

**CREATING MEANINGFUL INTERNET SERVICE
DIFFERENTIATION THROUGH SEGMENTATION**

by

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Abstract

As Internet consumption levels increase, consumer preferences have gravitated away from slow-speed, intermittent dial-up Internet services to high-speed, full time, broadband services. The basic Internet service provider model of offering a simple connectivity service provides minimal opportunity to create additional revenue points. Internet service providers are now evolving their existing business models, to allow for the creation of additional revenue opportunities through the sale of services above and beyond basic Internet connectivity. The Western Canadian Internet service market is characterized by a duopolistic structure; both incumbents acknowledge that few differentiated qualities exist between their existing basic Internet service offerings. Lack of differentiation has created price-based competition resulting in business challenges. Through the analysis of both primary and secondary data, this study examines the Western Canadian Internet service provider marketplace, and attempts to find relevant consumer segments and appropriate means of creating meaningful service differentiation.

Executive Summary

Internet service providers (ISPs) face distinct challenges when managing marketing efforts. Of interest, due to its evolving nature, is the Western Canadian ISP marketplace. The region is characterized by a duopolistic structure. Major players, ABC Corporation and XYZ Communications, Inc. both acknowledge that few differentiated qualities exist between their service offerings, and have been forced to compete on the basis of price. Both players are now building strategies which leverage service differentiation. The challenge for these organizations is determining what services are most meaningful to which specific consumer segment.

This paper offers recommendations for ABC Corporation's proposed Internet service differentiation with respect to gender-based segmentation within the Western Canadian market, through the review of secondary data regarding the broader U.S Internet service provider market and primary research and analysis using ABC Corporation's consumer base. Secondary research indicates broadband Internet service demand is experiencing exponential growth, which is creating a pattern of fragmentation. Historically, with the exception of communication-based services, there is no dominant Internet tool consumers gravitate towards, although, primary research of this study indicates that a small set of services are of perceived value to the consumer. Gender plays a large role in the Internet marketplace, with usage of most services dominated by males. However, females have a higher willingness to try new Internet services, implying that marketing through trial may stimulate the usage of services by females.

This study acts as a starting point for the discussion of meaningful differentiation within the Western Canadian ISP marketplace. Additional studies considering alternative methods of segmentation should be employed to gain a more complete understanding of the consumer.

Dedication

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Glossary

Blog	A website that contains brief, discrete pieces of information called posts which are comparable to a personal journal or diary entry. A blog can contain a wide variety of content including written essays, annotated links, documents, graphics, and multimedia. Unlike traditional websites, blogs are updated with new posts frequently and readers are able to comment openly on the content. Also known as a weblog.
Broadband	A classification of the bandwidth capacity of a communication channel. More commonly used as a descriptive term for evolving high-speed digital technology that provides consumers a single switch facility offering integrated access to voice, data video, and interactive delivery services. Cable modems, DSL and ISDN all offer broadband connections.
CRTC	The Canadian Radio Television and Telecommunication Commission, which is the governing body that regulates all Canadian broadcasting and telecommunications systems.
Dial-up	Refers to a connection to the Internet or another computer via an ordinary telephone line.
Digital cable	A type of digital television provided over a cable connection. Digital cable delivers more channels than possible with analogue cable by using digital video compression. Digital cable also enables two-way communication, enabling services such as video on demand and pay-per-view programming without the use of a phone line.
HDTV	High Definition Television. A digital television format that provides approximately twice the vertical and horizontal resolution of existing television standards. Also provides 5.1 audio technology, allowing for a TV consumption experience of a substantially higher quality than traditional television.
Home networking	The connecting of computers and other devices/appliances with processors (such as personal video recorders, printers, video cameras, etc.) within the home via a local area network.
Instant messaging	A form of electronic communication that involves real-time correspondence between two or more users who are online simultaneously. It is a conversation made up of typing rather than speaking words. There are several competing commercial instant messaging services, which have varying degrees of compatibility with one another.

Internet	A world-wide network that provides electronic connection between computers and enabling them to communicate with each other via one of several software devices such as electronic mail, FTP, Telnet, Gopher, WAIS, WWW browsers, etc. The Internet is not a single network, but rather a collection of networks that are connected to one another.
IPTV	Internet Protocol Television. IPTV has become a common denominator for systems where television and/or video signals are distributed to subscribers using Internet protocols. Often this is in parallel with the subscriber's Internet connection, supplied by a broadband operator using the same infrastructure and possibly bandwidth.
ISP	Internet Service Provider. An ISP provides consumer access to the Internet usually through dial-up or broadband connectivity services.
POTS	Plain Old Telephone System. Used to describe basic traditional voice telephone service. Dial-up Internet connections are often made over POTS.
Rich media	A term used to describe a broad range of interactive digital media that exhibits dynamic motion through the simultaneous use of pictures, video, and audio.
VOD	Video On Demand. Used as an umbrella term for a wide set of technologies designed to enable consumers to select videos from a central server for viewing on a television or computer screen. VOD can be used for entertainment (ordering digitally transmitted movies), education (viewing training videos), and videoconferencing (enhancing presentations with video clips). VOD content is not live but rather pre-encoded content available at any time from a server.
VOIP	Voice over Internet Protocol, or also called IP telephony. VOIP is a technology for transmitting ordinary telephone calls over the Internet using packet-linked routes. A major consumer advantage of VOIP and Internet telephony is that it avoids the tolls charged by ordinary telephone service.
World wide web	A subset of the Internet, often referred to simply as "the Web." Allows for the navigation between and browsing of hypertext documents (i.e. web pages) through the use of graphical user interfaces (i.e. web browsers) and links between different Uniform Resource Locators (URLs).

1. INTRODUCTION

1.1 ISP-Specific Marketing Challenges

Internet Service Providers face distinct challenges when managing marketing efforts. The experiential notion of a service creates four unique conditions (Kolter and Keller, 2002, p 466). First, Internet connectivity is an intangible from a consumer perspective, and thus perceptions of whether or not the service is of value is often not determined until after use. Second, Internet connectivity is produced and consumed at the same time, and thus cannot be separated from the provider. Third, the quality of the service can vary depending on situational factors surrounding delivery, such as geographic location or conditions of technical infrastructure. Fourth, Internet connectivity is perishable, which limits potential revenue generation; the provider cannot store the service for later sale, nor can the consumer store it for later consumption. These unique conditions force the ISP to more diligently monitor and evaluate the fit between service attributes and consumer preferences.

This need for diligent market analysis is further compounded because of the technologically complex nature of Internet service. Consumers may not be able to understand the complete functionality of the service and may, in turn, evaluate competing services on criteria unrelated to the technology, therefore potentially mitigating value created through the development of technically superior or overly innovative services.

This heightens the requirement for the Internet service marketer to actively strive to better understand the consumer, and to reconsider the market mix in non-traditional ways (Find/SVP, 2004).

1.2 The ABC Challenge

ABC Corporation's¹ Consumer Internet Service business unit will experience sweeping challenges as Internet, telecommunication, and television service providers begin to converge, forcing a state of intensified direct competition.

The first competitive battleground will be the broadband arena, where ABC Corporation (ABC hereafter) and XYZ Communications, Inc. (XYZ hereafter) will compete in strategic efforts to own the "high-speed home." The ownership of the "high-speed home" is a fundamental building block that paves the way for both of these companies to roll out the next level of competitive services (Brancheau et al., 2005, p 3). For XYZ, high-speed home ownership is required to provide voice and rich-media services above and beyond existing cable and Internet offerings. For ABC, high-speed home ownership is a requirement to provide television services above and beyond existing plain old telephone service (POTS) and Internet offerings. It is believed that under the context of the convergence marketplace, broadband consumers will be likely to get television or telephone service from the same company that delivers Internet service the home (Silvius and Gruman, 2005, p 82).

¹ At the request of corporate sponsors of this study, the names of all competing ISP firms discussed in this report have been masked with generic titles to mitigate the possibility of disclosing corporate information that may be deemed proprietary or strategic in nature.

ABC and XYZ both acknowledge that there are few differentiated qualities between existing service offerings (Harburn, 2005). Both competitors offer broadband Internet connectivity services with comparable data transmission speeds of over 1.5 megabits per second, both competitors offer free technical customer service with comparable levels of 24/7/365 support, and both competitors offer free e-mail and security features with comparable 10 megabyte mail storage capacity and bundled fire wall, anti-virus, anti-spy-ware, and parental control mechanisms. Of the small differences that may exist between the competing Internet service offerings, such as the physical design of the e-mail and security software interfaces, it is believed that these differences are not perceived as relevant by consumers and, in turn, are generally not considered when they evaluate Internet service offerings for initial purchase or subscription renewal (Harburn, 2005). Comparable service offerings, coupled with strategic priorities that place shorter-term focus on the maximization of Western Canadian “high-speed home” market-share through the sale of subscription-based Internet connectivity services over the more traditional focus of maximization of profitability, have fostered competition dominated by the price attribute. Price-based competition has forced both XYZ and ABC to repeatedly rely on frequent promotional discounting and competitor price matching of Internet service subscription offerings. This movement to price-based competition through generic offerings has created a state of “competitive convergence” (Porter, 1996, p 64). This is problematic as the ability to realize ROI on the technical infrastructure used to facilitate Internet connectivity and the ability to create service economies of scope are both crippled due to the inability to sustain or increase prices and, ultimately, margins. Additionally, sustained decreases in

Internet service offering pricing may affect consumer beliefs regarding what fair market prices for Internet services should be, conditioning consumers to reject any offerings without low pricing. The longer these beliefs are sustained, the greater the difficulty in changing consumer perceptions towards value and associated pricing.

It is evident that ABC is aware of these competitive issues, and it has explicitly stated that the company is focusing on “providing integrated solutions that differentiate ABC from [their] competitors” (ABC, 2004b, p 24). ABC plans to redefine its Internet service offering by establishing a set of new differentiated tools and features above and beyond the existing configuration, which will provide real value and will be perceived as meaningful by the customers. By becoming more understanding of the consumer’s evolving Internet interests, and by creating services that better align with consumer preferences and that are meaningfully differentiated in comparison to XYZ’s offerings, ABC believes that it will be able to shift its high-speed Internet service offering away from price-based competition and that it will be able to begin to mitigate issues associated with competitive convergence. As a result, it will be able to increase and sustain market shares of the Western Canadian “high-speed home” in a way that provides real value to the consumer while allowing ABC to structure its offerings more profitably in the longer term.

ABC is actively considering multiple subscription-based Internet tools as additions to its existing service offering. New tools under current consideration include:

- Enhanced e-mail services that would offer substantially greater storage capacity (i.e. up to one gigabyte of space).
- Instant messaging services that would allow for real-time communication and collaboration between ABC customers over the Internet.

- Blog services that would allow for user-friendly publishing of personal blogs and/or would allow for simplified blog reading through syndicated content aggregation from third party blogs.
- Streaming digital music services that would allow the consumer to listen to, but not download, customized music content over the Internet and through a personal computer.
- Photo sharing services which would allow consumers to create, store, and manage user-friendly formatted high-quality digital photo albums with large storage capacity (i.e. one gigabyte) over the Web.
- Online storage services that would allow for the consumer to securely back-up important digital files. It should be noted that this service is basic and utilitarian in nature and would not be a comparable substitute for the photo sharing service.
- Internet community services that would allow users to communicate and collaborate through social networks that may be arranged around common interests. This service would have a wider range of functionality and is more collaborative in nature than a blog or website.

In addition to the consideration of adding new Internet tools, ABC is re-evaluating the value of multiple non-bundled subscription-based Internet tools already offered. Updates to existing tools under current consideration include:

- Online gaming services that would allow the consumer to engage in a variety of Web browser-based games either alone or collaboratively with other subscribers. It should be noted that ABC currently offers a basic subscription-based gaming service; however, its has not been heavily promoted or adopted, thus further examination of whether or not the service is of real value to the consumer is appropriate.
- Internet security services that would offer the consumer premium protection from computer viruses, spy-ware, etc. ABC currently offers a basic security service at no charge to Internet service subscribers; however, an enhanced security service would offer greater protection through additional applications and has not been offered before by ABC. Thus, further examination to determine what specific consumer segments would find this service to be of value is appropriate.
- High-quality Internet video services would allow the consumer to interactively communicate with other ABC customers online in more of a face-to-face dynamic through real time transmission of voice and video, or allow the consumer to passively view areas of their home in a surveillance capacity. It should be noted that ABC currently offers a basic subscription-based video surveillance service; however, its has not

been heavily promoted or adopted. Thus, further examination of whether or not the service is of real value to the consumer is appropriate. In addition, it should be noted that the video services proposed are not considered substitutes to VOIP and have lesser technical functionality and complexity.

- Personal web space service would allow the consumer to create, host, and manage a home page or website. It should be noted that this service is basic in nature and not the same as a blog service, as it lacks complex functionality such as automated content management.

The acknowledged challenge for ABC is to understand which tools have most importance to which high-speed Internet consumer segments. Once there is clarity around segmentation preferences, marketing strategy to create meaningful differentiation can be formulated. This will ultimately allow the organization to move away from price-based competition.

1.3 Scope of Research

Based on the business priority of ownership of the “high-speed home,” a shift to differentiated market competition is required. Thus, the case exists for a research project to allow for better understanding the needs and interests of segments within the Western Canadian Internet service market. Arguably, the most apparent form of segmentation would be that of gender-based segmentation. An understanding of what is truly meaningful to both male and female segments within the market will allow for the development of an initial differentiation Internet service strategy, and act as the foundation for additional deeper future segmentation research.

This paper, which is the written report of the research project, documents the research of gender-based segmentation within the Western Canadian market, specifically

through the review of secondary data regarding consumer segment trends in the broader Internet service provider market. The findings of the secondary research are considered as a guiding force in the pursuit of related gender segmentation primary research and analysis. Both sources of analysis will be compared and contrasted acting as a gauge for gender-based customer segment interest in differentiated Internet services. The consideration of the primary and secondary research act as the driver for discussion and creation of a series of recommendations intended to help guide ABC Corporation to create meaningful service differentiation for both male and female segments within the Western Canadian Internet service market. Finally, this paper concludes by making recommendations to ABC as to the type of future research that will further its understanding of various consumer segments in order to better differentiate itself from its competitors by tailoring its offerings to specific consumer segments.

2. THE INTERNET

2.1 Overview

It is important to understand the context of the Internet service provider market. Unlike other industries, the Internet has only existed in a household consumer-friendly capacity for a decade. Arguably, the notion of high-speed Internet connectivity has existed for the latter half of this time. In order to develop an understanding of the evolving state of the Internet and, in turn, the Internet service provider marketplace, this research project examines the Internet. First, the Internet is examined from historical perspective, then from a forward looking perspective, closing with an examination of the evolving notion of the “high-speed home”

2.2 The Internet: 1999 - 2004

Fostered by unprecedented consumer adoption rates, the Internet is one of the fastest growing communication technologies (Horrigan et al., 2003, p 11). In Canada, the number of Internet users has grown from 11 million in 1999 to 17.3 million in 2004 (Euromonitor, 2005). Research conducted during the infancy of the Internet Age revealed that initial Internet usage in Canada paralleled Rogers’ Diffusion of Innovation (1962) theoretical characterization of innovators. Rogers (1962) argues that adopters of any new innovation or idea could be categorized as innovators (2.5%), early adopters

(13.5%), early majority (34%), late majority (34%) or laggards (16%), based on a bell curve distribution. Additionally, Rogers shows that each adopter's willingness and ability to adopt an innovation would depend on his/her awareness, interest, evaluation, trial, and adoption; ultimately, these innovations would spread through society in an S curve pattern over time. Within the context of the Internet, early Internet adopters predominately possessed demographic characteristics different from the overall population: male, well-educated, and upper income (Madden, 2003, p 5). However, over the last five years, the distribution of Canadian Internet users has reached a majority adoption position and evolved into a state of greater variety which more closely corresponds to the overall population. Wide-spread adoption and dependence on the Internet as a source of information and entertainment has created a massive and sustainable market for the supply of Internet connectivity services (Horrigan and Raine, 2003, p 15).

As Internet consumption levels increase, associated technology becomes more sophisticated and, in turn, consumer preferences gravitate away from slow-speed, intermittent dial-up Internet services to high-speed, full-time, broadband services. Growth patterns illustrate this trend. Subscriptions to residential dial-up Internet services in Canada peaked in 2000 at 114,800 subscriptions, and have since decreased by 41 percent to 67,720 in 2004 (Euromonitor, 2005). During this same period, the number of Canadian households with personal computers grew from 5.3 million to 8.1 million. The percentage of households who subscribe to Internet connectivity services also grew from 61.5 percent to 98.2 percent (Euromonitor, 2005). This shows that Canadian consumers have chosen to permanently embrace high-speed Internet service.

2.3 The Internet: 2005 and Beyond

High-speed connectivity has allowed for faster diffusion of the Internet and has heightened consumer dependence on the tool for communication, entertainment, and information search (Silvius and Gruman, 2005, p 82). Widespread Internet use has positioned the marketplace to offer more advanced services above and beyond basic connectivity via the Internet medium. 2005 and beyond will see the sales of new services over the Internet including television services (IPTV), phone services (VOIP), in addition to the more traditional core services such as e-mail, and the World Wide Web (CBC News Online, 2005). As the convergence of broadcasting, telephone, and Web services becomes a reality, further consumer appetite and dependence on Internet connectivity will develop. Consumers will demand seamless integration of the Internet into their homes. Internet service will become ubiquitous and be considered a required connection into all homes comparable to that of electricity or natural gas. This dependence will drive demand for what is ultimately known as “the high-speed home.”

2.4 The High-Speed Home

By definition, Internet service providers have a high-speed digital connection to the customer’s home. The basic Internet service provider (ISP) business model of offering a simple connectivity service provides minimal opportunity to create additional value for the consumer and, in turn, minimal opportunity to create additional revenue points. Further, since the technical attributes of the infrastructure associated with the service, such as modems, are governed by international telecommunication standards,

competitors can replicate and provide a similar connection. Thus the basic service becomes commoditized.

At the same time, technical innovation and increased consumer adoption of the high-speed connectivity to the Internet is fostering the development of new services that can be distributed over the Internet. Telecom and media content providers' motivation to offer these services to consumers includes cost savings through consolidation and decreased dependence on mature industries. Consumer interest in these services includes greater access to content, personal customization and, in some cases, cost savings. Possible Internet-based services include richer web-based media, telephone communication, and the delivery of television, movie and music content. That is, traditional entertainment and communication services that have been previously installed in the household can now be delivered on a single encompassing platform; the home becomes ready for digitized communication through Internet connectivity (Brancheau et al., 2005, p 3). The term "high-speed home" is used to describe this convergence-based phenomenon (Harburn, 2005).

At a global level, ISPs are evolving their existing business models and moving to develop capabilities allowing for their participation in the sales of greater breadth and depth of the high-speed Internet services. Generally speaking, ISPs have acknowledged the complexity of this model shift and are taking incremental steps towards full migration (Brancheau et al., 2005, p 7). Internet service providers have chosen to start this migration by enabling the connected home by offering home-networking service to support transport of new content such as television, and new services such as home networking and security software within the home.

3. THE WESTERN CANADIAN MARKETPLACE

3.1 Overview

The Western Canadian residential high-speed Internet service provider marketplace, defined as the collective region of Alberta and British Columbia, is currently considered duopolistic in nature. XYZ Communications, Inc. and ABC Corporation capture market shares of 58 percent and 37 percent, respectively, of all residential Internet service subscriptions (Harburn, 2005).

3.2 ABC Corporation

ABC Corporation is the largest telecommunications company in Western Canada and the second largest in the country. ABC offers a series of broad telecommunications product and services offerings including data, Internet, voice, video, and wireless services at both consumer and business levels. In 2004, ABC generated \$7.6 billion in revenue and is considered global leader among major telecommunications players with respect to revenue growth, operating earnings, and cash flow. Looking forward, ABC considers “focusing relentlessly on growth markets” including high-speed residential Internet service as an “imperative which will dictate investment decisions” (ABC Corporation, 2004b). Today, ABC retains approximately 566,000 high-speed residential Internet

service subscription customers in Western Canada, a customer base which has grown by 70 percent since 2003 (Sy, 2005).

3.3 XYZ Communications, Inc.

XYZ Communications, Inc. is a Canadian communications company with core business situated in cable television, Internet, and satellite direct-to-home services. Collectively, these areas were responsible for generating revenue levels of \$ 2.1 billion in 2004 (XYZ Communications, Inc., 2004).

Cable operations are comprised of XYZ's cable television and ISP operations, accounting for 71.7 percent of total company revenues. XYZ is the largest cable television provider in Western Canada with approximately 2.1 million cable television subscription customers. XYZ's current cable customer base is composed of approximately 1,021,000 Internet customers and 541,000 digital cable customers (XYZ Communications, Inc., 2004). The Western Canadian market is composed of 880,000 of these Internet customers. XYZ's forward-looking strategy focuses on leveraging its existing network by providing additional services beyond traditional cable. XYZ claims to be positioned to expand its Internet service offerings to include digital programming, video-on-demand (VOD), high definition television (HDTV), and digital phone services (VOIP) (XYZ Communications, Inc., 2004).

3.4 New Entrants

While only claiming minimal market share, additional players exist in the Western Canadian ISP marketplace. However, future growth potential and sustainability of these players is unclear due to unresolved legislation (CBC News Online, 2004). Companies such as QRS Canada – a subsidiary of one of the fastest-growing telephony companies in the United States, New Jersey-based QRS Holdings Corp – are attempting to penetrate the local market by offering VOIP services. However, incumbents such as ABC Corporation are petitioning the Canadian Radio-Television and Telecommunications Commission (CRTC), arguing that it would be unfair for foreign companies such as QRS Canada to leverage Canada's high-speed Internet platform to deliver VOIP while limiting the local companies that helped finance that infrastructure.

Additionally, incumbents from other markets within Canada are positioning themselves for entry into the Western Canadian residential marketplace. LMN, Inc., the country's largest telecommunications company, has publicly stated that its traditional phone system traffic will be migrated on to a national Internet-based system before the fourth quarter of 2006 (CBC News Online, 2004). This infrastructure shift would allow LMN to compete in the residential VOIP space across the entire Canadian market. However, LMN's existing strategy within the Western Canadian ISP market is to focus on the corporate, not residential segment, thus lowering the imminent threat of this entrant to XYZ or ABC.

4. SECONDARY RESEARCH

4.1 The Need for Secondary Research

In order to develop robust, forward-looking marketing strategy, it is essential to first have an in-depth understanding of the consumer and the market place from both historical and contemporary perspectives. Perhaps the most effective method to gain this understanding is through the use of secondary research. This is further exemplified in the context of Internet service providers. Since its inception, the market has remained in a state of rapid growth and evolution. It is essential to leverage the findings of others to ensure a realistic understanding of the market is gained before developing a strategy. In the context of this research project, secondary research allows for thorough exploration of emerging Internet services and consumer behaviour.

4.2 Methodology

The ideal secondary research for this project would be to find information and data focusing on the Western Canadian Internet service marketplace. However, during my secondary research efforts for this study, it becomes evident that only a limited amount of relevant information exists in the public domain. This lack of Western Canadian data could be attributed to several factors. First, the Internet service market sits in a state of relative infancy and, in turn, mitigates the ability to study extensive long-

term consumer data. Second, Canada has a small population that may have previously hindered the ability of others to develop meaningful Internet service consumer segmentation insight. Smaller population size equates to a smaller total Internet service market size. Arguably, previous research efforts may have been forced to consider the once niche-sized collective consumer group as relatively homogeneous simply because diversity was less evident and more challenging to identify within a niche. Finally, the Western Canadian marketplace is a physically massive area challenged by geographic disconnection. This disconnection makes the deployment of the technical infrastructure required to deliver high-speed Internet connectivity service nearly impossible in certain areas. Infrastructure shortages cause a “digital divide” between regions within the Western Canadian marketplace (Industry Canada, 2005). While in its current state the “digital divide” has decreased, previous connectivity-based disparity may have created challenges when researchers attempted to gain a representative understanding of what all Internet service consumers within the marketplace consider as truly meaningful attributes associated with the service.

As a remedy to the lack of available, insightful, Western Canadian customer data, and to mitigate some of the core issues causing the lack of data, I choose to predominantly use analyst sources as the material for my secondary research efforts. The sources are based on previous analysis of the United States Internet service provider market. The U.S. Internet service marketplace serves a substantially larger customer base, and does not suffer from a “digital divide.” Evidence from these sources demonstrates that U.S. and Canadian markets show similarity, and that examination of the U.S. market can offer insight into the Canadian market. With respect to

demographics, the Canadian and U.S. population share similar age distributions, sex ratios, and literacy rates (CIA World Handbook, 2005a, 2005b). However, with respect to Internet usage, differences between Canadian and U.S. markets do exist. Consider the number of Internet users as a percentage of total population: 60 percent of the total United States population are users of the Internet while only 53 percent of the total Canadian population are users of the Internet. While this variance may appear to be minor, it is important to note that these percentages have developed with very different growth rates over the last five years. The number of Internet users in the United States has grown by 32 percent while the number of Internet users in Canada has only grown by 19 percent (Euromonitor, 2005). Additionally, it is relevant to acknowledge that a large difference exists between total population sizes. Canada's population of 33 million equates to approximately 11 percent of the United States total population of 296 million. Comparison of these two nations indicates that the examination of the U.S. market will offer insight into consumer segmentation and potential value of Internet service provider differentiation that would be applicable in Canadian markets.

A caveat should be offered with the extrapolation of U.S market findings into Canadian market recommendations. Because of larger U.S. growth rates and diffusion levels, we cannot assume that Canadian consumers will adopt proposed new service tools as rapidly as their U.S. counterparts. Therefore, I will follow up the secondary research with primary research where I incorporate the findings from secondary research into the design of a questionnaire, with which I survey Canadian consumers. With data collected from the survey, I then conduct data analysis to further understand behaviour and preferences of Western Canadian customers.

4.3 Examination of the U.S. Market

Through the examination of secondary sources, it becomes evident that in the context of the U.S. marketplace, most residential Internet activities that the Internet service providers can offer the consumer through a subscription-based service can be divided into four descriptive categories: online communication, content creation, entertainment, and security.

4.3.1 *Online Communication*

As Internet adoption increases, consumers continue to see increasing value in the service and consider it a way to stay in touch with others. Online communication activities dominate the consumer's online experience. E-mail accounts are used by 93 percent of all Internet consumers (Madden, 2003, p 7). This positions e-mail communication as the most common online activity by far. Emerging communication tools are beginning to gain greater consumer acceptance. Instant messaging has been used in some capacity by 42 percent of all Internet users. Of this 42 percent, 24 percent send instant messages more frequently than e-mail as a communication means (Shiu and Lenhart, 2004, p 3). Less known communication tools such as person-to-person video chat or online community-focused chat rooms are used by approximately 14 percent of Internet consumers (Horrigan, 2003, p 12). While this usage rate may appear to be minimal, it is important to consider the context. For example, video chat requires broadband connectivity in the home and in addition the use of video camera infrastructure, this may be seen as a barrier to adoption by the consumer or, alternatively,

it may simply seem like a technically overwhelming communication medium. On the other hand, as further diffusion of broadband connectivity occurs and bundling of video cameras with personal computers becomes more common, these barriers may become irrelevant, causing increase in usage.

While Communication tools have found wide-spread adoption, no single gender segment dominates their usage. Gender differences are not significant in this category; the usage ratio between males and females in the category is equally distributed, approximately 50:50 (Madden, 2003, p 77). Wide-spread adoption and equal usage distribution of gender segmentation may indicate that marketing to a specific segment would yield little value. What may be of greater value is the development of a superior e-mail product with attributes that may motivate consumers to switch existing e-mail service providers. For example, this may require the sale of an “enhanced e-mail” product with noticeable differences in storage and transmission capacity.

4.3.2 Content Creation

As consumers become more involved with their Internet experience, they often move beyond passively surfing through Web content created by others and begin to contribute their own content to the World Wide Web through personal web spaces or websites. This ability to contribute has been greatly increased over the last five years, as user-friendly website publishing tools have become readily available at little or no cost. Generally, when a consumer decides to create a web space or site, he or she needs to purchase web hosting services from a third party. These services in their most basic form will consist of server space where their content will reside.

In the United States, 44 percent of Internet users have created or actively contributed to some form of a personal web space. Of this group, almost half (49 percent) have posted photographs to web spaces (Lenhart et al., 2004, p 4). This indicates that not only is there a substantial market to which Internet service providers can offer web space services, but there may also be a demand for photo storing and sharing-specific services.

An emerging form of personal web space is the blog. The blog differs from a traditional web space or site in that it is updated frequently and takes on characteristics of an electronic personal diary rather than an electronic static brochure. In order to facilitate this diary-like format, blog development and maintenance requires content management software in addition to basic web space hosting. In the last 18 months, blogs have established themselves as a key part of online culture, so much so that many deemed “2004 [as] the year of the blog” (Weiner, 2005, p 1). Statistically speaking, seven percent of Internet users claim to have created a blog while 17 percent of Internet users claim to regularly read blogs (Lenhart et al, 2004, p 5). Even more impressive is the growth rate of blog readership. From January 2004 to January 2005, blog readership grew by 58 percent. However, the phenomenon has not yet become ubiquitous. Only 38 percent of Internet users claim to actually know what a blog is (Rainie, 2005, p 2).

Another form of online content creation is through the medium of news groups. News groups are a form of electronic bulletin boards where text messages and files can be posted for others to view. This medium of content creation is in a state of stagnant growth. More contemporary substitute services, offering the same benefits in a more user friendly fashion, have crippled growth of this tool. Regardless of this decline, 20 percent

of Internet users have reported using news groups. However, only half of these news group users engage the tool with interactive intentions and actually post messages for others to read, and only five percent of news group users leverage the tool as a means of sharing rich media such as digital photos (Lenhart et al., 2004, p 6).

Gender usage patterns are of significance in the content creation category. Of those who create content using more traditional personal web spaces, such as static websites and news groups, there is a slight male dominance (51 percent). However, when emerging content creation tools are examined, gender differences become more evident. In the case of blogging, 57 percent of blog creators are male.

4.3.3 *Entertainment*

The wide-spread use of the multimedia personal computer with broadband Internet service has allowed for distribution of rich-media over the web. Predominantly, this rich media is consumed for personal entertainment purposes. The most widely used forms of entertainment-driven rich-media are digital music and online gaming.

Digital music has evolved over the last five years. Content which was once pirated, legally ambiguous, and of poor quality is beginning to be replaced by for-pay, legally approved, high quality services. Numerous for-pay, subscription-based models leveraging streaming (i.e. requiring no end-user downloading) or download-centric offerings are compatible with Internet service providers. Twenty-seven percent of Internet users have downloaded some form of digital music. Of this group approximately 20 percent listen to digital music on a daily basis (Madden, 2003, p 64). Consumer interest in legal music downloading services has skyrocketed. Of those Internet

consumers who have tried music downloading, 43 percent have tried using a legal downloading service (such as Napster or iTunes Music Store) in 2005. Furthermore, this figure has nearly doubled from 24 percent in 2004 (Madden and Raine, 2005, p 2). This offers strong indication that consumers are becoming more familiar with the notion of music over the Internet and are willing to experiment with digital music services.

Online gaming, which allows for collaborative entertainment, can be offered to the consumer in numerous ways. In its most basic form, game play over the Internet can be done through basic website interfaces. Individual games are limited in scope, however, and are normally sold in bundled packages allowing the consumer to realize value in a portfolio of varied game play. In its more complex form, online gaming can require additional software applications (such as the Microsoft X-Box) in order to create complex multi-player games. Regardless of the nature of the game, consumers purchase access to the playing environment through a service provider. Currently, 37 percent of all Internet users have tried gaming services. Of this group, 14 percent claim to partake in online gaming on a daily basis (Madden, 2003, p 64). While gaming may appeal to a small proportion of the online population, consumer adoption of online gaming may be hindered by technological requirements. Due to the rich-media nature of gaming, more powerful computers with rich-media capabilities and broadband connections are mandatory for use of gaming services. Arguably, as this technology further diffuses and the relative power of personal computers improves, these barriers may be lessened.

Gender differences across the entertainment category are of great interest. With respect to digital music, men are the dominant users; 35 percent of male Internet users said they had downloaded music, compared to 29 percent of female users. Men showed

tendency of using the service more frequently than women; seven percent of male users were downloading music on a typical day, while only three percent of female users reported doing so (Madden, 2003, p 63). With respect to online gaming, previous studies indicated that females were as likely as males to use gaming services, but more recently this distribution has shifted towards the male segment. In 2003, 22 percent of male Internet users said they have used a gaming service, while only 14 percent of females have done like-wise (Madden, 2003, p 65). These gender differences indicate that entertainment-based differentiation should be focused towards the male audience.

4.3.4 Security

While the Internet allows consumers access to communication, information, and entertainment on demand, it also exposes their personal computers to great risk. If consumers are not vigilant during the course of their Internet activities, their computers can be exposed to numerous malicious threats such as viruses or spy-ware. If these antagonistic forces enter the personal computer, the system can become compromised, leading to inconvenience, damage, or in more severe cases, identity theft. What further compounds these challenges is that some consumers are not aware that their personal computers are infected and unknowingly allow further system infection. Anti-virus and anti-spy-ware subscription-based software exists in the marketplace and consumers are beginning to see the value in remaining protected while online. Forty percent of all Internet users claim to have suffered from issues caused by viruses or spy-ware in the last year (Fox, 2005, p 9). In response, a great majority (88 percent) of home Internet users claim to use some form of anti-virus and anti-spy-ware tool to help curb concerns. Of

even more interest is the fact that of the protection-utilizing portion of the Internet population, 22 percent use a service provided via their Internet service provider (Fox, 2005, p 15). These facts indicate that consumer acceptance for Internet service security offerings is strong and established; however, because a large majority of consumers already have some form of Internet protection, a compelling security offer – which could include additional features and functionality – would have to be developed in order to for this consumer group to perceive differentiation from existing offerings and find motivation to switch.

4.4 Commentary

Review of the U.S. household Internet service market reveals that, with the exception of e-mail services, consumer use of various Internet services is in a state of fragmentation. This state of fragmentation is further compounded by the notion of gender segmentation and division of the marketplace. On numerous occasions, current usage rates may not clearly reflect future usage rates due to relative lack of technological diffusion within society. Simply because the secondary research indicates low consumer use of a service, we cannot assume that the product does not have potential as a strong revenue source for an Internet service provider in the future. Yet, this fragmented structure further highlights the need to create marketing strategies which allow for service differentiation and for segment-specific marketing strategies.

Secondary research efforts have allowed for the understanding of consumer habits and service trend development. While this is of value, for the context of this study the

case exists for the discovery of more specific gender segment trends through local market primary research.

5. PRIMARY RESEARCH

5.1 The Need for Primary Research

Secondary research provides insight into the Internet service consumer's needs, market trends, and potential segmentation. However, the information that can be derived from review of third party market research and analysis has limitations. The Internet, as most consumers understand it, is in a state of infancy, as wide spread use of the tool has only been commercially available for, at most, a decade. Consider this length of availability in comparison to the television which has been commercially available for seven decades, or the telephone which has been commercially available for ten decades. Further, when the Internet was first diffused into the North American market, usage was intermittent and most users used the tool in academic or corporate capacities rather than for personal use in the home. Additionally, technical innovation has shaped the growth of the Internet experience. Because of eventual technical development, broadband household Internet connectivity has only been widely available to consumers during the last five years, and consumption levels of at-home broadband connections show exponential growth during this period. For example, in the United States, the total number of homes with broadband connections has grown from approximately five million in 2000 to 50 million in 2004 (Horrigan, 2004, p 10). The incredibly short life-to-date of the Internet and broadband services, coupled with technological innovation and

exponential consumer growth, only allows market analysis to remain relevant and truthfully representative for limited time period. Thus, when attempting to develop meaningful differentiation for Internet service offerings, we can look at secondary market analysis as a guiding tool to help create a basic, high-level understanding of the Internet service consumer. However, corporate strategy should not be built on these findings alone, as risk of technological or consumer-based evolution exists. In order to manage this potential deviation, it is essential that primary Internet consumer research be performed on targeted consumers to confirm or disprove secondary findings. Only when secondary and primary research is considered in parallel can corporate strategy be developed.

5.2 Methodology

Realizing the great value in better understanding its customer as it begins to develop a meaningful Internet service differentiation strategy, ABC chooses to sponsor my primary research efforts, offering use of its in-house analytics tools to further my research efforts. As a part of marketing intelligence operations, ABC maintains a Consumer Advisory Panel. This panel, which existed prior to the commencement of my research, consists of 1,500 ABC customers who have opted-in to be a part of a group that provides feedback to the organization through the completion of periodic quantitative and qualitative surveys. Surveys are administered over the Internet through an e-mail invitation. If the respondent chooses to complete the survey, data is then collected

through a web interface and managed via a web server. Data collected from survey responses can be analyzed with data from previous surveys administered.

The panel members used in my research are pre-screened. Requests for survey participation are sent to a selection of panel members who fit the criteria of residents of Western Canada, except for those who were under the age of 19. Individual responses are kept confidential. Once a sufficient number of responses are received, working alone, I perform data analysis using SPSS statistical software.

The goal of my primary research is to determine how the male segment and female segment differ in the Western Canadian ISP market. Based on these ideas, I create a survey titled “Broadband Services Questionnaire” (Appendix A). There are two central questions asked in the questionnaire:

- The first question asks the respondent about their present familiarity with a series of Internet services and applications. Asking this allows for a better understanding of the level of diffusion of specific services within specific segment groups. This is important as it may indicate relative understanding and ease of acceptance of a service, and could ultimately shape an offering. Within the question, familiarity is gauged for those Internet services being actively considered by ABC (e.g. streaming music service) and some Internet services not being considered but comparable in nature (e.g. a peer-to-peer music sharing service). The reason for analyzing these external services is to determine whether the consumer could shift to a potential service (e.g. knowledge and understanding of a music sharing service could act as a gateway to the acceptance of a music streaming service) (Question 1, Appendix A).
- The second question asks the respondent about their future interest in accepting free limited term trials of potential services. Asking this allows for a better understanding of each gender group’s willingness to experiment with new services, removed from the constraint of price or subscription commitment. From this question we can also get a sense of whether or not promotion of a service to the gender segments through trial would be effective (Question 11, Appendix A).

The responses from this survey are then cross-tabulated with the same respondent's gender from a previous panel survey (Appendix B). This previous survey was conducted by ABC personnel prior to the start of this research project for a completely separate initiative. To ensure accuracy in my analysis, both survey data sets were merged by pairing responses using unique identification numbers for each respondent.

It should be noted that the two questions used in my primary research are a subset of the total survey administered. Since the survey is administered to the ABC consumer advisory panel using ABC infrastructure and resources, ABC product managers chooses to leverage the planned engagement with the panel, and request that additional questions be presented to the respondents that help gauge consumer affinity towards specific website portals. While this could be potentially problematic (e.g. larger surveys may cause respondent confusion, causing the submission of incomplete or less accurate responses), I believe the overall size of the survey is manageable (the average completion time is 6 minutes and 56 seconds) and the overall theme of all questions relate to the consumer's Internet experience. Thus, additional questioning does not affect my primary research results. Data pertaining to these additional questions is omitted from my analysis.

Invitations for survey participation were sent by ABC to 1,000 panel members on June 14th, 2005. Surveys were then collected for a 2-week period from June 14th to June 28th, yielding completed responses from 772 respondents, with a male and female gender distribution of 52 and 48 percent respectively.

5.3 Results

I conduct data analysis using a 2-phase approach. First, I compute descriptive statistics to allow for a broad understanding of what usage, awareness, and future interest exists for specific internet services. Second, I conduct cross-tabulation analysis to determine how gender is distributed across patterns of usage, awareness, and future interest. Findings from analysis of secondary data will act, in part, as drivers for the creation of relevant recommendations for ABC Co.

5.3.1 Descriptive Statistic Results

In order to gain a general sense of consumer interest, basic descriptive statistics are computed using SPSS statistical software. Two main questions are considered. The first attempts to gain an understanding of consumer usage and awareness, by gauging consumer's familiarity with specific, current Internet services. For the sake of clarity when analyzing this question, Internet services are compared within the categories established through secondary research (i.e. communication, content creation, entertainment, and security). The second question analyzed attempts to understand the consumer's future interest in new services by gauging willingness to try specific services in a free trial capacity.

5.3.1.1 Consumer Usage and Awareness

Table 5.1 Consumer Usage (Yes, No) and Awareness of Online Communication-Based Internet Services

Service	Yes	No	Never heard of it	Row Total
Webmail	79%	20%	1%	100%
Instant Messaging	68%	32%	0%	100%
Video Chat	23%	73%	4%	100%

Question 1: Have you ever tried the following Internet service/application? (n= 772)

In the context of communication-based Internet services, we see that wide-spread use and awareness of Webmail (a sub-set of e-mail) and, to a lesser extent, instant messaging exists. Moreover, Webmail and instant messaging, respectively, are ranked as the first and second most widely used services of all examined in this study. While approximately only one quarter of respondents have used video chat services, it's important to note that high awareness for the product exists (i.e. only four percent have never heard of video chat services). This variation in usage across communication-based services offers a deviation from secondary research findings. While the ability to communicate over the Internet may be of great desire to the consumer, not all communication-based services dominate the consumer's Internet experience. The means in which they communicate could potentially be based on other factors such as overall marketplace levels of service adoption. It should be noted that video chat – a service developed for at home consumer use in the last three years - may simply lack maturity as a service, and that the lower usage rate is due to a shorter availability period to date in the market.

Table 5.2 Consumer Usage (Yes, No) and Awareness of Content Creation-Based Internet Services

Service	Yes	No	Never heard of it	Row Total
Photo Sharing/Storage	45%	53%	2%	100%
Internet Community Service	44%	53%	3%	100%
Personal Web Space	30%	64%	6%	100%
News Groups	26%	69%	5%	100%
Personal Blogs	16%	70%	14%	100%

Question 1: Have you ever tried the following Internet service/application? (n= 772)

In the context of content creation-based Internet services, we see a mixed usage pattern. More consumers have not used the content creation-based services examined than those who have. However, regardless of usage, it's evident that consumers have a high awareness of all communication-based services examined. These findings are consistent with the findings of the secondary research, with exception to the personal Web space service. The secondary research indicates that personal Web space usage is approximately 10% higher. This may indicate less consumer interest in this form of content creation within the Western Canadian market.

Table 5.3 Consumer Usage (Yes, No) and Awareness of Entertainment-Based Internet Services

Service	Yes	No	Never heard of it	Row Total
Internet Radio	64%	34%	2%	100%
Peer-to-Peer File Sharing	45%	44%	11%	100%
Online Web Gaming	38%	61%	1%	100%
Pay For Music Download Services	23%	76%	1%	100%

Question 1: Have you ever tried the following Internet service/application? (n= 772)

In the context of entertainment-based Internet services, we see stronger, positive usage patterns. Many consumers have used the services examined. Of interest is the high usage of Internet Radio, a service offering which ABC Co. is activity looking to develop. Additionally, further promise exists when Peer-to-Peer File Sharing is considered. Peer-to-Peer applications could act as a free substitute service for an Internet Radio offering. The lower awareness may indicate that the threat of substitution is mitigated to an extent. Online gaming may also be an area for growth. High consumer awareness exists; however, lower usage is evident. As discovered in the secondary research, low gaming usage maybe a symptom of a lack of personal computing power. It is believed that this deficit in infrastructure will rapidly decrease with the diffusion of innovation.

Table 5.4 Consumer Usage (Yes, No) and Awareness of Security-Based Internet Services

Service	Yes	No	Never heard of it	Row Total
Online Storage or Backup Service	14%	80%	6%	100%

Question 1: Have you ever tried the following Internet service/application? (n= 772)

In the context of security-based services, we see an area for growth. Heightened consumer concerns over personal and technical security are growing. Online storage and backup is complimentary to existing anti-virus and anti-spy-ware offerings. Descriptive statistics in table 5.4 indicate that consumers have a high awareness for the backup service, yet a fraction has tried it.

5.3.1.2 Consumer's Future Interest

For analysis of questions to gauge future interest, data is recoded to create high and low willingness categories. Seven-point scale responses which are in the range of one to four are recoded as “low”, while responses which are in the range of five to seven are recoded as “high” (Question 11, Appendix A).

When posed with questions regarding willingness to try new Internet services for free, consumers show mixed interest. Consumers' greatest interest fall towards Internet security and digital music services, while photo sharing receives a mixed response. Interestingly, a sharp decline in interest is evident towards video chat and online storage and back up.

Table 5.5 Consumer Willingness to Try Internet Services for Free

Service	High Likelihood	Low Likelihood	Row Total
Internet Security Service	65%	35%	100%
Online Music Service	57%	43%	100%
Photo Sharing and Storage Service	44%	56%	100%
High Quality Internet Video Chat/Video Surveillance Service	37%	63%	100%
Online Data Storage and Backup	32%	68%	100%

Question 11: Assume you were offered the chance to try any of these Internet services for one month, at no charge to you with no future purchase commitments. Please indicate how likely you would be to try the service. (n= 772)

5.3.2 Gender Specific Results

In the context of this study, through basic descriptive statistics we can gain a sense of what Internet services consumers use, what Internet services consumers are

aware of, and what Internet services consumers show willingness to try. However, in order to understand *who* within the consumer group will most likely consider these services, segmentation analysis must be performed. I conduct one set of cross-tabulation between the gender of the respondent and his/her usage of internet services (Question 1, Appendix A). The second set of cross-tabulations is between the respondent's gender and his/her likelihood to try certain services for free (Question 11, Appendix A). Both sets of cross-tabulations are performed using SPSS. All analysis results are interpreted at the 90 percent confidence level. Table 5.6 shows the summarized results of the first set of cross-tabulation. Table 5.7 shows the second set of cross-tabulation.

5.3.2.1 *Consumer Usage and Awareness*

Table 5.6 Consumer Usage and Awareness of Current Internet Services vs. Gender

Service	Segmentation Differences	Chi-Square Statistic
Webmail	No significant difference between genders found.	0.558
Instant Messaging	No significant difference between genders found.	4.367
Personal Web Space	Males more likely to use service.	* 27.262
Internet Radio	Males more likely to use service.	* 31.327
Pay For Music Download Services	Males more likely to use service.	* 6.232
Online Web Gaming	No significant difference between genders found.	4.980
Personal Blogs	Males more likely to use service. Females more likely to be unaware of the service.	* 30.879
Photo Sharing/Storage	No significant difference between genders found.	3.845
Online Storage or Backup Service	Males more likely to use service. Females more likely to be unaware of the service.	* 25.721
Internet Community Service	No significant difference between genders found.	1.621
Peer-to-Peer File Sharing	Males more likely to use service. Females more likely to be unaware of the service.	* 26.014
News Groups	Males more likely to use service. Females more likely to be unaware of the service.	* 62.275
Video Chat	Males more likely to use service. Females more likely to be unaware of the service.	* 10.450

Question 1: *Have you ever tried the following Internet service/application? (n= 772)*
 * Indicates significance (Chi-square critical = 4.605170186).

Cross-tabulation analysis of gender against consumer usage and awareness reveal that all services examined fit into one of three profiles. The first profile consists of services where males dominate usage, but awareness of the service is even across

genders. These offerings are Internet Radio, Personal Web Space, and Pay For Music Download Services. The second profile consists of services where males dominate usage; however, awareness of the service is substantially lower for females. These offerings are Peer-to-Peer File Sharing, News Groups, Video Chat, Personal Blogs, and Online Storage or Backup Services. The third profile consists of services where there are no significant differences in usage or awareness between genders. These offerings are Webmail, Instant Messenger, Photo Sharing, Internet Community Services, and Online Web Gaming Services.

5.3.2.2 Consumer's Future Interest

Table 5.7 Consumer Willingness to Try Internet Services vs. Gender

Service	Segmentation Differences	Chi-Square Statistic
Online backup	No significant difference between genders found.	0.730
Photo Sharing	Females more likely to have higher interest.	* 16.735
Online Music	Females more likely to have higher interest.	* 10.137
Internet security services	Females more likely to have higher interest.	* 17.212
Internet Video	No significant difference between genders found.	0.008

*Question 11: Assume you were offered the chance to try any of these Internet services for one month, at no charge to you with no future purchase commitments. Please indicate how likely you would be to try the service. (n= 772)
* Indicates significance (Chi-square critical = 2.705543971).*

Cross-tabulation analysis of gender against consumer willingness to try new Internet services reveals female dominance. Three out of the five services proposed – Internet Security Services, Online Music, and Photo Sharing – indicates that females are more likely to have a higher interest in a trial opportunity.

5.4 Commentary

Generally speaking, the primary research efforts confirm the findings of the secondary research. The Western Canadian marketplace is in a state of fragmentation. Additionally, marketing challenges exist due to the technology associated with some services. Potential barriers to consumer adoption may exist due to a lack of diffusion of the associated technologies in society.

In the context of the four categories of Internet services, the following highlights were revealed through the primary research:

- Communication-based Internet services show the highest levels of usage and awareness.
- Content-based Internet services show diversity in usage and awareness. Immerging tools such as blogging lack consumer awareness.
- Entertainment-based Internet services find high levels of usage. Music-focused services are rated the highest in popularity.
- Security-based Internet services exhibit low usage and low awareness indicating large potential for growth.

Additionally, cross-tabulation analysis shows that differences between genders exist. Of the Internet services analyzed, we see that three common gender-based profiles of usage and awareness exist. Further we learn that females, despite often having lower usage and awareness, are more willing to try new Internet services.

Based on the congruency between the primary and secondary findings, and gender insight created through cross-tabulation analysis we can confidently create a series of conclusions and recommendations pertaining to meaningful differentiation within the Western Canadian Internet service provider marketplace.

6. CONCLUSIONS AND RECOMMENDATIONS

Through the consideration of primary and secondary research, conclusions can be drawn which can act as the foundation for strategic recommendations. This project first considers the notion of consumer usage, awareness, and future interest. It then draws a series of conclusions regarding this topic. Next, the project considers the effects of gender in the context of Internet services and draws a series of conclusions. Finally, strategic recommendations are proposed for ABC.

6.1 Consumer Usage, Awareness, and Future Interest

6.1.1 Communication-Based Internet Services

Communication-based Internet services, while high in usage and awareness by both males and females, may be challenging to leverage as a means of differentiation. Because of high consumer usage of existing services, the delivery of new e-mail service offerings may gain little consumer interest, due to loyalty towards existing services and accounts. A more effective communication-based offering may involve instant messaging. Secondary research reveals that usage of instant messaging services is growing. This fact, coupled with primary research indicating that high awareness of the service and lack of saturation exists, indicates that instant messaging offering could be a successful form of differentiation. Further, analysis indicates that interest in this service

is even across genders, indicating that the use of broad marketing efforts to reach both segments would be appropriate.

In the context of video chat services – a communication-based service with substantially lower usage levels - secondary research indicates that depressed levels of usage are, in part, due to lack of appropriate personal computer technology used by the consumer. It is believed that technology levels will rapidly improve, indicating future growth potential in the service area. It may be of value to initially monitor consumer technology developments in the interim, and consider the release of video chat service offerings only when future analysis indicates that the marketplace is ready. Future growth in the interest in video chat services is further confirmed through respondents' willingness to try. When asked if they would try a video chat service, nearly 40 percent of all respondents indicate a high likelihood of doing so (Table 5.5). It is important to note that gender differences exist with respect to video chat services. Males dominate usage of the service, while females have lower levels of service awareness. This indicates that it may be more effective to market the service to the male segment (Table 5.6, Table C-12 in Appendix C).

6.1.2 Content Creation-Based Internet Services

High awareness and lower usage patterns may indicate that content creation-based Internet services are an offering area with growth potential. A collaborative photo sharing tool, which could blend elements of photo sharing and Internet community, may be of interest to the consumer. While gender usage of these services has been even, it is evident that, females indicated a high likelihood of using the service in a trial capacity

(Table D-2 in Appendix D). Thus, this service could be marketed to both segments, but trial-based promotional methods may be most effective with females.

The notion of emerging technology must not be discounted. Despite the reporting through primary and secondary sources of low usage and relatively low awareness of personal blogs (Table 5.2), their value as a potential Internet service differentiator should not be ignored. This service appears to be male dominated in usage and awareness (Table 5.6, Table C-6 in Appendix C).

6.1.3 Entertainment-Based Internet Services

High awareness and high usage of digital music services indicates that consumer appetite exists for this product (Table 5.3). Online music is the second highest service likely to be used in a trial capacity in the future by the consumer, ranking only second to security-based Internet services in this project (Table 5.5). Additionally, direction for the structure of the music offering can be derived from the primary research. The most popular form of the product is Internet radio (i.e. streaming music) service, not the pay for music downloading service (Table 5.3, Tables C-3 and C-4 in Appendix C). Further, promise exists when Peer-to-Peer File Sharing is considered. Peer-to-Peer applications could act as a free substitute service for an Internet Radio offering. However, consumers show substantially lower awareness of the Peer-to-Peer service, indicating that the threat of substitution is mitigated to an extent. It should be noted that all Internet-based music services are dominated in usage and awareness by males. Thus, this service should be marketed to the male segment.

With respect to gaming services, secondary research results show that low gaming usage may be a symptom of a lack of personal computing power. It is believed that this deficit in infrastructure will rapidly decrease with the diffusion of innovation. Because of this, gaming may be an area to actively monitor and pursue in the next 12 – 18 months. Alternatively, gaming offerings may need to be bundled in a way where the required technology is included with the subscription. Regardless of the form of offering, primary research indicates that usage and awareness of this type of service is even across genders (Table 5.6, Table C-5 in Appendix C). Thus, marketing efforts should target both segments.

6.1.4 Security-Based Internet Services

Secondary research indicates that consumers view their Internet service providers as a credible channel for the purchase of personal computer security services, such as anti-virus and anti-spy-ware tools. However, it is acknowledged that since multiple channels (above and beyond ISPs) offer comparable security services, a favourable and unique offering would have to be created in order to be able to leverage the service as a means of differentiation. The primary research considers an online backup offering as a potential means of security differentiation. When asked if they had used the tool, only 14 percent say “yes”, 80 percent say “no”, and the remaining six percent are unfamiliar with the tool (Table 5.4). However, when asked if they would be interested in the trial of an Internet security service bundle, 66 percent indicate high levels of interest (Table 5.5). This may indicate security-based internet services can be used as a means of

differentiation; however, if new features are to be bundled into the service, their value must be clearly explained in the marketing messages.

Gender segmentation is also of interest; historically, this has been a male dominated service with respect to usage and awareness. However, females have a greater willingness to try security services in a trial capacity (Table D-4 in Appendix D). It may be possible to target both gender segments for the sale of Internet security services; however, the means in which they are targeted would vary. Males with higher understanding of the service may be receptive to broad messages explaining the attributes of the service while females would be more receptive to more detailed messages which would educate the consumer about the service and the overall value it can provide.

6.2 Recommendations

Based on the conclusions found in this study, the development of a series of recommendations regarding effective ways to create meaningful Internet service differentiation can be offered. Recommendations can be topically structured in terms of appropriate service type, segment audience, and time-frame for service launch.

Table 6.1 Service Recommendations for Immediate Launch, Listed by Priority

Service	Segment Audience	Launch Time-frame
Instant Messaging	Both Males and Females	Immediately
Online Photo Sharing	Both Males and Females	Immediately
Online Storage/Backup	Males	Immediately
Internet Radio	Males	Immediately

The conclusions drawn in this study indicate that instant messaging, online photo sharing, premium security, and Internet Radio (i.e. streaming digital audio) services should be launched immediately by ABC Co. as a means of creating meaningful differentiation, and should be done so in the priority listed. Selection of these services for launch is based on growth trends revealed through analysis of secondary research, and usage, awareness and willingness to try from primary research. Additionally, the separation of the services into two segment audiences indicates that the potential for bundling services exists. For example, a “chat and share” type bundle could be released. The offering would include both instant messaging and photo sharing services, and would be broadly marketed to both males and females.

Table 6.2 Service Recommendations for Delayed Launch, Listed by Priority

Service	Segment Audience	Launch Time-frame
Gaming	Both Males and Females	In 12 – 18 months.
Blog	Males	Blog reading services in 6 months, blog writing services in 18 months.

The conclusions drawn in this study also indicate that gaming and blog services should be launched by ABC as a means of differentiation. These services are recommended based on growth potential. However, because these services face technological barriers to adoption, it is recommended that release to market be delayed. With respect to gaming services, secondary research indicates that current low levels of gaming usage may be a symptom of a lack of personal computing power. It is believed that this deficit in infrastructure will rapidly decrease with the diffusion of innovation.

Because of this, gaming may be an area to actively monitor and pursue in the next 12 – 18 months. Alternatively, gaming offerings may need to be bundled in a way where the required technology is included with the subscription. With respect to blog services, since secondary research indicates that blog reading appears to be of interest to more consumers than blog creation (Raine, 2005), a more meaningful tool might involve content aggregation, such as a personalized blog headline-gathering portal webpage which would allow for comprehensive and systematic blog reading. As echoed in the secondary research, this tool is yet to reach a mainstream audience and has massive room for growth. Taking a first-to-market stance on offering services such as gaming and blogging allows for strong and unique means of Internet service differentiation.

It should be noted that not all Internet services examined are recommended for means of differentiation. Services that are not recommended are excluded because of either existing high market saturation (e.g. e-mail services) or are excluded due to low usage coupled with low growth potential (e.g. news group services).

6.3 Commentary

Through consideration and analysis of primary and secondary sources, the study has been able to draw conclusions and provide recommendations for the Western Canadian Internet service provider market. Of the wide range of services, only a few have meaning to consumers. Gender interest in the examined Internet services tends to lean predominantly to the male audience. While this can allow for the use of more

focused service development and delivery, this situation is, in some cases, complicated by technical barriers to adoption.

The broad approach to segmentation used in this study, coupled with existing marketplace technical barriers, may indicate that caution must be exercised when considering the conclusions and recommendations provided.

7. LIMITATIONS AND CONSIDERATIONS FOR FURTHER RESEARCH

Caveats should be considered in the context of the analysis offered in this study.

As a medium and industry, the Internet is in an extreme state of infancy. Lack of market history, coupled with service offerings dependent on technological innovation, hinders the ability to predict longer term market trends. Consumers may presently exhibit little interest in a particular service; however, this should not compel the Internet service provider to discontinue offering the service. It is reasonable to believe that some services may rely on “disruptive technology,” and, in turn, consumers may simply not yet understand the value of the service (Economist, 2004). At best, studies of this nature can only offer a snapshot of the current customer and the current marketplace.

Primary research used in this project is based on a sample composed exclusively of existing ABC customers. It is reasonable to assume that as customers, the sample population may have pre-existing bonds with the ABC brand and its Internet products. Subjects may have subconsciously biased their responses based on the positive or negative intensity of this bond. Further, since panel membership requires the consumer to wilfully opt-in, it may be reasonable to assume that consumers who have highly positive associations with the ABC brand would be more likely to join the panel than other consumers with less positive associations or lower involvement with the brand. Great value could be derived from additional research pertaining to meaningful

differentiation within the Internet Service Provider marketplace. The use of sample populations composed of consumers across all ISPs within a market may help mitigate brand equity effects and allow for greater diversity in response.

Future research should choose to consider meaningful differentiation in the context of other segments beyond gender. The study of meaningful differentiation for male and female gender segments is of value; however, gender should only be considered as a starting point for segmentation within the Internet service category. Other segments should be considered to allow for an even more refined strategy development. For example, the consideration of consumer tenure (i.e. total number of months or years using the Internet) as a basis for segmentation might offer additional insight. Relative experience with the Internet may have relation to use and demand for specific services. Since many Internet tools are new to the market, they sit relatively low on the consumer adoption curve (Rogers, 1962). Services fitting this profile will more likely initially be embraced by consumers with higher tenure and, in turn, higher technical comfort levels. Thus, factoring in Internet tenure in adoption may further explain Internet service demand. Alternatively, the consideration of the existing Internet services purchased by a consumer as a basis for segmentation may also offer additional insight. Consumers may tend to spend their time pursuing specific activities while online. Previous purchases of certain types of service may create interest in the purchase of additional service offerings with comparable attributes (e.g. previous purchase of content creation services, may lead to the desire to purchase additional content creation services).

Finally, consideration of how to best market and promote Internet tools would be of value. While this study examines what Internet tools have value to which consumer

segments, it cannot provide detailed insight into how to best market to the consumer and create awareness of the differentiated services provided.

APPENDICES

Appendix A: Broadband Services Questionnaire²

Good morning, we'd like to ask you a few questions regarding Internet services and applications. This should only take about 10 minutes to complete. Remember, all information provided will be kept strictly confidential and used only for legitimate research purposes. Your personal information will not be released to any other companies or organizations.

Questions

1. Have you ever tried any of these Internet services/applications?

- Webmail (e.g. MSN hotmail, Yahoo! Mail, Gmail) not ABC pop-mail
 Yes No Never heard of this service
- Instant Messaging (e.g. MSN messenger, Yahoo! messenger, AOL messenger, etc)
 Yes No Never heard of this service
- Personal Web space
 Yes No Never heard of this service
- Internet Radio
 Yes No Never heard of this service
- Pay for Music Download service
 Yes No Never heard of this service
- Online Web Gaming
 Yes No Never heard of this service
- Personal Web Blogs
 Yes No Never heard of this service
- Online Photo Sharing/Storage
 Yes No Never heard of this service
- Online Storage / back-up service
 Yes No Never heard of this service

² Note: ABC Corporation, 2004a: This is a plain text translation of the online survey administered to the ABC Advisory Panel. While this translation is representative of the questions asked, it does not reflect the format or presentation of the survey.

- Internet Community Service (e.g. MSN Communities, Yahoo Groups)
 - Yes No Never heard of this service
- Peer-to-peer file transfer services (e.g. Kazaa, Limewire, Gnutella, eDonkey, Bit Torrent)
 - Yes No Never heard of this service
- Newsgroups (i.e. USENET)
 - Yes No Never heard of this service
- Video Chat
 - Yes No Never heard of this service

Note: Respondents who chose "No or Never" to all services listed go directly to Question 5.

2. Please indicate your current usage of the following Internet services/applications?

- Webmail (e.g. MSN hotmail, Yahoo! Mail, Gmail) not ABC pop-mail
 - Frequently Often Occasionally Seldom
- Instant Messaging (e.g. MSN messenger, Yahoo! messenger, AOL messenger, etc)
 - Frequently Often Occasionally Seldom
- Personal Webspace
 - Frequently Often Occasionally Seldom
- Internet Radio
 - Frequently Often Occasionally Seldom
- Pay for Music Download service
 - Frequently Often Occasionally Seldom
- Online Web Gaming
 - Frequently Often Occasionally Seldom
- Personal Web Blogs
 - Frequently Often Occasionally Seldom
- Online Photo Sharing/Storage
 - Frequently Often Occasionally Seldom
- Online Storage / back-up service
 - Frequently Often Occasionally Seldom
- Internet Community Service (e.g. MSN Communities, Yahoo Groups)
 - Frequently Often Occasionally Seldom

- Peer-to-peer file transfer services (e.g. Kazaa, Limewire, Gnutella, eDonkey, Bit Torrent)
 - Frequently Often Occasionally Seldom
- Newsgroups (i.e. USENET)
 - Frequently Often Occasionally Seldom
- Video Chat
 - Frequently Often Occasionally Seldom

Note: In the context of this questionnaire "Frequently" is considered to be "once a week or more often." "Often" is considered to be "once or a few times per month." "Occasionally" is considered to be "once or a few times every 6 months." Seldom is considered to be "used in the past, but not in the last 6 months." Respondents were reminding of these definitions before answering all questions using this scale.

Note: Respondents who chose "occasionally" or "seldom" go directly to question 3 for each relevant service. All other respondents proceed directly to question 4.

3. Would you use this service again in the next 6 months?

- Yes No Not sure

4. On a scale of 1-7 (1 being not valuable at all and 7 being extremely valuable) please indicate how valuable you find the following internet services.

- Webmail (e.g. MSN hotmail, Yahoo! Mail, Gmail) not ABC pop-mail.
 - 1 2 3 4 5 6 7
- Instant Messaging (e.g. MSN messenger, Yahoo! messenger, AOL messenger, etc)
 - 1 2 3 4 5 6 7
- Personal Webspace
 - 1 2 3 4 5 6 7
- Internet Radio
 - 1 2 3 4 5 6 7
- Pay for Music Download service
 - 1 2 3 4 5 6 7
- Online Web Gaming
 - 1 2 3 4 5 6 7
- Personal Web Blogs
 - 1 2 3 4 5 6 7

- Online Photo Sharing/Storage
 - 1 2 3 4 5 6 7
- Online Storage / back-up service
 - 1 2 3 4 5 6 7
- Internet Community Service (e.g. MSN Communities, Yahoo Groups)
 - 1 2 3 4 5 6 7
- Peer-to-peer file transfer services (e.g. Kazaa, Limewire, Gnutella, eDonkey, Bit Torrent)
 - 1 2 3 4 5 6 7
- Newsgroups (i.e. USENET)
 - 1 2 3 4 5 6 7
- Video Chat
 - 1 2 3 4 5 6 7

5. Please indicate your current usage with the following ABC Internet services/applications?

- ABC e-mail via a PC e-mail program (e.g. Microsoft Outlook)
 - Frequently Often Occasionally Seldom Never
- ABC Webmail
 - Frequently Often Occasionally Seldom Never
- ABC Security Services (anit-virus, personal firewall)
 - Frequently Often Occasionally Seldom Never
- ABC Radio Service
 - Frequently Often Occasionally Seldom Never
- ABC Music Download service (Puretracks)
 - Frequently Often Occasionally Seldom Never
- ABC Newsgroups
 - Frequently Often Occasionally Seldom Never
- ABC Gaming Service
 - Frequently Often Occasionally Seldom Never

6. How often do you visit these Websites?

- MSN
 - Frequently Often Occasionally Seldom Never

- Yahoo
 - Frequently Often Occasionally Seldom Never
- myABC
 - Frequently Often Occasionally Seldom Never
- Google
 - Frequently Often Occasionally Seldom Never
- AOL
 - Frequently Often Occasionally Seldom Never
- Other _____ (please specify)

7. Please indicate how often you currently use the following Internet search tools?

- MSN
 - Frequently Often Occasionally Seldom Never
- Yahoo
 - Frequently Often Occasionally Seldom Never
- Google
 - Frequently Often Occasionally Seldom Never
- myABC
 - Frequently Often Occasionally Seldom Never
- AOL
 - Frequently Often Occasionally Seldom Never
- Other _____ (please specify)

8. Please indicate the how often you currently use the following e-mail services:

- Hotmail (MSN)
 - Frequently Often Occasionally Seldom Never
- Yahoo mail
 - Frequently Often Occasionally Seldom Never
- G-mail (Google)
 - Frequently Often Occasionally Seldom Never
- ABC e-mail
 - Frequently Often Occasionally Seldom Never

- AOL e-mail
- Other _____ (please specify)

Note: Respondents who respond that they have used an Instant Messaging service in Question 1 will next answer Question 9. All other respondents will go directly to question 10.

9. Please indicate the how often you currently use the following instant messaging services:

- MSN messenger
 - Frequently Often Occasionally Seldom Never
- Yahoo messenger
 - Frequently Often Occasionally Seldom Never
- AOL messenger
 - Frequently Often Occasionally Seldom Never
- ICQ messenger
- Other _____ (please specify)

10. For which of the following do you have a Login ID which you've used in the past 3 months? Please select all that apply.

- MSN account / passport
 - Yes No
- Yahoo account
 - Yes No
- Google account
 - Yes No
- myABC account
 - Yes No

11. Presented below is a series of Internet related services. Assume you were offered the chance to try any of these services for one month, at no charge to you and with no future purchase commitments.

Please indicate how likely you would be to try the service on a scale of 1 - 7 (where 1 is extremely unlikely and 7 is extremely likely).

- Online Data Storage / Back-up
 - 1 2 3 4 5 6 7

- Photo Sharing and Storage Service
 1 2 3 4 5 6 7
- Online Music Service (CD quality music with song download capabilities)
 1 2 3 4 5 6 7
- Internet Security Services (Anti-virus, personal firewall, parental controls, anti-spyware)
 1 2 3 4 5 6 7
- High Quality Internet Video Chat/Video Surveillance Service
 1 2 3 4 5 6 7

12. If ABC was to offer you a bundle of Internet applications for \$15/month that included:

- Photo Sharing/Storage service (1GB of storage)
- Music Download Service (CD quality music with song download capabilities)
- Online Gaming Service
- Internet Security Services (anti-virus, firewall parental control and anti-spyware)
- Online Data Storage (1GB of storage)
- Instant Messaging tool with high quality video chat

- Please rate from 1-7 (where 1 is extremely unlikely and 7 is extremely likely) how likely you would be to purchase this bundle.
 1 2 3 4 5 6 7

13. How likely would you be to purchase this bundle if it were offered to you for a cost of \$10/month?

- Please rate from 1-7 (where 1 is extremely unlikely and 7 is extremely likely) how likely you would be to purchase this bundle.
 1 2 3 4 5 6 7

14. How likely would you be to purchase this bundle if it were offered to you for a cost of \$5/month?

- Please rate from 1-7 (where 1 is extremely unlikely and 7 is extremely likely) how likely you would be to purchase this bundle.
 1 2 3 4 5 6 7

Appendix B: ABC Advisory Group Profiling Questionnaire³

Note: This survey was developed and executed entirely by ABC Co. during the fall of 2004, prior to the Internet service provider meaningful differentiation study. This survey has been used by permission of ABC Co.

Thank you for your interest in joining the ABC Advisory panel. If you decide to join the panel, you will be contacted by e-mail once every few months over the course of a year and be asked to provide your opinions and insights on a variety of topics.

All information provided by panel members will be kept strictly confidential and used only for legitimate research purposes. Your personal information will not be released to any other companies or organizations.

Questions

1. Are you...

Male

Female

2. Which of the following age categories represents your age?

Under 15 years

15-18

19-24

25-34

35-44

45-54

55-64

65 years or older

3. Are there any children aged under 18 in your household?

Yes

No

Note: If respondent chooses "Yes", they proceed directly to question 4. If "No" was selected, they proceed directly to question 5.

³ Note: This is a plain text translation of an online survey administered to the ABC Advisory Panel. While this translation is representative of the questions asked, it does not reflect the format or presentation of the survey.

4. Are there any children of the following ages?
- Under 6
 - 6-10
 - 11-13
 - 14-18
5. Please indicate which languages are spoken in your home.
- English
 - French
 - Cantonese
 - Mandarin
 - Punjabi
 - Tagalog
 - Hindi
 - German
 - Italian
 - Portuguese
 - Spanish
 - None of the above
6. What type of dwelling do you live in?
- Single detached house
 - Semi-detached house/ duplex
 - Row house / townhouse
 - Collective dwelling (such as staff house, military housing or nursing home)
 - Mobile home / trailer
 - Apartment or condominium building with less than 6 units
 - Apartment or condominium building consisting of 6 or more units
7. Which of the following ranges best reflects your current annual household income?
- Under \$30,000
 - \$30,000 to \$49,999
 - \$50,000 to \$74,999
 - \$75,000 to \$99,999
 - \$100,000 to \$149,999
 - \$150,000 or more
 - Prefer not to say
8. Please select the one title that most closely matches your occupation.
- Clerical/administrative
 - Manager / Supervisor

- Professional
- Other paid employment
- Retired
- Own business (operating mainly in your home)
- Own business (operating mainly outside of your home)
- Currently unemployed
- Other

9. Where do you live?

- Lower Mainland
- Vancouver Island
- Other British Columbia
- Edmonton
- Calgary
- Other Alberta
- Vancouver Island
- None of the above

10. When it comes to selecting your communications service providers which of one the following statements would best describe your role?

- Sole decision maker
- Shared decision with equal input
- Someone else is primarily responsible

11. Which of the following communications services do you currently have?

- Long Distance

<input type="checkbox"/> ABC Co.	<input type="checkbox"/> Other Provider	<input type="checkbox"/> Do not currently have
----------------------------------	---	--
- Call display

<input type="checkbox"/> ABC Co.	<input type="checkbox"/> Other Provider	<input type="checkbox"/> Do not currently have
----------------------------------	---	--
- Call Waiting

<input type="checkbox"/> ABC Co.	<input type="checkbox"/> Other Provider	<input type="checkbox"/> Do not currently have
----------------------------------	---	--
- Voice Mail

<input type="checkbox"/> ABC Co.	<input type="checkbox"/> Other Provider	<input type="checkbox"/> Do not currently have
----------------------------------	---	--
- Call Forwarding

<input type="checkbox"/> ABC Co.	<input type="checkbox"/> Other Provider	<input type="checkbox"/> Do not currently have
----------------------------------	---	--
- Other Calling features

<input type="checkbox"/> ABC Co.	<input type="checkbox"/> Other Provider	<input type="checkbox"/> Do not currently have
----------------------------------	---	--

- High Speed Internet
 - ABC Co. Other Provider Do not currently have
- Lite Speed Internet
 - ABC Co. Other Provider Do not currently have
- Dial up Internet
 - ABC Co. Other Provider Do not currently have
- Cell phone
 - ABC Co. Other Provider Do not currently have

12. Which of the following do you currently have and use regularly in your home?

- Gaming console capable of online gaming
- Digital Camera
- LMN Satellite TV
- XYZ Satellite TV
- Digital Cable TV
- Analogue Cable TV
- Separate phone answering machine
- Home security system
- Cell phone for personal use

13. How many working personal computers (including laptops) do you have in your home?

- None 1 2 3 More than 3

Note: If respondent answers greater than 1 computer, they move directly to question 14. If respondent answers 1 computer or less, they move directly to question 15.

14. Do you link or network your computers together so that they share equipment or Internet access? Equipment could be things such as printers or scanners.

- Yes No Don't know

15. How often do you do the following activities online?

- Download music files
 - Frequently Often Occasionally Seldom Never
- Make a purchase online
 - Frequently Often Occasionally Seldom Never
- Online gaming
 - Frequently Often Occasionally Seldom Never

- Streaming music
 - Frequently Often Occasionally Seldom Never
- Streaming video
 - Frequently Often Occasionally Seldom Never
- Make a phone call using your Internet connection
 - Frequently Often Occasionally Seldom Never
- Instant messaging
 - Frequently Often Occasionally Seldom Never
- Photo sharing
 - Frequently Often Occasionally Seldom Never
- Upload to your personal webspace
 - Frequently Often Occasionally Seldom Never
- Access your ABC e-mail via webmail
 - Frequently Often Occasionally Seldom Never

Closing

Our survey is now complete. Thank you once again for your time. We will be contacting you again in the near future to invite you to participate in a study on a topic that is relevant to you.

E-mail Confirmation

An e-mail has been sent to the e-mail address you provided. Please follow the e-mail instructions to confirm this address for entry into the panel.

Appendix C: Gender vs. Current Service Usage

Cross-Tabulation: Question 1 and Gender

Table C-1 *Have You Ever Tried Instant Messaging?
* Gender Cross-tabulation*

			Gender		Total
			Male	Female	
Have you ever tried Instant Messaging?	Yes	Count	259	270	529
		% within Gender	65.1%	72.2%	68.5%
	No	Count	137	103	240
		% within Gender	34.4%	27.5%	31.1%
	Never heard of this service	Count	2	1	3
		% within Gender	.5%	.3%	.4%
Total	Count	398	374	772	
	% within Gender	100.0%	100.0%	100.0%	

Note: Pearson Chi-square = 4.367, Chi-square critical = 4.605170186
 Conclusion: Males tend to have higher usage of the service than females. Overall awareness is high.

**Table C-2 Have You Ever Tried Personal Webspace?
* Gender Cross-tabulation**

			Gender		Total
			Male	Female	
Have you ever tried Instant Messaging?	Yes	Count	148	84	232
		% within Gender	37.2%	22.5%	30.1%
	No	Count	239	259	498
		% within Gender	60.1%	69.3%	64.5%
	Never heard of this service	Count	11	31	42
		% within Gender	2.8%	8.3%	5.4%
Total	Count	398	398	374	
	% within Gender	100.0%	100.0%	100.0%	

Note: Pearson Chi-square = 27.262, Chi-square critical = 4.605170186
 Conclusion: Males tend to have higher usage of the service than females. Overall awareness is lower.

**Table C-3 Have You Ever Tried Internet Radio?
* Gender Cross-tabulation**

			Gender		Total
			Male	Female	
Have you ever tried Instant Messaging?	Yes	Count	290	200	490
		% within Gender	72.9%	53.5%	63.5%
	No	Count	102	163	265
		% within Gender	25.6%	43.6%	34.3%
	Never heard of this service	Count	6	11	17
		% within Gender	1.5%	2.9%	2.2%
Total	Count	398	398	374	
	% within Gender	100.0%	100.0%	100.0%	

Note: Pearson Chi-square = 31.327, Chi-square critical = 4.605170186
 Conclusion: Males tend to have higher usage of the service than females. Overall awareness is high.

**Table C-4 Have You Ever Tried Pay-For-Music Downloading Service?
* Gender Cross-tabulation**

			Gender		Total
			Male	Female	
Have you ever tried Instant Messaging?	Yes	Count	104	71	175
		% within Gender	26.1%	19.0%	22.7%
	No	Count	292	299	591
		% within Gender	73.4%	79.9%	76.6%
	Never heard of this service	Count	2	4	6
		% within Gender	.5%	1.1%	.8%
Total	Count	398	398	374	
	% within Gender	100.0%	100.0%	100.0%	

Note: Pearson Chi-square = 6.232, Chi-square critical = 4.605170186
Conclusion: Males tend to have higher usage of the service than females. Overall awareness is high.

**Table C-5 Have You Ever Tried Online Web Gaming?
* Gender Cross-tabulation**

			Gender		Total
			Male	Female	
Have you ever tried Instant Messaging?	Yes	Count	151	140	291
		% within Gender	37.9%	37.4%	37.7%
	No	Count	245	225	470
		% within Gender	61.6%	60.2%	60.9%
	Never heard of this service	Count	2	9	11
		% within Gender	.5%	2.4%	1.4%
Total	Count	398	398	374	
	% within Gender	100.0%	100.0%	100.0%	

Note: Pearson Chi-square = 4.980, Chi-square critical = 4.605170186
Conclusion: No significant difference between genders.

**Table C-6 Have You Ever Tried Personal Weblogs?
* Gender Cross-tabulation**

			Gender		Total
			Male	Female	
Have you ever tried Instant Messaging?	Yes	Count	79	44	123
		% within Gender	19.8%	11.8%	15.9%
	No	Count	285	249	534
		% within Gender	71.6%	66.6%	69.2%
	Never heard of this service	Count	34	81	115
		% within Gender	8.5%	21.7%	14.9%
Total		Count	398	398	374
		% within Gender	100.0%	100.0%	100.0%

Note: Pearson Chi-square = 30.879, Chi-square critical = 4.605170186
 Conclusion: Males tend to have higher usage of the service than females. Females more likely to be unaware of the service.

**Table C-7 Have You Ever Tried Online Photo Sharing/Storage?
* Gender Cross-tabulation**

			Gender		Total
			Male	Female	
Have you ever tried Instant Messaging?	Yes	Count	175	168	343
		% within Gender	44.0%	44.9%	44.4%
	No	Count	216	191	407
		% within Gender	54.3%	51.1%	52.7%
	Never heard of this service	Count	7	15	22
		% within Gender	1.8%	4.0%	2.8%
Total		Count	398	398	374
		% within Gender	100.0%	100.0%	100.0%

Note: Pearson Chi-square = 3.845, Chi-square critical = 4.605170186
 Conclusion: No significant difference between genders.

**Table C-8 Have You Ever Tried an Online Storage/Backup Service?
* Gender Cross-tabulation**

			Gender		Total
			Male	Female	
Have you ever tried Instant Messaging?	Yes	Count	75	33	108
		% within Gender	18.8%	8.8%	14.0%
	No	Count	310	306	616
		% within Gender	77.9%	81.8%	79.8%
	Never heard of this service	Count	13	35	48
		% within Gender	3.3%	9.4%	6.2%
Total	Count	398	398	374	
	% within Gender	100.0%	100.0%	100.0%	

Note: Pearson Chi-square = 25.721, Chi-square critical = 4.605170186
 Conclusion: Males tend to have higher usage of the service than females. Females more likely to be unaware of the service.

**Table C-9 Have You Ever Tried an Online Internet Community Service?
* Gender Cross-tabulation**

			Gender		Total
			Male	Female	
Have you ever tried Instant Messaging?	Yes	Count	169	168	337
		% within Gender	42.5%	44.9%	43.7%
	No	Count	217	190	407
		% within Gender	54.5%	50.8%	52.7%
	Never heard of this service	Count	12	16	28
		% within Gender	3.0%	4.3%	3.6%
Total	Count	398	398	374	
	% within Gender	100.0%	100.0%	100.0%	

Note: Pearson Chi-square = 1.621, Chi-square critical = 4.605170186
 Conclusion: No significant difference between genders.

**Table C-10 Have You Ever Tried Peer-to-Peer File Services?
* Gender Cross-tabulation**

			Gender		Total
			Male	Female	
Have you ever tried Instant Messaging?	Yes	Count	200	138	338
		% within Gender	50.3%	36.9%	43.8%
	No	Count	170	170	340
		% within Gender	42.7%	45.5%	44.0%
	Never heard of this service	Count	28	66	94
		% within Gender	7.0%	17.6%	12.2%
Total		Count	398	398	374
		% within Gender	100.0%	100.0%	100.0%

Note: Pearson Chi-square = 26.014, Chi-square critical = 4.605170186
Conclusion: Males tend to have higher usage of the service than females.
Females more likely to be unaware of the service.

**Table C-11 Have You Ever Tried Newsgroups?
* Gender Cross-tabulation**

			Gender		Total
			Male	Female	
Have you ever tried Instant Messaging?	Yes	Count	149	50	199
		% within Gender	37.4%	13.4%	25.8%
	No	Count	238	296	534
		% within Gender	59.8%	79.1%	69.2%
	Never heard of this service	Count	11	28	39
		% within Gender	2.8%	7.5%	5.1%
Total		Count	398	398	374
		% within Gender	100.0%	100.0%	100.0%

Note: Pearson Chi-square = 62.275, Chi-square critical = 4.605170186
Conclusion: Males tend to have higher usage of the service than females.
Females more likely to be unaware of the service.

**Table C-12 Have You Ever Tried Video Chat?
* Gender Cross-tabulation**

			Gender		Total
			Male	Female	
Have you ever tried Instant Messaging?	Yes	Count	107	71	178
		% within Gender	26.9%	19.0%	23.1%
	No	Count	281	282	563
		% within Gender	70.6%	75.4%	72.9%
	Never heard of this service	Count	10	21	31
		% within Gender	2.5%	5.6%	4.0%
Total	Count	398	398	374	
	% within Gender	100.0%	100.0%	100.0%	

Note: Pearson Chi-square = 10.450, Chi-square critical = 4.605170186

Conclusion: Males tend to have higher usage of the service than females. Females more likely to be unaware of the service.

Appendix D: Gender vs. New Product Trials

Cross-Tabulation: Question 11 and Gender

Table D-1 Please Indicate How Likely You Would Be To Try The Service (Online Data Storage/Backup)
 • Gender Cross-tabulation

			Gender		Total
			Male	Female	
Have you ever tried Instant Messaging?	Yes	Count	294	287	581
		% within Gender	75.6%	78.2%	76.9%
	No	Count	95	80	175
		% within Gender	24.4%	21.8%	23.1%
	Never heard of this service	Count	389	367	756
		% within Gender	100.0%	100.0%	100.0%
Total	Count	398	294	287	
	% within Gender	100.0%	75.6%	78.2%	

Note: Pearson Chi-square = 0.730, Chi-square critical = 2.705543971
 Conclusion: No significant difference between genders.

**Table D-2 Please Indicate How Likely You Would Be To Try The Service (Photo Storage and Sharing)
* Gender Cross-tabulation**

			Gender		Total
			Male	Female	
Have you ever tried Instant Messaging?	Yes	Count	297	230	527
		% within Gender	76.3%	62.7%	69.7%
	No	Count	92	137	229
		% within Gender	23.7%	37.3%	30.3%
	Never heard of this service	Count	389	367	756
		% within Gender	100.0%	100.0%	100.0%
Total	Count	398	297	230	
	% within Gender	100.0%	76.3%	62.7%	

Note: Pearson Chi-square = 16.735, Chi-square critical = 2.705543971
Conclusion: Females more likely to have higher interest.

**Table D-3 Please Indicate How Likely You Would Be To Try The Service (Online Music)
* Gender Cross-tabulation**

			Gender		Total
			Male	Female	
Have you ever tried Instant Messaging?	Yes	Count	250	194	444
		% within Gender	64.3%	52.9%	58.7%
	No	Count	139	173	312
		% within Gender	35.7%	47.1%	41.3%
	Never heard of this service	Count	389	367	756
		% within Gender	100.0%	100.0%	100.0%
Total	Count	398	250	194	
	% within Gender	100.0%	64.3%	52.9%	

Note: Pearson Chi-square = 10.137, Chi-square critical = 2.705543971
Conclusion: Females more likely to have higher interest.

Table D-4 Please Indicate How Likely You Would Be To Try The Service (Internet Security)
• Gender Cross-tabulation

			Gender		Total
			Male	Female	
Have you ever tried Instant Messaging?	Yes	Count	208	141	349
		% within Gender	53.5%	38.4%	46.2%
	No	Count	181	226	407
		% within Gender	46.5%	61.6%	53.8%
	Never heard of this service	Count	389	367	756
		% within Gender	100.0%	100.0%	100.0%
Total	Count	398	208	141	
	% within Gender	100.0%	53.5%	38.4%	

Note: Pearson Chi-square = 17.212, Chi-square critical = 2.705543971
 Conclusion: Females more likely to have higher interest.

Table D-5 Please Indicate How Likely You Would Be To Try The Service (High Quality Internet Video)
• Gender Cross-tabulation

			Gender		Total
			Male	Female	
Have you ever tried Instant Messaging?	Yes	Count	284	269	553
		% within Gender	73.0%	73.3%	73.1%
	No	Count	105	98	203
		% within Gender	27.0%	26.7%	26.9%
	Never heard of this service	Count	389	367	756
		% within Gender	100.0%	100.0%	100.0%
Total	Count	398	284	269	
	% within Gender	100.0%	73.0%	73.3%	

Note: Pearson Chi-square = 0.008, Chi-square critical = 2.705543971
 Conclusion: No significant difference between genders.

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