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DISINTERMEDIATION IN THE UNITED STATES AIR
TRAVEL INDUSTRY WHO HOLD THE POWER
OF BOOKING STRENGTH?

A Thesis
Presented to the
Faculty of
California State University,
San Bernardino

In Partial Fulfillment
of the Requirements for the Degree
Master of Arts
in
Interdisciplinary Studies

By
Preenida Gajaseni

March 2005

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March 2005

Approved by:




Dr. C.E. Tapie Rohm Jr., Chair,
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15 March 2005
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Dr. Donna Simmons, Communication Studies



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ABSTRACT

This study investigates the correlation between U.S. domestic air travelers and patterns of air travel purchase within the U.S air travel industry. Influences on the patterns of air travel purchase involve 1) demographic characteristics of travelers 2) benefits to the customer 3) customer attitude toward service providers' performances within the air travel distribution channels (defined as airlines, web-based travel agents, and traditional travel agents and 4) information sources used to select and book a flight for business and leisure trips.

Results demonstrate that there is no correlation between loyal pattern and traveler demographics. No correlation was reported between service providers' benefits and travelers' choices of providers. And also, there is no correlation between service providers' performances and travelers' choices of providers. The last result involves information sources. The finding shows that Internet is not the most popular source of information for travelers to select and book a flight. Recommendations for travel agents are included and suggestions for future studies are discussed.

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To mom, dad and lovely sister..

I love you guys so very much...

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CHAPTER ONE

INTRODUCTION

Background

The Internet appears to be playing a role in the restructuring of some traditional business sectors in which some organizations profit and some decline. One sector significantly affected is the travel industry, particularly travel agencies. In the U.S. air travel distribution industry, travel agents are the traditional intermediary between the airline companies and the air traveler.

Typically, end-users passengers purchase their airline tickets from travel agents, online services or service providers, who provide travel information, travel planning, and personal assistance. The emergence of the Internet drastically changes the situation. It allows traditional channel intermediaries to be by-passed by suppliers reaching out to end customer directly. The common term used to describe this process is disintermediation.

Traditional travel agencies are being subjected to increased competition from virtual on-line travel agencies or so-called cybermediaries and airline direct services. Cybermediaries do not possess traditional retail outlets

but exist predominantly on the Web. In addition, airline companies and travel wholesalers are beginning to market their products directly to the consumer via their websites.

According to the Travel Industry Association of America (2001), more than 59 million Internet users in the United States went online last year to gather information or to check prices and schedules, growing 395% over the past three years. Of that group, 25 million actually purchased travel products or services online, a 384% increase from 1997. Other research also supports the scenario that more travelers are logging on to the Internet for travel information, trip planning, and online reservations and purchasing of travel products and services (Zongqing Zhou, 2004).

In the past, the travel agent was the intermediary who interpreted a confusing array of rules and fare-tables, usually through a direct terminal connected to the airline system. Today, most people have direct Internet access to airlines with the complete array of schedules and fares. Some airlines provide a discount for purchase directly through the Internet, to eliminate the cost of the intermediary. To prove their value, many airline web sites even provide a list of alternatives (with perhaps low

fares) from other airlines.

This project addresses the occurrence and impact of disintermediation and reintermediation in the U.S. air travel distribution industry. It describes the threat of disintermediation to traditional travel agents by two powerful new competitors enabled by e-commerce technologies: airline direct services and travel cybermediaries. It also addresses the background of the distribution in the air travel industry, the major channel players involved in the U.S. air travel distribution industry, the major changes that have taken place within the industry, and provides a practical guide and framework for traditional travel agents to help them better cope with the future.

Statement of Problems

The U.S. air travel industry has always been an interesting industry to observe because of the way it has used information technology (IT) consistently for competitive advantage. Airlines started with reservation systems and moved on to frequent-flyer programs, yield management systems (variable pricing systems), and fleet scheduling and maintenance systems. With Internet-based

e-commerce, the airlines shifted their attention to their distribution costs principally commissions paid to travel agents, their third highest cost after labor and fuel.

First, to reduce distribution costs, they reduced travel agents' commissions and, at the same time, set up websites and improved their call centers. They introduced e-ticket which eliminated the paper tickets that customers were accustomed to having delivered to them by travel agents. After that, they made no secret of the fact that they were going to do everything possible to bypass the travel agents to avoid paying commissions and to recapture the principle relationship with their customers. This latter point was important because, even though the airlines' frequent-flyer programs tended to tie their customers to them more closely, travel agents represented a potentially influential intermediary between airlines and their customers (Harrell Associates, 2002). Travel agents, for example, could convince a traveler that it was preferable to use a particular airline to fly from the United States, rather than another to Thailand, and that the added convenience would more than offset foregoing a few thousand frequent-flyer miles. In essence, the strategic question for airlines and travel agents was

whether the airline or the travel agent 'owned' the customer.

When new intermediaries Web-based travel agencies or cybermediaries such as Expedia and Travelocity evolved, they presented a new entity vying for the attention of the airlines' customers. The airlines responded by devoting more resources to their websites and encouraged their frequent-flyer members to use them by offering mileage bonuses if they did. For instance, at one point, Northwest Airlines offered a new online booking program to small and medium-size corporations that featured incentives including free tickets and upgrades, elite frequent-flier program status, airport lounge memberships, and travel management aids. United Airlines offered a bonus of 25,000 miles to participants in its frequent-flier program who stayed at least 10 times at Regent International Hotels by December 30, 2000; each stay had to be a minimum of three nights. Travelers also needed to register with Regent and pay the corporate room rate. British Airways established a Web site using London as a destination that contained in-depth information on the city from a variety of travel guidebooks as well as data on the newest restaurants, bars, clubs, theaters, and art exhibits. Visitors to the site could also

buy airline tickets and reserve hotel rooms (Zongging Zhou, 2004).

The Internet provides airlines with the means to strengthen substantially their relationships with all their customers. Airline loyalty schemes have been the traditional means of binding customers to an airline. Superior customer service and tailored personal offerings have been successful strategies for some airlines. The Internet provides a new set of enhanced tools to enable airlines to develop special relationships with their customers. In addition to the airlines' websites that facilitate direct sales, there are many other examples: 1) set up e-mail lists to market unsold seats a few days before flight time at discounted rates. 2) communication of schedule changes directly to customers via WAP-enabled devices- phones, pagers and PDAs. 3) web-enabled sales of non-airline products and services e.g. telephony, banking (Harrell Associates, 2002).

The advent of online booking, the commissions cut and cap by travel suppliers and carriers put tremendous pressure on travel agents. The best solution to offer to travel agents to cope with the reality of the changes brought by the Internet is to identify and focus on the

pattern of air travel purchases. This study provides reference data for travel agents to pursue the development of their customer service as another market strategy.

Purposes of Study

The purpose of this study is to investigate the correlation of U.S. domestic air travelers and patterns of air travel purchase within the U.S air travel industry. Influences on the patterns of air travel purchase involve 1) demographic characteristics of travelers 2) benefits to the customer 3) customer attitude toward service providers' performances within the air travel distribution channels (defined as airlines, web-based travel agents, and traditional travel agents and 4) information sources used to select and book a flight for business and leisure trips.

Research Questions

This study seeks to answer the following questions:

- What is the relationship between demographic characteristics and patterns of air travel purchase?
- How do the performances of service providers influence travelers' choices of providers?

- How do the service providers' benefits to customers influence travelers' choices of providers?
- What is the most popular source of information that travelers used to select and book a flight?

Hypotheses

- H1 The frequency of the air travel purchase is significantly affected by customer demographics.
- H2 Service providers' performances strongly influence travelers' choices of providers.
- H3 Service providers' benefits influence travelers' choices of providers.
- H4 Internet is the most popular source of information for travelers.

Organization of the Study

This chapter provides background of the research problems, statement of problems, purpose of study, organization of the study, and keywords. Chapter two provides a comprehensive literature review where background and problems of the U.S air travel distribution industry are discussed. Chapter three describes the methodology used in this study. Chapter four presents the results. The statistical evaluations of travelers' attitude relevant to the pattern of the air travel purchase are presented. Chapter five provides findings, conclusion, implication and recommendation for travel agents, limitations and recommendations for future research direction.

Keywords

Frequency

Frequency is defined as the number of times that a traveler has made a purchase airline ticket from service provider

Demographic Data

Characteristics of travelers that includes such information as age, gender, annual income, and education.

Service Provider

Service providers within the air travel distribution channels are defined as airlines, web-based travel agents, and traditional travel agents.

Service Providers' Performances

The degree to which service provider fulfill the purposes for which they were acquired, or which they are now expected to fulfill; ability to get best prices, accuracy of booking and good past experiences.

Service Providers' Benefits

A favorable result that a traveler receive from a service provider because of a particular advantage which has the ability to satisfy the traveler' needs.

Pattern of Air Travel Purchase

The study how travelers make decisions about purchasing airline tickets with multiple decision parameters

Air Travel Distribution

The method through which a airline tickets sold including travel agents, GDSs, CRSs, cybermediaries, and airline websites, etc.

CHAPTER TWO

LITERATURE REVIEW

Background on the Distribution in the United State Air Travel Industry

In the 1920s, the airline reservation system was fairly simple. A consumer had to contact the airline office in the departure city and, if the seat was available, reserve it for the desired date. The reservation process then evolved into a formalized three-step procedure where an airline agent would determine availability, modify the inventory, and record the passenger record. This three-step procedure, which is now fully automated, remains relatively the same today (Harrell Associates, 2002).

In the early airline reservation system (ARS), manual systems required centralized reservation centers. These reservation centers had groups of human beings in a room that used physical cards represented the availability of airline seats. The ability to keep all the data updated eventually led to reservation centers having the capability to price seats on airplanes at many different levels. Initially, there were only three reservation classes per flight (Harrell Associates, 2002).

In 1953, American Airlines and IBM began a partnership to develop the first computer system to handle airline reservations, ticketing, schedules, seat inventories, and passenger name records (PNRs). This development effort, which involved years of research and development, and over \$40 million investment, was called SABRE (Semi-Automated Business Research Environment), a system that would allow real-time access to flight details in all of its offices by integrating and automating its booking and ticketing processes. At the time, Sabre was the largest commercial real-time processing system in operation that was accessible to travel agencies.

In an effort to increase productivity and capability for handling information, airlines and travel agencies began calling for the development of a neutral-wide computer reservation system (CRS). The CRS connected the various ARSs together and made them available to travel agencies. Just as the invention of the ARS enabled the automation of flight and seat control within an airline, the CRS concept automated the reservation process by placing the reservation technology for all airlines on a travel agent's desk. Thus, the CRS concept eliminated the need for travel agents to call the airline to make

reservations (Harrell Associates, 2002). As a result, travel agents could spend more time helping consumers. In addition, the airline companies saved millions of dollars when the majority of telephone-reservation work was transferred to the travel agencies instead. In 1976, the CRSs were offered to travel agencies. The agencies paid a monthly subscription fee to the vender and the monthly fee depended on the level of usage. United Airlines began installing its in-house Apollo CRS in travel agencies and American Airlines soon followed.

Prior to airline deregulation, the U.S. airline industry operated similarly to a public utility company with each carrier's routes and prices set by a governing body, the Civil Aeronautics Board (Harrell Associates, 2002). In 1978, Congress passed the Airline Deregulation Act, which introduced true competition into the airline industry and applied free market principles to the U.S. airline business. The airlines were allowed to change their route and fare structure in order to respond to consumer demand and competitive pressures from other airline carriers.

By the mid 1990s, the major CRSs were replaced by Global Distribution Systems (GDS) which allowed travel

agents to check real-time flight schedules, seat availability, pricing information, as well as allow travel agents to issue tickets to consumers. The CRS evolved into a GDS when the CRS companies expanded outside the U.S. to other parts of the world. The main purpose of the GDS is to provide travel agents with a single reservation system that supports the sales of airline seats and travel products (such as hotel and car rentals) via a single computer terminal (Harrell Associates, 2002).

Today, there are roughly a dozen GDSs worldwide. However, there exist four major players in the GDS family which include Amadeus, Galileo, Sabre, and Worldspan (Harrell Associates, 2002). Amadeus, has become the world leader among GDSs after merging with SystemOne, with a 27% market share. Galileo and Sabre follow behind Amadeus with a 22% market share each, while WorldSpan is last with a 10% market share (Harrell Associates, 2002).

The United State Airline
Travel Industry's Major
Channel Players

Five major companies exist within the U.S. air travel distribution industry.

1. Travel agencies. There are two kinds of traditional travel agencies
 - 1.1 National/Global Travel Agencies. They typically serve several market segments and offer sophisticated marketing expertise as well as strong IT systems support system. They serve multinational corporations and thus have a global presence. Examples of companies in this group are American Express Travel Services, Carlson and Rosenbluth.
 - 1.2 Independent Local Travel Agencies. Companies in this group mostly range from the very small, 2 person agencies that focus on serving individual clients to larger agencies that serve more than one market segment, including small to medium sized corporate clients.
2. Airline Companies. The airline companies such as Southwest Airlines, United Airlines, and

Continental Airlines entered the Internet scene after the major cybermediaries, such as Travelocity and Expedia. Today, most major airline companies have a Web site where consumers have the ability to purchase a travel ticket via their Web site.

3. GDS companies. As mentioned previously, there are four dominant players within the GDS. These include Sabre, Worldspan, Amadeus and Galileo. Sabre powers Travelocity's Web site, allowing its customers to have access to fares and schedules. Worldspan powers both Expedia and Priceline's Web sites, again allowing its customers to have access to fare and schedule information as it relates to airlines, hotels, and car rentals (Global Aviation Associates, 2001). The GDS company's revenue comes from booking fees charged to airlines and subscription fees paid by travel agencies. The airline carriers are charged a booking fee for every ticket that is purchased through a travel agent.

The subscription fees are typically charged monthly to travel agencies for having access to

the database of fares. The average net profit for a GDS company is 13.6%, which is more than double the profit of any U.S. major airline and is more than three times the profit of the "bricks and clicks" agencies, which are agencies that operate both offline and online (Global Aviation Associates, 2001). It is clear that the GDS companies have been the dominant player within the industry.

4. Web travel service providers/Cybermediaries.

Cybermediaries are the new Internet-based intermediaries who have arisen and are independent of travel agents and airlines (although, in some cases, the more traditional players invest in them). There exist many online agencies, such as CheapTickets.com, Lowestfares.com, and BuyTravel.com, to name a few. However, this paper will focus on the top three cybermediaries which are Travelocity, Expedia, and Priceline.

Travelocity was the first of the top three cybermediaries to launch on the Web in March 1996. Travelocity is owned by Sabre, which is one

of the top GDS companies today. Travelocity is considered the top ranked Internet site according to Global Aviation Associates, 2001. Travelocity has access to over 700 airlines, 55,000 hotels, 50 car rental companies and 6,500 cruise and vacation packages. Travelocity is a site where consumers can book a flight, car rental, hotel, and purchase a vacation package without leaving the comfort of their home. Travelocity is contracted with AOL, Yahoo, Lycos, CompuServe, Digital Cities, Netscape Netcenter, Go Network, and Excite@Home (Bates, 2000; Global Aviation Associates, 2001). In an effort to obtain more of the travel industry market share, Travelocity merged with PreviewTravel.com in October 1999 (Bates, 2000; Greenberg, 2000). Travelocity operates Web sites in the United Kingdom, Canada, and Germany. Travelocity's gross sales totaled \$3 billion in 2001 (Zellner, 2002).

Expedia was launched several months after Travelocity in October 1996. Expedia is 85% owned by Microsoft (McDougall, 2000). Expedia has access to over 450 airlines via its Web site.

Expedia is just like Travelocity in that consumers can book a flight, car rental, hotel, and purchase a vacation package with the convenience of never leaving the comfort of their home. Expedia is of course contracted with many Microsoft proprieties, such as MSN, Hotmail, and WebTV (Bates, 2000). Following in Travelocity's footsteps, Expedia purchased both Travelscape.com and Vacationspot.com in January 2000 (Bates, 2000; Greenberg, 2000; McDougall, 2000). Just like Travelocity, Expedia's gross sales totaled \$3 billion in 2001 (Zellner, 2002). However, Expedia exceeded Travelocity's 2001 fourth quarter earnings with \$5.2 million in net profit versus Travelocity's \$25 million loss (Zellner, 2002). Expedia operates Web sites in the United Kingdom, Germany, Canada, France, Italy, and the Netherlands. Travelocity and Expedia combined make up 70% of the online market (Atkinson, 2001; Global Aviation, 2001).

Priceline was launched in April 1998. During its first week on the Internet, the Web site sold 162 airline tickets. Priceline

operates a "Name Your Own Price" bidding-type Web site. Consumers enter a price they are willing to pay for a particular airline ticket, provide the Web site with their credit card number and then wait to see if their bid is accepted or denied. If it is accepted, the consumer is bound to that particular airline ticket regardless of any unwanted layovers or multiple connections. Similar to the moves made by Travelocity and Expedia, Priceline also ventured into other aspects of the industry with the purchase of both the trademark and domain name of Lowestfare.com, the partnership with LastMinuteTravel.com and the agreement to market its "Name Your Own Price" booking engine on OneTravel.com's Web site (Williams, 2002).

Priceline is an example of how the Internet can be a very unpredictable wild ride. Priceline went through a period of discomfort during the later part of 2000 with the departure of Priceline's founder and vice president, Jay Walker; the resignation of their CFO, Heidi Miller; the closure of the "Name Your Own Price"

gasoline and grocery stores; and a plummeting stock price that hit rock bottom, going from \$96 per share on March 13, 2000, to \$1.125 per share on December 26, 2000 (Williams, 2002). Despite the apparent bad luck, Priceline has bounced back and today sells tens of thousands of airline tickets daily (Williams, 2002).

5. Third Party Websites. A number of air carriers have banded together to invest in and create third party websites that would be materially less costly than GDSs although somewhat more expensive than their own websites. Two such creations are Orbitz and Hotwire, however, this paper will focus on Orbitz who plays the major role among the third party websites.

Orbitz was launched last June and is a joint venture Web site by the top five U.S. airlines: American Airlines, United Airlines, Delta Airlines, Northwest Airlines and Continental Airlines (Harris, 2002; Zellner, 2002). The joint venture, announced in November 1999, was code-named "T2" after Arnold Schwarzenegger's Terminator film for two reasons. For one, "T2"

was used to reflect the possible take over of the industry by the giant venture. The second reason Orbitz was coded named "T2" was to reference Orbitz' aspirations to become known as "Travelocity2" (Bates, 2000). Orbitz is open to all travel suppliers and is able to provide Charter Associate Members with a booking fee cost that is roughly two-thirds that of the traditional GDS. Currently, Orbitz has access to over 455 airlines nationwide, 210 hotel chains, 42 car companies, and 18 cruise lines. Unlike Travelocity and Expedia, Orbitz charges a flat \$5 fee per ticket purchased (Engle, 2002). Orbitz's success has been driven by two primary characteristics: 1) a search engine that is unbiased and technologically advanced, and 2) a technology that allows it to sell at a substantially reduced cost when compared to the traditional GDS that must rely on legacy architecture.

In 2001, Orbitz has come under fire by other players within the travel industry. The American Society of Travel Agents (ASTA) filed a compliant

against Orbitz in March 2002 claiming that Orbitz was using "anti-competitive" practices ("Complaint Dismissed," 2002). Specifically, the ASTA claimed that Orbitz would lead to price-fixing and would obtain a "competitive edge" by offering cheaper fares on its joint venture Web site (Atkinson, 2001). The ASTA demanded that Orbitz provide the travel agencies with the airline's lowest fares. This would seem like the proper thing for the airline companies to do. However, what the ASTA did not realize was that it would still cost the airlines money to go through them versus having consumers purchase travel online via Orbitz' Web site (Atkinson, 2001). Therefore, economically speaking, it would not make sense for Orbitz to offer such special fares to travel agencies. In September 2002, the Transportation Department dismissed the complaints levied against Orbitz, stating there was no need to further investigate the claim ("Complaint Dismissed," 2002). However, By 2004, Orbitz still was under investigation by antitrust

regulators at the Justice Department (Harris, 2002).

To further dampen Orbitz' spirits, five California based travel agencies are currently suing Orbitz for "anti-competitive" practices. They are requesting that the lawsuit be changed to a class action status. In addition, the travel agencies are demanding to be reimbursed for commissions that would have been paid out to them over the last four years if the travel agent commissions had not continued to decrease. Ultimately, the travel agencies are insisting that Orbitz be disbanded because they feel Orbitz is nothing more than a monopoly (Harris, 2002).

According to Bob Jones, an analyst with the online site, OneTravel.com, "It's [Orbitz] in the perfect position to quickly go from a benevolent oligopoly to a brutal monopoly" (Harris, 2002). This statement is perhaps made because Orbitz is planning to completely eliminate the need for GDSs by developing the technology to directly connect the individual consumer to the Web site without the need of a GDS (Doernhoefer, 2002).

The claim that Orbitz is or will turn into a monopoly seems rather unfounded. Just because Orbitz offers the lowest fares doesn't mean that Orbitz is going to turn into this giant that will devour any competitors that get in its way. Furthermore, Orbitz has made it clear that airlines are not required to offer their lowest fares only to Orbitz (Atkinson, 2001). This means that the lowest airline fares will not only appear on Orbitz but on many other different avenues.

How has the United State Air Travel Industry Changed?

The Internet has caused the U.S air travel industry to go through a complete transformation with regard to how companies conduct business and consumers purchase travel. The air travel industry has experienced Internet "disintermediation" (Wilson, 1997). Disintermediation is "the reduction or elimination of the role of retailers, distributors, brokers, and other middlemen in transactions between the producer and the customer" (Atkinson, 2001, p. 1). Specifically related to the air travel industry, air

travel suppliers' reliance upon travel "intermediaries" such as travel agencies and GDS companies is declining in wake of the Internet. With the help of the Internet, a power shift has occurred within the industry. The travel industry has changed from supplier driven to consumer driven (Wilde & Rosen, 2000). The Internet is allowing consumers to access information without the help of travel industry "middlemen." Furthermore, consumers no longer have to go through a travel agency or GDS company; rather they can now book a flight directly through an airline carrier. The consumers now hold the power and control as to what they want and how much they are willing to pay for it.

One of the most significant changes within the air travel industry, travel agent commissions, has forever changed the way travel agencies conduct business. In 1995, travel agents on average received a 10% commission on every airline ticket sold, regardless of price. Just two years later, in 1997, travel agent commissions averaged 8% per airline ticket (Wilson, 1997). By 2000, travel agent commissions had decreased to a mere 4.47% per airline ticket (Rosen, 2000). The ultimate blow to travel agencies occurred in 2002. Led by Delta, travel agent commissions were eliminated in March (Engle, 2002). All major U.S.

carriers also eliminated online commissions in October. However, both travel agencies and airline suppliers admit that "override" commissions continue to be given to travel agents for pushing business to a particular airline (Engle, 2002; Harrell Associates, 2002; O'Neill, 2002). These so-called "override" commissions are typically 1% to 2% of the ticket price (Engle, 2002). So, although commissions have been eliminated on paper, incentive based commissions continue to be offered based on the performance of the travel agent.

Some feel the elimination of agent commissions will decrease the number of travel agencies and therefore, limit the average consumer's travel choices. On the other hand, others feel the elimination of agent commissions will actually benefit consumers, by reducing travel agent bias since they no longer receive commissions (Engle, 2002). According to Engle (2002), travel agent bias will likely increase based on the fact that several travel agents advised Engle they will push travelers to make bookings with airlines that will provide them with "override" commissions. It is clear that the elimination of agent commissions will potentially perpetuate the existence of travel agent bias. However, it appears that the

elimination of commission will not limit the average consumer's travel choices, rather will increase them as more and more companies sell travel via the Internet.

Many claimed the Internet will promote unemployment as more and more consumers choose to buy travel online.

Atkinson (2001) discounts this claim by stating, "At a time when unemployment is at a 25-year low, productivity is at two-decade high" (p. 5). Atkinson (2001) further explains that even though higher levels of efficiency creates short term job loss, it promotes lower prices and higher wages; therefore, stimulating economic growth.

Why has the United State Air Travel Industry Changed?

Why the travel industry has changed and continues to change comes down to one word, money. With the birth of the Internet, the major players within the travel industry envisioned their profit margins soaring higher and higher than ever before. Therefore, airline companies, travel agencies, and the GDS companies alike, had to adjust to the changes within the industry by altering the way they conducted business.

Airline Companies/Suppliers

The Internet has allowed travel suppliers to reduce the cost of transacting business with consumers, to gain a better relationship with consumers, and to gain more control over the travel industry. It is estimated that it costs an airline company over \$20 to process a ticket from its own call center (Bates, 2000). An "e-ticket" costs roughly \$0.30 to process in comparison to \$9.49 for an airline ticket purchased from a traditional travel agent (Greenberg, 2000). It is ten times cheaper for airline carriers to issue an "e-ticket" versus a ticket purchased via a travel agent (Ott, 2000). If consumers purchase airline tickets directly through the airline carrier's Web site, the airline carrier can save approximately 15% per ticket (Harrison, 2001b).

Furthermore, a typical booking fee costs airlines roughly \$3.50 per ticket purchased through a travel agency. The booking fee is approximately 2.7% of the average ticket price (Global Aviation Associates, 2001; Rosen, 2000). The GDS companies increased their booking fees nearly 7% 1990 and 2000 (Global Aviation Associates, 2001). This accounted for a 79% increase in booking fees since 1990 (Global Aviation Associates, 2001). Even though the

major GDS companies have continually increased their booking fees charged to airlines, their processing and equipment costs have actually decreased over the past two decades (Global Aviation Associates, 2001). Clearly, both booking fees and commission fees can be avoided by consumers purchasing airline tickets directly through the airline's Web site.

The Internet has also allowed airline companies to provide a much more personalized experience for customers by offering frequent flier programs and by obtaining more personal information about consumers, such as what a consumer wants to read, drink and where a consumer wants to sit on the plane (Bates, 2000). By airline companies choosing to "direct connect" with their customers via the Internet, it is allowing airline companies to lower costs, relate with consumers, and regain power within the industry (DiSabatino, 2001).

Travel Agencies

With the elimination of both traditional and online commissions paid to travel agents, travel agencies have had to stay alive by charging additional service fees to consumers. Since mid March 2002, travel agents have increased their service fees, sometimes even doubling them.

The service fees charged by travel agencies have gone up from roughly \$10 per ticket to roughly \$50 per ticket, depending on the particular travel agency (Engle, 2002b).

Global Distribution Systems Companies

The once dominant players within the travel industry are now seeing stiff competition from online agencies and airline companies thanks to the development of the Internet. Consolidation is occurring within the industry among the major GDS companies in an effort to stay alive in the industry. The competitiveness that exists between the travel industry's major players is causing the industry to undergo consolidation, something that would typically occur later in the growth of the online sector (Harrison, 2001). One of the major players, Galileo, was bought by Cendant Corporation, the world's largest hotel franchiser and the owner of Avis Group Holdings Inc., the car rental agency (Harrison, 2001). It is rumored that Cendant is also looking to acquire Worldspan, another major GDS company (Harrison, 2001, 2001b). In addition, Cendant Corporation bought CheapTickets Inc. last October (Harrison, 2001; Zellner, 2002). The major GDS companies, along with all of the major companies involved within the travel industry will continue to consolidate and find other aspects of the

travel industry to venture into, in an effort to remain one of the dominant players. The changes that have occurred within the industry can be understood by taking a look at a communication and marketing theory.

Theories Applied to the Air Travel Industry

Two theories that can be used to analyze and explain the current changes within the travel industry include the media richness theory and the attitude change theory. Both theories assist in our understanding of what is currently occurring within the travel industry. The first theory that will be discussed and applied to the travel industry is the media richness theory.

Media Richness Theory

The media richness theory suggests that a medium chosen to transmit a message depends upon the particular task at hand. Media richness is defined as "the processing of rich information to reduce equivocality and share meaning" (Jackson & Purcell, 1997, p. 221). Daft and Lengel suggest there are two underlying variables that drive an individual's media choice: Uncertainty and equivocality. Uncertainty is an absence of information, whereas equivocality refers to an absence of shared meaning

(Jackson & Purcell, 1997). In other words, with equivocality, there exist "multiple and conflicting interpretations" (Jarvelainen, 2000, p. 6). Equivocality is a more abstract concept that demands more interactive activities in order to achieve a shared meaning. Whereas uncertainty can be reduced with the help of information, information alone cannot reduce equivocality.

Daft and Lengel suggest that media richness is defined and identified based on the ability of the medium to offer immediate feedback, the ability of the medium to transmit information via multiple cues, the use of natural language, and the ability of the medium to have a personal focus (Harwood, 2000; Jackson & Purcell, 1997; Jarvelainen, 2000). The information being transmitted through the medium can be communicated with the help of multiple cues, such as facial expressions, body language, and voice tones. These same cues can also be regarded as feedback (Jarvelainen, 2000). The media could use either natural language or numeric information. The personal focus of the medium refers to the ability of the media to be customized to the wants and needs of the individual who is receiving the message. The richest media is considered face-to-face followed by the telephone, written documents, and numeric

documents, in decreasing richness (Harmer, 2002; Jarvelainen, 2000).

Media richness theory suggests, as well as past research on media richness, that rich media is necessary in an equivocal situation (Harwood, 2000; Jackson & Purcell, 1997; Jarvelainen, 2000). On the other hand, an uncertainty situation is decreased with the use of a leaner medium (Jarvelainen, 2000). This explains two phenomena occurring in the travel industry. First, it helps to explain the explosion of consumers who are using the Internet to look and/or book travel online. Second, it helps to explain the travel agency's dominance on foreign travel, cruises, and vacation packages. A consumer looking and/or booking travel via the Internet is considered an uncertain situation. It is considered an uncertain situation and therefore multiple cues, immediacy of feedback and the personal focus are not necessary and/or needed to purchase a flight via the Internet. If all a consumer wants to do is book a flight online or look into some travel information online, all they have to do is gain access to information. Once they have access to that information, it will lower their uncertainty regarding their travel plan.

On the other hand, a consumer purchasing a vacation package or cruise is considered an example of an equivocal situation. In this particular situation, multiple cues, immediacy of feedback, the use of natural language, and the personal focus of the medium are all important in decreasing the level of equivocality. Purchasing a vacation package or cruise is considered an equivocal situation because just having access to information will not decrease the level of equivocality due to the fact that purchasing such an item is considered such a complex task. In the presence of a travel agent, the travel agent can clarify any sort of discrepancies and can help to obtain a shared understanding. A 2000 research study conducted and published by Bear, Stearns Equity Research found one of the main reasons why consumers are not using the Internet to purchase travel is because "they enjoy their personal relationships with their travel agent, and trust their agent's ability to solve problems" (Bush, 2000, p. 17). This further identifies and clarifies that in equivocal situations, such as purchasing a cruise, a much richer media is necessary. The other theory used to explain the current changes within the travel industry is the attitude change theory.

Attitude Change Theory

An attitude is "the extent of liking or disliking something" (Mueller, 1986). Attitudes consist of three components including a cognitive, affective, and behavioral component. The cognitive component refers to a person's beliefs, the affective component refers to a person's feelings, and the behavioral component refers to a person's actions. People in general are always adopting, abandoning, and/or modifying their attitudes to fit their ever-changing needs and interests. The attitude change theory states that attitudes change when a person receives new information from others (a cognitive change), through direct experience with the attitude object (an affective change), and when a person is forced to behave in a way different than normal (a behavioral change) (Traindis, 1971).

The principles of the attitude change theory can be applied to the travel industry. The attitude change theory can be applied to the travel industry because people are always changing their attitudes to fit their changing needs and interests. When people receive new information that they believe is good or useful to them, they will develop favorable attitudes about that specific information.

Consequently, they will change their behavior and their attitude towards that new product, idea, or process.

The way in which people purchase their airline tickets can be used to explain the attitude change theory as it relates to the travel industry. In the past, most people bought their tickets from travel agencies. They either made a phone call or went to the travel agency in person to purchase their tickets. The development of computer technology and the Internet has greatly affected the travel industry. The Internet has changed the way people buy their tickets by giving them the option to purchase airline tickets via the Internet rather than having to purchase tickets through a travel agent. As a result, people feel more comfortable buying their tickets via the Internet. Many feel that buying airline tickets on the Internet is a more convenient way to purchase their airline tickets. The Internet provides access to a wide variety of airline information via the airline's very own Web site. Purchasing airline tickets via the Internet also allows people to save both time and money.

With the ability to purchase airline tickets via the Internet, people have been introduced to a new process. By experiencing a more convenient way of purchasing airline

tickets via the Internet, people have changed their attitude and behavior in regards to the way they purchase airline tickets. With the added convenience and information, people shifted their behavior from buying airline tickets from travel agencies to buying airline tickets via the Internet. Table 1 is included to further explain consumer's attitudes towards purchasing tickets via the Internet by applying the attitude change theory.

Table 1. The Attitude Change Theory

Attitude component	Purchasing a travel ticket via the Internet
Cognition (belief)	<ul style="list-style-type: none"> - Purchasing tickets on the internet is very convenient. - Shopping on the Internet can find the cheapest fares. - Shopping on the Internet can provide a wide range of schedules. - Shopping on the Internet is now very secure.
Affect (feeling)	<ul style="list-style-type: none"> - Purchasing a travel ticket via the Internet is easy. - Purchasing a travel ticket on the Internet is "cool." - I like to buy a ticket via the Internet.
Behavior (action)	<ul style="list-style-type: none"> - Purchasing a travel ticket via the Internet. - Searching the Internet for a travel trip.

The attitude change theory helps to explain how and why consumer attitudes towards purchasing travel has changed. As the travel industry continues to change, so

will the consumer attitudes toward the travel industry. In an effort to perhaps change consumer attitudes regarding the travel industry, wireless technology has emerged as yet another tool consumers can use to interact with the travel industry companies.

Wireless Technology

All major U.S. airlines and online agencies use wireless technology to keep in touch with their customers. Consumers can have flight information sent to them via mobile phones, text pagers, email, personal digital assistants (PDAs), fax, or from a personalized voice mailbox (this option is only available through Orbitz). Consumers can be sent schedule/gate changes, and departure/arrival times. Furthermore, consumers can also book a flight, hotel, or rental car and change their itinerary all via their wireless device of choice. It was estimated that 23 million people in the U.S. would use a wireless device in 2003 (McDougall, 2000). According to Don Addington, director of mobile solutions for Travelocity, number of consumers who actually used a wireless device to purchase travel amounted to less than 1% of business for the full year of 2002 (Stone, 2001). This

is interesting to note considering the number of consumers who actually own a wireless device. Consumers using wireless devices to obtain travel information were likely increase, amongst other changes.

Strategies for Travel Agents

Facing this new challenge, travel agents had several different responses. The first was to blame the airlines, accusing them of breaking the traditional partnerships and practicing bad business ethics. The second was to simply give up, claiming that doomsday had come for the travel agents. The final one, this time positive, was to look for ways to survive, compete, and ride the tidal wave of e-commerce.

While all these reactions have some facts to support them and may be justified in specific circumstances, there are three things travel agents need to do before they subscribe to any particular visions or claims. First, they need to ask the questions about their business: 1) Why are customers leaving us? 2) Are we meeting the changing needs of our customers? 3) How can we keep and grow our customer base?

Second, they need to ask questions about the use of technologies: 1) What can the Internet do for us and our customers? 2) What can I do to take advantage of the Internet to meet the needs of my customers?

Finally, travel agents have to realize and admit the following facts about themselves before they can realistically comprehend their current situations. First they are almost totally at the mercy of travel suppliers for their revenue. Second, they have never been active participants in any technological advancement. Third, they have never clearly defined their role in relation to consumers. By changing their attitudes toward technology and defining their new role, travel agents can create strategies to take advantage of the Internet and better serve the needs of their customers.

Despite all the hoopla about the death of the middleman caused by the Internet, many travel agents are still surviving and, in fact, doing quite well. This is not to dispute the fact that many small mom-and-pop travel agencies have closed their doors since Internet reservations became available. We have to admit that even until today, the Internet is just beginning to be understood and its power and potential revealed. There are

no certain ways to predict the future of its development and impact on travel agents. However, we can use some general guidelines to help them better cope with the future. We can, as a general rule, predict the following assumptions:

1. Technology will not totally replace human service, but it will considerably reduce dependence on it. Travel agents are not going away, but they will feel the pinch from now on.
2. The travel information distribution system will undergo major shake-ups, and so will travel agents. Restructuring and forming new partnerships are inevitable. Fee-based and value-added services will be combined. Only the fittest will survive.
3. Travel agents must find their niches in customer service-areas where human service is superior to nonhuman interaction-to find new customers and at the same time to keep the old ones.

Consumers are not using the Internet for cheap tickets and inexpensive reservations. They are looking for value and experience in their total travel purchase of travel

products and services. Whoever can provide value and good experience will win the minds of the consumer.

In order to support the above assumptions, we set out to explore the pattern of air travel purchase because we believe that understanding the pattern of air travel purchase is the first important step to lead travel agents find the right strategy to win their customers back. In the work outlined here, we investigated how travelers conceptualize the decision parameters of purchasing air travel tickets by conducting a study of how consumers shop for airline tickets. The results suggest trends in how decisions are made to purchase airline tickets with multiple decision parameters.

CHAPTER THREE

METHODOLOGY

In this chapter the focus has shifted from the research problems and information needs to the strategic and tactical decisions that will achieve the objectives of the research purpose. Tactical research design decisions include questionnaire development, the design of the experiment, the sampling plan, and the data analysis method. Also, issues relevant to the design of research project will be discussed in this chapter.

Research Design

The questionnaire to be used in the research project was design for self-administration. It was designed, for self-administration, to eliminate the costs and potential errors associated with interviews. The questionnaire consisted of yes and no, multiple choice, checklist and scale questions. It covered a wide range of issues including

1. Identifying the relationship of demographic profile of travelers toward patterns of air travel purchase

2. Identifying the service providers' performances which influence the travelers' choice of providers,
3. Determining specific insights concerning the service providers' benefits which influence the travelers' choices of providers, and
4. Identifying the sources of information that the travelers used to select and book travel services.

Questionnaire Design

The questionnaire was designed to accomplish the four research objectives. Before individual questionnaire items were written, four objectives were translated into specific information requirements or hypothesis. After that, the questionnaire was created to elicit those possible answers. This study included specific hypotheses as to which demographic characteristics of travelers, sources of information, service providers' benefits and performances would influence the patterns of air travel purchase within the U.S air travel industry. Each of these characteristics was represented by a question so that the hypotheses could be tested.

Before specific questions were phrased, a decision was made as to the degree of freedom to be given respondents in answering the question. In this study, multiple choice, yes-no, checklist and scale point questions were employed.

The order, or sequence, of questions were determined initially by the need to gain and maintain the respondent's cooperation and make the questionnaire as easy as possible for the researcher to administer. In order to help establish rapport and build the confidence of the respondents in their ability to answer, the questionnaire started with an easy question about the purpose in taking the trip. And then, the question flew logically from one topic to the next. It can be seen from Q2-Q5. After that, the specific question about service providers' benefits and performances were addressed and then ended with the sensitive questions about demographic data of respondents.

Target Population

Since the research objective is to learn about the correlation of U.S air travelers and the patterns of air travel purchase within the U.S air travel industry, a target population for "a traveler" will be defined as a person who has made U.S. domestic air trip for either

business and pleasure/personal reasons in the past 12 months (count each round trip as one trip). Also, "a traveler" will be defined more specifically as a person who is the U.S resident or non U.S resident that purchased air ticket for domestic flight through service providers in the United States.

Sample Selection

The sampling procedure employed for the project was simple random sampling. One hundred and fifty questionnaires were handed out to the U.S domestic travelers at Los Angeles International Airport (LAX). Ninety questionnaires were hand out to leisure travelers. Another sixty questionnaires were hand out to business travelers.

Data Collection Methods

The questionnaires were handed out to respondents at Los Angeles International Airport (LAX) during February 02-04, 2005. The self-administered questionnaires were given to passengers who were waiting in line to check their baggage at U.S domestic flights. In an attempt to randomize an otherwise self-selected sample, majority of visitors

were approached and asked if he/she would participate in the study. On the first day, a lot of visitors declined to participate, stating that they were "too busy." Therefore, incentives such as souvenirs from Thailand were used on the second day to increase the response rate and more reliable results.

Statistical Analysis

Analysis will focus on frequencies, relative frequencies, cross-tabulations, one sample t-test, and paired samples t-test. Statistical Package for the Social Sciences for Windows 10.0 (SPSS for Windows) program was employed for data processing.

CHAPTER FOUR

RESULTS

The study of the correlation between the U.S domestic air travelers and pattern of air travel purchase within the U.S air travel industry was conducted under the principle guidelines of research methodology. One hundred fifty questionnaires were distributed to the U.S domestic air travelers at the U.S domestic flight at the Los Angeles International Airport (LAX), however 142 or 94.66 percent were returned. The data was analyzed using a program called SPSS (Statistical Package for the Social Science for Windows).

Profile of Respondents

The expectations of the numbers of questionnaires are 150 but only 142 participated. Eighty-seven respondents are leisure travelers and another fifty-five are business travelers. Statistic from Table 1 shows that the sample consists of 62 respondents or 43.66 percent male and 80 respondents or 56.34 percent female. As seen in Table 2, half of the respondents are in the age range between 18-35 year-old (55.63%) followed by 35-53 year-old (27.46%), 54-

None of them purchased an airline ticket for more than six times a year.

Service Providers' Performances

From Table 9, expectantly, the highest percentage of respondents shows that traveler mostly concerned about the ability to get the best price from service providers with 69 respondents or 48.59 percent, followed by knowledge or level of expertise (8.45%). The numbers of respondents who concern about person to person contact or personal assistant and customer service are equivalent at 5.63 percent in each group. Around 4.23 percent chose accuracy of booking, followed by time saver, company policy and incentive offered respectively.

Service Providers' Benefits

From Table 10, respondents were asked to evaluate an array of service providers' benefits on scale type; not at all important, somewhat important, very important based on usefulness when purchasing airline ticket. It can be seen that average 2.8521 or 28.52 percent of respondents felt that the price value is the most important benefit, followed respectively by reliability or accuracy of

booking, convenient departure and/or arrival times, most direct routes and fewest stopovers, 24-hour access, communication of schedule changes directly to customers, access to the Internet, airline's ground services and only airline with seats available. The small proportion of respondents fell into the categories of airlines in-flight services, airline part of traveler package, aircraft preference, reward offered, and large number of frequent-flyer program.

Sources of Information

For this question, the researcher gave the opportunity for participants to answer more than one answer. Therefore, the total counts are 258. Statistics from Table 11 show that the Internet has exceeded other sources among business and leisure traveler with 43.41 percent of respondents. Besides the Internet, 18.60 percent of traveler also used friends/relatives' recommendation or word of mouth to be a part of their decision in booking airline ticket. Travel magazine (12.01 percent) is another source of information that traveler used to obtain information, followed by travel agent (11.24 percent), auto club brochure/books

(8.13 percent). The rest reported commercial from TV and e-mail notification of fares to be a part of their decision.

CHAPTER FIVE

FINDINGS, CONCLUSIONS, AND RECOMMENDATION FOR FUTURE RESEARCH

This chapter consists of discussion of the findings, recommendation, limitations and extensions of this study for follow-up research. 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

Findings

RQ1: What is the relationship between demographic characteristics and patterns of air travel purchase?

This question seeks to identify the relationship of demographic profile of travelers toward pattern of air travel purchase. The focus here is on the demographic data and the frequency of loyal traveler that purchase airline ticket from same service providers within the past 12 months.

Five demographics were tested, including gender, age, level of education, annual income and occupation. The

results from each demographic characteristic show that large proportion of respondents usually purchased airline ticket from the same service providers less than 3 times a years. From Table 12-16, service providers can learn that loyal travelers are between the ages of 18-35 years old, can be either male or female, have some college degree, earn an annual income under \$25,000 and mostly are secretary, clerk or office worker.

H1 The frequency of air travel purchase from the same service provider is significantly affected by traveler demographics.

H1.1 The frequency of air travel purchase from the same service provider is significantly affected by gender of traveler.

H1.2 The frequency of air travel purchase from the same service provider is significantly affected by age of traveler.

H1.3 The frequency of air travel purchase from the same service provider is significantly affected by education of traveler.

H1.4 The frequency of air travel purchase from the same service provider is significantly affected by annual income of traveler.

H1.5 The frequency of air travel purchase from the same service provider is significantly affected by occupation of traveler.

To test hypotheses H1.1-H1.5 paired samples t-test were conducted to test if the frequency of air travel purchase from the same service provider is significantly affected by gender, age, education, annual income and occupation. Each result of the test was significant at the .05 level. The results, as presented in Table 17 indicate that there are no significant difference observed between frequency of air travel purchase from the same service provider and traveler demographics. Base on these results, H 1.1-1.5 are rejected. Therefore, the frequency of air travel purchase from the same service provider is not significantly affected by traveler demographics.

RQ2: How do the performances of service providers influence travelers' choices of providers?

The second research question seeks to identify performances of service providers within the air travel industry which influence the travelers' choices of providers. Statistic from Table 18 shows that 60 percent of

travelers who purchased airline tickets from travel agents are mostly concerned with the ability of the service provider to get the best prices, followed by of knowledge or level of expertise, customer service, and time saver.

As for online booking, travelers are mostly concerned with the ability to get the best prices, followed by accuracy of booking, knowledge or level of expertise, person to person contact, customer service, company policy, and incentive offered respectively,

For airline website booking, travelers also ranked the ability to get the best price and accuracy of booking. Last but not least, Travelers who booked airline ticket through toll-free number are mostly concerned with the price value as the same with other groups of traveler.

H2 Service providers' performances strongly influence travelers' choices of providers.

From Table 20, to test hypotheses H2 paired samples t-test was conducted to test if the service providers' performances strongly influence travelers' choices of providers. The result of the test was significant at the .05 level. The results, as presented in Table 19 indicate that there are no significant differences observed between

service providers' performances and travelers' choices of providers. Base on these results, H 2 is rejected. Therefore, the service providers' performances do not strongly influence travelers' choices of providers.

RQ3: How do the service providers' benefits to customers influence travelers' choice of providers?

The third research question determine specific insights concerning the service providers' benefits that influence travelers' choice of providers. From the results of the questionnaire as seen in Table 10, we are able to distinguish which benefit was most important, somewhat important and not important at all. As seen in Table 20, ten benefits were examined by using four service providers. Results reported that large proportion of travelers who purchased airline tickets through four service providers are mostly concerned with the price value.

The findings also indicate in detail that besides price value, direct routes and fewest stopovers, convenient departure and arrival times, and reliability and accuracy of booking also rank high on travelers' choices of travel agents. Like online booking, travelers also reported that besides price value, reliability or accuracy of booking,

convenient departure and arrival times, direct routes and fewest stopovers, and access to the Internet are the most useful benefit for them.

For airline website booking, except for price value, travelers are mostly concerned with large number of FFP points, in-flight service, airlines' ground services, and aircraft preference. The fewest number of respondents chose to purchase airline ticket through toll-free number and felt that price is the most important concern for them.

H3 Service providers' benefits influence travelers' choices of providers.

H3.1 Cheapest available fare influences travelers' choices of providers.

H3.2 Reliability or accuracy of booking influences travelers' choices of providers.

From Table 21, to test hypotheses H3.1- H3.2, paired samples t-test was conducted to test if the Cheapest available airfare and reliability or accuracy of booking influence travelers' choices of providers. The results of the test were significant at the .05 level. The results, as presented in Table 21 indicate that there is no significant difference observed between cheapest available airfare and reliability or accuracy of booking and travelers' choices

of providers. Based on these results, H 3.1- 3.2 are rejected. Therefore, the cheapest available airfare and reliability or accuracy of booking do not influence the travelers' choices of providers.

RQ4: What is the most popular source of information that travelers used to select and book a flight?

The fourth research question identifies the sources of information travelers used to select and book a flight for business and leisure trips. Specifically, respondents were asked for their opinion to the source of information used to select and book a flight. The findings are presented in Table 11. Obviously, travelers used the Internet as their number one source for both business and leisure trips.

H4 Internet is the most popular source of information for travelers.

From Table 22, to test hypotheses H4 one sample t-test was conducted to test if the Internet is the most popular source of information for travelers. The result of the test was significant at the .05 level. The results, as presented in Table 22 indicate that there is no significant difference observed between service providers' performances

and travelers' choices of providers. Based on these results, H 4 are rejected. Therefore, the Internet is not the most popular source of information for travelers.

Implications and Recommendations

This research was conducted to investigate the correlation of U.S. domestic air travelers and patterns of air travel purchase within the U.S air travel industry. The findings intended to provide travel agents a practical guideline and suggest a framework for them to cope with the reality of the changes brought by the Internet. The results show significant points listed below.

1. Although the hypotheses testing from the first research question shows that the loyal pattern of air travel purchase is not influenced by traveler demographics, the results from survey can give the researcher some idea about the correlation between the loyal pattern of air travel purchase and traveler demographics that travelers from different demographic segments will response to different degree of loyalty.

Travelers can be divided into groups according to their degree of loyalty. Some

travelers are completely loyal, for example, they purchase airline ticket from the same service provider every time they travel. Others are somewhat loyal. They might be loyal to two or three service providers or favor one provider while sometimes purchasing from others. Still other travelers show no loyalty to any provider. They either want something different each time they purchase ticket or they purchase whatever is on sale.

This can be applied to travel agents that they need to learn how to use their existing customer database to understand travelers' needs and ask their customers what they can do for them to keep them as loyal customer. They can learn a lot by analyzing loyalty patterns in their market. It should start by studying their own loyal customers. By studying its less-loyal travelers, travel agents can detect which travel services are most competitive with its own. By looking at customers who are shifting away from their service, travel agents can learn about their marketing weaknesses. As for non-loyal

customers, travel agents may attract customers by putting their services on sale.

2. The hypotheses testing from the second research question shows that there is no significant difference observed between service providers' performances and travelers' choices of providers. Therefore, the service providers' performances do not strongly influence travelers' choices of providers. However the correlation between service providers' performances and travelers' choices of providers can lead to a greater understanding of relationship of both variables.

The survey results suggest travelers purchase airline tickets from different providers due to different needs and wants. Providers who can create strategies to take advantage of their strengths to better serve the needs of their customers will win customers' minds. It is critical for travel agencies to sell the value of their services and expertise over price to sustain long-term relationships with customers and be profitable. The recommendation for travel agents is to differentiate themselves from other

providers by applying the following strategies to their business.

2.1 Bring out their strengths

Travel agents have much to offer customers in air travel industry. Their knowledge of the industry, their human touch and personal relationship with customers, their vast base of existing customers and their traditional role of being a neighborhood store provide them with a solid foundation to play competitively in the market. It is critical for travel agents to bring out these strengths while avoiding their weaknesses. It can be implied that travel agents must find their niches in customer service in the areas where human service is superior to nonhuman interaction to find new customers and at the same time to keep the old ones.

2.2 Redefine their role and relationship to their customer.

The traditional travel agents' business model needs to be revamped. A business model

that was based totally on commissions and at the mercy of a single source was very vulnerable. Travel agents need to change from a ticket retailer to travel information, from a product-oriented business to a service oriented one. For example, they need to specialize in one of several ways. They need to perhaps specialize by type of travel e.g. cruise only agencies, by destination e.g. Australia specialists, and by type of passenger e.g. gay travel specialists. They need to specialize and sell in conjunction with only one or two partner suppliers e.g. car rental companies. Perhaps they might also specialize in providing contract travel services to specific major customers, rather than general travel services to the general public.

3. Table 20 from the third research question shows the correlation between service providers' benefits and travelers' choice of providers. It can be seen that travelers do not want just only

cheap ticket and convenient itinerary. They are looking for value and experience in their tickets purchased e.g. travel information, and travel planning. As far as the competition goes, travel agents have to differentiate themselves from other providers by offering and shifting the focus from price to value.

Another concern for travel agents is the loss of commission income. Travel agents need to make up for this by charging fees to companies and individual travelers who use the services of a travel agent. Charging a service fee will require travel agents to demonstrate that they are adding value, otherwise travelers will use the less expensive airline direct services. Below are the examples of what travel agents may add to their services for their customers.

- Negotiate with an airline to make available seats on flights that are otherwise sold out
- Get traveler priority wait listing on flights

- Negotiate with an airline to get traveler a lower fare even though it is showing sold out in the computer
 - Help traveler to get the best seat pre-assignments possible
 - Pro-actively monitor flights and fare and tell travelers if better itineraries or fares come along
 - Act as travel agent advocate in dispute and problem resolution
 - Be available for emergency problems and flight changes
 - Can sometimes obtain discounted consolidated tickets on domestic flights
 - Can almost always obtain discounted consolidated tickets for international flights
4. Even the result from hypothesis testing shows that the Internet is not the most popular source of information for travelers. In actuality, more and more people are using the Internet for travel information, planning, reservation and booking.

The Internet is changing the way consumers access travel information, plan their trips, and purchase the products and services. The impact of the Internet on air travel distribution is far reaching, especially in the area of travel information distribution, marketing, planning and booking. As the technology keeps changing, new innovations and solutions are being added daily to take advantage of this new medium. It is important for travel agents to learn how to take advantage of this medium.

The strategy that travel agents should consider is to adopt web-based technology. Overall, travel distribution is more efficient with the application of the Internet and Web-based tools. The Internet enables customer and agency to be better informed, so when it is time to book a trip, fewer questions need to be answered. Traditional agencies should recognize the importance of the Internet as a complementary distribution channel to their services, they must increasingly use the Internet and leverage other Web-based tools to increase productivity. For example travel agents can use email as a direct marketing tool to target

customers with tailored products based on their past patterns of purchase.

Limitations and Recommendations

Sample sizes are generally too small to represent the entire population of business and leisure travelers and also only single area in the Southern California was examined, given the researcher' geographic and demographic limitations. Future researchers may consider replicating this study and increasing the sample size in other area of California and other states. Comparisons from region to region can then be assessed. Additionally, other forms of research methods should be considered. Further, in the future a more stringent random sampling procedure should be used so that results can be more generalizable to population.

The list of service providers' benefits was derived from promotional materials of some airlines and travel agents therefore it cannot adequately represent the service providers' benefits. To complement this work, it might be useful to conduct in-depth qualitative research with both leisure and business travelers. This would enable fuller investigation of the benefits sought by travelers, their

perceptions of current benefits, potential disadvantages and other nuances. A similar approach with other key persons in the decision-making process might also repay investigation.

And also, the list of service providers' performances cannot provide a complete picture of all service providers' performances in the distribution channel. Based on reviews of related studies, there are so many practices that service providers have implemented to improve and enhance their customer services. We recommend extend research on the attitude of traveler toward service providers' performances in more detail. A more extensive study might offer more reliable results.

Based on our findings, it can be seen that the Internet is number one source of information that business and leisure travelers used to select and book a flight. We suggest research to examine the impact of the Internet on air travel purchase. Not only will these studies discover effect of the Internet toward air travel distribution channels, but they will serve as a source of comparison data with other outcome studies.

The Future of the Travel Industry and Conclusion

With the travel industry changing at such a remarkable pace, it is hard to say without a doubt what to expect in the near future. For sure, as more and more people feel comfortable using the Internet, the online travel revenue will continue to increase. Supplier online sales will also continue to increase as they continue to offer consumer incentive programs, such as frequent flyer programs and special e-fares to attract consumers to their Web sites (Atkinson, 2001). We believe the relationship between the travel industry and wireless technology will continue to merge as more and more consumers opt to obtain their travel information via their wireless device of choice. It is expected that travel agencies will continue to go out of business but will never die out. Just as Forrester Research analyst Henry Hareveldt said, "The Internet is not the end for travel agents but a challenge for them" (Wilde & Rosen, 2000). We feel that travel agencies will never go out of business because they offer customer service, personalized travel experiences, ability to plan complex itineraries and travel industry expertise that is hard to come by on the Internet. It is clear that one of "the main

thing[s] that will keep travel agents alive is person-to-person interaction" (Greenberg, 2000, p. 125). This strong reliance on face-to-face communication explains why the Internet will more than likely never become the dominant channel of choice for travel purchases by consumers (Global Aviation Associates, 2001). It is clear that the Internet has made a huge imprint on how the travel industry functions and will continue to do so in the near future.

APPENDIX A
QUESTIONNAIRE

Please answer all questions that apply to you and check one answer for each question.

Section I: General Information

- 1) What is your main purpose for traveling by air in the past 12 months?
(Please check only one answer)
 - Business
 - Pleasure/Personal

- 2) What method did you use to purchase your air ticket?
 - Through a travel agent
 - Online travel agent; e.g: Priceline.com, Expedia.com, etc)
 - Airline website; e.g: Southwest Airline)
 - At the airport
 - Telephone (calling direct to the airline)
 - Free (like redemption)
 - Other (please specify) _____

- 3) Who made the decision regarding the airline flown on this trip?
 - I primarily chose the airline
 - Travel agent/Co. travel department chose the airline
 - Friend or companion chose the airline
 - Airline was included in my tour package
 - Other (please specify) _____

- 4) How often did you purchase airline tickets from the same service provider within the past 12 months?
 - None
 - 1 to 3 times a year
 - 4 to 6 times a year
 - More than 6 times a year

Section II: Preference

5) What was the most important performance that made you purchase the airline ticket from a service provider stated in Question 2? (Please check only one answer)

- Knowledge
- Time saver
- Ability to get the best prices
- Loyalty/good past experiences
- Company policy
- Person to person contact
- Customer services
- Accuracy of booking
- Incentive offered
- Internet access

6) Please tell us how important each of the following benefit was in making your decision to purchase air ticket from service provider stated in Question 2 within the past 12 months.

	Not at all important	Somewhat Important	Very Important
Cheapest available fare	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Large number of frequent-flyer program	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Reward offered	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Reliability/accuracy of booking	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Flight came in package	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
E-mail travel alerts	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Access to the Internet	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Communication of schedule changes directly to customers via WAP-enabled devices e.g. phones, pagers, and PDAs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
24-hour access	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Airline's departure and/or arrival time was more convenient	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Airline's flight had fewer stops or better connections	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Airline's in-flight services are better (meals, movies, flight attendants, etc.)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Airline's ground services are better (ticketing, baggage handling, check-in, etc.)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
That Airline was the only airline with seats available	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Aircraft preference	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Section III Sources of Information

7) How do you obtain information used to select and book a flight for your trip?

- TV
- Radio
- Newspaper
- Travel magazines
- Auto club brochures/books
- Ask a travel agent
- Call travel supplier directly using a toll-free number
- Internet
- E-mail notification of fares
- Friends/relatives
- Other (please specific) _____

Section IV: Demographic Data

8) Your gender:

- Male
- Female

9) What age group are you in?

- Under 18
- 18-35
- 36-53
- 54-70
- Over 70

10) Education:

- High school or under
- Some college
- College graduate
- Post graduate

11) Annual Income:

- Under \$25,000
- \$25,000-49,999
- \$50,000-74,999
- \$75,000-100,00
- Higher than \$100,000

12) What is your occupation?

- Executive/Manager
- Government/Military
- Teacher/Professor
- Professional/Technical
- Salesman/Buyer
- Craftsman/Laborer
- Religious/Clergy
- Secretary/Clerk/Office worker
- Airline employee/Travel agent
- Homemaker
- Student
- Self-Employed
- Retired
- Unemployed
- Other (please specify) _____

APPENDIX B

TABLES

Table 1. The percentage of respondents by gender

Gender	Frequency		Total	
	Business Traveler	Leisure Traveler	n	%
Male	18	44	62	43.66
Female	37	43	80	56.34
Total	55	87	142	100.0

Table 2. The percentage of respondents by age

Age	Frequency		Total	
	Business Traveler	Leisure Traveler	n	%
Under 18		4	4	2.82
18-35	22	57	79	55.63
35-53	27	12	39	27.46
54-70	6	14	20	14.08
Total	55	87	142	100.00

Table 3. The percentage of respondents by education

Education	Frequency		Total	
	Business Traveler	Leisure Traveler		
Some College	19	48	67	47.18
College	15	21	36	25.35
Post College	21	18	39	27.46
Total	55	87	142	100.00

Table 4. The percentage of respondents by annual income

Annual Income	Frequency		Total	
	Business Traveler	Leisure Traveler	n	%
Under \$25,000	15	30	45	31.69
25,000-49,999	17	29	46	32.39
50,000-74,999	18	15	33	23.24
75,000-100,000	4	3	7	4.93
Higher than 100,000	1	10	11	7.75
Total	55	87	142	100.00

Table 5. The percentage of respondents by occupation

Occupation	Frequency		Total	
	Business Traveler	Leisure Traveler	n	%
Executive/Manager	20	4	24	16.90
Government/Military	0	2	2	1.41
Teacher/Professor	5	2	7	4.93
Professional/Technical	3	11	14	9.86
Salesman/Buyer	5	11	16	11.27
Secretary/Clerk/ Office Worker	10	20	30	21.13
Homemaker	0	4	4	2.82
Student	0	17	17	11.97
Self-Employed	12	4	16	11.27
Retired	0	10	10	7.04
Total	55	85	140	
Missing		2	2	1.41
Total			142	

Table 6. The percentage of method to purchase an airline ticket

Method to Purchase an Airline Ticket	Business Traveler	Leisure Traveler	Total n/%	
Through a travel agent	6	29	35	24.65
Online travel agent	43	56	99	69.72
Airline website	6	0	6	4.23
Telephone	0	2	2	1.41
Total	55	87	142	100.0

Table 7. The percentage of decision maker purchasing an airline ticket

Decision Maker	Business Traveler	Leisure Traveler	Total n/%	
Myself	26	44	70	49.30
Travel agent	2	17	19	13.38
Friend or Company	27	12	39	27.46
Airline included	0	14	14	9.86
Total	55	87	142	100.00

Table 8. The percentage of frequency for purchasing an airline ticket

Frequency for Purchasing an Airline Ticket	Business Traveler	Leisure Traveler	Total n/%	
1 to 3 times a year	42	87	129	90.85
4 to 6 times a year	13	0	13	9.15
Total	55	87	142	100.00

Table 9. The percentage of service providers' performances

Service Provider Performance	Frequency		Total	
	Business Traveler	Leisure Traveler	n	%
Knowledge	0	12	12	8.45
Time saver	0	2	2	0.07
Ability to get the best price	35	34	69	48.59
Loyalty/good past experience	0	0	0	0
Company Policy	2	0	2	0.70
Person to person contact	0	8	8	5.63
Customer service	0	8	8	5.63
Accuracy of booking	6	0	6	4.23
Incentive offered	0	1	1	0.07
Internet access	0	0	0	0
Total	55	87	142	100.00

Table 10. The percentage of service providers' benefits

Service Providers' Benefits	Travelers' Evaluation						Mean Response
	N	%	S	%	V	%	
Cheapest available fare	-	-	21		121		2.8521
Large number of frequent-flyer program	85		52		5		1.4366
Reward offered	68		51		23		1.6831
Reliability/accuracy of booking	5		17		120		2.8099
Flight came in package	58		41		43		1.8944
E-mail travel alerts	86		50		6		1.4366
Access to the Internet	18		55		69		2.3592

Communication of schedule changes directly to customers via WAP-enabled devices e.g. phones, pagers, and PDAs	45		40		57		2.5211
24-hour access	18		26		98		2.5634
Airline's departure and/or arrival time was more convenient	-		31		111		2.7817
Airline's flight had fewer stops or better connections	14		24		104		2.6338
Airline's in-flight services are better (meals, movies, flight attendants, etc.)	44		52		46		2.0141
Airline's ground services are better (ticketing, baggage handling, check-in, etc.)	34		52		56		2.1549
That Airline was the only airline with seats available	28		65		49		2.1479
Aircraft preference	32		81		29		1.9789
Average							2.2178

N = Not at all important

S = Somewhat Important

V = Very Important

Table 11. The percentage of respondents using information sources

Source of Information	Frequency		Total	
	Business Traveler	Leisure Traveler	n	%
TV	0	12	12	4.65
Radio	0	0	0	0
Newspaper	0	0	0	0
Travel Magazines	5	26	31	12.01
Auto Club Brochure/Books	10	11	21	8.13
Ask a travel agent	8	21	29	11.24
Toll-free number	0	0	0	0
Internet	50	62	112	43.41
E-mail notification of fares	0	5	5	1.93
Friends/Relatives	8	40	48	18.60
Total	81	177	258	100.00

Table 12. The cross tabulation between frequency for purchasing an airline ticket and age of respondents

Frequency for Purchasing an Airline Ticket	Age				Total
	Under 18	18-35	35-53	54-70	
One to three times a year	4	67	38	20	129
Four to six times a year		12	1		13
Total	4	79	39	20	142

Table 13. The cross tabulation between frequency for purchasing an airline ticket and gender of respondents

Frequency for purchasing an airline ticket	Gender		
	Male	Female	Total
One to three times a year	62	67	129
Four to six times a year		13	13
Total	62	80	142

Table 14. The cross tabulation between frequency for purchasing an airline ticket and level of education.

Frequency for purchasing an airline ticket	Level of Education			
	Some college	College	Post College	Total
One to three times a year	66	24	39	129
Four to six times a year	1	12	-	13
Total	67	36	39	142

Table 15. The cross tabulation between frequency for purchasing an airline ticket and annual income of respondents

Frequency for purchasing an airline ticket	Annual Income					Total
	Under \$25,000	\$25,000-\$49,999	\$50,000-\$74,999	\$75,000-\$100,000	Higher than \$100,000	
One to three times a year	45	34	33	6	11	129
Four to six times a year	-	12	-	1	-	13
Total	45	46	33	7	11	142

Table 16. The cross tabulation between frequency for purchasing an airline ticket and occupation of respondents

Frequency for purchasing an airline ticket	Occupation					
	E	G	T	Tech	S	Sec
One to three times a year	13	2	7	13	16	30
Four to six times a year	11			1		
Total	24	2	7	14	16	30

Frequency for purchasing an airline ticket	Occupation				
	H	Stu	Self	R	Total
One to three times a year	4	17	15	10	127
Four to six times a year			1		13
Total	4	17	16	10	140

E = Executives H = Homemaker
 G = Government Stu = Student
 T = Teacher Self = Self-Employed
 Tech = Technical R = Retired
 S = Salesman
 Sec = Secretary

Table 17. The paired-samples t-test
for Hypothesis 1.1-1.5

	Mean	t	df	Sig. (2-tailed)
Frequency - Gender	-.4718	-11.223	141	.000
Frequency - Age	-1.4366	-19.658	141	.000
Frequency - Education	-1.7113	-23.176	141	.000
Frequency - Annual Income	-1.1549	-11.261	141	.000
Frequency - Occupation	-6.4143	-16.320	141	.000

Table 18. The cross tabulation between Service providers' performances and traveler choices of providers

Performances	Service Providers							
	T	%	O	%	A	%	C	%
Knowledge/Level of expertise	8	22.80	21	21.21	-		-	
Time Saver	2	5.7	-		-		-	
Ability to get the best prices	21	60.0	41	41.41	5	83.33	2	100.0
Loyalty/good past experiences	-	-	-		-		-	
Company Policy	-		2	2.0	-		-	
Person to person contact	-		8	8.0	-		-	
Customer services	4	11.42	4	4.0	-		-	
Accuracy of booking	-		22	62.85	1	16.66	-	
Incentive offered	-		1	1.0	-		-	
Internet access	-		-		-		-	
Total	35	100	99	100	6	100	2	100

T = Travel Agents

O = Online Travel Agents

A = Airline Websites

C = Calling Direct or Toll Free Number

Table 19. The paired-samples t-test
for Hypothesis 2

	Mean	t	df	Sig. (2-tailed)
Method to purchase - performance	-2.0141	-9.857	141	.000

Table 20. The cross tabulation between Service providers'
benefits and traveler choices of providers

Benefits	Service Providers			
	T	O	A	C
Cheapest available fare	2.7429	2.8788	3.0000	3.0000
Large number of frequent-flyer program	1.7143	1.2626	2.8333	1.0000
Reward offered	1.6000	1.6667	2.0000	3.0000
Reliability/accuracy of booking	2.6857	2.8485	2.8333	3.0000
Flight came in package	1.8857	1.8384	2.8333	2.0000
E-mail travel alerts	1.3143	1.4141	2.0000	3.0000
Access to the Internet	1.7429	2.5253	3.0000	3.0000
Communication of schedule changes directly to customers via WAP-enabled devices e.g. phones, pagers, and PDAs	2.5143	1.9495	2.1667	3.0000
24-hour access	2.4286	2.5758	3.0000	3.0000
Airline's departure and/or arrival time was more convenient	2.7143	2.7879	3.0000	3.0000
Airline's flight had fewer stops or better connections	2.7143	2.5758	3.0000	3.0000
Airline's in-flight services are better (meals, movies, flight attendants, etc.)	2.3714	1.8384	2.8333	2.0000
Airline's ground services are better	2.4857	1.9697	3.0000	3.0000

(ticketing, baggage handling, check-in, etc.)				
That Airline was the only airline with seats available	2.0571	2.1414	2.8333	2.0000
Aircraft preference	1.7714	1.9798	2.8333	3.0000
N (Number of Respondents)	35	99	6	2

T = Tarvel Agents A = Airline Websites
O = Online Travel Agents C = Calling Direct or Toll Free Number

Table 21. The paired-samples t-test for Hypothesis 3

	Mean	t	df	Sig. (2-tailed)
Method to purchase - Cheapest available airfare	-1.0141	-18.228	141	.000
Method to purchase- Reliability or accuracy of booking	-.9718	-15.786	141	.000

Table 22. The one-sample t-test for Hypothesis 4

	Mean Difference	t	df	Sig. (2-tailed)
Internet	1.2113	35.235	141	.000

REFERENCES

- Atkinson, R.D. (2001). The revenge of the disintermediated: How the middleman is fighting e-commerce and hurting consumers. *Progressive Policy Institute*. Retrieved October 2, 2004 from <http://www.ppionline.org/documents/disintermediated.pdf>
- Bates, A. (2000). The airlines strike back. *Upside*, 12(5), 234-246. Retrieved October 3, 2004, from ABI/INFORM Global database.
- Bush, M. (2000, September 4). Study predicts where Internet booking is heading. *Hotel and Motel Management*, 215, 17. Retrieved October 3, 2004, from ABI/INFORM Global database.
- Complaint dismissed against Orbitz. (2002, September 6). *The Los Angeles Times*. Retrieved November 5, 2004, from <http://www.latimes.com>
- Daft R., Trevino & L. Lengel R. (1987) Media Symbolism, Media Richness, and Media Choice in Organizations. *Communications Research* 14 5 P 553-574.
- DiSabatino, J. (2001, November 12). Travel firms' IT projects falter. *Computerworld*, 35, 1, 77. Retrieved October 2, 2004, from ABI/INFORM Global database.
- Doernhoefer, G. (2002). Orbitz revisited: The Orbitz perspective. *The Transportation Industry Committee*. Retrieved November 2, 2004, from <http://www.orbitz.com>
- Engle, J. (2002, March 31). Airlines stop paying commissions to agents. *Los Angeles Times*. Retrieved November 5, 2004, from <http://www.latimes.com>
- Engle, J. (2002b, April 7). As agents' commissions vanish, fliers pay more: The costs are passed on as airlines change how they do business, and booking online may not be the solutions it appears. *Los Angeles Times*. Retrieved November 5, 2004, from <http://www.latimes.com>

- Global Aviation Associates. (2001). The history and outlook for travel distribution in the PC-based Internet environment. Retrieved October 31, 2004 from <http://www.orbitz.com>
- Greenberg, P. S. (2000). Are we there yet? *Yahoo! Internet Life*, 6(6),122-127. Retrieved October 3, 2004, from EBSCOhost database.
- Harmer, B. M. (2002). Culture at the edge: An exploration of cultural adaptation and sense-making across workgroup boundaries in complex organizations. Doctoral dissertation, Victoria University of Wellington.
- Harrell Associates. (2002) The Internet travel industry: What consumers should expect and need to know, and options for a better marketplace. *Consumer WebWatch*. Retrieved October 2, 2004, from <http://www.consumerwebwatch.org/news/Harrellreport.pdf>
- Harris, B. (2002, November 4). Five travel agencies suing major airlines, Orbitz. *Los Angeles Times*. Retrieved November 5, 2004, from <http://www.latimes.com>
- Harris, B. (2002b, August 5). Missed connections: Travel agencies struggle to survive as online bookings surges. *The Los Angeles Times*, p. C1, C5.
- Harrison, J. (2001). Cendant muscles into the highly competitive online travel arena. *Mergers and Acquisitions*, 36(10), 19-20. Retrieved October 3, 2004, from ABI/INFORM Global database.
- Harrison, J. (2001b). Competitive pressures are putting the squeeze on travel providers. *Mergers and Acquisitions*, 36(8), 18-19. Retrieved October 3, 2004, from ABI/INFORM Global database.
- Harwood, J. (2000). Communication media use in the grandparent grandchild relationship. *Journal of Communication*, 50(4), 56-78. Retrieved October 31, 2004, from EBSCOhost database.

- Jackson, M. H., & Purcell, D. (1997). Politics and media richness in World Wide Web representations of the former Yugoslavia. *Geographical Review*, 87(2), 219-239. Retrieved October 31, 2004, from EBSCOhost database.
- Jarvelainen, J. (2000). Cruise reservation systems used by European passenger ferry companies in Internet: An evaluation with media richness theory. Retrieved October 31, 2004 from <http://www.iris23.htu.se/proceedings/PDF/57final.PDF>
- McDougall, D. (2000). Travel by site. *CMA Management*, 74, 52-53. Retrieved October 3, 2004, from ABI/INFORM Global database.
- Mueller, D. J. (1986). *Measuring social attitudes: A handbook for researchers and practitioners*. New York: Teachers College Press.
- O'Neill, S. (2002). Be sure to look before you book. *Kiplinger's Personal Finance*, 56(8), 110. Retrieved October 3, 2002, from EBSCOhost database.
- Ott, J. (2000, March 27). Airlines using Web for more than e-ticketing. *Aviation Week & Space Technology*, 152, 52-54. Retrieved October 3, 2004, from ABI/INFORM Global database.
- Rosen, C. (2000, June 26). Transforming travel. *Information Week*, 792, 50-57. Retrieved October 3, 2004, from EBSCOhost database.
- Stone, A. (2001, April 25). Travel industry makes wireless inroads slowly. *M Commerce Times*. Retrieved October 7, 2004, from <http://www.mcommercetimes.com/Services/115>
- Travel Industry Association (TIA). (2003). *Online Travel Booking Jumps in 2002 Despite Plateau in Online Travel Planning*. Retrieve November 7, 2004, from <http://www.tia.org>
- Triandis, H. C. (1971). *Attitude and attitude change*. New York: John Wiley & Sons.

- Wilde, C., & Rosen, C. (2000, November 13). Up in the air. *Information Week*, 812, 19-22. Retrieved October 3, 2004, from EBSCOhost database.
- Williams, K. (2002). Tom D'Angelo priceline.com's Mr. inside. *Strategic Finance*, 84(1), 22-27. Retrieved October 2, 2004, from ABI/INFORM Global database.
- Wilson, T. (1997, December 22). Online services squeeze travel agencies. *Internet Week*, 695, 20. Retrieved October 3, 2004, from EBSCOhost database.
- Zellner, W. (2002, April 1). Online travel takes wing. *Business Week*, 3776, 77. Retrieved October 3, 2004, from EBSCOhost database.
- Zhou, Z. Q. (2004). The past, present, and future of travel agents. *E-Commerce and Information Technology in Hospitality and Tourism*, 150, 160-165.