabilities who have the ability to break into

stored data without authorization, and to decode or alter information in a variety of potentially harmful ways. Hackers operate from any computer terminal and are able to penetrate the systems of their choice at will, often from great distances. Most hackers are violating the law by engaging in unauthorized access to restricted data. Some have been known to be very young, posing a significant threat to society from a group with immature value systems and lack of life experience.

High-speed is a term that identifies a higher quality of connection that makes Internet use faster, easier and more efficient. Newer and more powerful technology yields higher speeds and is more desirable.

Host is the name for the individual or entity who is responsible for allowing the public to have access to data content at a specific online location, called an Internet address (or "web address").

Identity theft is the term for the activity of illegally obtaining the private, individualized information of a specific consumer that allows a business history and a financial record for that consumer to be created or accessed. When that information is used to obtain benefits, services and goods without the

permission or knowledge of the consumer whose private information is being used, a crime is committed. The victim will discover that he or she is being held financially responsible for the activity because of the use of his or her identifying information, without actually having received any of the benefits, services or goods. Identity theft requires the victim to spend time and money clearing their name. The disruption can be devastating. Fear of identity theft by hackers and criminal elements inhibits many consumers.

Internet is the official name for the electronic and telecommunications technology which links individual computer terminals into a global system for virtually instantaneous communication from one terminal to another using visual, audio, graphic and written means to deliver any kind of content through digital encryption transmitted as electronic code. The Internet is an interactive content delivery system which allows the user at a given computer terminal or transmission unit to input as well as output content, thus allowing communication to take place according to the custom of dialog and social discourse which is essential for viable commerce.

Internet address is the specific set of coordinates (a

combination of letters, numbers and keyboard symbols)

which is established as the password code leading to

a specific data location within cyberspace. Typing in

this password code allows access to the desired data

location, known as a "web page."

Keyboarding skills defines the ability to use a computer

terminal keyboard comfortably, quickly and properly,

without stumbling and making constant errors.

Keyboarding skills are developed by knowing the

position of all the letter, number and function keys

on the keyboard in order to be able to type in

requests and responses. Effective keyboarding skills

require strong literacy and language proficiency.

Log on is the term for the sequence of keyboard operations

which allows a user to connect to Internet data.

Mouse is the small computer device that fits the palm of

the hand and works together with the keyboard to give

commands to the communication system.

Offline, online is a set of expressions indicating the

state of being disconnected from the Internet or

connected to it, respectively.

Platform is a term used in the technology industry for a

set of devices, means or tools which together

constitute a foundation, method or system for a
certain kind of activity or operation to be able to
take place.

Retail is the term for a commercial purchase offering in
which individual items or units of products or
services are offered to individual consumers at a
price greater than what it costs the seller to be
able to offer them.

Risk is the possibility of negative consequences which
accompanies any action or decision, and may vary in
degree from situation to situation, case by case and
moment by moment.

Risk-aversion is the condition of being afraid of inviting
an uncomfortable degree of risk into one's life. How
much risk a person is willing to accept is a highly
individual matter, and may be difficult to specify,
because it is difficult to describe in quantifiable
ways and is often subject to change with
circumstances.

Surfing the web, or Internet surfing, is a term used to
describe the activity of visiting a variety of
websites in cyberspace for either business or
pleasure.

Website is the name for a single content communication made available at a specific web address on the Internet and used to connect to the data offered at that address by its host. A website is the online equivalent of a printed brochure, prospectus or catalog in bricks-and-mortar business.

Web-page is the portion of data offered on a website that answers to a specific inquiry, without moving on to the next subject heading or category of logic. A web-page may contain more information than a single page of print would, but it serves the same purpose of breaking up the information being offered into sections with a single address. A website may consist of one or more web-pages. In casual use, the terms "website" and "web-page" may be used interchangeably.

World wide web, sometimes referred to by its "w-w-w" abbreviation, is another expression used to identify the Internet.

CHAPTER TWO

REVIEW OF THE LITERATURE

The Early Years of Internet Commerce

In examining the role played by risk and
risk-aversion in the success or failure of e-commerce, it
is important to understand how people reacted to the
development of this new technology which would create new
shopping alternatives. Curiously, it is quite remarkable
how much negative feeling the Internet inspired, even
among its pioneers. This negativity may have elevated
feelings about the risks of using the Internet "too much"
within the overall community of consumers.

An important work on the early years of the
development of the Internet as both a system for
delivering content (including entertainment), and as a
means of earning revenue from the delivery of information
using is Clifford Stoll's (1995) Silicon Snake Oil: Second
Thoughts on the Information Highway. Stoll's book is
valuable for the wealth of information it offers on the
way the Internet developed from its earliest beginnings in
the 1970s as "the Arpanet," an American reinterpretation
of a French household convenience known as the "Minitel."
The Minitel was specifically developed as a way of making

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consumption of products and services more attractive, more efficient and more convenient for consumers. Stoll describes the Arpanet, with which he was already professionally involved, in the first few pages of the book. Stoll's book does not hesitate to "debunk" the Internet, mocking the hype and inflated expectations which Stoll believes exaggerate the value of the technology as a method for delivering information, communication, entertainment and educational content.

Stoll's position, based on his expertise as a professional and an Internet development veteran, is that the disadvantages of the Internet far outweigh its advantages. Stoll asserts that Internet capability adds little value to the life of the average user (even the sophisticated user) and that it asks for too much in return, in the way of time, money and attention. Stoll laments the time that the typical online "surfer" takes away from other professional and personal pursuits.

Silicon Snake Oil is a fascinating resource for the scholars interested in the rocky and uncertain beginnings of online culture. The ambivalence of a pioneer such as Stoll might have helped a wary investor avoid the losses incurred by speculators who bought dot-com stocks that later crashed. On the other hand, seven years after the

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book was published, it seems almost naïve in its
negativity. Perhaps Stoll's criticism of the Internet
accurately reflects the limited value of its early form
for his needs at the time of his writing. However, for a
student or scholar, for a journalist or a consumer, for a
civil servant, for an executive needing an efficient
source of information to make crucial decisions, the
Internet in its present state of development is of
extraordinary value. It makes all activities that require
obtaining, analyzing and comparing information – including
the information used to conduct and prepare a study such
as this one – much easier and quicker.

Stoll writes with scorn of Al Gore's dream that

> '[A] school child could plug into the Library of
> Congress...and explore a universe of knowledge,
> jumping from one subject to another, according
> to the curiosity of the moment.' Such a dream
> assumes that the library's books are all
> digitized and available on the computer. They
> aren't. They never will be. (Stoll, 1995,
> p. 176)

Remarkably, seven years later, an enormous number of
books already are available online, many of them for no
charge at all. Small private collections of specialized
works, including entire libraries of classical works such
as all of Shakespeare or all of Cervantes, are within
several keystrokes of an Internet user's reach.

Thus, Stoll's work has been discredited in its fundamental perspective, even though it does raise interesting questions about what constitutes a "virtual" reality or a high quality of life. Nevertheless, it is extremely useful in identifying fundamental risk-aversion even among technology professionals.

Stoll's view of the Internet is highly subjective. For an exhaustive and rigorously objective account of the rise of the Internet, including its commercial prospects, the best academic source is Manuel Castelli's three-volume set, The Rise of the Network Society (London, Blackwell, 1996-1998). Castelli's approach recognizes the transformative impact of the Internet, its potentialities as well as the risks. This work is especially valuable for its willingness to consider the tension between Internet culture and traditional culture, as well as how that translates into fear of innovation, consumer behavior, experimentation and acceptance in various parts of the world. However, in this rapidly changing area of business, much of the data that went into the 1998 edition is already outdated.

Profitability of Online
Retail Business

It should not surprise that a greater number of
publications have appeared celebrating the potential of
the Internet as a life-enhancing and business-enabling
development, than dismissing it as a fleeting fad or even
a dangerous waste of time and money. One reason for there
being more positive commentary than negative was the
success of the French experience with the Minitel.
Visitors to France came back and raved about the
convenience of having a display screen linked to the
telephone allowing tickets to be ordered, for example, or
appointments to be made based on a database of transport
schedules, auditorium seating charts, community calendars
and the like. Another reason was that those who were
inclined to be skeptical were more likely to keep quiet
and wait for the excitement to fade away, whereas the
advocates who enthusiastically welcomed the Internet had a
greater motivation to promote it so that it might grow
more quickly and serve their interests. Nevertheless,
comprehensive accounts such as Castelli's reflect the
controversies surrounding the growth of cybernetworks.

The first few years of Internet retail commerce were
characterized by the kind of uncertainty and ambivalence

reflected in Stoll (see also Adler in <u>Newsweek</u>, "The United States of eBay," June 17, 2002). Gradually, however, more and more consumers logged on and completed purchasing transactions, usually paying for them with credit or debit cards. As the number of transactions grew, the number of failures, abuses and complaints also grew. News of difficulties and disappointments generated new ripples of doubt in consumers (Christensen, 1997). The failure of a large number of overvalued dot-com ventures specifically designed to sell services and merchandise through retail websites seemed to indicate that perhaps e-commerce could not be made profitable (Brown & Duguid, 2000). Brondmo (2000) describes in detail these bumpy years of adapting to the new technology. Another perspective on how the Internet evolved, from the position of a marketing management professional fighting for survival, is offered by Charles Ferguson in <u>High Stakes, No Prisoners: A Winner's Tale of Greed and Glory in the Internet Wars</u> (1999). Ferguson's highly personal account explores the dramatic decision-making by key players responding to a rapidly changing landscape of entrepreneurial competition unfolding at hyperspeed, as a young generation of technologically astute businessmen challenged - and often outmaneuvered - an older generation

of corporate titans perplexed by the "virtual," not entirely comprehensible combinations of digital networks, software design, ephemerous business models, mysterious acronyms, fiberoptic infrastructure, broadband, encryption, techno-jargon and twenty-year-old paper billionaire chief executives. Ferguson's book is particularly helpful in demonstrating how a small army of determined entrepreneurs ensured the rapid integration of online capabilities into every part of life in the industrialized countries, from health care to entertainment.

The retail industries which first began to show clear indications of the long-term potential for profitability of online retail services were sellers of popular, reusable, standardized, high-volume merchandise, such as books and music (Bly, 2002). A turning point in the outlook on e-commerce was reached on the day Jeff Bezos, founder of Internet retailer Amazon.com announced the company – a pioneer in the dot-com field – had become profitable in the "traditional" sense. In other words, the day Amazon began to make more money than it spent became a landmark of the Internet retail history landscape (Kaplan, 2002). The Kaplan article stands in sharp contrast to an earlier investment report by Kathy M. Kristof (2001),

"Some See Information Highway as Road to Riches, Others as

Road to Ruin." Both Kaplan and Kristof discuss the lows

and highs of Amazon.com, from both a positive and negative

perspective, complete with impressive numbers. These

reports are available online.

The March 25, 2002, issue of Newsweek has as its

cover story "Welcome Back to Silicon Valley: How the

Dot-Com Crash Saved Technology," by Steven Levy. He

summarizes the latest developments and offers evidence for

the optimistic view that, in fact, e-commerce will survive

in a healthy, profitable form, with global reach

capability. The article cites Doug Henton, author of an

unpublished white paper, "Next Silicon Valley: Riding the

Waves of Innovation." Levy writes:

> Obviously, the ubiquity of the Internet provides
> a platform to instantly propel new ideas into
> the marketplace – just as the previous boom in
> personal computers set the stage for the Net,
> and the microchip revolution sparked PCs.
> Historically, however, each transition was
> preceded by a downturn. (Levy, 2002, p. 45)

The contrary view of hardened skepticism is expressed

by writers such as David Colker (2002). In a recent

article in The Los Angeles Times, Colker writes of the

somber and subdued mood of participants at the latest

high-tech trade shows, who have grown used to having to

"adapt to diminished expectations," as attendance and revenues have fallen by 50% or more in recent months.

At the same time, in "Amazon's Loss Narrows Sharply," (2002), Nick Wingfield announces that Bloomberg News reported a 21% rise in Amazon.com sales, of which 8% was from the sale of music, video and books, for the second quarter in a row. As an Internet pioneer (see Hof, 2002), Amazon.com is considered an important bellwether for the retail e-commerce industry. Its sales increased to 443 million from 409.6 million for the previous year. According to the Chief Financial Officer of Amazon.com, Inc., Warren Jenson, the rise was evidence that the "low-price strategy" is working. This strongly correlates with this study's hypothesis that attractive prices, made possible by the efficiency and convenience of round-the-clock online retailing, creates an attractive incentive for consumers. Wingfield quotes professional analysts at Prudential Securities: "'They've done a tremendous job bringing the company back from the brink. A worst-case scenario is they can be successful in books, music and video on a global basis'" (Wingfield, 2002). Such an assessment is consistent with the position of this study that time will demonstrate the sustainability of e-commerce.

At the same time, Wingfield takes note of a hidden problem with the accounting which allows successes to be proclaimed, perhaps prematurely, for the companies Hof calls "behemoths" of online business:

> Using a nonstandard accounting measure Amazon favors – one that excludes interest payments on its debt, stock-based compensation charges, amortization of intangible assets and a number of other charges – the company said it would earn more than $100 million for the year, compared with an earlier forecast of $30 million. (Wingfield, 2002, p. A3)

Levy (June 17, 2002) reporting about eBay (the online auction house), describes a growing interest in online shopping for all kinds of goods, yet emphasizes that there is still much more room to grow. Large numbers of consumers in the US, not to mention less sophisticated consumer cultures, have yet to attempt even one transaction. Other authors have seized upon these early signs of a trend to adopt the online retail experience, contributing thoughtful book-length works on this phenomenon. Berners-Lee (1999) sees a bright future in which every aspect of consumption will be made simpler and more enjoyable by navigating cyberspace. David Bollier (1996) devoted two massive works to the discussion, both addressing aspects of "the global advance of electronic commerce" and "the networking society." Bollier believes

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firmly that the technology will completely "...transform markets, organizations and social relationships" (Bollier, 1996, p. 37). Davis and Meyer (1998) also support the idea of Internet capabilities radically changing the way shopping is transacted. Evans and Wurster (2000) interpret these changes as mandating fundamental strategic changes in the way businesses allocate resources and approach consumers.

Risk-Aversion and E-Commerce Performance

Having seen that the initial period of doubt over the Internet's viability for commercial applications has given way to signs of profitability in specific areas of retail sales, more and more experts have turned their attention to the factors which either promote or obstruct the growth of online retail sales. Risk is seen as a key factor in shaping online consumption patterns. Responding to the question "...why so many websites haven't managed to become successful on the Internet today," Lindstrom (2001) writes: "The fact is that in far too many cases the 'real' added consumer value when buying online is too low, when compared with the 'risk' the consumer perceives when making an online purchase..." (Lindstrom, 2001, p. 60). Lindstrom, who calls the Internet "the perfect market"

(p. 4) provides a relentless recitation of remarkable statistics about Internet use and consumer preference. He cites Jacob Nielsen's 1999 "Alertbox" survey which indicated that consumers who used the Internet to purchase services or merchandise did so in 83% of the cases because it made ordering easy. The next six most important reasons cited in Nielsen were: "selection (63%), lower cost (63%), faster service and delivery (52%), clear and detailed product information (40%), absence of sales pressure (39%) and easy or convenient payment method (36%)" (Lindstrom, 2001, p. 72). These findings are significant because they suggest areas of strength for future growth.

An even more recent book by Lindstrom, Clicks, Bricks and Brands (2002), addresses the risk issue directly in its fourth chapter, provocatively titled "Trust Me!" (pp. 71-96). Here, Lindstrom analyzes ways to reduce consumer discomfort over the actual and imaginary risks associated with online retail shopping and makes practical suggestions for marketers, managers and executives to adopt secure, user-friendly practices.

Other experts writing for business peers interested in increasing the profitability of retail websites also focus on bold or clever strategies. Thus, there is Kevin Kelly's New Rules for the New Economy: Ten Radical

Strategies for a Connected World (1998) or Keating's more ruthlessly competitive Cut Throat: High Stakes and Killer Moves on the Electronic Frontier. R. S. Wurman (1989) writes explicitly about Information Anxiety. Edward Tenner (1996) feeds that anxiety further with Why Things Bite Back: Technology and the Revenge of Unintentional Consequences. Neil Postman (1995) deplores "the surrender of culture to technology" in Technopoly – but then changes his mind and celebrates, even if with some reservations, The Promise of Global Networks (1999). Michael Hiltzik (1997) writes of The Internet as Paradigm for our reality, which only makes sense, since it consists entirely of content created by the people who live in that reality. Nicholas Negroponte (1995) takes it one step further in Being Digital, which also sees the same connection between who we are and what we preserve, promote and convert into code. Each one of these books refers to risk, fear, hesitation and ambivalence as part of the way modern consumers and data users approach their new reliance on technology to transact the business of life. But their comments are largely indirect in their approach of risk, or more philosophical. An exhaustive search of available materials did not find any studies devoted specifically to risk-aversion as an inhibitor of online purchasing events.

Although a number of works in the field of psychology were consulted about the subject of fear and anxiety relative to behavior, these did not relate the fear or anxiety to shopping experiences. Neither the Journal of Retailing, nor mainstream publications such as Psychology Today were found to have in print recent studies on the influence exerted by fear of risk in determining a consumer's willingness to complete a purchase online. The closest and most thorough examination of the question of how consumers in America are responding to the risks and benefits of online commerce may be found in the National Telecommunications and Information Administration study (2002) published by the US Department of Commerce on the basis of a current population survey conducted by the US Bureau of the Census in 2001.

It is a purpose of this study to make a contribution to the field of consumer behavior by examining this specific element of risk within the context of how Internet users and ordinary shoppers decide to complete a purchase, whether as an ultimate determining factor, an inhibiting influence that can be overcome, or an important factor that combines with other considerations in preventing online retail purchases.

CHAPTER THREE

METHODOLOGY

In order to gain an understanding of the role that
risk and risk-aversion plays in guiding consumers towards
or away from online retail purchases, an original survey
instrument was created. It was distributed to a
randomly-selected local population for anonymous written
completion, then compiled and analyzed.

Design of the Investigation

The investigation was designed to test the following
research questions:

1. a period of time must go by before most users of
    the Internet feel comfortable making a purchase
    online;

2. fear of identity theft is the biggest inhibitor
    for online purchasing;

3. fear of loss of privacy is the biggest inhibitor
    for online purchasing;

4. income correlates to online purchasing
    frequency;

5. age correlates to online purchasing experience
    and risk-aversion in such a way that older users

require more time to feel comfortable buying

online;

6. college-level education correlates to online

purchasing and the ability to conquer fear of

risk;

7. computer skills and adaptation to technology

correlate to online shopping;

8. English proficiency correlates to greater use of

online shopping resources.

The Survey

Respondents were asked questions designed to provide

answers corresponding to the hypothetical postulates. The

surveys were designed in such a way that they could obtain

useful responses from both those who used the Internet,

and those who did not. A complete sample survey is

included as an Appendix.

The Population Sample

Three hundred surveys were printed and distributed on

a large Southern California college campus which has a

diverse population. A portion of the surveys was

distributed at a local senior citizen community center

frequented by retired people. The population was randomly

selected and contained respondents from all socio-economic

groups, both males and females, aged from 17 to 85, with and without college educations, with and without strong English. The sampling procedure for the senior citizen respondents was to distribute surveys over three evenings during their regular lunchtime. The younger respondents were randomly selected by distributing the survey in person at a large sports event.

<center>Treatment</center>

As anticipated, not all surveys were returned by the younger respondents. The senior citizen respondents all returned their surveys. A total of 278 surveys were returned. Of these, 40 were from senior citizens, of whom 24 were female and 16 were male. Of the 238 surveys returned by young respondents, 130 were from female respondents and 108 were from males. No inducements of any kind were offered for completing the surveys. The data was tabulated manually and treated as raw data, without using any weighted mathematical model to give greater or lesser significance to any response. As a result, it is clear that the data would only be significant in the strictest sense for the specific population sampled in the region from which the sample was drawn. The survey instrument was constructed in accordance with prototypes discovered in

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other research. It used nominal data in the form of a simple "Yes/No" format and focused on developing preliminary raw data only that might then be used for a subsequent, more rigorous study.

Data Analysis Procedures

Data analysis for the completed surveys was based on simple computation of "Yes/No" responses. Although the length of the survey allowed for correlations to be made and profiles to be drawn of categories of respondents, no attempt was made to make such complex inferences. The reason for this decision has to do with the limitations inherent to the conditions under which this study was being conducted. It was designed as a preliminary study suitable to be conducted by one person with no special modeling and correlating programs, no specialized budgetary or other resources and working under a very stringent deadline. The goal was not to gather information reflective of a broad spectrum of practice or perception. It is known that respondents offered a scale or range of responses will use subjective criteria to determine, in each individual's case, what they think their most accurate answer should be. Definitions of ranges vary from individual to individual. Furthermore, an individual

respondent's perception about their own practice and belief may also be incompletely accurate. For that reason, it is suggested that a simple "Yes/No" response is in fact more frequently reflective of true opinions and habits, because it forces the issue rather than allowing a multiplicity of possible evasions. Therefore this study chose the simpler, firmer answer model, as the goal of the analysis was simple and straightforward: to construct raw data relative to percentages of respondents in the sample population who identified the various types of risk (risk of identity theft, risk of financial loss, risk of loss of privacy, risk of failure, risk of task difficulty, risk of physical or linguistic discomfort, risk of lack of funds for other needs, etc.) as factors which inhibited their purchasing of products or services using online retail opportunities. Similar considerations led to a decision to limit the amount of demographic information being gathered about the respondents to their age and gender. It was felt that exceeding such a narrow definition of the respondent category would raise interesting but complex and distracting issues of race and household income, or regional origin, or career pursuits as determining factors in shaping a given respondent's or respondent clusters affinity for and compatibility with the Internet as a

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medium of information and communication. It was understood

that the relatively small population sample used in this

study (a maximum of 300 respondents out of a total US

population of almost 288 million, as compared to the

2001-2002 NTIA study based on well over 100,000

households) could not escape the limitation of regional,

social and possibly individualized idiosyncrasies specific

to the area and lifestyle traits specific to the location

of the study. For example, it was unlikely that the pool

of respondents, being in the vicinity of a retirement

center and a college campus, would include representatives

of the working mother population, the low-income wage

earner, or recent immigrants with severely limited

English. Also, California being a global leader in the

technology industry, it would be reasonable to expect

greater numbers of respondents who are highly adapted to

technology here, than possibly in other parts of the US.

The purpose of the study was therefore acknowledged

from the outset to be much narrower, as has been stated

earlier. It was merely to gather specific raw data that

would be unambiguously indicative of factors which

influence risk-awareness, contribute to risk-aversion, and

also help to overcome actual or perceived risks, among

consumers responding to marketing campaigns which are

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encouraging them to use the Internet to complete

purchases. This raw data then became the basis for

evaluating the validity of each research questions

identified as forming the scope of the study.

Results and Discussion

The findings of the study are presented and discussed

below. Wherever appropriate, tables, charts and graphs

illustrate the proportional distribution of responses to

the survey questions.

Presentation of the Findings

The first survey questions addressed the composition

and education of the sample, as reflected in Tables 1

and 2.

Tabulation of Survey Results on
Internet User Responses

"Q1.   Are you male or female?"

There were 40 senior respondents: 24 female, 16

male. The age range of the senior females was 62

to 87. The age range of the senior males was 66 to

78. The mean age for the senior females was 70.

The mean age for the senior males was 72.

There were 238 younger respondents: 130 female,

108 male. The age range of the younger females was

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Table 1. Frequency of use Distributions in Response to
Survey Questions Q1, Q2, Q3, Q4

	Older Respondents (OR) (40 total)	Younger Respondents (YR) (238 total)

Female Respondents
  Age range
  Mean age
	62 to 87 years old
	      70 years old
		17 to 23 years old
		      19 years old

Male Respondents
  Age range
  Mean age
	66 to 78 years old
	      72 years old
		17 to 22 years old
		      19 years old

Years of school completed	More than 14 (10 OR) 12 yrs (17 OR) 10 yrs (1 OR)	More than 16 (33 YR) More than 13 (205 YR) Less than 12 (33 YR)

English proficiency
  Native
  Acquired, good
  Acquired, weak
	33 OR
	 7 OR
	 0 OR
		175 YR
		 52 YR
		 11 YR

Regular Internet Use
  Yes
  No
	14 OR
	26 OR
		211 YR
		 27 YR

17 to 23. The age range of the younger males was

17 to 22. The mean age for the younger females was

19. The mean age for the younger males was

also 19.

Table 2. Frequency of use Distributions in Response to
Survey Questions Q7, Q8

	Older Respondents (OR)	Younger Respondents (YR)

Use Internet
  More than once/week
  Less than once/week
	14 OR	180 YR
		 31 YR

Use Internet More than once/day	11 OR	134 YR

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"Q2.   What year were you born?"

All 40 senior respondents were 62 years or older.

Of the 238 younger respondents, 28 females

indicated they were born before 1950, and 102 that

they were born in 1950 or later. 18 males

indicated they were born before 1950, and 90 that

they were born in 1950 or later. The youngest

respondents were born in 1985 (2 females, 1 male).

It should be noted that a subtle subconscious bias

may have influenced the pattern of distribution

used for the non-senior citizen group. Thus,

inadvertently, more young females may have been

approached, or fewer older males.

Thus, of the total 278 surveys returned completed,

40 out of 278 were for individuals over 62

(14.4%). 46 out of 278 were between 52 and 62

years old (16.5%). 192 out of 278 were between 17

and 52 years old (69.1%).

"Q3.   How many years of school did you attend?"

Of the 40 senior respondents, 17 had 12 years of

school; 1 had 10 years of school; 10 had at least

14 years of school or more. Of the 238 younger

respondents, 33 had less than 12 years of school,

and 205 had 13 years or more. Of the 205 with 13

years of more, 33 had more than 16 years of
school.

"Q4. Was English your first language? If not, do you read
and write in English well enough to read the paper
and write a letter to a friend?"

Of the 40 senior respondents, seven indicated
English was not their first language. Of these
seven, all indicated they knew enough English to
read and write comfortably.

Of the 238 younger respondents, 63 indicated
English was not their first language (26.5%). (Of
the entire sample, the percentage of non-native
English speakers was 25.2%.) Of these 63, 11
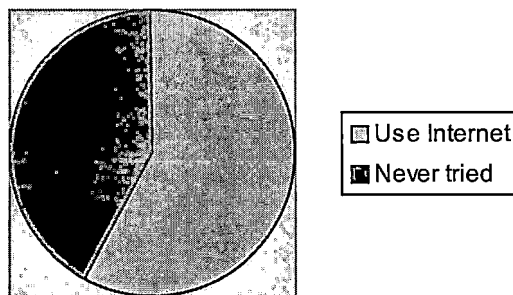indicated they were not proficient readers and
writers in English.

Chart 1. Proportion of Older Respondents Who Have Never
Tried the Internet, Versus Those Who Use It (Survey
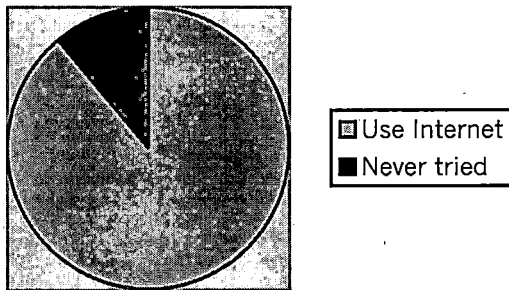Question Q5)

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Chart 2. Proportion of Younger Respondents Who Have Never
Tried the Internet, Versus Those Who Use It (Survey
Question Q5)
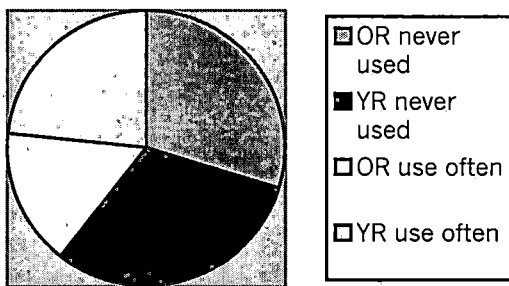
Chart 3. Cumulative Proportions for Use Versus Non-use of
the Internet (Survey Question Q5)

"Q5.   Do you use the Internet on a regular basis?"

Of the 40 senior respondents, 14 replied "Yes" (35%). Of the 238 younger respondents, 211 replied "Yes" (89%). The overall percentage of the sample who were regular Internet users was 81%.

"Q6.   If you do not use the Internet, which of the following reasons prevents you from using the Internet:

(a)   don't own a computer

(b)   own a computer but don't have Internet access

(c)   too much trouble

(d)   don't like (don't approve of) the Internet

(e)   using the Internet to shop is financially risky

(f)   using the Internet may lead to loss of privacy

(g)   would like to use the Internet but can't manage to

(h)   it's too hard to read

(i)   it's too hard to type

(j)   it's too confusing

(k)   would like to but can't afford to."

Reason (a): of the seniors, 24 of 26 non-users said this (92%). Of the younger set, 11 of 27 gave this reply (41%). Cumulative: 35 of 53, or 66.0%.

Reason (b): of the seniors, two non-users lacked access. Of the younger respondents, 9 of 27 non-users lacked Internet access but had a computer.

Reason (c): of the 26 senior non-users, 21 felt the Internet was "too much trouble" (81%). Of the 27 younger non-users, only 2 felt the Internet was troublesome (7%).

Reason (d): of the 26 senior non-users, 9 did not like the Internet on principle (37%). Of the 27 younger non-users, 5 did not like the Internet (18.5%). Cumulative: 14 of 53 did not approve of Internet use (26.4%).

Reason (e): of the 26 senior non-users, all 26 believed there was financial risk in using the Internet. Of the 27 younger non-users, 21 indicated financial risk existed from using the Internet (78%). Cumulative: 47 of 53 non-users feared financial risk (88.7%).

Reason (f): of the 26 senior non-users, 17 believed there was a risk of losing privacy from

Internet use (65.4%). Of the 27 younger non-users,
12 named loss of privacy as a consideration
(44.4%). Cumulative: 29 of 53 non-user respondents
feared privacy risk (54.7%).

Reason (g): of the 26 senior non-users, 16
complained of personal difficulty with the task
(61.5%). Of the 27 younger non-users, 11
complained of personal difficulty (40.7%).

Reason (h): of the 26 senior non-users, 10
complained of difficulty with reading specifically
(38.5%). Of the 27 younger non-users, 19
complained of reading difficulty (70.4%).

Reason (i): of the 26 senior non-users, 22
complained of typing difficulty (poor keyboarding
skills). Of the 27 younger non-users, 17
complained of keyboarding difficulty (62.3%)
Cumulative: 39 of 53, or 73.6% had trouble with
handling the keyboard.

Reason (j): of the 26 senior non-users,
"confusion" prevented 15 (57.7%). Of the younger
27 non-users, 20 felt confused (74.1%).
Cumulative: 35 of 53, or 66.1% confused.

Reason (k): of the 26 senior non-users, 16
indicated they would try the Internet if they

could afford it (61.5%). Of the 27 younger

non-users, 23 (85.2%) were being held back by

money from trying the Internet.

Table 3. Reasons Given for not Using Internet (Survey

Question Q6).

Reasons	Older Non-Users (26 total, out of 40 OR)	Younger Non-Users (27 total, out of 238 YR)
(a) don't own a computer	24 OR	11 YR
(b) own computer, lack Internet	2 OR	9 YR
(c) too much trouble	21 OR	2 YR
(d) dislike on principle	9 OR	5 YR
(e) financial risk of use	26 OR	21 YR
(f) risk of loss of privacy	17 OR	12 YR
(g) personally difficult	16 OR	11 YR
(h) reading difficulty	10 OR	19 YR
(i) typing difficulty	22 OR	17 YR
(j) confusion	15 OR	20 YR
(k) would if could afford	16 OR	23 YR

"Q7.   If you use the Internet, do you use it more often

than once a week or less often than once a week?"

Of the 14 senior users, 100% indicated frequent

use. Of the 211 younger users, 31 were using the

Internet less than once a week (14.7%).

"Q8.   If you use the Internet, do you ever log on more

than one time per day?"

Of the 14 senior users, 11 logged on more than

once a day (78.6%). Of the 211 younger users, 134

logged on multiple times per day (63.5%). The

cumulative total was 145 of 225, or 64.4%.

"Q9.   Have you ever purchased anything online?"

The question specified completed transactions

only. Of the 14 senior users, 6 had made online

purchases (42.9%). Of the 211 younger users, 79

(37.4%) had bought online. The cumulative value

for all ages was 85 of 225 (37.8%).
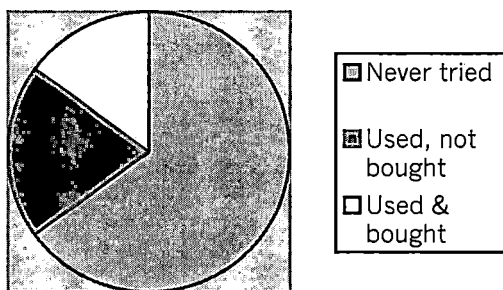

Chart 4. Proportion of Older Users of the Internet Who Had

Completed a Purchasing Transaction Online (Survey Question

Q9)
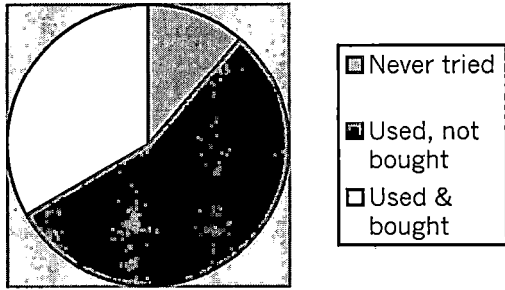
Chart 5. Proportion of Younger Users of the Internet Who
Had Completed a Purchasing Transaction Online (Survey
Question Q9)
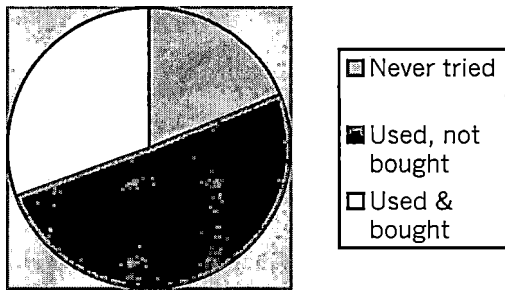
Chart 6. Cumulative Proportions of all Respondents Who
Reported Using the Internet to Complete a Purchasing
Transaction (Survey Question Q9)
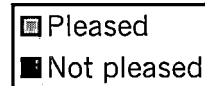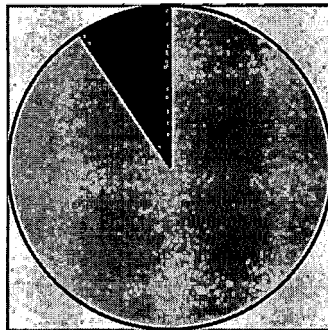
Chart 7. Proportion of Online Buyers Who Were Pleased with Their Shopping Experience (Survey Question Q10)

"Q10.   Did you like your online shopping experience?"

Of the 6 senior online buyers, 5 were pleased (83.3%). Of the 79 younger buyers, 72 were pleased (91.1%). The cumulative value for all ages was 77 of 85, or 90.6%.
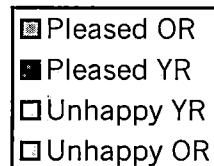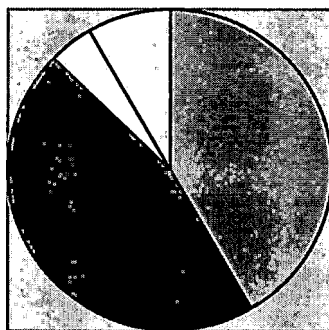
OR = older respondents; YR = younger respondents

Chart 8. Proportion of Online Buyers Who Were Pleased with Their Shopping Experience, by Age (Survey Question Q10)

"Q11.   How much time went by between the first time you went online and the first time you made an online purchase?

(a)   less than a day

(b)   about a week

(c)   about a month

(d)   two to three months

(e)   more than three months

(f)   more than six months

(g)   about a year

(h)   more than a year

(i)   more than 2 years."

Response (a): of the 6 seniors, none. Of the 79 younger consumers, two (2.5%). Cumulative: 2.4%.

Response (b): of the 6 seniors, none. Of the 79 younger respondents, two (2.5%). Cumulative: 2.4%.

Response (c): of the 6 seniors, one (16.7%). Of the 79 younger persons, three (38%). Cumulative: 4.7%.

Response (d): of the 6 seniors, none. Of the 79 younger persons, four (5.1%). Cumulative: 4.7%.

Response (e): of the 6 seniors, none. Of the 79 younger shoppers, three (38%). Cumulative: 3.5%.

Response (f): of the six seniors, one (16.7%). Of the 79 younger respondents, seven (8.9%). Cumulative: 9.4%.

Response (g): of the six seniors, three. Of the 79 younger respondents, 14 (17.7%). Cumulative: 20%.

Response (h): of the six seniors, none. Of the 79 younger shoppers, 22 (27.8%). Cumulative: 25.9%.

Table 4. Positive Adaptations to Online Shopping (Survey Questions Q9, Q10, Q11, Q13)

Online behaviors	Older Internet Users (14, out of 40 OR)	Younger Internet Users (211, out of 238 YR)
Purchased something online	6 OR	79 YR
Liked online shopping event	5 OR	72 YR
Time needed to adapt, from first online visit to first online purchase: • Less than a day • About a week • About a month • Two to three months • More than 3 months • More than 6 months • About a year • More than a year • More than 2 years • Five years	0 OR 0 OR 1 OR 0 OR 0 OR 1 OR 3 OR 0 OR 0 OR 1 OR	2 YR 2 YR 3 YR 4 YR 3 YR 7 YR 14 YR 22 YR 22 YR 0 YR
Ever completed more than 1 purchase within 1 week	1 OR	16 YR

Response (i): of the six seniors, none. Of the 79

younger shoppers, 22 (27.8%). Cumulative: 25.9% of

the users of all ages waited more than two years

to begin completing purchases online.

One of the senior respondents indicated waiting

for more than five years of regular Internet use

before completing an online purchase.

"Q12.   If you buy online, do you remember feeling worried

about shopping online?"

Of the six senior online shoppers, all six

reported past feelings of worry. Of the 79 younger

Internet shoppers, 73 reported such worry (92.4%).
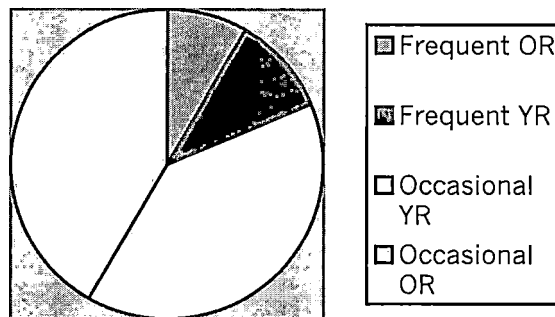
OR = older respondents. YR = younger respondents
Frequent buying is defined as more than one purchase
within one week's time, being indicative of a developing
habit

Chart 9. Proportion of Frequent Online Buyers, by Age

(Survey Question Q13)

"Q13.   If you buy online, have you ever completed more
        than one purchase in a week online?"
        Of the six senior online shoppers, one confirmed
        it (16.7%). Of the 79 younger shoppers, 16
        admitted buying more than once in a week via the
        Internet (20.3%). The cumulative value was 20%.

"Q14.   If you buy online, did you hesitate because you
        were afraid of identity theft?"
        Of the six senior online consumers, all six
        confirmed worry about identity theft. Of the 79
        younger purchasers, 62 worried about identity
        theft (78.5%). The cumulative value was 80%.

"Q15.   If you buy online, did you hesitate because you
        were afraid of being cheated?"
        Of the six senior online consumers, five admitted
        to worry about fraud. Of the 79 younger
        purchasers, 36 worried about fraud (45.6%). The
        cumulative value was 48.2%.

"Q16.   If you buy online, did you hesitate because you
        were afraid your privacy would be violated?"
        Of the six senior online shoppers, only two
        worried about privacy. Of the 79 younger shoppers,
        60 worried about privacy loss (75.9%). The
        cumulative value for this response was 72.9%.

"Q17.   If you buy online, are you still worried about the

risks of identity theft?"

Of the six active senior shoppers, all six still

fear identity theft. Of the 79 younger shoppers,

51 worry about identity theft (64.5%). The

cumulative percentage was 67.1% concerned about

identity theft although active online shoppers.
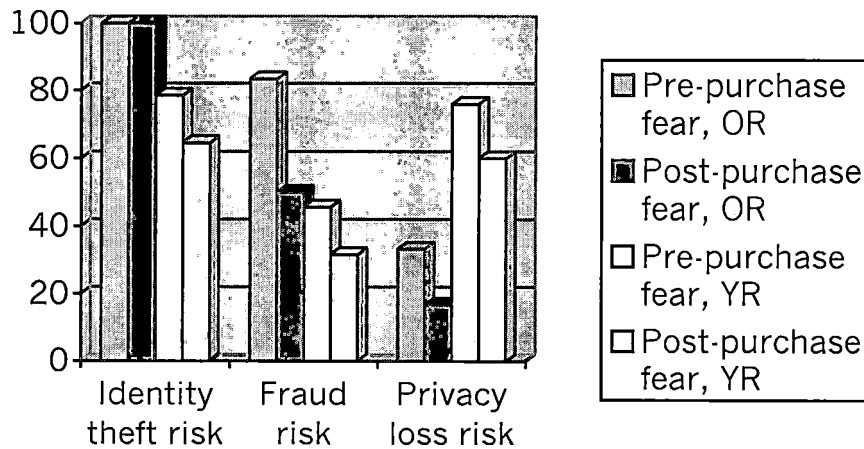
Graph 1. As a Percentage, Proportion of Older Respondents

(OR) and Younger Respondents (YR) Who Have Made Purchases

Online Who Described Inhibiting Fears of Three Risk

Categories as a Factor in Their Online Shopping Decisions

(Survey Questions Q14, Q15, Q16, Q17, Q18, Q19)

"Q18. If you buy online, are you still worried about the risks of being cheated?"

Three of the six senior shoppers continue to worry about being cheated. Of the 79 younger shoppers, 25 still worry about being cheated (31.6%). The cumulative value is 32.9% of all age groups in the sample who shop online.

Table 5. Risk Perceptions Inhibiting Online Shopping (Survey Questions Q12, Q14, Q15, Q16, Q17, Q18, Q19, Q20, Q22)

Risks, fears of risks	Older Online Shoppers (6 total, out of 40 OR)	Younger Online Shoppers (79 total, out of 238 YR)
Remember feeling worried	6 OR	73 YR
Feared identity theft (past)	6 OR	62 YR
Feared being cheated (past)	5 OR	36 YR
Feared privacy violation (past)	2 OR	60 YR
Fear identity theft (now)	6 OR	51 YR
Fear being cheated (now)	3 OR	25 YR
Fear privacy violation (now)	1 OR	51 YR
Online convenience outweighs risks	6 OR	75 YR
Ever considered stopping due to risk	0 OR	3 YR

"Q19. If you buy online, are you still worried about the risks of losing your privacy?"

Only one of the six seniors who shop online has privacy concerns. Of the 79 younger online consumers, 51 still worry about privacy (60%). The cumulative value is 52 of 85, or 61.2%.

"Q20. In your opinion, does the convenience of online shopping outweigh the risks of online shopping?"

All six senior shoppers concurred on convenience being an advantage greater than risk with online shopping. Of the 79 younger shoppers, 75 (94.9%) considered the convenience also to be decisive. The cumulative score on convenience was 95.3%.

Legend:
- ▣ Enthusiastic (OR)
- ▣ Enthusiastic (YR)
- ☐ Worried (OR)
- ☐ Worried (YR)
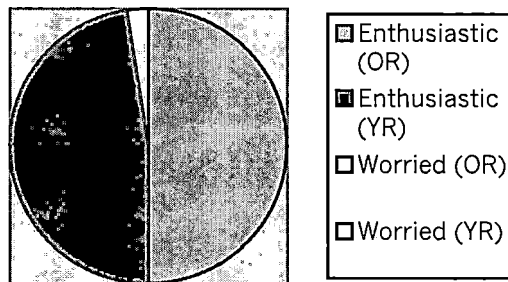
Chart 10. Proportion of Respondents Who Have Shopped Online Who Believe that the Convenience of Online Shopping Outweighs the Risks (Survey Question Q20)
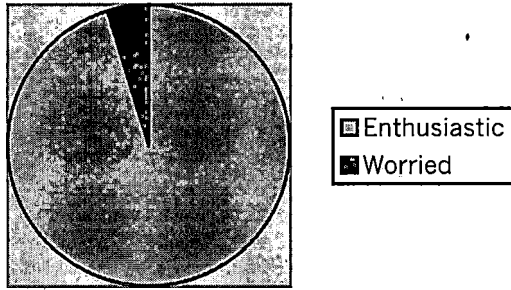
Chart 11. Cumulative Proportion of all 85 Respondents Who Have Shopped Online Who Believe the Convenience of Online Shopping Outweighs the Risks (Survey Question Q20)
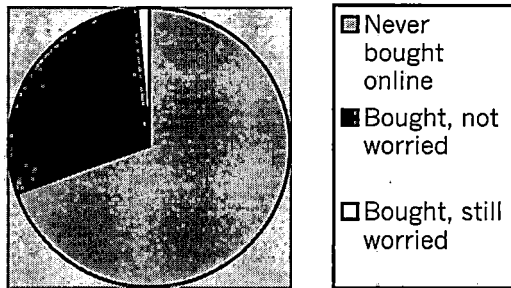
Chart 12. Of 278 total Survey Respondents, Proportion of Experienced Online Buyers Who Have Expressed Lingering Concerns that Risks Associated With Online Shopping may not Outweigh the Convenience of this Method (Survey Question Q20)

"Q21.   Have you ever had an experience related to online

shopping that made you wish you had not shopped

online?"

Of the six senior shoppers, no one indicated such

an event. Of the 79 younger respondents, 8

reported instances of regret (10.1%). The

cumulative score on regret was 8 out of 85, or

9.4%.

"Q22.   Have you ever made the decision to stop shopping

online completely because of the risks?"

Of the six senior shoppers, no one indicated such

a decision. Of the 79 younger online shoppers,

just three indicated thoughts of quitting (3.8%).

The cumulative result for this sample was 3.3%.
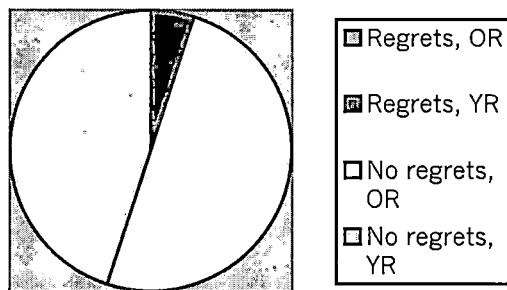
Chart 13. Proportion of Online Shopper Respondents Who
Expressed Any Instance of Regret Over Any Transaction
(Survey Question Q21)

"Q23.   Can you imagine yourself ever abandoning online

shopping for any reason?"

Of the six senior shoppers, none suggested any

possibility of abandoning the practice. Of the 79

younger shoppers, seven indicated that possibility

(8.9%). Cumulative: 8.2%.

"Q24.   Can you imagine yourself ever buying every single

thing you need or want online, without visiting

stores?"

Of the six senior respondents, two indicated they

could. Of the 79 younger respondents, five

indicated they could (6.3%). Cumulative: 7 of 85,

or 8.2%.
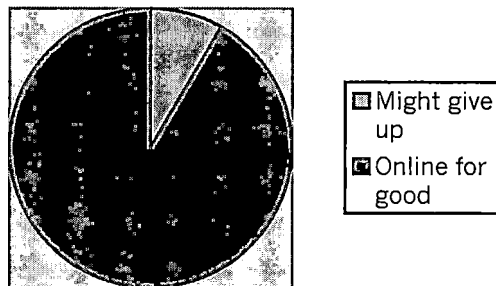
Chart 14. Proportion of Respondents Who Have Bought Online

who cannot Imagine Themselves Giving up Online Shopping

for Any Reason Whatsoever (Survey Question Q23)
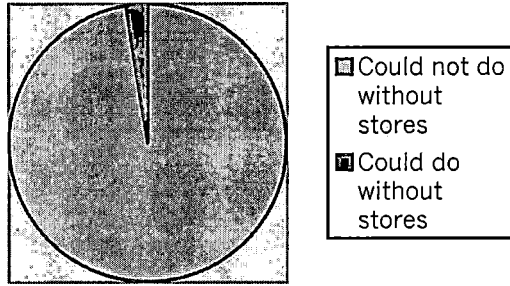
Chart 15. Proportion of 278 Respondents Who Can Imagine in Theory Buying Everything Online and Giving up Visiting Stores Altogether (Survey Question Q24)

"Q25.   Do you ever feel it is a struggle to use English for online shopping?"

Of the six senior respondents, one did (16.7%). Of the 79 younger respondents, 10 did (12.7%). The cumulative score on imperfect English as a contributor to online shopping difficulty was 12.9%.

"Q26.   Do you ever feel it is a struggle to deal with the mouse and keyboard while going online?"

Of the six senior shoppers, three expressed constraint with these devices. Of the 79 younger shoppers, 8 did (10.1%). The cumulative score on lack of adequate keyboarding skills was 12.9% for all age groups in the sample.

"Q27. Would you make more online purchases if you felt

more comfortable with the language and written

presentation of the websites that interest you?"

Of the six senior shoppers, one agreed. Of the 79

younger shoppers, three did (3.8%). Cumulative: 4

of 85, or 4.7% of online shoppers of all ages.

"Q28. Would you make more online purchases if you felt

more comfortable with your skills using a keyboard

and mouse?"

Of the six senior shoppers, two agreed. Of the 79

younger shoppers, six did (7.6%). The cumulative

score here was 9.4%.

"Q30. Do you believe online shopping is a valuable

alternative for you?"

All six senior online shoppers agreed. Of the 79

younger shoppers, 76 did (96.2%). The cumulative

score was 82 of 85 established active online

shoppers, or 96.5%.

"Q31. Based on your experience so far, do you believe

you could live the rest of your life without

making purchases online, and have no regrets about

not shopping online?"

Of the six senior shoppers, one said she would not

mind, or have any regrets, if she gave up online

shopping. Of the 79 younger active online

shoppers, six indicated they would have no regrets

if they stopped completely their online purchasing

(7.6%). The cumulative score for this question was

8.2%.

"Q32. If you had more money to spend, would you buy more

online than you currently do?"

Of the six senior respondents actively buying

online, four said they would buy more if they had

more disposable income. Of the 79 active younger

online consumers, 65 said they would spend more

online given more income (82.3%). The cumulative

score for this question about disposable income

was 81.2% for all ages.
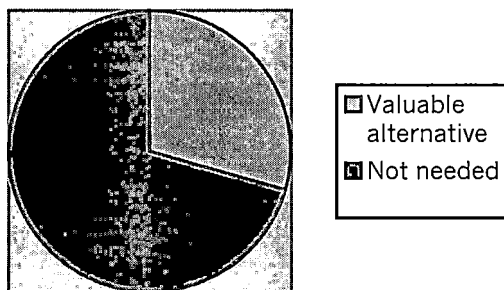
Chart 16. Proportion of 278 Respondents Who Felt Online

Shopping was a Valuable Alternative for them, Based on

Their Experience (Survey Question Q30)
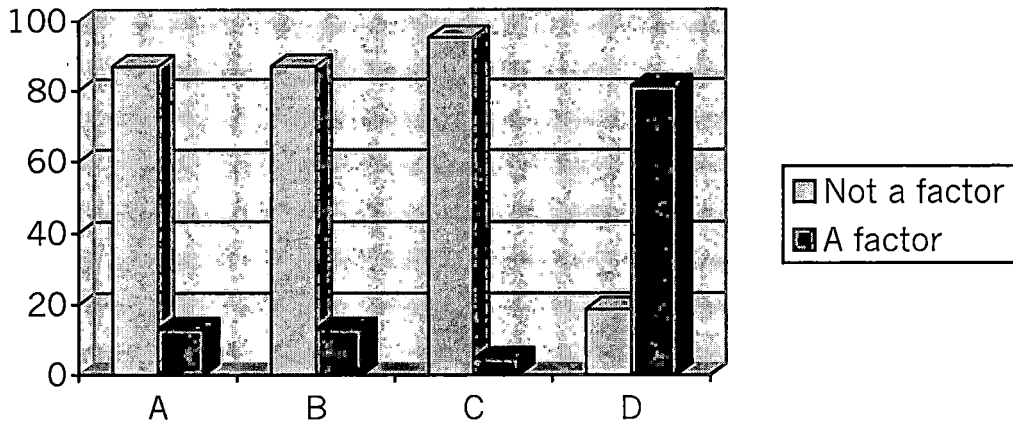
Graph 2. External Factors Inhibiting Internet Use and Buying

Bars represent: [A] English language skills - [B] Computer use skills - [C] Website presentation quality -- [D] Not enough money to make online purchases as often as would like (Survey questions Q25, Q26, Q27, Q28, Q32).

CHAPTER FOUR

DISCUSSION OF THE FINDINGS

Overview of the Findings

The findings of the study which is the subject of this research on consumer perceptions about risk and responses to risk in the transaction of purchases using Internet technology confirm that consumers of different backgrounds, interests and ages have a significant awareness of such risk yet remain overwhelmingly attracted to online shopping as a convenient and efficient way of meeting their purchasing needs.

Discussion

Even under the limitations which governed this modest study conducted by a single individual with no special resources or funding, the raw data, simply calculated, supports the assumptions underlying the research questions presented at the beginning of this research.

The first research question was formulated as follows: Do individuals who decide to make purchases over the Internet require a period of time (from three months to as long as a year or more) in order to overcome their innate hesitation over using a new method to conduct a

transaction involving the exchange of money for goods or services?

The data from survey question 11 (which examines how much time passed between the first use of the Internet and the first purchase online) clearly reflected a need on the part of the majority of Internet users to become well adapted to the Internet before engaging in purchasing. Almost 30% of this sample took as much as a year before they began to shop; about the same number took as long as two years before the online shopping opportunities began to interest them. A larger proportion of older respondents took longer than younger respondents to adapt to the possibility of buying over the Internet. Individuals who rushed to shop online were very much the exception, not the rule.

The second research question asked whether the most important perceived risk factor inhibiting online retail commerce might be the security risk associated with potential exposure to identity theft.

Survey questions 14 and 17 (which examined fears of identity theft) accurately reflected the great concern with identity theft that legitimately worries online shoppers. Even after experience with Internet purchases, about two-thirds of the respondents remained concerned

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about the possibility of falling victim to such destructive criminal behavior. It is possible that there might be somewhat less concern among younger consumers. Nevertheless, the validity of the second research question is generally proven.

The third research question asked whether the most important perceived risk factor inhibiting online retail commerce might be the risk of loss of privacy.

Before the survey was conducted, it was difficult to postulate whether identity theft or the loss of privacy would be the dominant fear of the online consumer. Even with a slight bias in favor of identity theft as being the more disruptive and destructive criminal offense of the two offenses, there was some uncertainty as to which risk was the more inhibiting one. The responses to survey questions 16 and 19 (which examine the fear of loss of privacy) show that loss of privacy is the second most dreaded risk associated with online shopping.

The fourth research question probed whether individuals who make frequent purchases over the Internet (defined as more than one transaction per week) have higher income than those who make fewer purchases.

This research question was proven indirectly through the convincing replies to survey question 6, which

explores reasons for not using the Internet. Response

option (k) was the appropriate answer for those who lacked

the financial means to use the Internet as they would

like. As shown in Table 3 (p. 60), 16 out of 26 older

non-users and 23 out of 27 younger non-users expressed

this concern about the role played by lack of adequate

income in inhibiting their online shopping. Consistent

with these findings were the answers given directly in

response to survey question 32 (the question about wanting

more money for more online purchasing), which clearly

showed that the persons who do make purchases online, and

obviously enjoy this activity, would virtually all be

spending more online if they had the additional disposable

income.

The fifth research question was formulated in a way

which predicted that individuals born after 1950 would

probably be more likely to make purchases over the

Internet than individuals born before 1950, whereas

individuals born before 1950 would probably have a longer

adaptive period before they felt comfortable making

purchases on the Internet, than individuals born after

1950.

This research question was clearly demonstrated to be

true from the higher percentages of respondents born after

1950 who were active online consumers: 89% compared to 35% of the older respondents, according to survey question 6. The accuracy of this research question was further supported by the responses to question 11, which consistently showed greater numbers of younger Internet users being willing to try completing purchases more quickly than their senior citizen counterparts.

The sixth research question was designed to determine if in the United States, individuals with a college degree are more likely to make purchases on the Internet than individuals with less education. The findings strongly supported that fact, indicating that heavy Internet use with a correspondingly higher proportion of completed buying transactions occurs more frequently among Americans with higher levels of education.

The responses to survey question 3 showed that roughly 80% of the younger population, which had a greater inclination to use the Internet and buy on it, had at least some college, whereas only about 25% of the older population segment had attended college. This data further correlated to a larger proportion of the more educated younger respondents actually shopping regularly online, as compared to a smaller proportion of the seniors who responded.

The seventh research question theorized that computer literacy skills and adaptation to technology correlate highly with greater willingness to make purchases online and reduced feeling of risk.

The responses to survey question 6, response options (c) and (i), concerning typing difficulty, as well as to survey questions 26 and 28 (attitudes to technology and comfort levels with computer skills) did reflect that for a small but significant and quantifiable group of respondents, having significant computer skills and being comfortable using high-tech devices were factors which contributed in a positive way to encouraging participation in online shopping opportunities.

The eighth research question raised the possibility that English proficiency correlates highly with greater willingness to make purchases online and reduced feeling of risk. This research question was indeed confirmed by the responses to survey questions 4, 25 and 27. (Survey question 4 examined fluency in English; 25 and 27 asked the respondent to relate English proficiency to their experience of Internet shopping.) Individuals responding to these questions in Southern California, which has great diversity, would be more likely to exist in bilingual and multilingual environments than individuals in many other

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regions of the United States. The implication is that being completely at home in the language in which online business is transacted – whatever that language might be – will necessarily make it easier for a consumer to trust the host and retailer who present their merchandise or services for consideration. Careful, thoughtful and aware consumers are the backbone of any commercial community. Increasing English proficiency and computer use skills, while at the same time increasing the availability of retail websites fluent in other languages, should have a positive effect on online consumption patterns.

Summary and Recommendations

Summary

The relatively new field of online retail business poses a unique, entirely novel set of challenges for the marketing specialist. For the first time in history, the simple act of shopping becomes associated with a complex set of skills requiring high literacy, technological adaptation, access to costly means of high technology as well as an unprecedented ability to set aside risk-associated fears and believe that a picture reproduced on a digital display corresponds to a desirable item of sufficiently high quality which will be delivered

as promised by persons unseen and unknown upon the proper
execution of electronic payments requiring entrusting
additional numbers of persons (in numbers which the
consumer cannot limit or predict) with personal financial
information normally kept under the strictest possible
control.

Although initial indications show that online retail
commerce can be highly profitable, a more detailed
understanding of the ways in which consumers make
decisions about using the Internet or not using it to make
purchases will be necessary before the full commercial
potential of cyberspace can be harnessed by retailers. By
examining more closely the steps taken by consumers
shopping online, their concerns about risks, and their
specialized adaptive needs, retailers and marketing
specialists will be better able to tailor their methods
and technologies to suit the marketplace.

As has been recently demonstrated, in particular by a
national study of online habits in the American population
conducted by the National Telecommunications and
Information Administration (NTIA) for the US Department of
Commerce in 2001-2002, the extent to which the Internet
has penetrated the households of the general population in
our country suggests that, most definitely, the time has

come for marketing specialists to develop a thorough expertise and protocol for optimally exploiting the specific, distinct and novel possibilities of this new phenomenon and its unique suitability for selling to individuals as well as groups.

This study raises the possibility that more detailed studies of consumer attitudes and experiences with online retail transactions could help improve the performance of this important emerging sector of the retail market. Using the simplest of means, this study has established that risk and risk-aversion do indeed play an important role in inhibiting consumption of merchandise and services offered through online opportunities. It has also demonstrated that the convenience of online shopping is a powerful stimulant for consumers of all age groups. While education and socio-economic factors do play a part in making a consumer perhaps more likely to try purchasing products over the Internet, it is also clear, as the experts have predicted, that there is considerable interest in and curiosity about the Internet as a method of simplifying and enhancing shopping, among all age and gender categories, including persons with less education, or struggling with English and computer skills.

Interpretation

This study did not enter into many finer points about online shopping behavior, such as which demographic and socioeconomic segments were exhibiting the greatest tendency to try making online shopping transactions. But this study did demonstrate that purchasing products over the Internet was a convenience tested and approved enthusiastically by large numbers of people of both sexes, at both ends of the spectrum of age. It demonstrated that for the overwhelming majority of these consumers, the experience of online shopping was seen positively and would remain for them an important activity in the future. It showed that without exception these consumers had a significant appreciation that some element of increased risk was involved in conducting purchasing transactions over digital telecommunications networks. However, the aversion to risk which most respondents acknowledged was not sufficient to deter them from online buying. In fact, a desire for more online buying opportunities was generally recognized, and a striking proportion of respondents actually expressed the belief that they could replace the standard shopping experience at a physical location to be visited by the consumer, or by mail-order

catalog, with online shopping as an exclusive method of making all their necessary purchases.

The responses to the survey used in this study unambiguously established the factual foundation reflected in the literature reviewed in Chapter Two (notably Bollier, Brondmo & Lindstrom), which predicted the viability and profitability of Internet commerce as a general trend popular with consumers. The findings from this study confirmed the trend defined in the NTIA study of 2001-2002, showing a growing incidence of Internet use as large numbers of American households join the online networking community. Furthermore, in sharp contrast to the opposing views of those experts (Postman, Stoll, & Tenner) who believe Internet users will in time abandon the new medium after disillusionment and negative experiences transform their attitudes from faddish curiosity to regretful hostility, the data collected by this study showed a high degree of acceptance of the Internet as a modern convenience, even among the elderly. Perhaps, in the final analysis, the adapted consumer, being more results-oriented than process-oriented, will embrace the Internet tool in the same way that the traveling public embraced the automobile – as a "newfangled" contraption requiring specialized skills and

caution, whose effectiveness as a means for achieving the goal of transporting individuals from point to point far outweighed in the popular mind the terrible consequences of occasional car wrecks.

Implications

From the moment the Internet emerged into the public awareness as a method of connecting virtually unlimited numbers of individuals, organizations and interest groups, regardless of their physical location, into active networks capable of interacting in real time by means of operating terminals, the central question for all concerned -- and for marketing specialists above all – has been: Can this method make money? Is it possible to develop this technology-driven method and integrate it sufficiently into the consciousness of large populations to make it a profitable method for selling and buying tangible goods, commodities, merchandise?

In recent years, after a period of rapid growth of Internet-oriented marketing ventures during the 1990s, there took place a period of rapid deflation in such ventures, as the speculative boom led to a catastrophic bust. Many hundreds of companies shut down after initially burning through literally tens of millions and even hundreds of millions of dollars in venture capital. These

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shocking developments inevitably revived the debate about the ultimate profitability of the Internet as a marketing tool. Even though a few large brands designed exclusively for the Internet, such as amazon.com (retailer of books and other related media products) or eBay (online reselling station for individuals with articles to dispose of), have survived, some experts feel there is still room for debate about the likelihood of Internet-based retail commerce surviving.

To this large and important debate which will inevitably help shape the growth, development, orientation and distribution patterns of the consumer goods market for the future, this study contributes a small but significant body of raw data clearly demonstrating that large proportions of the shopping public have already adapted to the Internet with considerable enthusiasm.

To the extent that California leads the nation in its adaptation to technology, and the United States as a whole is one of the global leaders (along with Japan and the EU) in mass use of innovative technologies in every area of life, it is safe to say that the results of this study do not necessarily imply that the entire planet is wired and ready to shop online. There remain large numbers of populations and even entire regions, even in the more

developed countries of the world, where access to computer terminals with high-speed connections enabling online shopping is still under development. Not only is it necessary for the infrastructure of electronic commerce to reach every community in the same way that bricks-and-mortar stores already do, but large numbers of income earners need to have the motivation and behavioral adaptation to deliberately take the time out of their routines to seek out websites and try to buy things of value to them. In that sense, before online purchasing becomes a habit common to many, there is still a great deal of work, education and development to be done. Nevertheless, even under the conditions that exits at present, with Internet infrastructure and online habits still very much under construction, it is possible to discern convincing patterns of online shopping attitudes and behaviors which imply convincingly that this method for selling and buying has not only become an established alternative, but will certainly continue to grow in popularity in the coming decades.

Fundamentally, the convenience of being able to shop from home, without sales pressure, on one's own schedule seems to outweigh all other considerations for the consumer. Even the fear of becoming the victim of skilled

identity thieves, snoops and cheats does not inhibit the

buyer who finds this category of risk still more

preferable to the ordeal of traveling, walking, being

exposed to vast numbers of strangers in the physical sense

(skilled thieves, snoops and cheats among them, perhaps no

less than online) in order to purchase goods or services.

The implication for the science of marketing is that in

order to compete effectively for the consumer's attention,

it will no longer be possible to overlook the Internet

medium. It is believed that the results of this study,

with its implication that younger, more educated,

technologically well-adapted consumers are at the

forefront of the online shopping movement also imply that

there will be greater profitability in the future in

developing segmented marketing campaigns targeting

specific categories of buyers, based on the rich data

which can be easily and consensually gathered from online

shoppers, rather than in the kind of generic,

broadly-written mass-market campaigns commonly favored in

the recent past by mega corporations. Online consumers

tend to be more educated, and perhaps more intelligent

consumers, therefore marketing methods must also recognize

and adapt positively to a more sophisticated pool of

potential customers, recognizing their specialized

interests and concerns.

Strengths and Weaknesses

A strength of this study was its fundamentally narrow

scope. There is a reliable quality to data gathered under

such simple conditions, which admitted few variables in

response, and no room for over-interpretation. Under the

time constraints of this undertaking it was simply not

possible to cross-correlate factors such as gender or

socioeconomic background to Internet shopping habits -

although that might certainly have been of interest. At

the same time, it is necessary to recognize that the

extremely limited pool of respondents, being all drawn

from Southern California, could not be said to reflect a

national trend. The respondents tended to be from a middle

class, suburban background that does not say much about

the way inner city households, rural households or even

highly affluent households operate. The parameters for age

and frequency were chosen with thought, but could have

after all been somewhat arbitrary. The breakdown of risks

being considered could have been much more elaborate. No

attempt was made to quantify or qualitatively define the

dollar values of transactions, for both positive and

negative shopping events. (Obviously, it would make a

difference if a person was unhappy with a $20 CD purchase or had been cheated on the sale of an expensive car.) There was no attempt made to conduct any statistical analysis or to project the validity of the responses onto a broader population. The answers in each case were accepted as truthful, accurate and at face value, with no independent means to corroborate their reliability. The type of answer, given the "Yes/No" format could not be analyzed on any kind of scale or other proportionate means of statistical analysis. Only frequency of affirmative vs. negative responses was being considered.

On the other hand, the simplicity of the study and the relatively high response rate speak well of the study's capacity to understand the consumer. The study was not too long and its questions were clearly well understood by the respondents. The patterns of behavior that were established by the survey were valuable and suggested new areas for further investigation.

Recommendations for Further Research

The overriding recommendation that arises from the results of this investigation is that more studies of this type be conducted, using greater details, and perhaps incorporating more complex statistical models and consumer profiles, with greater demographic diversification, in

order to develop marketing strategies aimed at promoting

online purchasing by introducing greater numbers of

consumers to its advantages. It would be valuable to

extend the research further into a analysis of specific

types of consumption preferences or experiences, the

effectiveness of Internet-oriented marketing research

tools (such as "pop-up" ads), the proportion of funds

exchanged in various types of transactions, or the

frequency and volume of sales on well-known Internet sites

(such as amazon.com) as opposed to specialty sites (such

as private label music publishers and independent

distributors).

This study demonstrated that the biggest inhibitor

acting against online purchasing is risk – in other words,

fear – and that the single greatest weapon to overcome

this fear is not only the development of more secure

processes to protect the integrity of transactions and the

privacy of consumers, but the best tool of all: personal,

direct, hands-on experience with successful results.

A number of methods for helping facilitate the growth

of online shopping readily suggest themselves. One would

be for online retailers to formulate as a matter of

practice a survey-type feedback form which would allow

consumers immediately to evaluate their experience and to

pinpoint likely trouble spots, or recognize positive features. A natural advantage of online retailing over other kinds of shopping is that it cannot be transacted in complete anonymity. That factor becomes a significant advantage from a marketing standpoint.

In turn, the large retailers who make use of electronic technologies could provide feedback to manufacturers on ways to enhance the experience for the consumer considering shopping online. For example, having demonstrated that there are demographic segments that, for professional reasons as well as education, may not be as comfortable with a standard alphanumeric computer keyboard as perhaps those consumers who use such a keyboard day in day out, it may become economically beneficial to develop an alternative way of inputting commands and orders. On the other hand, industry may in turn prefer to lobby legislators and government to ensure that mastery of computer skills becomes even more fundamental to school curricula at every level.

The important thing to accept, at a time when perhaps economic stresses raise questions about the overall direction of business growth, is that online retail commerce has established itself as a valuable and profitable method of both marketing and purchasing.

From a research perspective, future studies would do
well to focus on specific analysis of risk factors,
assessments, perceptions and adaptive behaviors; on types,
categories and quantities of merchandise most sought
(whether something new or something tested and familiar);
on gender-based and community-based preferences; on
quality of technological infrastructure (Wireless?
High-speed? Load time? Voice-assisted?).

Above all, broader based studies based on larger and
more varied populations, and crossing national borders
(into Canada and Mexico, for example) would be
particularly valuable. The Internet crosses all borders;
retailers and marketing specialists will benefit from
knowing exactly who is looking, shopping and buying – from
where, and why. That is the vast area of marketing inquiry
which lies ahead for all specialized audiences fascinating
by the prospects, rapid expansion and nuanced complexities
of online retail commerce.

Conclusion

This study ventured into an area of marketing which
is very new when compared to the millennia of established
human purchasing history. After becoming well familiarized
with the current controversy in opinions about the future

of online commerce, a research investigation was conducted

into the attitudes and practices of a local pool of

consumers. Using a survey, it was established that 278

individuals (out of 300 approached) of varying ages,

backgrounds and interests, had some exposure to the

subject of online commerce; that of these 278, 225 had

become regular users of the Internet; that 85 of the 225

had made purchases online and that 77 out of the 85 –

27.7% of the original pool of 278 respondents – were

pleased with the experience of making purchases online,

and could thus be expected to become repeat users of this

method.

In spite of the limitations of this simple, modest

study, this data and these findings are presented with the

conviction that they are significant and indeed

representative of a growing practice among consumers in

those developed parts of the world where the

infrastructure supports electronic commerce.

Such a growing practice offers considerable rewards

and poses interesting challenges for those merchants and

marketing specialists who wish to be able to access this

pool of consumers, and to interact with them productively,

profitably and regularly. It is the conclusion of this

study that the Internet as a means of facilitating and

enabling commercial transactions including retail sales --
in fact encouraging the growth and profitability of the
retail industry by reducing its dependence on expensive
showroom space and increasing its frequency of access into
individual households regardless of their address – has
been unambiguously demonstrated. There is no longer any
question about the future of the Internet: the future has
been here for some time; consumers have embraced it in
large numbers, and backed up their enthusiasm with their
monetary payments for actual online purchases. The
questions which remain to be answered, perhaps by future
marketing research studies, have instead to do with how to
make Internet transactions easier, safer, and more
profitable – and how to increase access to this valuable
marketing tool for greater numbers of consumers and
retailers.

APPENDIX

THE SURVEY

The Survey

Please answer all questions that apply to you.

Q1.   Are you male or female?

Q2.   What year were you born?

Q3.   How many years of school did you attend?

Q4.   Was English your first language? If not, do you read
      and write in English well enough to read the paper
      and write a letter to a friend?
      [Yes or No]

Q5.   Do you use the Internet on a regular basis?
      [Yes or No]

Q6.   If you do not use the Internet, which of the
      following reasons prevents you from using the
      Internet:

      ____ don't own a computer
      ____ own a computer but don't have Internet access
      ____ too much trouble
      ____ don't like (don't approve of) the Internet
      ____ using the Internet to shop is financially risky
      ____ using the Internet may lead to loss of privacy
      ____ would like to use the Internet but can't manage
            to
      ____ it's too hard to read
      ____ it's too hard to type
      ____ it's too confusing
      ____ would like to but can't afford to

Q7.   If you use the Internet, do you use it more often
      than once a week or less often than once a week?

Q8.   If you use the Internet, do you ever log on more than
      one time per day?
      [Yes or No]

Q9.   Have you ever purchased anything online?
      [Yes or No – Complete transactions only, please]

Q10. Did you like your online shopping experience?
      [Yes or No]

Q11. How much time went by between the first time you went online and the first time you made an online purchase?

    ____ less than a day
    ____ about a week
    ____ about a month
    ____ two to three months
    ____ more than three months
    ____ more than six months
    ____ about a year
    ____ more than a year
    ____ more than 2 years

Q12. If you buy online, do you remember feeling worried about shopping online?
[Yes or No]

Q13. If you buy online, have you ever completed more than one purchase in a week online?
[Yes or No]

Q14. If you buy online, did you hesitate because you were afraid of identity theft?
[Yes or No]

Q15. If you buy online, did you hesitate because you were afraid of being cheated?
[Yes or No]

Q16. If you buy online, did you hesitate because you were afraid your privacy would be violated?
[Yes or No]

Q17. If you buy online, are you still worried about the risks of identity theft?
[Yes or No]

Q18. If you buy online, are you still worried about the risks of being cheated?
[Yes or No]

Q19. If you buy online, are you still worried about the risks of losing your privacy?
[Yes or No]

Q20. In your opinion, does the convenience of online shopping outweigh the risks of online shopping? [Yes or No]

Q21. Have you ever had an experience related to online shopping that made you wish you had not shopped online? [Yes or No]

Q22. Have you ever made the decision to stop shopping online completely because of the risks? [Yes or No]

Q23. Can you imagine yourself ever abandoning online shopping for any reason? [Yes or No]

Q24. Can you imagine yourself ever buying every single thing you need or want online, without visiting stores? [Yes or No]

Q25. Do you ever feel it is a struggle to use English for online shopping? [Yes or No]

Q26. Do you ever feel it is a struggle to deal with the mouse and keyboard while going online? [Yes or No]

Q27. Would you make more online purchases if you felt more comfortable with the language and written presentation of the websites that interest you? [Yes or No]

Q28. Would you make more online purchases if you felt more comfortable with your skills using a keyboard and mouse? [Yes or No]

Q30. Do you believe online shopping is a valuable alternative for you? [Yes or No]

Q31. Based on your experience so far, do you believe you could live the rest of your life without making purchases online, and have no regrets about not shopping online?
[Yes or No]

Q32. If you had more money to spend, would you buy more online than you currently do?
[Yes or No]

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