

**A STRATEGIC ANALYSIS OF THE ONLINE INTERNET
ADVERTISING INDUSTRY FOR THE NEW SOFTWARE
START-UP VENTURE, WIRELESSFRIEND.COM**

by

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ABSTRACT

This paper presents a strategic analysis of the online internet advertising industry for the software company Fawkes Technologies. The paper researches the business environment for the company's application WirelessFriend.com, determines its competitive position in the industry and crafts strategies for company growth.

An industry analysis is conducted to determine the key success factors for firms that compete in this industry. The feature coverage and market segments of the leading companies are analyzed and the strategic positions of the current competitors are presented to identify the strategic alternatives. Competitors are compared to explore the opportunities and threats for the WirelessFriend.com service in this operating environment.

Several criteria are established to evaluate the strategic alternatives based on the environment: resource requirements, management preferences and organizational capabilities. An alternative assessment and internal analysis are conducted to choose the strategy for WirelessFriend.com and a recommendation is concluded for Fawkes Technologies.

EXECUTIVE SUMMARY

This paper presents a strategic analysis of the online internet advertising industry for a new software start-up venture, WirelessFriend.com, currently under development by the company Fawkes Technologies. Advertising on the internet is growing along with the number of information service companies that introduce new websites. Fawkes Technologies' WirelessFriend.com service provides a solution in the form of a free question-and-answer application paid for by online internet advertising. WirelessFriend.com utilizes Short Message Service (SMS) technology available on mobile phones to provide an educational question-and-answer service directed toward young adults.

Young adults in the 18-24 age range are the primary users of SMS and use the technology to send 160-character messages to each other. This age segment also typically consists of students who use the internet for research and for socializing. While these young adults use the internet at home, in libraries or while travelling globally, to expend effort to find answers to their ad-hoc questions, they cannot easily contact an expert anytime/anywhere using only their mobile phone. WirelessFriend.com visitors answer questions assisted by companies that provide keyword-sponsored advertising based on searchable questions.

An industry analysis is conducted to determine the key success factors in the online internet advertising industry. The content coverage and market segments of the leading online advertising companies are analyzed and the strategic positions of the current question-and-answer service competitors are presented to identify the strategic alternatives. The competitive advantages of the main competitors are compared to explore the opportunities and threats for the WirelessFriend.com service in this operating environment.

Several criteria are established to evaluate the strategic alternatives based on the environment: management preferences, resource limitations and organizational fit. An alternative assessment and internal analysis are conducted to choose a strategy for WirelessFriend.com. From the analysis, the recommendation for Fawkes Technologies is to position the WirelessFriend.com service as targeting the young adult segment and utilize a revenue model supported by keyword-sponsored advertising. In addition, the company will benefit from adopting a strategy that targets partners with complementary technologies and advertisers who are interested in advertising to the young adult market segment.

DEDICATION

This final project is dedicated to my wife, Heather, and to my children, Victoria and Virginia and to my parents, Norman and Dorie, with my gratitude for their support, tolerance and inspiration throughout my study.

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GLOSSARY

Blog	A personal website that provides updated headlines and news articles of other sites that are of interest to the user, also may include journal entries, commentaries and recommendations compiled by the user; also written web log, Weblog.
Browser	A browser is an application that provides a way to navigate and interact with all the information on the Web. Technically, a Web browser is a client program that uses the Hypertext Transfer Protocol (HTTP) to make requests of Web servers throughout the Internet on behalf of the browser user.
Channel	In sales and marketing, a communication medium to reach customers with a specialized message. For a distribution channel, a way of selling a company's product either directly or via distributors; possible distribution channels are wholesalers or small retailers or retail chains or direct mailers or your own stores.
Click-through or Clickthru Advertisement	The selection of an advertisement or link on a web page which is counted as part of an effectiveness rating for these features; also written clickthrough.
Google PageRank	PageRank also known as PR is one of the methods Google uses to determine the relevance or importance of a Web page. PageRank is a vote, by all the other web pages on the internet, about how important a web page is. A link to a web page counts as a vote of support. If there are no incoming links to a web page then there is no support.
Microbrowser	A microbrowser is an internet or web browser designed for use on a handheld device such as a PDA or mobile phone. Microbrowsers have small file sizes to accommodate the low memory capacity and low-bandwidth of wireless handheld devices. Essentially it is a stripped-down web browser. Sometimes it is referred to as mobile browser, micro-browser, mini-browser or minibrowser.
Question-and-answer Service	A question-and-answer service is usually an internet-based online information service use by one user to ask a question and a different user or system to answer the question. The system answering the question may be a search engine or database.
QWERTY Keyboard	QWERTY is the modern-day layout of letters on most English language computer and typewriter keyboards. It takes its name from the first six letters shown on the keyboard's top row of letters.

Short Message Service (SMS)

Short Message Service: available on digital GSM networks allowing text messages of up to 160 characters to be sent and received via the network operator's message centre to your mobile phone, or from the Internet, using a so-called "SMS gateway" website. If the phone is powered off or out of range, messages are stored in the network and are delivered at the next opportunity.

Textspeak

Textspeak, also known as Netspeak, is a jargon introduced with the emergence of the internet. It typically consists of English words abbreviated to still retain their meaning (e.g. u means you), acronyms of popular terms (e.g. CUL8R mean "See you later").

Text Message

Same as a Short Message Service message.

Website

One or more files (pages) stored on a computer (a "server") that can be accessed via the Internet. Every website has a "home page", which is generally designed as the file visitors first see when coming to the site and which gives an idea of the site's contents. All files on a website usually contain textual or graphical "links" that can be clicked using an input device such as a mouse to move to other files, either within the site or on another one.

1 INTRODUCTION

This paper presents a strategic analysis of the online internet advertising industry for the start-up venture, WirelessFriend.com. WirelessFriend.com is under development by the company Fawkes Technologies and utilizes Short Message Service (SMS) technology available on mobile phones to provide an educational and fun question-and-answer service. The revenue model is based on online internet advertising whereby companies sponsor keywords located in searchable questions. WirelessFriend.com Phase 1 application development began in January 2004 and a working prototype was available May 2004. Phase 2 development is in progress.

1.1 Objective

The objective of this paper is to conduct a strategic analysis of the online internet advertising industry for the new start-up venture, WirelessFriend.com. Since the revenue model for WirelessFriend.com will be based on online internet advertising, an industry analysis will provide the key success factors that must be satisfied to successfully compete in this industry.

The paper aims to examine the content coverage and market segments of the leading online advertising companies to determine where Fawkes Technologies can strategically position its WirelessFriend.com service to gain competitive advantages. As there are already several question-and-answer information service competitors, it will be important for the WirelessFriend.com service to be differentiated enough to both attain a large mobile user base as well as attract online internet advertisers interested in reaching this mobile user base via the website. Note that there are two customer groups differentiated in this paper: mobile users who use the WirelessFriend.com question-and-answer service for free, and; companies that pay

WirelessFriend.com to place their advertising links on the website. WirelessFriend.com brokers the communication between these two customer groups.

The competitive advantages of the main competitors will be compared to explore the opportunities and threats for the WirelessFriend.com service and used to clarify Fawkes Technologies' competitive position in the online internet advertising industry and to craft strategic alternatives for the growth and operation of the company.

1.2 Methodology of Analysis

The online internet advertising industry and the strategic positions of the current question-and-answer information service competitors are analyzed by examining industry market data and custom marketing surveys. Statistical data are collected and examined to demonstrate the trend of online internet advertising growth globally. The sources of internet industry and wireless statistical data include the following research companies: *eMarketer Inc.*, *Jupiter Research Inc.* and *Telephia Wireless Research Inc.*

The WirelessFriend.com service uses SMS technology, also known as mobile text messaging. Statistical data are collected and examined to validate the predicted trend in increased use of text messaging by the target segment of young adults in the 18-24 age range, globally. In addition, a custom marketing survey is used to assess the demand by the target segment for the WirelessFriend.com service. The custom marketing survey is conducted using an internet-based email tool to pose relevant questions to the young adult segment. The survey results are used to gain a better understanding of the character of this particular market and to identify the nature of the market demand for the WirelessFriend.com service.

Online internet advertising is growing rapidly according to an *eMarketer* industry report, as advertisers are paying increasingly more to have website links displayed alongside content

such as information articles and search results. (Yahoo! News, 2005) This rapid change in the industry provides challenges to performing an external analysis of this industry. A comprehensive business model, Porter's Five Forces Model, is used to assist in identifying and relating the broad forces that must be considered in building and testing a strategy for WirelessFriend.com. (Porter, 1980, pp. 3-33)

Porter's Five Forces Model includes the following key forces in its analysis framework: Bargaining Power of Customers, Bargaining Power of Suppliers, Threat of Entry, Threat of Substitute Products/Services, and Rivalry Among Existing Competitors. Bargaining Power of Customers is high if they are concentrated or purchase in large volumes, the products are standard and do not save the buyer money, and the purchased product or service is a fraction of overall costs and does not save the buyer money. Bargaining Power of Suppliers is high if they are concentrated, have a differentiated product or one with high switching costs, do not contend with other substitute products as sources of supply, and are not dependent on the industry. Threat of Entry is typically related to six sources of barriers to entry: economies of scale, product differentiation, capital requirements, cost disadvantages, access to distribution channels and government policy. Threat of Substitute Products/Services are products from outside the industry that can provide a similar package of benefits. Rivalry Among Existing Competitors is affected by all other forces through the number of competitors, and the extent to which the forces direct competition on price, brand, or distribution. For example, the greater the rate of growth, the less there is competitive rivalry. The weaker the forces, the greater the opportunity for superior performance by firms within an industry.

Three criteria have been established to evaluate the strategic alternatives based on the environment: resource requirements, management preferences and organizational capabilities. Resource requirements are the financial, human and operational guidelines affecting the company. Management preferences are what senior managers are trying to achieve by making a

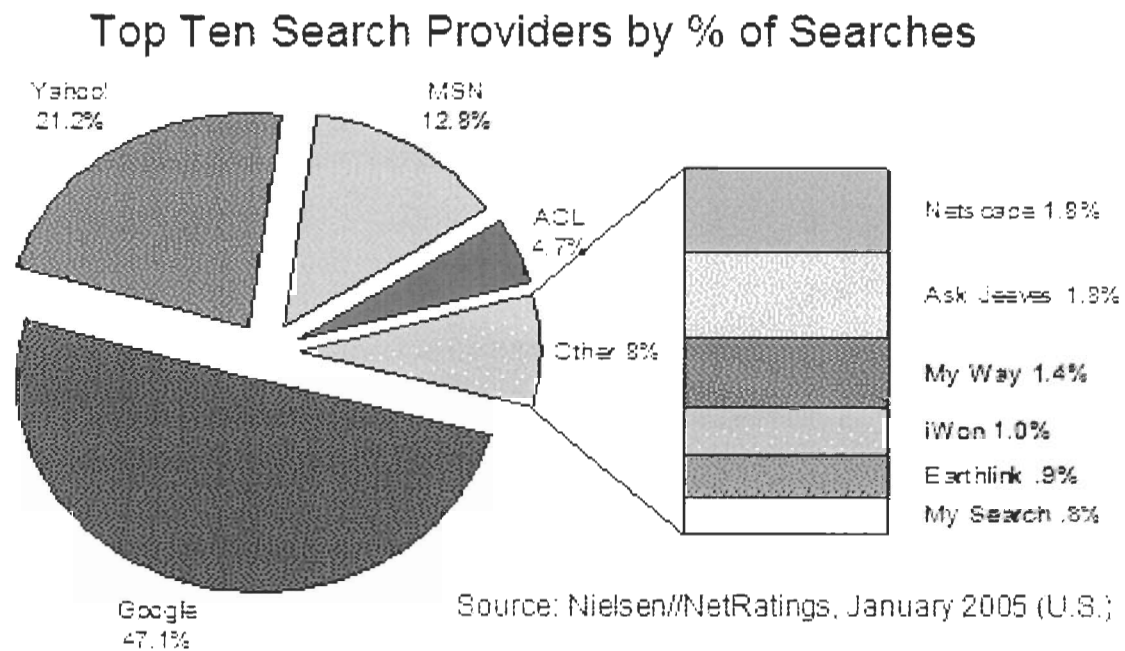
decision based on the criteria, their personal competencies and their values, and their attitudes and goals based on prior experience. Organizational capabilities are the fitness of the strategies within the existing systems, structures and culture of the company. An alternative assessment and internal analysis are conducted to choose the strategy for WirelessFriend.com and a recommendation is made for Fawkes Technologies.

1.3 Online Internet Advertising Industry

Online internet advertising typically involves search engine technology, paid searching and keyword-sponsored links. For example, search engine companies such as Google, Yahoo Search and MSN Search, rely on links heavily to formulate which search results rank at the top of their search result lists. The types of links they rely on the most are the ones that have the most peer links. In other words, the more links that lead to a site from other web pages, the higher that site will be ranked on a search engine.

While a search engine provides a valuable free research tool for users, inevitably the business model driving the search engine is keyword-sponsored advertising. Essentially, when a user types a word, or words into a search engine, the search results are displayed, and alongside these results are unobtrusive links to advertisers who sponsor the results containing the keywords entered by a user. In March 2005, IAC/Interactive Corp. acquired search engine service Ask Jeeves for U.S. \$1.85 billion – industry reports indicate that advertisers are paying increasingly more to have their website links displayed alongside search results; an activity expected to generate \$4.7 billion in 2005, up from \$3.8 billion in 2004. (Yahoo! Finance, 2005) One factor sustaining the growth of paid search comes back to its unique position among advertising: the user's control. Since users can react to or ignore search engine advertisements, at will, that greater control encourages greater responsiveness to relevant advertisements. (eMarketer, 2005) The search market share of the top ten search engine companies is shown in Figure 1.1.

Figure 1.1 Top Ten Search Providers by % of Searches.

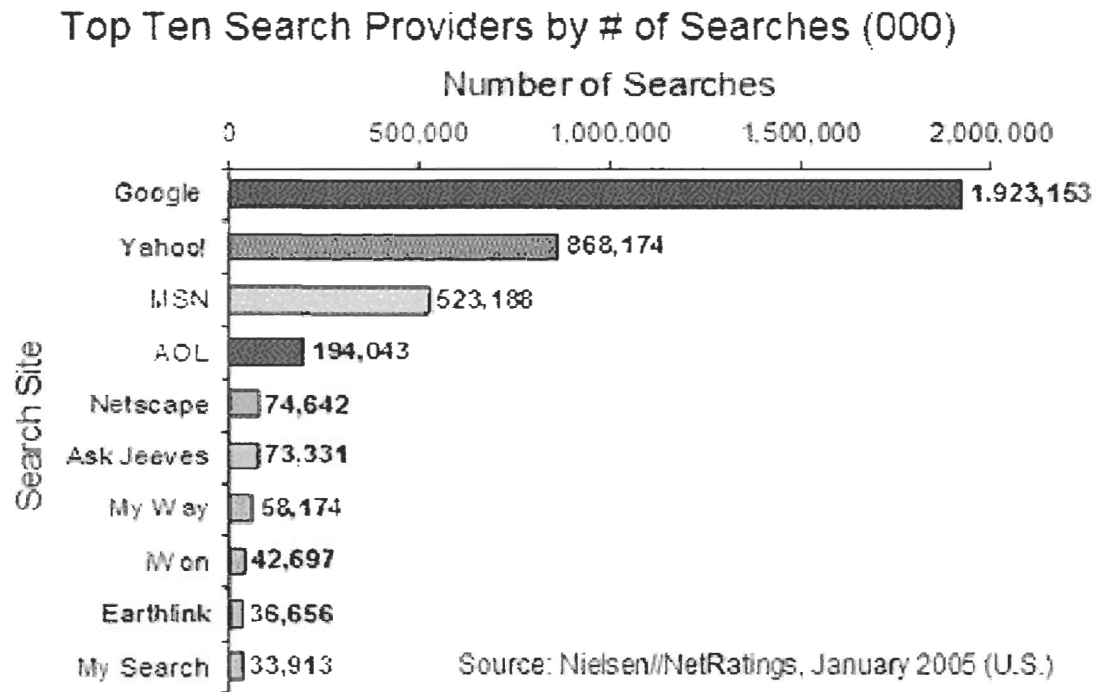


Source: Nielsen/NetRating MegaView Search, January 2005 (U.S.), by permission

Keyword-sponsored advertising is typically charged to advertisers on a cost-per-click (CPC) basis. For example, Google AdWords allows advertisers to configure a maximum CPC dollar amount bid for a search keyword. When multiple advertisers bid for the same keyword, their links are ordered on a search results page with the highest bidding advertiser at the top of the list. Reports are available to each advertiser so they can better position their advertisements by increasing/decreasing how much they want to bid. Advertisers are charged the bid on a per click-through basis – when users click a link to visit the advertiser’s website, the search engine company charges the advertiser. For example, Google charges, on average, 54 cents per click-through and makes a profit of 9 cents per click. The number of searches for the top ten search engine companies is shown in Figure 1.2.

Google, Yahoo Search and MSN Search are non-discriminatory search engines. The search engine service knows nothing about the user who enters the search keywords, and the user

Figure 1.2 Top Ten Search Providers by # of Searches (000).



Source: Nielsen/NetRatings MegaView Search, January 2005 (U.S.), by permission

subsequently remains anonymous after clicking an advertiser link and visiting its website. Age, gender, time zone, repeat-visits and location of the user are unknown to the search engine company and as a result, both pages returned and keyword-sponsored advertisements displayed are generalized for all visitors. One notable exception is the Ask Jeeves Kids search engine service, which is an interesting case in audience segmentation that has not been modelled by other search engine services. Ask Jeeves Kids targets the under-15 age group and provides only results and advertisements relevant to this age.

1.4 Short Message Service: The Enabling Technology for WirelessFriend.com

Short Message Service (SMS) is a globally accepted wireless service that enables the transmission of alphanumeric messages between mobile subscribers and external systems such as email. It is a relatively low cost, easy to use messaging solution for on-the-go connectivity using

a cellular phone's keypad as the text entry method. An SMS message is typically 160 characters in length. Cellular phone networks have supported person-to-person SMS since 1992 and as a result, most mobile phones manufactured after this time support SMS messaging. However, the traditional phone keypad has been difficult to use for entering alpha character messages – curiously, adults 18-24 are also more tolerant of difficult to use technologies and hence this is another driver for the increase in SMS usage in this age group. To ease this limitation, Nokia introduced the 6800 handset in March 2003 (and the 6810, and 6820 in 2004), which has a flip-open QWERTY keyboard to support greater ease of text entry. Mobile phone manufacturers including LG, Samsung and Motorola began offering QWERTY keyboard phones in 2004 targeted at text messaging users.

UK cellular carrier giant Vodafone sees future SMS scope increase. They predict relatively uncharted applications for SMS. One such use could be as the backbone of a robust application-to-person messaging trend and, according to *Jupiter Research* figures, such traffic could grow from about five billion messages per month in 2001 to 22 billion in 2007. At that time, half of all SMS users are expected to have signed up for application-to-person messages. (Instant Messaging Planet, 2002)

SMS messaging or “texting” is a popular form of communication using cellular phones. *Telephia Wireless Research* reported in January 2003 that use of cellular phone SMS by adults 18-24 doubled to 45% from 22% in Q4 2002, and that person-to-person texting increased from 12% to 24% for all SMS users since 2001. The drivers for the increase were determined to be the lower cost per message as well as inter-carrier texting gateways being established. (Cellular Phone News, 2003)

The young adult market, ages 18-24, is the largest market of mobile phone users that use SMS today. Research shows the following usage characteristics: they use SMS because it's far

less expensive than voice calls; they “text” for entertainment and let multiple friends know about changes in their social plans; they are typically more inquisitive than older adults and are more tolerant of difficult to use technologies or see them as a learning challenge; they upgrade their phones to newer, more visually appealing phones.

1.5 The WirelessFriend.com Service

The goal of the WirelessFriend.com service is to provide young adults around the world with a very simple value proposition: people with mobile phones will value on-demand, anytime, anywhere, any-language answers to their questions. WirelessFriend.com will capitalize on this growing need for ad-hoc data, by creating a customer base of people who research questions using answers provided by question keyword-sponsored links.

WirelessFriend.com integrates the mobile messaging strengths of SMS with the ability for online internet advertisers to reach a community of users interested in both asking questions and providing answers to ad-hoc questions via SMS. WirelessFriend.com provides a free wireless application paid for by online internet advertising - visitors answer questions assisted by companies who provide keyword-sponsored advertising based on searchable questions.

Appendix A contains sample screens for the WirelessFriend.com Home Page and Search Page. To use the WirelessFriend.com service, a user types questions on a mobile phone, and types answers to other user’s questions on the WirelessFriend.com website. For example, a user might type the question, “Why is the sky blue?”, and a different user on the website might answer it with, “This is due to Rayleigh Scattering.” A question is addressed to the global email address questions@wirelessfriend.com, and sent using a mobile phone’s SMS-to-email option. By sending via SMS-to-email, worldwide coverage is supported. The WirelessFriend.com server receives email messages, stores a user’s return email address (e.g. 6046719245@pcs.rogers.com), and displays the questions on a web page list. Once a question is answered once, it is removed

from the list. A mobile phone user who is new to the service can begin asking questions today, and receive answers – but only until his or her limited number of “question credits” expires. Once expired, a user is reminded by a text message to visit the WirelessFriend.com website to log on and add more question credits. A user must register a profile with the WirelessFriend.com website to continue using the system. Once registered, the user begins the cycle of answering questions to add question credits and a critical mass of users both asking and answering questions continues to build. The concept of question credits provides the following benefits:

- Any mobile phone user worldwide, who has never used the WirelessFriend.com system, can begin having his/her questions answered by registered users.
- As a new user finds value in the system, he/she will be enticed to register thereby continuing the question & answer cycle. Questions will be answered quickly – within minutes – as a critical mass of users builds.
- Data can be collected on registered users related to system usage, keywords saved, links clicked – and analyzed to both improve the system and analyze usage patterns.

For privacy and spam avoidance, users who ask questions are anonymous to users who answer questions – but are always known to the system. How does a user know they are getting the right answers to their simple questions? – through the use of an “authority rating”. When a user receives an answer to a question on a mobile phone, also displayed is a numeric authority rating of the anonymous sender who answered the question. The higher the authority rating, the greater the confidence a user has in the answer provided being correct. If the user likes the answer he/she takes no action – the WirelessFriend.com system will, after a period of time, assume the answer was satisfactory and increase the sender’s rating – further continuing the cycle of establishing knowledgeable users known by their high authority rating. If a user does not like

the answer, or the sender's authority rating is low, then he/she replies to the SMS message by typing and sending an "N" response. The WirelessFriend.com system then returns the question to the list ready for a different answer, and leaves the original sender's authority rating unchanged. The concept of authority rating provides the following benefits:

- Switching costs for the WirelessFriend.com system become high since users with a high authority rating will be unwilling to switch to a competitor service and lose their rating, thereby giving WirelessFriend.com a sustainable competitive advantage as a first mover.
- As more users attain a high authority rating, there will be a higher probability of correct answers to questions, and the WirelessFriend.com system and brand will gain a reputation as having a community of knowledgeable users.
- Question credits are granted to users who both answer questions and maintain a high authority rating – this feature further motivates users to answer questions correctly to continue using the service.

The WirelessFriend.com usage model is unique. The innovation provided by the concepts of question credits and authority rating provides a compelling value proposition.

1.6 Company Overview

Founded in 2002 in Vancouver, British Columbia, Fawkes Technologies is an early stage software start-up company that is developing a unique information service, WirelessFriend.com. The service utilizes mobile phone text messaging service and website technologies to support an educational and fun question-and-answer information service for young adults, typically students. The WirelessFriend.com service business model is supported by keyword-sponsored advertising, whereby online internet advertisers assist website users with answering questions, by sponsoring

keywords embedded in questions. A user can begin using all features of the service immediately by simply sending a question to the WirelessFriend.com email address - the only requirement is an SMS-capable mobile phone and access to the internet.

The value for WirelessFriend.com users is in the data. When people receive timely answers to their questions, their value expectations will be satisfied. When people gain usage incentives from interacting with the website, their value expectations will be exceeded. A global, multi-lingual user base will further create value in the WirelessFriend.com brand associating the brand with reliable, knowledgeable users.

1.7 Revenue Model

The revenue model for the WirelessFriend.com service is based on keyword-sponsored advertising. A website user becomes a “customer” of a product vendor by clicking question keyword-sponsored links. The website supports the ability for a user to search for questions of interest using favourite keywords. If a user requires a “hint” to answer a difficult question, he/she simply clicks on a sponsor’s link.

The website supports the ability for a user to search for questions of interest using favourite keywords. For example, a user may set up a favourite search for the word “hockey”, and visit the site regularly to contribute their hockey knowledge to questions containing this keyword. A hockey equipment vendor may decide to sponsor this keyword – the system then displays the sponsor’s advertisement link alongside hockey questions. If a user requires a “hint” to answer a difficult question, he/she simply clicks on a sponsor’s link. The concept of keyword sponsored advertising provides the following benefits:

- A user accesses vendor-supplied “hints” to questions, thereby using the system at no-charge. Multiple vendor links are displayed, ordered by highest paid sponsor fee.
- Vendors gain the ability to target market their advertisements to young adult users indirectly interested in their specific products, based on keyword and user profile information, such as location, age and gender.
- Revenue for Fawkes Technologies is expected to grow in relation to the number of users accessing the WirelessFriend.com website worldwide. Vendors are billed only when their links are clicked by users, and are provided with reports to validate clicks.

The WirelessFriend.com revenue model is unique. The innovation provided by the concepts of question credits and authority rating, coupled with the ability for vendors to use keyword sponsored advertising to target customers potentially interested in their products and services, provides a compelling value proposition.

1.8 Current Situation

Fawkes Technologies’ founder and President Geoff Fawkes is the sole employee of the company and manages all business and technical functions in the organization. He is supported by a student software development team from the British Columbia Institute of Technology (BCIT). Mr. Fawkes has over 18 years experience as a research and development software engineer, technical lead, and senior manager at several successful organizations, including Inmarsat, Newbridge Networks (Alcatel), Pivotal Corporation and HSBC Bank. He was responsible for development and leadership for satellite communications, network management, wireless, customer relationship management, and banking security projects at these organizations.

Mr. Fawkes holds a B.Sc. degree (Computer Science, 1987) from the University of British Columbia. He will complete his Executive MBA studies at Simon Fraser University in 2005.

WirelessFriend.com Phase 1 prototype application development began in January 2004 and most features were completed by May, 2004. As the purpose of the prototype application is to assess the market for SMS-based applications, the application will continue to be enhanced over time based on marketing feedback. Phase 1 of the application was developed by a team of four BCIT Computer Systems Technology students (Network Option), led by Geoff Fawkes. The prototype will be presented to investors at technical conferences (e.g. the Vancouver Angel Investor Forum in 2005 and 2006) and the business plan adjusted based on feedback. Phase 2 feature development began in January 2005 with the addition of four new BCIT Computer Systems students. The business plan targets the goal of commercialization of the WirelessFriend.com service and start of generation of advertising revenue in 2006.

1.9 Chapter Summary

This paper consists of five main chapters: an introduction in chapter 1; the industry analysis in chapter 2; a competitive analysis and strategic alternatives in chapter 3; an internal analysis in chapter 4, and; the recommendations in chapter 5.

The introduction in chapter 1 provides an overview of the methodology of analysis, a description of the organization, Fawkes Technologies, a description of the enabling technology Short Message Service (SMS), and a definition of online internet advertising. The WirelessFriend.com service is described and the revenue model and current situation in the company are presented.

The industry analysis in chapter 2 is presented using Porter's Five Forces Model and leads to the identification of Key Success Factors (KSFs) required to be competitive in the online internet advertising industry.

The competitive analysis and strategic alternatives in chapter 3 describe the competitive environment for the online internet advertising industry and formulate strategic alternatives for the WirelessFriend.com service to successfully compete in the industry. A competitive analysis is also provided to compare Fawkes Technologies against key competitors based on the KSFs to determine where the threats and opportunities arise.

The internal analysis in chapter 4 determines whether the internal capabilities of Fawkes Technologies are, or could be made capable to achieve one of the strategic alternatives proposed in chapter 3. The "Diamond E Framework" is used to evaluate the strategic alternatives based on the environment, resource requirements, management preferences and organizational capabilities. (Crossan, Fry & Killing, 2005, pp. 42-54)

The recommendations in chapter 5 evaluate the strategic alternatives in the context of internal capabilities as they exist, or realistically could exist, and a strategy is chosen for WirelessFriend.com and a recommendation is made for Fawkes Technologies.

2 INDUSTRY ANALYSIS

Porter's Five Forces Model is used to assist in identifying and relating the broad forces that must be considered in building and testing a strategy for the WirelessFriend.com information service. From this analysis, the Key Success Factors (KSFs) which are required to be competitive and successful in the online internet advertising industry are identified.

2.1 Industry Analysis Chart

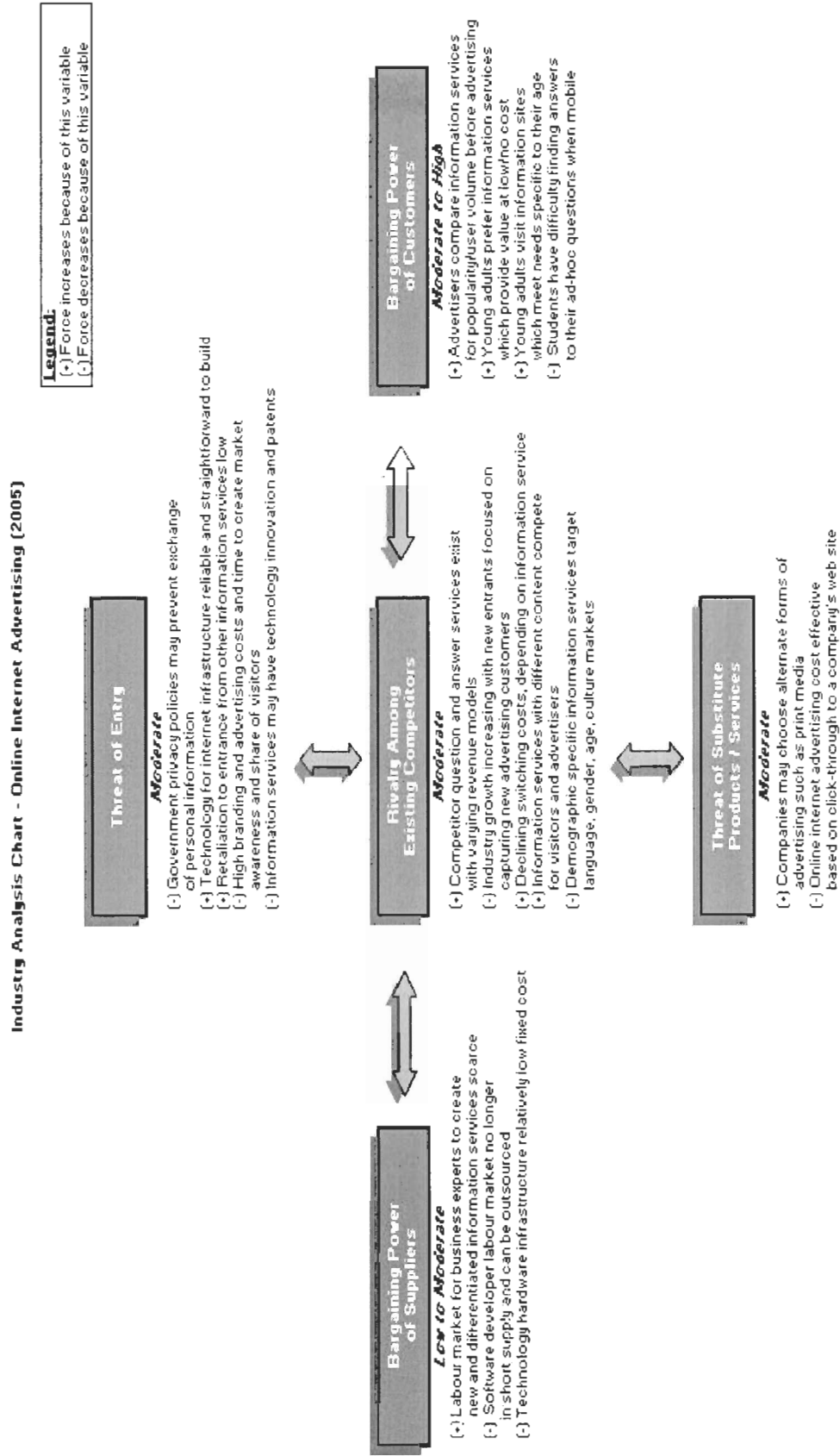
The industry analysis chart in Figure 2.1 defines the industry and the five forces to be analyzed: Bargaining Power of Customers, Bargaining Power of Suppliers, Threat of Entry, Threat of Substitute Products/Services, and Rivalry Among Existing Competitors. For each of the forces, the general characterization is indicated in *italics* as Low, Moderate or High. For each variable contributing to the characterization, the notation (+) is used if the force increases because of this variable, and (-) is used if the force decreases because of this variable.

2.2 Bargaining Power of Customers

In the online internet advertising industry, the demand forces are assessed as moderate to high. The Bargaining Power of Customers force is usually high when the following conditions exist: buyers are more powerful if they are concentrated or purchase in large volumes, the services are standards of the overall costs and not important to the overall quality, and the buyer possesses a credible threat to backward integrate.

Given the ubiquitous nature of the internet, customers can access online information services more readily from any location with an internet connection, and can easily switch

Figure 2.1 Industry Analysis Chart – Online Internet Advertising (2005).



Source: Based on Porter, 1980

between services. The variables which contribute to this characterization indicate a steady increase in the bargaining power of customers due to their ability to easily compare online information services between competitors. Note that online internet advertisement-supported websites have two customer groups: users who visit the websites for their content, and; firms that pay those websites to place their advertising links on the pages containing content.

Table 2.1 contains survey results for data collected from users of the WirelessFriend.com information service. Survey questions are available on the website and pose a number of questions to website visitors related to their background, use of technology and interest in a question-and-answer service. The survey was conducted from May to June, 2005 and was available to registered users. Appendix B contains sample screens for the WirelessFriend.com Results Poll Page and a sample Survey Question Page.

The survey results show the total number of respondents for each question, the number of respondents who answered yes or no to the question, and the percentage of yes responses. The survey results were recorded June, 2005. The following are observed from the survey results:

- 79% of visitors to the WirelessFriend.com information service are 18 to 24 years of age and a 76% are students.
- 69% prefer text messaging over voice calls, 72% believe voice calls are expensive and 86% are avid text messaging users, sending over 10 SMS text messages a day.
- 97% would find the WirelessFriend.com service useful and 83% would contribute their knowledge and expertise to answer questions.

Table 2.1 Industry Analysis – Survey Results.

Surveyed Information	Industry Analysis - Survey Question Respondents	Affirmative Respondents	Results
Visitors who are between the ages of 18 and 24	28	22	79%
Visitors who are students	29	22	76%
Visitors who sent at least 10 text messages per day	28	24	86%
Visitors who prefer text messaging over voice calls	29	20	69%
Visitors who think voice calls are expensive	29	21	72%
Visitors who find it difficult to type text messages on their phone	29	19	66%
Visitors who have a QWERTY keyboard mobile phone	29	7	24%
Visitors who upgraded their phone in the past year	29	16	55%
Visitors who would find a mobile question-and-answer service useful	29	28	97%
Visitors would pay for a mobile question-and-answer service	29	1	3%
Visitors who would click-through on a product or service of interest	26	19	73%
Visitors who would use their expertise to answer questions	30	25	83%
Notes:			
Respondents were visitors to www.wirelessfriend.com website			
Results were collected from May 25, 2005 to June 15, 2005			
Average number of visitors to website per day is approximately 100			

Source: Fawkes Technologies WirelessFriend.com, May 2005, by permission

Further conclusions related to the demand forces from customers are presented in the following sections.

2.2.1 Advertisers Compare Information Services and Pricing Options

Companies that advertise on the internet can easily compare information services for popularity and user volumes before advertising. Data about an information service's brand popularity, website volumes and cost to advertise are readily available and comparable between competitor information services. The majority of websites utilize click-through advertising – an advertiser is charged an advertising fee only when a visitor clicks on its sponsor link. As a result, companies can decide on how much of their advertising budget to spend with a particular website, monitor their advertising efforts over time for results, and, if the advertising is unsuccessful (measured by a low number of click-throughs), they can choose to discontinue their advertising. This variable increases the bargaining power of advertisers since they can move their business from one information site to another, and monitor for successful advertising results.

2.2.2 Young Adults Prefer Free Information Services

Young adults between the ages 18-24 typically have constrained incomes and therefore choose carefully where to spend. For example, the popularity of SMS is driven by young adults' aversion to spend money on mobile phone voice calls between friends – for a fraction of the cost of a voice call, a text message can be sent to a friend to achieve the same communication function or to gather information.

Information service websites must provide age-relevant and up-to-date content to attract young adults. Young adults avoid subscription-based sites that charge fees for access to content since they typically do not have credit cards. They also avoid information services which are provided free, but which require them to sign up on the condition of receiving advertisements sent

via email, or via mobile SMS text messages – they value their privacy and as with all age groups of users will ignore advertisements, or may even view them as offensive SPAM. As Jean-Paul Edwards, head of media futures at Manning Gottlieb OMD, points out: “An SMS campaign may get a 1% response rate, but we don’t know the feelings of the other 99%...mobile messaging has a great deal of potential to harm brands, but this is rarely measured.” (Bashford, 2004, p. 68)

2.2.3 Young Adults Visit Information Services of Interest to Them

As with many age groups, young adults between the ages 18-24 prefer to visit websites that have content relevant to their age interest. Information service sites providing age-specific content must select appropriate advertisers to maximize the probability that click-throughs will occur. Finally, advertising companies must ensure the sites they advertise with cater to the target age they are trying to reach with their products and services. Young adults may still visit information websites which are non-specific to their age, but the online internet advertising may be too generic in its message to interest a click-through to the advertiser. Online advertisers also may avoid all-ages sites in favour of young adult sites since the probability of click-through on an advertisement and the subsequent conversion of that click-through to a sale will be higher on a site with age-specific content.

Young adults are often characterized in the group classified as “leading adopters”. Leading adopters will not buy new services to be the first to own them; rather, they buy services which offer genuine benefits. “They represent the early majority, the people who can tell you where you will get critical mass,” says Tim Wragg, global director of NOP World, a leading marketing firm. In comparison to style leaders (clothing, fashion), leading adopters are intensely social. They act as “market multipliers”, says Wragg. “They let the rest of the public know what’s good and what’s bad.” (Clegg, 2004, p. 47)

When young adults travel or are within their locale, they are typically interested in information appropriate to their surroundings such as locations of stores/businesses in their city or answers to educational questions while at their school. Similarly, if an information service can identify a website visitor's location and age, it can display advertisements which are specifically targeted at that user. A recent trend in search engine-based information services is the emergence of locale-based searches. In many cases, what people want to search for, or want information about is close to home. MSN Search Engine business manager David Graham says: "With up to 20 per cent of online search queries relating to a product or service near a person's home or work, local search represents a relatively untapped opportunity for advertisers to connect with their customers. Price is a compelling factor: the cost-per-lead generated through online internet advertising is 50% lower than other forms of advertising when content is targeted on a local level." (Croft, 2005, p. 41)

2.2.4 Students Require Mobile Access to Information Services

Young adults between the ages 18-24 are frequently students. This age group is also the primary consumer of SMS text messaging service which they use for communicating with friends and peers. This group also uses the internet for school research and for socializing with others either via chat rooms, or via instant messaging software. While these young adults use the internet at home or in libraries to communicate with each other and perform school research, they cannot easily contact an expert anytime/anywhere using only their mobile phone to find answers to their ad-hoc questions, unless they make an expensive voice call. Many existing information research services require computer internet access and provide generic non-age-specific search engine results – they provide answers but not necessarily specific to a student's question. With current information service websites, young adults do not have an effective solution to provide them with ad-hoc answers to their questions while away from a computer.

The variables for the Bargaining Power of Customers force are mostly increasing over time. Therefore, the online internet advertising industry has moderate to high demand forces. These forces are due to: the ability for advertisers to easily compare information services for popularity of brand, high user visits and validation of click-throughs to their company sites, and; the ease with which advertisers can move their business between information sites based on the response rates. Young adults also typically prefer information services which have content that is both free, specific to their age group and can be accessed when they are mobile.

2.3 Bargaining Power of Suppliers

In the online internet advertising industry, the supply forces are assessed as low to moderate. The Bargaining Power of Suppliers force is usually low when the following conditions exist: suppliers are less powerful when they are not concentrated, they do not have differentiated services (or have ones with low switching costs), they contend with other substitute services as a source of supply, they cannot forward integrate, and are dependent on the industry they supply to.

The industry has both labour and infrastructure variables which lower the bargaining power of suppliers. Generally, the costs of both technology labour and infrastructure have been decreasing over time due to the ubiquitous nature of supplier goods and services and the low cost options available to information services companies to hire labour and build web services. One exception is the labour market for business and product feature experts to define new information services – these individuals are in high demand given their skills in identifying changing market conditions and anticipating demand for new features for information services.

2.3.1 Labour Market for Business and Marketing Experts Scarce

The online internet advertising industry requires skilled business people to: identify changing market conditions that create demand for new online information services; define features for new, value-providing information services, and; create the marketing programs to

reach both end users of the services and the companies that want to target those end users with specific advertising. These business experts are highly trained through both education and experience and are in high demand and short supply in the industry. Marketing research is an important function coordinated by skilled business people since it determines whether an online information service will attract both users and advertisers and thereby result in a successful business model.

2.3.2 Technology Labour Market has Lower Cost

The labour market for software development professionals is currently in low demand. There are many options available to an information service company which requires software development staff: hire permanent staff from a large, local supply of software developers; hire contract software developers on a short-term basis, or; outsource all or part of the software development to contract software developers in countries where the labour cost is favourable (e.g. India and China). For all these options, the labour cost is generally low and decreasing over time. In many cases, software systems can be built from low cost or freely available “open source” software components, thereby reducing the time in which a website information service can be completed and brought to market. These software components include website creation tools, searching tools, databases and e-commerce tools for billing advertisers.

2.3.3 Technology Hardware Infrastructure has Lower Cost

Online information services are built using industry standard software and hardware infrastructures. Because of the many software platforms available, the cost of each has been driven down over time and comparable internet tools and licenses are available from different vendors. For example, an information services company can choose between IBM, Microsoft or Sun Microsystems to provide the software licenses required to build its internet services infrastructure and be assured of high quality and comparable functionality between vendors.

Although computer hardware infrastructure is a sunk cost, it can be leased to reduce fixed costs for the information service company. In many cases, both the hardware infrastructure and internet server connections can be outsourced to a third-party hosting company since maintenance is generally not a core competence required by an information service company – an information service company need only focus on designing and building the software for the site.

The variables for the Bargaining Power of Suppliers force are low and increasing slightly over time. Therefore, the online internet advertising industry has low to moderate supply forces. These are due to the scarcity of business experts to define new and differentiated information services, and the low technology costs for both software labour and hardware infrastructure required to design, build and host an information service.

2.4 Threat of Entry

In the online internet advertising industry, the threat-of-entry forces are assessed as moderate. The Threat of Entry force is based on six major sources of barriers to entry: economies of scale, service differentiation, capital requirements, cost disadvantages independent of size, access to distribution channels, and government policy. The rationale behind new entrants as a competitive force relates to the economic model that the greater the number of competitors, the closer the industry is to perfect competition. The fewer the number of competitors, the greater the likelihood of higher profits for a firm. Where there are high economies of scale, incumbents with a differentiated service, incumbents who have location or patent advantages, difficult access to distribution channels, and government policy that limits entry, there will be very high barriers to entry, and hence lower competitive rivalry.

The industry has many incumbent and new entrants, with each competitor deciding the form of entry based on its internal capabilities and the nature of the information service it has to offer. As the threat of entry is neither low (some large advertisement-based information services

have a large visitor base) nor high (small online advertisement-based information services can enter with minimal technology cost/resources), most barriers can be overcome by adopting a moderate strategy for entry.

2.4.1 Government Privacy Policies and Internet User Privacy Concerns

Online information services must be wary of how they use and distribute personal information they collect from visitors to their websites. Website visitors typically guard their personal information such as name, address, phone number, email address and credit card number. Some personal information may not be as closely guarded, such as age, gender or general geographic location. Still, online information services must protect all personal information and ensure its stated use is communicated to the website visitor before collection.

Information services may choose to make some of the information they collect available to their advertising companies. Internet advertisers gain benefits from receiving this information as it allows them to tailor an advertisement to a particular visitor who clicks through a website link, based on their gender or location. In some geographic locations, local government regulations may protect the consumer and prevent customer information from being distributed without a website user's permission.

2.4.2 Technology Infrastructure Construction and Reliability

As the internet is now a mature communication channel for distributing information, and software tools exist to both build and secure applications, information services companies can create and maintain an internet presence in any country with high confidence in the quality and reliability of the infrastructure. Companies that enter the online internet advertising industry can in many cases use off-the-shelf website development components to quickly construct an internet presence and begin generating revenue. The threat of entry is high since even a small start-up

information service can create an internet presence of comparable quality to a large information service quickly, and base the revenue model on online internet advertisements.

2.4.3 Retaliation to Entrance from Other Information Services

As new information services enter the online internet advertising industry they will attempt to enter with a differentiated service, in order to attract both website visitors and companies interested in advertising with them. As there are a very large number of websites worldwide which provide a range of information services, retaliation to entrance will be very low. Information services which generate a small amount of website visitor traffic will not be a competitive threat to large information services, since the online internet advertising market is growing. Where two or more information services have similar offerings they will either attempt to differentiate their services from each other, or increase their brand awareness. The threat of entry will therefore increase since retaliation to entrance will be low.

2.4.4 Brand Awareness and Advertising Costs

An information service needs to educate its customers about both its website's existence and the value of its service. The cost to achieve awareness may be high due to the large number of information websites competing to attract similar visitors. To attract website visitors, an information service needs to promote its site through advertising its brand and the value of the information service it provides to the visitor. For companies it wishes to gain advertising revenue from, it must promote the traffic volumes it generates, and provide evidence that it drives visitors to click-through to advertiser's links. Creating brand awareness is expensive and must be sustained over time by the information service to continue to attract new visitors, and replace ones who do not return.

The chart in Figure 2.2 indicates the reasons North American advertisers use online internet advertising. According to eMarketer, the top reason online internet advertisers use search engine marketing is to increase/enhance their brand awareness.

Figure 2.2 Reasons that North American Advertisers Use Search Engine Marketing.

Reasons that North American Advertisers Use Search Engine Marketing, by Company Size, 2004 (as a % of respondents)			
	<500 employees	500+ employees	Total
To increase/enhance brand awareness of products/services	60%	61%	61%
To sell products, services, or content directly online	62%	52%	58%
To generate leads that we ourselves will close as sales via another channel	49%	61%	54%
To drive traffic to our Web site, the revenue model of which is online advertising	40%	52%	44%
To generate leads for a dealer or distributor network to close as sales	26%	13%	21%
To provide informational/educational content only	13%	16%	14%
Other	2%	0%	1%

Note: n=219 (US=91% and Canada=9%)
Source: Search Engine Marketing Professional Organization (SEMPO), December 2004

062416 ©2005 eMarketer, Inc. www.emarketer.com

Source: eMarketer, December 2004, by permission

Opinion Leader Research Director Graeme Trayner says: “We are seeing a shift in the nature of influence away from institutional sources, such as big business and politicians, and moving towards a society in which we are more affected by the opinions of trusted friends and associates.” (Clegg, 2004, p. 47) The explosion of micro-media – internet chatrooms, blogs and text messaging – means that the power of advocacy is being amplified, as opinionated people now have the means to make their views about a brand or service known, instantaneously, to a vastly enlarged network of worldwide contacts.

While it is possible that visitors may be attracted through viral means (e.g. word-of-mouth), the information service the website provides must still be unique and differentiated from other similar information services. Co-branding partnerships between complementary information websites or with complementary technologies further contributes to reducing the threat of entry.

2.4.5 Technology Innovation and Patents

An information service with a difficult to duplicate method or process in its technology, or a patent on its technology can reduce the threat of entry from other information services. Technology innovations for information services may consist of integration with proprietary or complementary hardware technologies, software features which cannot be easily duplicated, or innovations which have a first mover advantage allowing the website to build visitor acceptance. A patent can be legally enforced by one information service to prevent entry by other information services if there is evidence of similar methods and processes being used.

The variables for the Threat of Entry force are a combination of increasing and decreasing. Therefore, the online internet advertising industry exhibits moderate threat of entry between information services. While the technology infrastructure is reliable and straightforward to build, and retaliation to new entrants is very low, there remains very high branding and advertising costs for an information service to educate customers of its presence and value, as well as patents which create barriers to entry.

2.5 Threat of Substitute Products/Services

In the online internet advertising industry, the substitute services forces are assessed as moderate. The Threat of Substitute Products/Services force consists of products and services outside an industry that can provide a similar package of benefits. Substitute products and services reduce profitability in an industry when they place a ceiling on the price that can be

charged. Often the assessment of threat by substitute products and services is quite dynamic as a variety of forces shape the service features, the cost competitiveness of the substitutes, and the industry structure.

Substitute services consist of advertising offered by companies through alternative mediums to online internet information services, such as radio, television, and printed media. Since the threat of substitutes varies by the choices available to companies, and online internet advertising is growing in usage (companies are spending more), the threat is considered moderate.

2.5.1 Alternative Advertising Media

Companies that advertise have many options for media through which they attempt to reach prospects and turn them into customers of their products and services: radio can be used to reach customers who are geographically local to a service; television provides a visual medium to influence prospective customers to buy a product or service, and; printed media in all its formats provides a hardcopy representation of a product or service.

A recent marketing study by the Audit Bureau of Circulations (June, 2004) found that young adult magazines targeting females lost more than a third of their sales – down from 3.2 million issues in 1997 to 2.1 million issues by the end of 2003. One reason was attributed to young woman's rapidly advancing maturity and sophistication, and preference for magazines in older women's age group. Another reason was attributed to SMS use – time and money previously spent on magazines, was being diverted by young women to text messaging on their mobile phones. Similar to the interactivity of the internet, all young adults find SMS better suited for communicating with others. (Grimshaw, 2004, p. 42)

All these forms of media provide an alternative for online advertising and in many cases can be targeted at a specific audience. For example, a company trying to reach the young adult 18-24 year old group may advertise on a radio station which plays music young adults are interested in, or may advertise in a magazine which young adults read. The primary advantage of radio and television is that an advertiser can reach a large number of potential customers instantly. The primary disadvantage is that the advertising is indiscriminate to age and personal details about the consumer such as gender, age and location remain unknown.

2.5.2 Online Internet Advertising Billing Based on Click-Through Model

The growth in online internet advertising revenue and the increase in the number of information services which use this form of business model are primarily due to the flexibility of the model's click-through billing. When a company advertises on the internet, it is not billed by the information service until a prospective customer clicks its link and passes through to the company's website.

The costs for alternate forms of advertising such as radio, television or print media are much higher than with online internet advertising – with click-through pricing, companies are charged only for visitors who click-through to their website links. But with other forms of media, advertising must be paid in advance, and the company does not know exactly how many potential buyers are reached or influenced to buy the company's product or service. According to a recent study by research company Piper Jaffray & Co., the cost to acquire a customer is U.S. \$8.50 for online internet advertising through a search engine, \$20 for Yellow Pages, \$50 for online display banner ads, \$60 for email and \$70 for direct mail. (Yahoo! News, 2005)

The variables for the Threat of Substitute Products/Services force are a combination of increasing and decreasing. Therefore, the online internet advertising industry exhibits moderate threat of substitute services. There are several alternative advertising mediums including radio,

television and printed media, but unlike online internet advertising, they do not capture which potential buyers are turned into customers, and do not allow a company to control its advertising expenditure to the same granularity as can be done with the online click-through advertising model.

2.6 Rivalry Among Existing Competitors

In the online internet advertising industry, the competitive forces are assessed as moderate. The Rivalry Among Existing Competitors force is affected by the other forces, but also has its own dynamic. Competitive rivalry is affected by the other forces through the number of competitors and by price, brand and distribution channels. The greater the rate of growth in an industry, the less there is competitive rivalry between firms.

There are many variables which contribute to a climate of rivalry between both incumbents and new entrants providing online information services. Most importantly, it is the content of an information service (e.g. web search engine, question-and-answer service, news portal, auction website, photograph sharing service) which drives both users to a popular website, and motivates companies to consider advertising with a high traffic website.

2.6.1 Competitive Information Services with Different Revenue Models

Information services vary in both the content type, value provided and advertising model they utilize. Generally, the content types consist of web search engines, question-and-answer services, news portals, auction sites and photograph-sharing websites. Most sites use online internet advertising whereby companies place advertising links on the websites – generally the information service is provided free to the website user with the website generating revenue from advertisement click-throughs (auction sites typically generate revenue through buying/selling transaction fees). For competitors who have question-and-answer information services, the business models are either pay-per-question, opt-in advertising sent in the form of an email or

mobile phone text message, or graphical banner ads to an advertiser's sites. Given the range of different information services available to website visitors, and the variation in advertising revenue (and pricing) models supported by each, this variable contributes to high competitive rivalry between information services.

2.6.2 Online Internet Search Result Advertising Revenue Growing

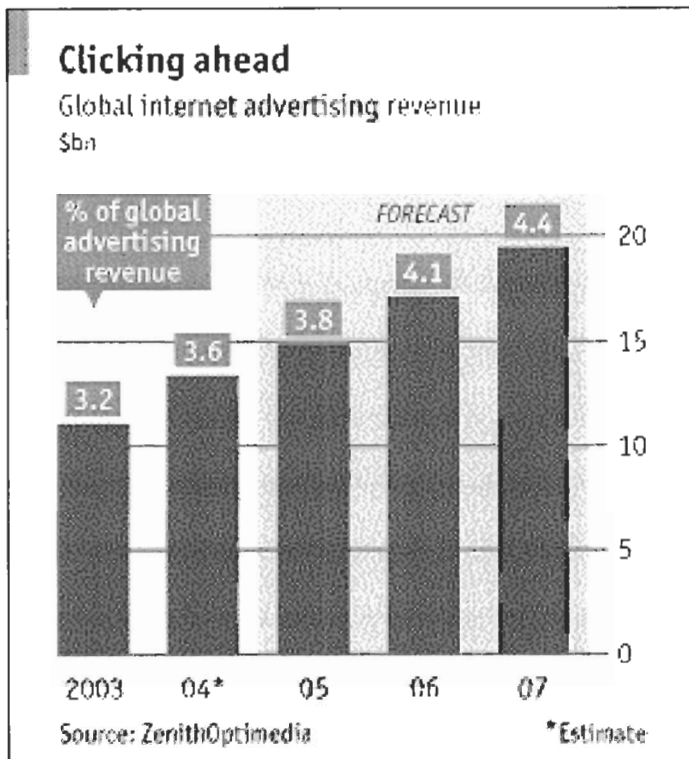
The revenue for online internet advertising based on search results is expected to grow from U.S. \$3.8 billion in 2004 to \$4.7 billion in 2005. (Yahoo! Finance, 2005) This growth is based on companies increasing the allocation of advertising budgets toward internet-based advertising away from more traditional advertising mediums such as printed media. As this rate of growth increases, competitive rivalry decreases. Online information services which provide search results must focus on marketing their brand and value of the information service they provide to more users to ensure that their advertisers receive a steady stream of traffic as click-throughs to their websites. According to Merrill Lynch Equity Research, the share of online internet advertising to other forms of media is low, but is growing rapidly. For example, of the U.S. \$260 billion in total U.S. advertising spent in 2004, less than \$10 billion, or 4% is online, with an expected annual growth rate of 13%.

From the chart in Figure 2.3, worldwide advertisement revenue on the internet grew by 21% in 2004, and it is expected to continue at that pace for the next few years, says research firm ZenithOptimedia. (Yahoo! Finance, 2005)

2.6.3 Switching Costs Declining for Some Information Services

Many information services provide similar or equivalent content to website visitors. For example, different news portal services provide the identical news stories and as a result the cost for a website visitor to switch between services is low. There are few competitive differentiators

Figure 2.3 Global Internet Advertising Revenue.



Source: ZenithOptimedia, April 2004, by permission

between news portals and, as a result, these portals must promote and advertise their brand to drive website visits. In the case of web search engines, the search engine company must ensure it provides value in the form of accurate searches – this alone will not drive website visitors to a search engine’s site; the search engine company must still build awareness of its brand name. For most information services, companies that advertise online typically only need to monitor which websites attract the most visitor traffic and focus their advertising budgets toward these sites. In the case of auction sites or websites where users build a high reputation for either honesty (seller and buyer) or expertise (question-and-answer) the switching costs can be high since users must abandon their high reputation/expertise rating if they want to move to a similar website’s service.

2.6.4 Information Services Compete for Two Customer Groups

There are two customer groups differentiated in the online internet advertising industry: internet users who visit information service websites, and; companies that pay information service websites when their advertising links on the website are clicked-through to the advertiser's website. The information service must market its service differently to each of these groups. For internet users, the information service must provide value in the form of information (news), transactional services (auction), search services or email/database services. Regardless of the type of service, it must be high quality, reliable and have a recognizable brand to differentiate it from similar services. To attract companies to advertise, the information service must demonstrate a high traffic volume of visitors. Information service competitors in the online internet advertising industry must focus on providing a valuable service first – companies wishing to advertise will be attracted once high traffic volumes to the site has been demonstrated.

2.6.5 Demographic Specific Information Services: Language, Gender, Culture and Age

Information services can choose to target specific demographic groups by providing content of interest to them. For example, young adults between the ages of 18-24 typically use SMS text messaging on their mobile phones, travel worldwide for pleasure/work, are full-time students and socialize with friends with similar interests. Companies with products and services marketed at this group will seek online information services which cater to a high volume of young adults who potentially will click-through and buy their products/services. If the information service can provide more tailored demographic information such as age, gender, cultural background and location, an internet advertiser can further tailor an advertisement to meet specific product and service needs, and thereby increase the probability of converting a click-through visitor to a customer. As there are few information services which provide tailored demographics to meet online internet advertiser's needs, there is low rivalry for this variable.

The variables for the Rivalry Among Existing Competitors force are a combination of increasing and decreasing. Therefore, the online internet advertising industry exhibits moderate rivalry between different information services which utilize the online internet advertising revenue model. There are many different information services available, each competing for two customers: those users that visit an information services website, and those companies whose advertisements are shown on the information service's website. As the rate of growth for online internet advertising increases, the competitive rivalry between information services decreases – there is more advertising budget being diverted by companies from their traditional advertising mediums toward online internet advertising.

2.7 Assessment of Attractiveness of Industry

Porter's Five Forces Model views industries with low buyer power, low supplier power, low threat of entry, low threat of substitute products/services and low competitive rivalry as "five star" industries with a high level of expected profitability for firms which compete in these industries.

The online internet advertising industry is a moderately attractive industry overall, based on the characterization of the forces. The demand force is moderate to high, since companies who advertise online can readily compare information services for popularity of brand, high user visits and validation of click-throughs to their company's website. The supply force is low to moderate, since the industry has both labour and infrastructure variables which lower the bargaining power of suppliers. The costs of both technology labour and infrastructure have been decreasing over time; however, the availability of business experts to define new information services is scarce.

The Threat of Entry force is moderate – while technology infrastructures are mature and retaliation to new entrants is very low, there are very high branding and advertising costs for an

information service to gain customers. The Threat of Substitute Products/Services force is moderate – while there are many alternative forms of advertising mediums, they do not provide the ability for a company to control its advertising expenditure on a per customer basis or to capture exactly which potential buyers are turned into paying customers. The rivalry force is moderate given that the rate of growth for online internet advertising is increasing, and as a result the competitive rivalry is decreasing.

The online internet advertising industry is most attractive for information services which can retain business experts to create new and differentiated information services customers demand. In addition, if the information service can leverage the plentiful technology labour market and low hardware infrastructure costs, the company can expect higher profits. The industry is least attractive for information services which do not have a unique and differentiated service offering and who do not target a specific demographic. If an information service can create a popular brand, have high user visits and provide its service to a specific demographic at no cost, then it will attract advertisers – these advertisers will consequently contribute to higher profitability.

2.8 Key Success Factors

Based on the industry analysis of the business environment, to achieve a leading market position as an information service provider in the online internet advertising industry, the following key success factors are critical to being competitive and successful in the industry.

2.8.1 Leverage R&D to Create Unique Content Valuable to a Specific Market Segment

An information service company must utilize its core competencies in R&D to create a unique and compelling offering which provides high value content and is targeted at a specific demographic, for example, young adults. By targeting young adults in the 18-24 age range,

content can be provided which is relevant to their interests and will encourage a high number of website visitors. As a result, companies who are interested in reaching this target market segment will be encouraged to provide advertising and will benefit from click-throughs to their company websites. Content must be differentiated from competitors through the unique features provided on the website, or its integration with other technologies popular in the same market segment. For example, young adults are avid users of SMS on their mobile phones and are also students; therefore, an information service should leverage their need for research information and also integrate with these technologies when providing the information. Business experts who can create the unique services which meet the needs of the target market must be hired by the company.

2.8.2 Establish Intellectual Property as Barriers to Entry

An information service company must utilize its core competencies in R&D to create innovations with patent potential or trade secrets to reduce the threat of entry from competitors. For example, with a question-and-answer service, website visitors could search for questions of interest based on keywords – advertisers could sponsor these keywords, display them on the website and encourage website visitors to click-through for assistance with answering their questions. This is an example of a method and process which could be patented for the information service. As competitors may simply copy those features and ideas which cannot be patented, the company must continually innovate with new software releases to retain its advantages over competitors. An information service should also attempt to create high switching costs for a website visitor. For auction websites, this is achieved through the use of a high reputation value each buyer/seller builds. For question-and-answer services, this is achieved by users establishing themselves as experts by building a high authority rating.

2.8.3 Establish Brand as the Leading Information Service in its Market

An information service company must utilize its core competencies in marketing to establish its brand as the leading information service in its market. To attract both users interested in the content which it provides and companies who advertise and wish to target these users, an online information service must brand itself as the leader in the specific industry it chooses to compete in. For example, to be the leading question-and-answer information service, a company may choose to market itself to young adults who are students and create brand awareness of its service at various schools. In this example, the question-and-answer information service's branding strategy is to target the young adult group in locations where they are accessible - in the educational environment – and provide them with a service whereby students can research ad-hoc questions and get reliable answers. Essentially, the company must be a market-driven company, in addition to being a service-driven company, to ensure that users of the service associate the company's brand with the value provided by its service.

2.8.4 Acquire Financial Resources for Product Development and Marketing

An information service company must possess the financial resources through investment and sales to grow and expand. Investment capital is used to hire staff, build the website information service, market the service and build the brand in the online internet advertising industry. An information service company must utilize its core competencies in sales to assist in generating revenue from customers who click-through to advertisers. Revenue must be generated by the information service as early as possible to communicate the value of its service to investors. A large base of users must be attracted to the site, and retained as repeat visitors. As visitors to the website confirm the value of the information service, and associate that value with companies who advertise on the site, visitors will click-through on advertiser links thereby generating revenues for the online information service.

3 COMPETITIVE ANALYSIS AND STRATEGIC ALTERNATIVES

A competitive analysis describes the competitive environment for the online internet advertising industry and formulates strategic alternatives for Fawkes Technologies' online information service, WirelessFriend.com, to successfully compete in the industry. The competitive analysis compares Fawkes Technologies against key competitors based on the Key Success Factors (KSFs) to determine where the opportunities and threats are. The strategic alternatives are proposed for how to compete in the environment.

3.1 Competitors

The primary competitors in the online internet advertising industry were identified using several information sources. First, an internet search was done using both Google and Yahoo! search engines for the phrases "online internet advertising", "SMS", and "question and answer". Over 25 companies were found which closely met the search criteria. Next, Google and Yahoo! search engines were used to search each company name along with the keyword "competitors". The top 12 companies were cross-referenced with each other to ensure they compete in the online internet advertising industry, and utilize similar technologies and provide similar features and content.

Finally, each of the 12 companies was verified against the following additional research sources to ensure each was an operating business in 2005: Jupiter Research Marketing (www.jupiterdirect.com); 160Characters SMS and Mobile Messaging Association (www.160characters.org), and; textually.org SMS messaging blog (www.textually.org). These

research sources provide marketing data or news about SMS technology and the online internet advertising industry.

Each of these 12 information service competitors is listed in Table 3.1, along with the WirelessFriend.com information service.

Table 3.1 Competitive Environment – Competitors.

Competitive Environment - Competitors			
Competitor	Web Site	Stage	Customer Locations
Google Answers	answers.google.com	Production	Worldwide
Google SMS	sms.google.com	Beta	US only
Yahoo! Mobile	mobile.yahoo.com	Production	Worldwide
SMS.ac	www.sms.ac	Production	Worldwide
Mojoknows	www.mojoknows.com	Production	Australia and Germany
Linguit MyNuggets	www.mynuggets.net	Beta	UK and Germany
IssueBits AQA	www.issuebits.com	Production	UK only
Kasamba	www.kasambqa.com	Production	Worldwide
AllExperts	www.allexperts.com	Production	Worldwide
4INFO Mobile	www.4info.net	Beta	US only
Ask Jeeves Mobile	www.askjeeves.com	Development	US only
Kwickee	www.kwickee.com	Production	UK only
Fawkes Technologies	www.wirelessfriend.com	Development	Worldwide

Each competitor supports a website which provides both their features/content and, optionally, online internet advertisements. For some competitors, advertising is done through mobile phone advertisements. For others, there is minimal to no advertising and instead, a pay-per-question revenue model is used.

Competitor information services are noted in the following stages of operation: Production (mature website, generating revenue); Beta (operational website, some revenues), or; Development (early website under development, low to no revenues). As indicated, competitors conduct business either on a worldwide scale, or only in certain countries.

3.1.1 Features and Content

An online information service must create a unique and compelling offering which provides high value content to attract and retain visitors. Content must be differentiated from competitors through the unique features provided on the website, or its integration with other technologies popular in a particular market segment.

Table 3.2 lists feature and content categories for each of the 12 information service competitors, including the WirelessFriend.com information service. The first three categories are features that define the advertising, revenue and mobile answer capabilities of each competitor. These were chosen as they potentially create rivalry among existing competitors. The remaining four categories are characteristics of a question-and-answer service's content. These were chosen as they are important differentiators for a question-and-answer information service, and describe the key success factor for creating unique and differentiated content.

The Website Advertising category is a feature that defines if the website displays browser advertisements. A small number of competitor websites display browser advertisements, with a number undecided (these are in Beta Stage – advertising method To Be Determined). Browser advertisements are most effective when they are targeted at a customer based on content displayed - search engines typically use this when displaying search results. A number of competitors do not advertise on their websites since advertising does not fit with their revenue model.

The Revenue Model category is a feature that defines how the website generates income. Competitors adopt either a pay-per-question model whereby users pay from U.S. \$1 to \$100s of dollars for an answer to a question or adopt an online advertising model whereby advertisers pay an information service company based on user click-throughs to their advertisements. A number

Table 3.2 Competitive Environment – Features and Content.

Competitor	Competitive Environment - Features and Content				Command or Free Format	Answer Source	Languages Supported
	Web Site Advertising	Revenue Model	Mobile Answers	Question and Answer Service			
Google Answers	Browser Ads	Users Pay-per-question, Browser Advertisements	No	Yes - Browser	Free Format	Company Employee	English
Google SMS	TBD	Free for Users, TBD Advertising	Yes - SMS	Yes	Command	Search Engine	English
Yahoo! Mobile	Microbrowser Ads	Free for Users, Browser Advertisements	Yes - Microbrowser	Yes	Free Format	Search Engine	English
SMS.ac	Mobile SMS Ads	Free for Users, SMS Advertisements	No	No	N/A	N/A	English/Chinese
Mojknows	No	Users Pay-per-question	Yes - SMS	Yes	Free Format	Company Employee	English/German
Linguit MjNuggets	TBD	Free for Users, TBD Advertising	Yes - SMS	Yes	Free Format	Search Engine	English/German
IssueBixs AQA	No	Users Pay-per-question	Yes - SMS	Yes	Free Format	Company Employee	English
Kasamba	No	Users Pay-per-question	No	Yes - Browser	Free Format	Company Employee	English
AlIExperts	Browser Ads	Free for Users, Browser Advertisements	No	Yes - Browser	Free Format	Other Users	English
4INFO Mobile	No	Free for Users, SMS Advertisements	Yes - SMS	Yes	Command	Search Engine	English
Ask Jeeves Mobile	TBD	TBD	Yes - SMS	Yes	Free Format	Search Engine	English
Kwickee	No	Users Pay-per-question	Yes - Microbrowser	Yes	Free Format	Company Employee	English
Opportunities and Threats	O	T				O	
WirelessFriend	Targeted Browser Ads	Free for users, Advertiser Browser Ads	Yes - SMS	Yes	Free Format	Other Users	English

Legend:

O: Opportunity. An opportunity for WirelessFriend.com

T: Threat. A threat to WirelessFriend.com

TBD: To Be Determined

of competitors employ both revenue models, while others are free for users (these are in Beta Stage – revenue model To Be Determined).

The Mobile Answers category defines if the website uses SMS to deliver answers to questions via a mobile phone. Most competitors use SMS however a small number support a computer's browser to deliver answers. Two competitors support delivering an answer to a microbrowser installed on a mobile phone. This technology, while effective, typically is expensive since a large amount of data is sent to the phone and charged to the mobile user.

Most of the competitors support a question-and-answer service, although some only support asking questions and providing answers through a browser, instead of using SMS text messaging technology. Almost all competitors support sending free format questions to the information service, although one requires the use of difficult-to-remember commands to format a question before it is asked. Finally, all competitors support English language websites – a few support a second language, including one that supports Chinese language for its customers.

The Answer Source category defines the origin of the answer content. The source of answers was evenly distributed with some information services relying on live experts/researchers to provide answers, while others relied on their proprietary search engine. While the search engine source provides the benefit that answers to questions can be provided immediately, their correctness is questionable. The live expert/researcher may take longer to answer a question, but can provide greater accuracy when interpreting and answering questions containing misspelled words.

Table 3.2 lists several opportunities and threats for a number of the feature and content categories (O and T as indicated in legend). Most information service competitors are strong in satisfying the content characteristics of providing a question-and-answer service using mobile

SMS. In addition, most services allowed free format questions to be asked in English. It remains unclear whether the pay-per-question or the online advertising model will be chosen and preferred by customers (end users of the service). The WirelessFriend.com information service is planning on adopting the online advertising model but needs to monitor adoption of the pay-per-question model as a potential threat.

Most information service competitors are weak in providing website advertising targeted to specific users. Competitors that use a pay-per-question revenue model have no need for website advertisements – however, they must convince customers of the value of paying for each answer. Those that have website advertisements do not target their advertisements based on searchable words of interest in the questions being asked – as a result, they cannot target the interests of a specific market segment. An opportunity exists for the WirelessFriend.com service to provide targeted browser advertisements, which assist users with answering questions. In addition, WirelessFriend.com has an opportunity to provide answers to questions provided by other users – with its unique authority rating system, answers with a high probability of correctness can be provided via SMS to mobile users for free.

3.1.2 Market Segment

An online information service must provide content targeted at a specific demographic based on age, gender, location or culture, to stimulate visitor's interests and encourage repeat visits to the website. In addition, companies that are interested in reaching a target market for their products and services will benefit from advertising on these websites.

Table 3.3 lists market segment categories for each of the 12 information service competitors, including the WirelessFriend.com information service. The first four categories are the age ranges targeted by each competitor. The last two are gender (male and female) and

Table 3.3 Competitive Environment – Market Segment.

Competitor	Competitive Environment - Market Segment					Gender	Location
	All Ages	Child/Teen (<18)	Young Adults (18-24)	Adults (>24)			
Google Answers	M	L	L	H	L	L	H
Google SMS	M	L	M	M	L	L	H
Yahoo! Mobile	M	L	M	H	M	M	H
SMS.ac	L	M	H	L	M	M	H
MojoKnows	M	L	L	H	L	L	L
Linguit MyNuggets	M	L	L	H	L	L	L
IssueBits AQA	M	L	L	H	L	L	L
Kasamba	M	L	L	H	L	L	L
AllExperts	M	L	L	H	L	L	H
4INFO Mobile	M	L	L	H	L	L	H
Ask Jeeves Mobile	M	L	L	H	L	L	L
Kwickee	M	L	L	H	L	L	L
Opportunities and Threats	T		O	T	O	O	O
WirelessFriend	L	M	H	L	H	H	H
Legend:							
H: High. The competitor is strong at targeting information services to market segment							
M: Medium. The competitor is average at targeting information services to market segment							
L: Low. The competitor does not target information services specifically to market segment							
O: Opportunity. An opportunity for WirelessFriend.com							
T: Threat. A threat to WirelessFriend.com							

location (geographic). The table contains ratings of H (High), M (Medium) or L (Low) representing how well each competitor targets the market category.

For the All Ages and Adults categories, all competitors target these categories as their general advertisements can reach the maximum number of undifferentiated visitors to a website. Only SMS.ac and WirelessFriend.com do not specifically focus on all ages and older adults, instead preferring to target the young adult age range.

For the Child/Teen category, most competitors ignore this category. The reason is few children/teenagers (and their parents) have the financial means to buy mobile phones and pay-per-question services, or buy products and services over the internet. While children/teenagers can be targeted via online internet advertising, none of the competitors in the table support the ability to target their advertising specifically at children/teenagers.

For the Young Adult category, most competitors ignore this category. As with the Child/Teen category, few young adults 18-24 have the financial means or will pay for a question-and-answer service. While many young adults are also students and have a need for a question-and-answer service for research purposes and entertainment, competitors have chosen to target their advertisements at ages outside of this group to reach a wider audience. Only SMS.ac and WirelessFriend.com target the Young Adult category, however SMS.ac does not specifically provide a question-and-answer service using SMS.

For the gender category, most competitors do not differentiate the content of their websites between male and female visitors and instead, provide gender-neutral advertising. For the location category, most competitors do not track the geographic location of their website visitors and thus do not target their advertisements by country.

Table 3.3 lists several opportunities and threats for a number of the market segment categories (O and T as indicated in legend). Most of the information service competitors target All Ages and Adults categories. Since the WirelessFriend.com information service does not target the Adult segment it should not be concerned with market share for this group. However, WirelessFriend.com must monitor which age groups are distributed across which competitors, as these could become potential threats.

Most of the information services do not target young adults. As a result, this segment provides an opportunity for WirelessFriend.com since it can provide its question-and-answer service free, to a target group with a high number of students who prefer to use SMS text messaging technology to do research. In addition, WirelessFriend.com also provides the ability to identify the gender and location of its users – this provides an opportunity, since this information is of value to online internet advertisers who need to customize their advertisements based on gender and location.

3.2 Strategic Position

The strategic position of an online information service defines where a company can compete successfully in a given competitive environment. By graphing the companies across the most desirable features and market segments, three strategic alternatives for the position of the WirelessFriend.com information service are identified: Strategic Alternative A - SMS or browser advertisements targeted at Adults; Strategic Alternative B - users pay-per-question targeted at Young Adults, and; Strategic Alternative C - targeted browser advertisements targeted at Young Adults. Based on the competitive analysis, Fawkes Technologies favours Strategic Alternative C as providing the optimum position for competing in the environment.

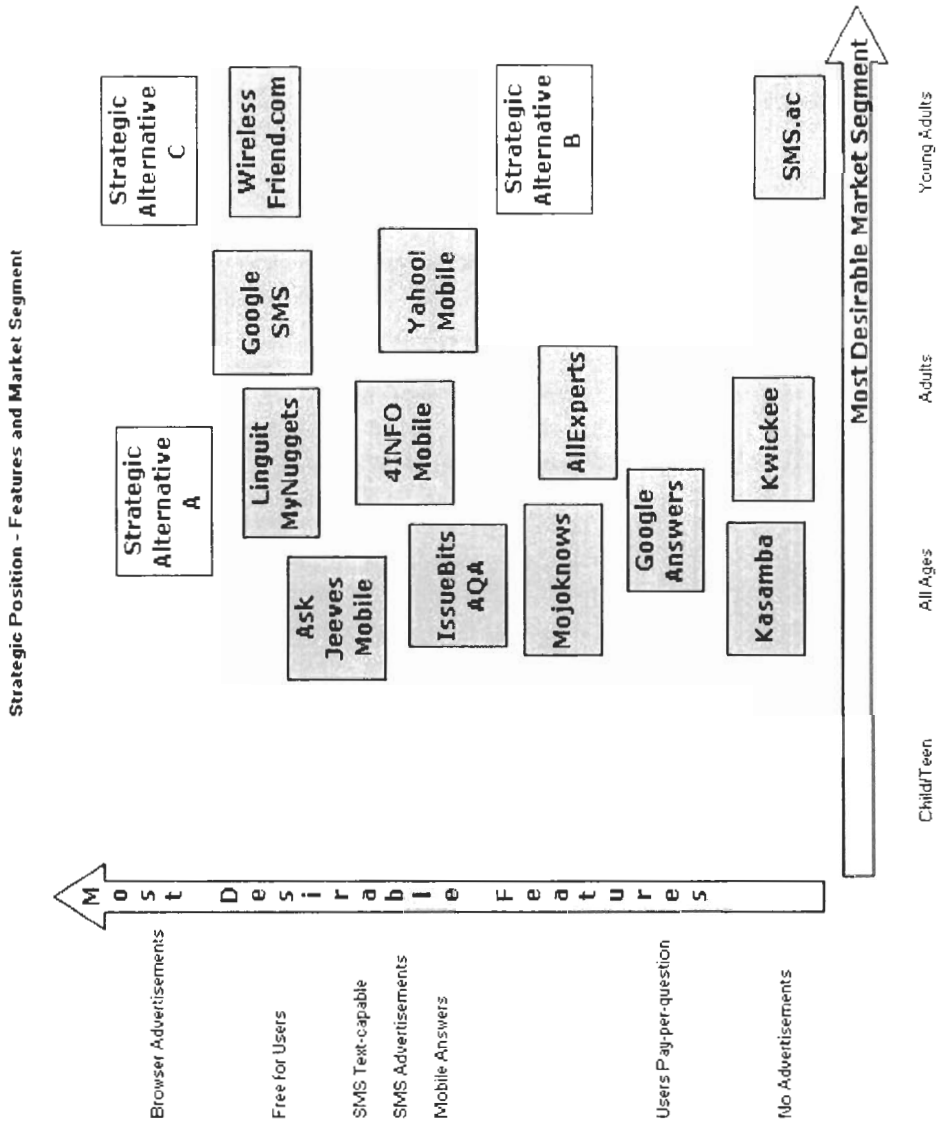
The chart in Figure 3.1 compares Features and Market Segment. For the most desirable features the following are listed ordered from least to most desirable: No Advertisements, Users

Pay-per-question, Mobile Answers, SMS Advertisements, SMS Text-capable, Free for Users and Browser Advertisements. This ordering was chosen based on the opportunities available to WirelessFriend.com as identified in the Features and Content table. For the most desirable market segments the following are listed ordered from least to most desirable: Child/Teen, All Ages, Adults and Young Adults. This ordering was chosen based on the opportunities available to WirelessFriend.com as identified in the Market Segment table.

The 12 information service competitors are distributed in the chart as follows:

- Kasamba, Kwickee, Google Answers and SMS.ac compete at the low end of the range of desirable features, and most target All Ages/Adults. All employ a Users Pay-per-question revenue model and minimal to no website advertising. SMS.ac does not support mobile SMS but does target young adults.
- Mojoknows, AllExperts, IssueBits AQA, 4INFO Mobile and Yahoo! Mobile compete at the middle range of desirable features, and most target All Ages/Adults. Most use SMS and some employ the Users Pay-per-question revenue model. A Strategic Alternative B exists whereby the Young Adult market segment is not being served in this range.
- Ask Jeeves Mobile, MyNuggets and Google SMS compete at the high range of desirable features, and target All Ages/Adults. All use SMS and there is strong indication all will eventually support some form of SMS or browser advertising. As a result, a Strategic Alternative A exists whereby these companies have not committed completely to a revenue model for advertising. There is also a Strategic Alternative C whereby the Young Adult market segment is not being served in this range.

Figure 3.1 Strategic Position – Features and Market Segment.



3.2.1 Fawkes Technologies WirelessFriend.com Position

WirelessFriend.com competes at the middle-high range of desirable features, and targets Young Adults. While browser advertisements are not used today, the intent in the future is to employ advertisements which give companies the ability to target users based on age, gender, cultural background and location. WirelessFriend.com will remain free for end users of the information service. Based on the competitive analysis and the markets currently not addressed by other competitors, Fawkes Technologies could position WirelessFriend.com at Strategic Alternative A (SMS or browser advertisements targeted at Adults), Strategic Alternative B (users pay-per-question targeted at Young Adults) or Strategic Alternative C (targeted browser advertisements targeted at Young Adults).

3.2.2 Main Competitors

For Strategic Alternative A, the closest competitor is MyNuggets, and for Strategic Alternative B, the closest competitor is Yahoo! Mobile. For Strategic Alternative C, both these competitors, along with Google SMS and 4INFO Mobile, are the closest competitors. While Ask Jeeves is close to A, it is still in development, and not enough is known about its revenue model or if it will advertise. While All Experts is close to B, it is not designed to support SMS text messaging for mobile answers.

3.3 Fawkes Technologies WirelessFriend.com Opportunities and Threats

Table 3.4 lists the feature categories (as previously listed in Table 3.2) along with other Key Success Factors (KSFs) for each of the four information service competitors closest to Strategic Alternative C, including the WirelessFriend.com information service. The competitors listed are Google SMS, Yahoo! Mobile, Linguist MyNuggets and 4INFO Mobile.

Table 3.4 Competitive Environment – Competitive Advantages.

Competitor	Competitive Environment - Competitive Advantages					
	Web Site Advertising	Revenue Model	Mobile Answers	Intellectual Property	Brand Leadership	Financial Resources
Google SMS	TBD	Free for Users, TBD Advertising	Yes - SMS	L	H	H
Yahoo! Mobile	Microbrowser Ads	Free for Users, Browser Advertisements	Yes - Microbrowser	L	H	H
Linguit MyNuggets	TBD	Free for Users, TBD Advertising	Yes - SMS	L	L	L
4INFO Mobile	No	Free for Users, SMS Advertisements	Yes - SMS	L	L	H
Opportunities and Threats	0	0	0	0	T	T
WirelessFriend	Targeted Browser Ads	Free for users, Advertiser Browser Ads	Yes - SMS	H	L	L
Legend:						
H: High. The competitor has advantages in this area						
L: Low. The competitor has disadvantages in this area						
0: Opportunity. An opportunity for WirelessFriend.com						
T: Threat. A threat to WirelessFriend.com						
TBD: To Be Determined						

The first three categories are features that define the advertising, revenue and mobile answer capabilities for each of the four competitors closest to Strategic Alternative C. These three categories contribute to the KSF which defines the unique and differentiated content valuable to a specific market segment.

The remaining three KSFs define the intellectual property, brand leadership and financial resources advantages for each of the companies. The table contains ratings of H (High) or L (Low) to indicate if the company has competitive advantages for the KSF. A brief background of each of the four information service competitors along with their competitive advantages and potential disadvantages follows.

3.3.1 Google SMS (sms.google.com)

The Google SMS information service was launched in October 2004 and is owned and operated by Google, Inc. Google is a large multinational search engine company founded in 1995 by two Ph.D. students at Stanford University. It is well-funded and viewed by analysts as one of the most recognized brands for a dotcom company based on its successful IPO on NASDAQ in 2004.

The service is still in beta stage and is a search engine-based service. While the service can be used as a question-and-answer service, it supports free format queries. Keywords are sent as SMS messages and a search engine returns results related results. Currently it only supports sending an SMS to a U.S.-based mobile phone number – and only the top six mobile phone carriers in the U.S. are supported. Search results returned are also limited to U.S. content.

Google SMS is free for mobile phone users and there is currently no advertising of any form. Google has not released plans for how it will create a revenue model. Since there is no

requirement for a user to visit the Google SMS website to use the service, Google may decide to use SMS advertisements in their revenue model.

The service employs Google's patented PageRank algorithm to maximize the probability of relevant results returned. While this algorithm is very effective for searching on popular keywords and phrases, spelling mistakes in questions will cause the search engine to return erroneous answers. In addition, the PageRank algorithm is designed to return many search results ranked in order of keyword relevance – for a question-and-answer service, only one short answer is required.

3.3.2 Yahoo! Mobile (mobile.yahoo.com)

The Yahoo! Mobile information service for SMS was launched in January 2005 and is owned and operated by Yahoo!, Inc. Similar to Google, Yahoo! is a large multinational which supports both a search engine and news portal service. Also similar to Google, it was founded in 1994 by two Ph.D. students at Stanford University. It is also well-funded, a highly recognizable brand and had its successful IPO on NASDAQ in 1996.

The Yahoo! Mobile service is in production and is a search engine-based service. It does not use SMS for its information service but instead uses a microbrowser resident on a mobile phone. While SMS-based services are very low cost for sending and receiving data, similar data sent and received through a microbrowser can be quite expensive since mobile phone carriers charge for the data sent and received and require subscription fees for the browser service. Because it is microbrowser-based, the service can be used worldwide. However, many older phone models available worldwide do not support microbrowser technology.

Yahoo! Mobile is free for mobile phone users and utilizes microbrowser advertisements. These advertisements are displayed alongside search results on the mobile phone. There is no intellectual property with Yahoo! Mobile which creates barriers to entry against similar services.

3.3.3 Linguit MyNuggets (www.mynuggets.net)

The MyNuggets information service was launched in 2004 and is owned and operated by Linguit GmbH, Germany. Linguit is a privately held company founded by Dr. Jochen Leidner in 2001, and specializes in the research and development of natural language processing technology. Dr. Jochen Leidner is a doctoral researcher in the School of Informatics at the University of Edinburgh, Scotland. Linguit is currently looking for seed funding to further develop and commercialize its technology. Press releases on the company's website indicate their participation in the research seminar, Search Engine 2005 Conference, Boston, MA, April 2005.

The service is still in the beta stage and is a search engine-based service. As with Google SMS, the MyNuggets service is not limited to being a question-and-answer service since it supports sending keywords to its search engine which returns the most closely matching results. Currently it only supports sending an SMS to a UK and Germany-supported phone number, and only four mobile carriers operating in these countries are supported. It does have the advantage over other competitors of supporting English and German language keywords and phrases. As with other search engine-based services, spelling mistakes in keywords will cause the search engine to return erroneous answers.

MyNuggets is free for mobile phone users and there is currently no advertising of any form. Linguit has not released plans for how it will create a revenue model. As with Google SMS, Linguit does not require mobile phone users to visit its website to use the service. Linguit may decide to use SMS advertisements in its revenue model in future as their service is similar to 4INFO Mobile, and 4INFO Mobile have indicated this revenue model as viable for them.

Linguit claims to perform extensive research in the field of natural language processing but there are no patents pending or intellectual property with MyNuggets which create barriers to entry against similar services.

3.3.4 4INFO Mobile Search (www.4info.net)

The 4INFO Mobile Search information service was launched in March 2005 as a beta stage service. It is owned and operated by 4INFO, Inc. and is a well-funded private U.S. company having recently secured U.S. \$8 million in venture capital funding from U.S. Venture Partners. The company was founded by Pankaj Shah in 2004.

As with a number of its competitors, 4INFO is in the beta stage and is a search engine-based service. It is not limited to being a question-and-answer service and supports a command structure to increase the accuracy of search, return search engine results faster, and reduce typing for known queries such as “sports” or “weather”. Currently it only supports sending an SMS message to a U.S.-based mobile phone number. Using the command structure, result topics are limited based on what services are supported by the search engine (sports, weather, stock quotes, and flight information). 4INFO partners with established data provider companies to populate its search engine database. As with other search engine-based services, spelling mistakes in keywords or misuse of commands will cause the search engine to return erroneous results.

4INFO is currently a free service for mobile phone users and there is no advertising in the beta system. The company has, however, indicated that it may insert advertisements at the end of SMS text messages sent back to mobile phones, which are related to the context of the search. This revenue model may also be appropriate for services which do not require a user to visit the company’s website to use the service, as with Google SMS and Linguit MyNuggets.

4INFO claims to have patent-pending search technology which may give it a competitive advantage and create barriers to entry against similar services.

3.3.5 Opportunities and Threats

The WirelessFriend.com information service was launched in 2004 and is being developed through successive software prototype releases. Fawkes Technologies is currently seeking funding to further develop and commercialize its technology.

Unlike the other four competitors closest to Strategic Alternative C, WirelessFriend.com does not use a search engine to provide answers to questions. Instead, users ask free format questions with mobile phones and other users provide free format answers to questions on the website. Other competitors also use an SMS phone number to receive questions – their service is therefore limited to countries and mobile phone carriers which support this number. Since WirelessFriend.com SMS messages are sent using SMS-to-email and not phone numbers, worldwide service is supported. These mobile answer capabilities provide an opportunity for WirelessFriend.com to differentiate itself from its four closest competitors.

WirelessFriend.com is free for mobile phone users and utilizes web browser advertisements. Users who ask questions must periodically visit the website to answer other user's questions and gain question credits to continue using the service. Since the service supports keyword-sponsored advertising, users can set up saved searches for their favourite question topics – browser advertisements are displayed based on keywords found in the search questions displayed.

The service has two potentially patentable areas: the method and process for how the website functions, and; an algorithm for searching based on misspelled words in questions. A translation engine on the website supports an algorithm which corrects misspelled words in

questions. The translation engine provides two advantages to customers: users will get accurate search results for questions based on their saved keywords, and; advertisers can sponsor keywords which may have been originally misspelled in a question.

Table 3.4 lists several opportunities and threats faced by the WirelessFriend.com service when compared to its four closest competitors. Since WirelessFriend.com is a prototype application it is not adequately funded in relation to the competitors. Fawkes Technologies must acquire funding to develop its service, hire staff and remain competitive. The companies Google and Yahoo! have very strong brand awareness – this provides them with a competitive advantage and is a threat to the new brand WirelessFriend.com. However, the services Google SMS and Yahoo Mobile! have average brand awareness as they are still newly launched services.

The closest competitors do not use browser advertising, with the exception of Yahoo! Mobile which uses mobile phone microbrowser advertisements (microbrowser advertisements are costly compared to SMS, due to the high cost of data transmission). The remaining competitors are in beta phase and there is a strong likelihood they will use inserted advertisements into their text messages – this presents an opportunity for WirelessFriend.com since users may view this form of advertising as undesirable SPAM sent to mobile phones and may avoid the competitor services altogether.

3.4 Strategic Alternatives

As shown in Features and Market Segment Figure 3.1, there are three strategic alternatives identified, denoted as A, B and C. These strategic alternatives define how WirelessFriend.com could compete based on variations of features and market segment. Based on the previous competitive analysis, Fawkes Technologies favours Strategic Alternative C as providing the optimum position for competing in the environment.

3.4.1 Strategic Alternative A

With this alternative, Fawkes Technologies would position the WirelessFriend.com information service as targeting both all-ages and adult market segments, while still maintaining all the features as currently defined. It would compete in the same market segments as eleven of the competitive information services. It could provide its service to a broad, undifferentiated customer base and monitor which groups of customers based on age, location, culture or gender were using the system. Fawkes Technologies would also attempt to attract a wide range of companies that were interested in advertising to users of all ages.

3.4.2 Strategic Alternative B

With this alternative, Fawkes Technologies would position the WirelessFriend.com information service as utilizing the pay-per-question revenue model, while still targeting the young adult market segment. Many features would not be implemented in favour of competing with only five of the competitive information services which also have adopted the pay-per-question model. By not providing answers via a search engine, WirelessFriend.com could enlist live expert/researcher employees to answer even the most ambiguous questions accurately. By avoiding the online internet advertising revenue model, Fawkes Technologies would only expend marketing and branding resources to reach its end user customers who paid for the service.

3.4.3 Strategic Alternative C

With this alternative, Fawkes Technologies would position the WirelessFriend.com information service as targeting only the young adult market segment, and maintain all the features as currently defined. It would compete in the same market segments as only one other competitive information services. It would provide its service to the specific customer base who were interested in both SMS technology and a mobile question-and-answer service for education,

research purposes and entertainment. It would only spend time and effort attracting those companies that were interested in advertising to young adult users.

4 INTERNAL ANALYSIS

An internal analysis determines whether the internal capabilities of Fawkes Technologies are, or could be made capable of achieving one of the strategic alternatives proposed in chapter 3. The “Diamond E Framework” is used to evaluate the strategic alternatives based on the environment, resource requirements, management preferences and organizational capabilities. (Crossan, Fry & Killing, 2005)

An alternative assessment is conducted for the three strategic alternatives: Strategic Alternative A (SMS or browser advertisements targeted at All Ages/Adults); Strategic Alternative B (users pay-per-question targeted at Young Adults), and; Strategic Alternative C (targeted browser advertisements targeted at Young Adults). Based on the competitive analysis in chapter 3, Fawkes Technologies favours Strategic Alternative C as providing the optimum position for competing in the environment. This alternative will be used as the baseline when comparing other alternatives.

4.1 Evaluation Criteria

The evaluation criteria include required resources, required management preferences and required organizational capabilities. Resource requirements are the financial, human and operational guidelines affecting the company. Management preferences are what senior managers are trying to achieve by making a decision based on the criteria, their personal competencies and their values, and their attitudes and goals based on prior experience. Organizational capabilities are the fitness of the strategies within the existing systems, structures and culture of the company.

4.1.1 Required Resources

Resource requirements are the financial, human and operational guidelines affecting the company. These are the internal resources specifically related to the strategic alternatives being proposed. Four resource requirements are assessed: Human Resources, Partnerships, Marketing and Financial Resources.

Human resources consist of the people required to build and staff a company. An information services company must hire senior managers to manage and grow the company, business experts to research the market and define the information services, and technology staff to develop the features for the service and maintain the computer systems. For a start-up information services company, the senior managers may consist only of one or two individuals responsible for the following functions: sales and business development (typically the Chief Executive Officer or CEO), and development and operations (typically the Chief Operating Officer or COO). As identified as KSFs, business experts who can create unique services which meet the needs of a target market, and technology staff who can innovate and create intellectual property are key people to hire.

Partnerships consist of business relationships with complementary technology vendors who can cross-sell and cross-market their products and services to the same customers. For example, for an SMS-based question-and-answer information service, partnerships with mobile phone manufacturers (to leverage the sales of QWERTY keyboard phones) and mobile carriers (to leverage the sales of SMS text messaging services) are beneficial.

Marketing is a KSF and consists of the branding and brand awareness programs required to educate both end users and advertisers about the benefits of being a customer of the information service. Marketing activities should be broad if the market segments are large, and

focused if there is a smaller market segment. Marketing activities performed are responsible for creating the differentiated content valuable to a market segment.

Financial resources are a KSF and consist of both the investment in a company and the revenue generated from its operation. For a start-up information services company, revenue will be initially low or non-existent. As the number of paying customers builds, the company will become more attractive to investors. Investment capital is used to hire staff, commercialize the website information service, market the service and build the brand in the online internet advertising industry. The goal of the company will be to look for annuities and generate positive cash flow.

4.1.2 Required Management Preferences

Management preferences are what senior managers are trying to achieve by making a decision based on the criteria, their personal competencies and their values, and their attitudes and goals based on prior experience. Four management preferences are assessed: Founder Objectives, Advisors, Investor Preferences and Business Development.

Founder Objectives consist of what goals the founder(s) must achieve to create value for customers, investors, shareholders and employees. For example, for the WirelessFriend.com service, the founder's goal is to provide an educational and fun question-and-answer information service for young adults. The revenue model for the service is supported by keyword-sponsored advertising. Two customers benefit: mobile users who use the service for free and companies who place advertisement links on the website to reach these users. Investors and shareholders benefit from the increasing valuation of the company as revenue is generated from advertisers. Employees benefit from joining a growing company which provides a stimulating culture.

Advisors are people who provide expert experience and advice to the management of start-up companies. Ideally, several advisors should be selected and agree to make their time available to advise the company on resource, management and organizational issues. Typically, advisors are not paid a salary but may be compensated in the form of equity (e.g. stock options) for their time and advice.

Investor Preferences consist of the need for shareholders to eventually realize a return on their investment, and the influence they have over management to deliver this need. Shareholders consist of any persons who retain equity in the company and include outside (non-employee) investors, senior management, advisors and employees. Senior management must provide adequate visibility to investors of financially sound decision making, a business plan to profitability and milestones being achieved which lead toward positive cash flow.

Business Development consists of both the sales activities and partnership generation activities for the online information service. Sales programs must be defined with the goal of communicating the value of the information service to online internet advertisers. Management must ensure revenue is generated through sales of advertising and quarterly sales forecasts are met or exceeded. Management must also ensure that strategic partnerships are established with complementary technology vendors.

4.1.3 Required Organizational Capabilities

Organizational capabilities are the fitness of the strategies within the existing systems, structures and culture of the company. These are the internal organizational attributes which affect how people and work are organized. For example, hiring, developmental training and compensation are organizational attributes. Five organizational capabilities are assessed: Divisional Structure, Technology Systems, Business Processes, Culture, and Hiring and Compensation.

Divisional Structure is the organization of functional teams within one location and across multiple geographical locations. Typically, the structure in most companies will be hierarchical with individual managers leading small teams. However, a matrix structure may be established to augment a hierarchical structure. In a matrix organization, individual managers organize their teams for performance and set employee goals; however, separate project managers are responsible for ensuring work is completed based on predetermined development objectives and timelines. For a start-up information service company, a project or program manager ensures that separate teams focus on building the service within constrained timelines.

Technology Systems consist of the software and hardware server systems required to operate and support the online information service. Web servers and database software must be planned carefully to allow the software and hardware to scale as capacity grows. As more customers visit the website or use the service, the performance of the site must match their expectations. A company must plan its expenditures on software and hardware server systems to anticipate the expected capacity it will need at certain milestones during start-up.

Business Processes consist of the methods and procedures between divisions in an organization, and the functional inputs and outputs between teams. In a small organization, the business processes can be more loosely defined and evolve over time, since the communication channels between teams are fewer and usually affect one location. In a large organization, the business processes must be well-defined and may evolve slowly over time based on learned improvements. Since the communication channels in a large organization are usually more complex and involve a larger group of people, large organizations will react more slowly to changes in strategy.

Culture in an organization defines the values the employees hold high, and how effectively these values translate into the production and delivery of services to customers. In a

start-up information service organization, it is the responsibility of management to define and evolve the culture to create an environment where creativity and innovation are rewarded. Management must effectively communicate why the company is in business, what goals it is trying to achieve over time and what progress it is making toward achieving these goals. As a company grows, the cultural values must be reinforced as new employees are hired.

Hiring and Compensation define how the organization finds, hires, retains and rewards employees for providing their expertise to an organization. For a start-up company, there is typically minimal start-up capital available and equity in the form of stock options must be used to augment salary, retain employees and reward high performing employees. As the company grows, less equity may be distributed to employees in favour of salary. While formal training and career development for people in a start-up organization may be minimal due to limited financial resources, knowledge sharing must be promoted as the company grows.

4.2 Alternative Assessment

Based on the competitive analysis and the markets currently not addressed by other competitors, Fawkes Technologies could position WirelessFriend.com at Strategic Alternative A, B or C. Alternative C is the preferred strategy and utilizes browser advertisements targeted at the Young Adult market segment. However, the assessment of Alternatives A and B provides insight into advantages these alternate strategies may have over Alternative C.

Tables 4.1 and 4.2 list the evaluation criteria for resource requirements, management preferences and organizational capabilities. Each of the three strategic alternatives is compared and assessed against the evaluation criteria. The advantages and disadvantages of pursuing each strategic alternative are summarized at the end of Table 4.2.

Table 4.1 Internal Analysis – Alternative Assessment (Part A).

	Internal Analysis - Alternative Assessment (Part A)		
	Alternative A (SMS/Browser Advertisements, Target All Ages/Adults)	Alternative B (Users Pay-per-question, Target Young Adults)	Alternative C (Targeted Browser Advertisements, Young Adults)
Resource Requirements			
Human Resources	Larger number of employees required to support more market segments Larger management team required sooner	Small number of employees required Expert researcher staff required either permanent or on contract	Small number of employees required Easier to hire start-up managers
Partnerships	Partnerships with many mobile phone manufacturers possibly required Partnerships with general technology vendors may be required	Establishment of advertiser partnerships not required	Partnerships with specialized mobile phone manufacturers beneficial
Marketing	May require broad marketing activities to compete with competitors May require multiple branding messages to reach different age segments	Focused marketing at young adults Need to market pay-per-question model	Focused marketing at young adult segment who use SMS Branding required for young adult market segment only
Financial Resources	More operational capital required to address all ages market segment sooner Potential for higher revenue from more market segments	Minimal financial resources required to maintain website Pay-per-question revenue from target market unknown	Medium to low financial resources required Revenue comes from specific advertisers Intellectual property and patent costs high
Management Preferences			
Founder Objectives	Provides service to broad market	Users pay-per-question revenue model does not meet objective as young adults may be averse to paying	Fits objective to provide service to young adults who use SMS with keyword-sponsored advertising
Advisors	May need advisors with broader market experience and large company growth	Advisors inexperienced with pay-per-question revenue model	Experienced at growing start-ups
Investor Preferences	Broader target market may translate to higher return on investment	Investors prefer pay-per-question model the least	Meets specific market need for customers
Business Development	Sales and business development for large target market requires large effort	No advertising may impact or require limited business development	Develop only relationships which can benefit the young adult market Target sales campaigns to advertisers interested in reaching young adults

Table 4.2 Internal Analysis – Alternative Assessment (Part B).

	Internal Analysis - Alternative Assessment (Part B)		
	Alternative A (SMS/Browser Advertisements. Target All Ages/Adults)	Alternative B (Users Pay-per-question. Target Young Adults)	Alternative C (Targeted Browser Advertisements, Young Adults)
Organizational Capabilities			
Divisional Structure	May require more management groups which are geographically dispersed	Simple management structure but may require management of contract employees	Simple management structure in one location
Technology Systems	Servers need to scale to handle higher volume of website visitors Server infrastructure more expensive	Low server scalability requirements Development of intellectual property may not be required website not focus of operation	Low server scalability requirements Easier to predict system usage and volume
Business Processes	May have complex business processes with large organization High workload for website management	Credit card processing with end users required Lower workload for website management	Easier communication between small teams Lower workload for website management
Culture	Start-up may proceed to larger organization quickly which changes culture	Start-up culture involving both permanent and contract employees	Start-up culture with slow employee growth
Hiring and Compensation	May need to hire quickly to address broad markets and quality of employees may vary Compensation may favour salary over equity	Quality of expert researcher employees varies Compensation model required for salary, equity and contract staff May have difficulty finding expert researchers and/or high turnover	Focus on hiring best and brightest while pacing growth more slowly Compensation may favour equity over salary since start-up
Advantages	Broad and multiple market segments Potentially high revenue opportunity High brand awareness Complex business processes	Niche market leadership Brand focused on one market segment Low investment Control operating costs with contractors	Niche market leadership Brand focused on one market segment Low investment Low number of competitors Easiest to manage Intellectual property potential One competitor
Disadvantages	High investment High number of competitors May require multiple segment brands More difficult to manage Broad business experts difficult to find Eleven competitors	Potentially high number of competitors Limited potential revenue Pay-per-question amount variable Young adults averse to pay-per-question Revenue may be lower and variable Expert researchers difficult to find/costly Five competitors	One market segment creates risk Lower potential revenue Staff compensation may be lower

4.3 Resource Comparison and Gap-Closing Analysis

By comparing the resources required with the resources currently existing in the company, the gaps can be identified and compared against the favoured strategic alternative. Fawkes Technologies favours Strategic Alternative C as providing the optimum position for competing in the online internet advertising industry, therefore, the feasibility of closing the resource gaps to meet this strategy are analyzed. Strategic Alternatives A and B are used for comparison of the advantages and disadvantages for these alternate strategies.

4.3.1 Human Resources

Fawkes Technologies is a Vancouver-based company and currently has one employee, its founder Geoff Fawkes. The company is assisted by a volunteer BCIT student development team and two outside company advisors. There are currently no salaries paid within the company. Geoff Fawkes retains ownership of 100% of the company's founder shares.

Geoff Fawkes is responsible for the requirements definition and ongoing design of the WirelessFriend.com information service. The WirelessFriend.com prototypes are developed by a team of BCIT Computer Systems Technology students who rotate on six-month work terms. To expand its contact network and market the WirelessFriend.com idea, the company provides volunteer services to the Vancouver Enterprise Forum operations committee, and is a member of the BC Technology Industries Association and the Wireless Innovation Network of BC (WINBC). The WirelessFriend.com information service received a WINBC Wireless Innovation Contest innovation award in early 2005 further strengthening the credibility of the company.

The company seeks to commercialize the WirelessFriend.com information service in 2006. To achieve this goal, additional people will be required in the areas of software development, management and marketing. The company requires a small number of software

engineers to complete commercialization of the service. Geoff Fawkes is an experienced senior manager in the areas of software development and operations; however, a 2nd senior manager experienced in the areas of sales, business development and marketing is required to augment the skill set of the management team. By leveraging the recent WINBC award and visibility the company has in the Vancouver high-technology community, a senior manager with experience in software start-ups, sales and marketing will be recruited and given a compensation which includes both salary and equity (founder's shares).

By adopting Alternative C, Fawkes Technologies can manage its growth by hiring a limited number of senior managers and technology experts to meet the needs of the well-defined market, young adults. Alternative A may require a large number of staff to support multiple market segments. In addition, since SMS technology is not as popular with segments outside the young adult market, interest in the service may be lower. Alternative B is similar to Alternative C; however, expert researchers would need to be hired to answer questions - an added employment cost not required by Alternative A or Alternative C.

4.3.2 Partnerships

Fawkes Technologies plans to secure partnerships with complementary technology companies, although none have been established today. As a result of exposure received from the WINBC Wireless Innovation Contest in early 2005, an industry representative from Nokia communicated to the company that Nokia's QWERTY keyboard mobile phone market would benefit from an information service such as WirelessFriend.com.

The company will require a dedicated business development employee to pursue and evolve relationships with complementary technology vendors – alternatively, this effort can be staffed by senior management. For example, two vendors with complementary technologies are Nokia and Rogers AT&T (SMS texting services). Nokia supports a range of mobile phones

which allow easier text entry and Nokia would benefit from the WirelessFriend.com service by creating demand for their phones. Rogers AT&T would gain revenue from increased SMS traffic on its network as generated by the WirelessFriend.com service users. Geoff Fawkes has business and technical contacts established at Nokia and Rogers AT&T and will evolve these relationships until the 2nd senior manager is hired.

For Alternative C, Fawkes Technologies can pursue partnerships with a limited number of specialized technology partners which address its young adult market segment. With Alternative A, a greater number of partnerships may need to be established with technology vendors who provide services that address the all-ages market segment. This is due to the large number of competitive information services (eleven for strategy A) competing in the same market segment who may also be seeking similar technology vendor partnerships.

4.3.3 Marketing

Fawkes Technologies collects website visitor data on its company website and, through the WirelessFriend.com information service website, monitors survey feedback and visitor statistics from the information service's users. All branding and marketing activities are currently performed within the company. As the company is focused on the young adult market, all branding is designed to have an entertainment-oriented theme of interest to 18-24 year olds. The company conducts regular marketing surveys using internet-based tools accessible from its WirelessFriend.com website. Appendix B shows example poll and survey pages which are used to collect ongoing feedback from WirelessFriend.com website visitors. The feedback is used to gauge the demand for the service and modify the features to address customer needs and suggestions.

The company will require a business expert to further evaluate the demand by the young adult market segment for the WirelessFriend.com service. In addition, while the brand design

and brand awareness materials were created in-house, there is a need to formalize and promote the WirelessFriend.com information service through media advertisements to young adults who may be interested in the service. The BCIT Marketing Studies program provides small student teams to perform directed marketing projects for companies in the Vancouver area. Fawkes Technologies has arranged with BCIT to engage one of these teams mid-2005. This team's work will be supervised by the 2nd senior manager when hired in late 2005.

Alternative C provides Fawkes Technologies with the strategy to focus its limited resources on marketing activities which target the one market segment strongly interested in SMS messaging – young adults. Alternative A may require broad marketing activities to compete with the large number of competitors (eleven for strategy A) who may be tailoring their marketing communications and branding to reach each age segment. Alternative B may require marketing activities to convince the young adult market segment to subscribe to a pay-per-question information service.

4.3.4 Financial Resources

Fawkes Technologies is funded by its founder and family members. There are currently no outside investors in the company, although the company is actively promoting the opportunity for investment. The WirelessFriend.com information service is in prototype phase and is offered free to end users. The revenue model will be based on browser advertisements, however, there are currently no companies advertising on the service's website (the keyword-sponsored advertising software components are currently under development).

Company founder Geoff Fawkes presented the company at the Vancouver Angel Forum in early 2005. The opportunity for investment was pitched and good interest was received from investors in attendance. Feedback from the forum indicated that having paying customers (companies advertising on the WirelessFriend.com website) would validate the

WirelessFriend.com revenue model and stimulate investor interest. The company is now focusing resources on completing development of its advertising software components.

By adopting Alternative C, the company can focus its limited financial resources on completing development of its application and begin generating revenue. Revenue from advertising companies will improve the company's credibility while raising capital. Alternative A provides the potential for larger revenue generation in the long term since it targets the all-ages market segment. Alternative B provides two cost savings: further development of advertising software components on the website is not required for the pay-per-question revenue model, and; since revenue comes directly from end users instead of advertisers, the effort to market the service to advertisers is not required.

4.4 Management Comparison and Gap-Closing Analysis

By comparing the required preferences and capabilities with the observed preferences and capabilities of influential managers and management groups in the company, the gaps can be identified and compared against the favoured strategic alternative C. The feasibility of closing the management gaps to meet strategy C is analyzed in the following sections.

4.4.1 Founder Objectives

Geoff Fawkes is founder and President of Fawkes Technologies. He has over 18 years of experience as a senior manager, technical lead research and software development engineer at several successful organizations in the Vancouver area. He has developed an extensive contact network in the high technology community, and has worked in the satellite communications, network management, wireless, customer relationship management and banking software development sectors. He was responsible for the start-up of a major telecom company's Vancouver division in 1998 and grew that organization to over 40 staff in two years. Geoff

Fawkes holds a B.Sc. in Computer Science from the University of B.C. and is completing Executive MBA studies at Simon Fraser University.

The founder's goal for the WirelessFriend.com service is to provide an educational and fun question-and-answer information service for young adults who use mobile SMS text messaging. The revenue model for the service is supported by keyword-sponsored advertising, thereby providing a revenue stream for the company. Fawkes Technologies has researched the online internet advertising industry extensively and through the evolution of its business plan, believes there is strong demand from the young adult target market for the WirelessFriend.com information service.

Strategic Alternative C allows the company to meet the founder's objectives. Alternative A is similar to C in revenue model but does not meet the objective of providing the WirelessFriend.com information service to a specific target market, young adults. Alternative B is similar to C in target market but does not meet the objective of providing the service following the desired revenue model, keyword-sponsored advertising.

4.4.2 Advisors

Management currently has two advisors. The first advisor has over 25 years experience in senior executive positions including President/General Manager of a successful Canadian software start-up. He has extensive experience in operational business processes and was responsible for the operational structuring required for the Canadian software start-up's successful IPO on NASDAQ. He has a business education from Trinity/Western University and is completing Executive MBA studies at Simon Fraser University. The second advisor has over 10 years experience as a senior sales manager with a successful international tool importer. He has created successful sales and marketing strategies for a Japanese industrial equipment

manufacturer, and implemented ISO9000 quality and monitoring systems. He is also completing his Executive MBA studies at Simon Fraser University.

The first advisor has experience in growing the management and staff at software start-up companies, and has provided advice to Fawkes Technologies for the past two years. The second advisor has provided capital-raising advice to the company in preparation for its investor presentation at the Vancouver Angel Forum in early 2005. The second advisor does not have experience in the software development industry but does provide advice in the area of structuring a sales team, how to compensate them and structuring partnership contracts. Both advisors are not currently compensated for their advice.

By adopting Alternative C, the company can leverage the valuable experience of its advisors in the areas of software start-up growth. Alternative A may require advisors who are more experienced in the management and operation of larger companies. Alternative B is similar to Alternative C in target market, however, the advisors have provided marketing advice related to the online internet advertising industry for the past two years, and are unfamiliar with the pay-per-question revenue model.

4.4.3 Investor Preferences

Management plans to raise capital through the angel investor community in the near term. As an early stage software company, Fawkes Technologies is building its company valuation by validating the market with its prototype information service WirelessFriend.com, building an experienced senior management team with credible advisors, and setting and meeting milestones in its business plan.

The company is now focusing software development resources on completing development of the keyword-sponsored advertising software components in its application. It is

expected that when the WirelessFriend.com information service begins to generate revenue, interest will be gained from angel investors. The company also strives to make financially sound decisions with its current capital available, executes on its business plan with the goal of reaching profitability in the long term, and targets milestones which lead towards positive cash flow in the short term.

Alternative C provides the company with a strategy to pursue the well-defined young adult market with its services according to its current business plan. Angel investors will seek evidence of meeting milestones over the past year as a forecast of management competence over the next year. Alternative A would provide the company with the strategic change to pursue the larger all-ages market, and investors may prefer the perceived larger return on their investment. The company's advisors have commented that the pay-per-question revenue model for Alternative B may not generate high enough revenues to interest an angel investment round of financing. Alternatives A and B would require the company's business plan be modified extensively.

4.4.4 Business Development

Management plans to pursue a sales and marketing strategy which targets the young adult market for its online internet service, WirelessFriend.com. Young adults 18-24 are interested in products and services relevant to their age, and may be influenced by advertising which delivers information about those specific products and services. Fawkes Technologies will create internal sales campaigns with the goal of communicating the value of advertising with WirelessFriend.com and the service's ability to reach the specific young adult market segment.

Fawkes Technologies will design its keyword-sponsored advertising software components to provide reports to advertisers. These reports will provide quantitative click-through data to advertisers as well as demographic information such as age, location, gender and

cultural background of website visitors. These reports will also be used by Fawkes Technologies to monitor for popular vendor products and services and tailor its sales campaigns to attract new online internet advertisers to the WirelessFriend.com service.

Strategic Alternative C allows Fawkes Technologies to optimize its service for online internet advertisers interested in reaching the young adult market. With Alternative A, the target market is broad and requires an extensive and expensive sales and marketing strategy to reach advertisers that sell products and services to all ages. With Alternative B, there is no advertising as part of the revenue model; therefore Fawkes Technologies would focus sales and marketing on the young adult end user.

4.5 Organization Comparison and Gap-Closing Analysis

By comparing the organizational capabilities required with the organizational capabilities currently existing in the company, the gaps can be identified and compared against the favoured strategic alternative C. The feasibility of closing the organizational capability gaps to meet strategy C is analyzed in the following sections.

4.5.1 Divisional Structure

Fawkes Technologies is structured as a small start-up company and maintains a home-based business office. Communication between management and student software engineering staff is done via phone, instant messaging and email. All team members work from their homes or at the BCIT campus computing lab. The team consists of five individuals who meet once a week at BCIT and manage their work according to a project plan. Geoff Fawkes acts in all management roles required, with the software engineering students responsible for writing design documents, creating the software for the WirelessFriend.com system and testing the system to ensure high quality. The student team consists of four volunteer software engineers who rotate with the company on six-month work terms. At the end of a work term, the outgoing team

documents their work in the form of design documents and provides training materials for the next incoming team.

The company plans on establishing an office in Vancouver as it grows and begins to hire permanent staff. As the number of staff is expected to remain low in the short-term, a flat reporting structure will be maintained with all staff reporting directly to senior management. This reporting structure will allow the company to benefit from the speed of team communication it has grown accustomed to.

By adopting Alternative C, the company can organize its staff in one location to deliver its WirelessFriend.com service. Growth of the company is expected to be slower by addressing the single young adult market segment; however, development of the information service is expected to proceed more quickly than other alternatives due to the speed of communication. Alternative A may require a large number of staff located in geographically dispersed sites to support multiple market segments – the result may be slower communication, and slower development. Alternative B may require the management of contract employees who are expert researchers – the result may be slower communication as well as increased management effort.

4.5.2 Technology Systems

The company maintains its web server environment from a home office. Three production and development servers operate 24 hours a day/7 days a week to support the WirelessFriend.com website and database application components. The servers are backed up on a regular basis and the hardware is designed to scale to several hundred concurrent users. The servers are connected to the internet through a high speed business service internet connection through the local phone company.

As the company grows, the servers will be moved to a collocation facility to provide a more secure environment. A collocation facility is a commercial hosting company responsible for the high speed internet connection, security, temperature control and power backup requirements for web servers. The WirelessFriend.com system is architected to allow servers to be added, with additional cost incurred only from adding computer servers and software licenses.

Alternative C targets the young adult segment and as a result the server scalability and volume requirements are expected to be lower than if the all-ages segment was targeted. It is expected that more hardware and software resources would be required for Alternative A to meet the user demand for the all-ages market segment. While the system could scale to handle the broader target market, there would be increased costs. Alternative B is similar to C in that lower server hardware and software requirements are expected.

4.5.3 Business Processes

Fawkes Technologies currently has informal business processes in place. As the current focus of the company is to complete additional revenue-generating features for the WirelessFriend.com service, business processes are created as needed to support the software development process. Geoff Fawkes is solely responsible for all other activities outside of software development: server maintenance, marketing, financing and financial management activities. He has documented the processes which are necessary for the start-up's operation, and will delegate the responsibilities to others when the company begins to add staff.

It is expected that once the WirelessFriend.com service is launched commercially, business processes will be required to manage online internet advertising customers and the revenue model for payment services. These processes are expected to be a high priority since they support the revenue generating capabilities of the WirelessFriend.com service.

The strategy for Alternative C allows the company to grow and create business processes on an as-needed basis. By targeting the young adult market segment only, marketing campaigns to grow the user base and attract advertisers will be focused and limited in scope. With Alternative A, the company may need to establish more complex business processes sooner to support the larger number of market segments, more employees and expanding communication channels. Alternative B is similar to C in that the company can grow slowly and implement business processes as necessary. However, with Alternative C the pay-per-question payment business processes are expected to be more complex for expected higher volume of end users compared to a smaller volume of advertisers.

4.5.4 Culture

Geoff Fawkes strives to build a culture based on open communication, empowerment, respect, honesty, perseverance and innovation. The relationship between Geoff Fawkes and the BCIT students who develop the software is a mixture of “getting the work done” and social interaction. The team spends an equal amount of time socializing and learning about each other’s personal interests, as they do developing the WirelessFriend.com information service. The team meets formally twice a week at BCIT and usually has a lunch meeting paid for by the company.

As the company grows, management hopes to maintain these cultural values and improve upon them based on employee feedback. A culture will be grown where creativity and innovation will be rewarded. Management will regularly communicate why the company is in business, what goals it is trying to achieve over time and what progress it is making on achieving these goals. Financial transparency will be important and the company’s successes will be celebrated.

Alternative C supports the strategy of building a small employee base and maintaining close social and business relationships among employees. Alternative B may require more visibility and/or regular communication between management and staff to reinforce the cultural

values. This may also introduce the complexity of communicating the importance of satisfying multiple target segments, instead of the young adult segment. Alternative C may present the challenge of integrating contract staff employed by outside companies into Fawkes Technologies' culture.

4.5.5 Hiring and Compensation

As an early stage start-up, Fawkes Technologies currently does not have a compensation plan. As sole shareholder of Fawkes Technologies, Geoff Fawkes is compensated in sweat equity. Several BCIT software engineering teams have developed WirelessFriend.com as part of their Computer Systems Technology degree program over the past two years. Fawkes Technologies compensates the BCIT school administration with a small administrative fee for utilization of the student project program. The two Advisors to the company will be compensated in the form of stock options when the company establishes a capital structure upon investment. Also upon investment, the 2nd senior manager in addition to Geoff Fawkes will be hired and compensated with a base salary and founder's shares.

The company's hiring and compensation strategy will be to employ the best and the brightest. Hiring will not be done if a candidate is not deemed to be exceptional. Full-time staff will be compensated with a blend of equity in the company's shares and base salary. High performing employees who achieve milestones through exceptional effort will be rewarded using a bonus program. Lower performing staff will be redirected from the company.

By adopting Alternative C and growing the company slowly while focusing on the young adult market segment, the company can hire and retain key staff by compensating more through equity than through base salary. The company can focus on hiring fewer top-performing staff only when they are found. Alternative A may require a large hiring ramp-up of staff to address the all-ages market and, as a result, the best and the brightest may not be hired. In addition,

equity in the company may be reduced as employees may favour salary. Alternative B may introduce the requirement of hiring contract expert researchers which may also vary in quality and demand higher salary-only compensation.

4.6 Strategy Summary

Based on the internal analysis, Fawkes Technologies can pursue one of three strategic alternatives: Strategic Alternative A targets all ages in all market segments and implements all features as currently defined including the browser advertising revenue model; Strategic Alternative B targets the young adult target market and utilizes the pay-per-question revenue model, and; Strategic Alternative C targets the young adult target market and implements all features as currently defined including the browser advertising revenue model.

4.6.1 Strategic Alternative A: All Ages and All Features Strategy

With strategy A, Fawkes Technologies would position the company and the WirelessFriend.com information service to target all market segments based on any age of website visitor. The company would attempt to attract a wide range of companies interested in advertising to users of all ages.

The company would direct resources toward building a large number of employees to address a greater number of market segments. This growth would require hiring a large number of management staff to coordinate the activities of the many teams. With a greater number of target markets being addressed, the company may need to establish complementary technology partnerships with companies who also target the all-ages market. Broad marketing activities and multiple branding messages would need to be implemented to reach different age groups with different information service interests. While strategy A has the greatest potential of all the strategies for higher revenue, it also requires the highest amount of short-term capital to address all the market segments sooner.

Strategy A meets part of management's objective of providing the WirelessFriend.com service using online internet advertising; however, the current company advisors may not have the broader market experience to advise the company on large company growth. Investors may prefer the broader target market since this may translate to higher revenues. Sales and business development would require more effort (and more capital) to address the larger number of target markets.

Strategy A may require a larger organizational structure and possibly a geographically dispersed organization to support multiple market segments. The company's technology systems would also require more servers and would need to be powerful enough to scale to meet the higher number of website visitors. With a large number of employees, the business processes would be complex. The company would have to evolve the culture carefully to ensure that the values are communicated consistently to a larger number of employees. Hiring may require ramping up staff quickly however the company may have difficulty finding key employees and may have to compensate staff with more salary over company equity.

4.6.2 Strategic Alternative B: Targeted Age and Reduced Feature Strategy

With strategy B, Fawkes Technologies would position the company and the WirelessFriend.com information service to target only the young adult 18-24 year old market segment. The company would implement fewer features in favour of adopting a pay-per-question revenue model.

The company would direct resources toward building a smaller number of employees; however, expert researchers may need to be hired or contracted with the company. Fewer managers would be required but there may be complexity in managing contract employees. By addressing only the young adult market, few partnerships with complementary technology vendors would need to be established. Focused marketing activities and simple branding

messages would be implemented to reach the young adult 18-24 year old target market; however, there would be challenges with target market acceptance of the pay-per-question revenue model. Strategy B requires low short-term capital to address the young adult market segment.

Strategy B meets part of management's objective of providing the WirelessFriend.com service targeted to young adults; however, the current company advisors are inexperienced with the pay-per-question revenue model. Investors may not prefer the pay-per-question revenue model since they are sceptical of the revenue generating potential. Sales and business development efforts may require a very large effort (and the most capital) to reach a very large number of end users.

Strategy B would require a small organizational structure but would require management of contract employees. The company would require few servers and would scale servers as user demand grew for the WirelessFriend.com service. Most business processes would be simple in a small organization, however the payment processing for the pay-per-question revenue model would be complex given the large number of end users. The company would have to evolve the culture carefully to ensure that permanent staff and contract expert researchers worked cohesively under the same values. Hiring could be more selective with a smaller number of staff; however, contract expert researchers may be difficult to find and may be subject to high turnover.

4.6.3 Strategic Alternative C: Targeted Age and All Features Strategy

With strategy C, Fawkes Technologies would position the company and the WirelessFriend.com information service to target only the young adult 18-24 year old market segment. The company would attempt to attract a narrow range of companies interested in advertising to only young adult users.

The company would direct resources toward building a small number of employees. As a result, the management team would also be small and focused. By addressing only the young adult market, fewer key partnerships with complementary technology vendors would be needed and established. Focused marketing activities and simple branding messages would be implemented to reach the young adult 18-24 year old target market. Strategy C requires low short-term capital to address the young adult market segment.

Strategy C meets all of management's objectives including both providing the WirelessFriend.com service using online internet advertising and servicing the young adult market. The company advisors are familiar with the objectives the company has been pursuing over the past year and are experienced in growing start-up software companies. Investors will be satisfied that the company is executing on its business plan to meet the defined market's need. Sales and business development efforts will require the least amount of effort and capital of all three alternatives.

Strategy C would require a small organizational structure and simple management structure in one location. The company would require few servers and would scale servers as user demand grew for the WirelessFriend.com information service. Most business processes would be simpler in a small organization. The company would evolve the culture with a small number of employees and it would be easier to communicate the values consistently as the communication channels would be few. Hiring would be more selective for the smaller number of staff required and management could focus on selectively hiring the best and the brightest. Compensation for a smaller number of employees would favour equity in the company over base salary.

4.6.4 Selected Strategy

Table 4.2 provides a summary of the advantages and disadvantages for each strategy.

Strategy C has the following advantages:

- Niche market leadership
- Brand focused on one market segment
- Lowest investment
- Lowest number of competitors
- Easiest to manage
- Intellectual property potential
- Only one direct competitor in the market segment

This strategy also has the following disadvantages and risks:

- One market segment may create risk over targeting multiple market segments
- Lower potential revenue with only one market segment
- Staff compensation may be lower resulting in recruiting challenges

Based on the internal analysis, Strategic Alternative C is the selected strategy for Fawkes Technologies.

5 RECOMMENDATIONS

A summary is provided of the recommended strategic course of action for Fawkes Technologies and how it is consistent with the requirements of the external environment and the internal capabilities (resources, management preferences and organizational capabilities). This summary discusses how the proposed alternative satisfies the criteria of the decision makers that want to solve the problem as originally stated.

Fawkes Technologies should pursue a strategy to position the WirelessFriend.com information service as targeting the young adult market segment and maintain all the features as defined including adopting an online internet advertising revenue model. It would compete in the same market segment as only one other competitive information service. It would have the advantage of being the only company to provide its service to the specific customer base that are interested in both SMS communication and a question-and-answer service for education, research purposes and entertainment.

The following key issues have been identified for the company. They are presented in order of importance to implement. Recommendations are provided to address each issue.

5.1 Create Unique and Differentiated Content

The company should create unique and differentiated content valuable to its target market segment, young adults. Young adults are avid users of SMS on their mobile phones and many are also students; therefore, the WirelessFriend.com question-and-answer service should leverage young adults' need for ad-hoc research information while they are away from their computer. Since the company is building its core competence in R&D it can create a compelling offering

which provides high value content to young adults via their preferred communication medium - the mobile phone.

5.1.1 Leverage Website Advertising and Revenue Model

By providing content relevant to the young adult segment, a high number of visitors will be encouraged to visit the WirelessFriend.com website. Online internet advertisers regularly search for unique ways to target the 18-24 year old demographic with age-specific products and services. With WirelessFriend.com, companies would have a service to reach this target market and provide their advertising via click-through links to their websites.

The WirelessFriend.com service should leverage its keyword-sponsored advertising feature to begin generating revenues. Keyword-sponsored advertising operates by having users set up saved searches for keywords which may appear in questions they are interested in. When a user performs a search with a keyword, questions they are interested in are displayed - advertisers who have sponsored the keywords also have their advertisements displayed next to the questions. An analysis of the online internet advertising industry shows that this method of advertising will undergo significant growth and WirelessFriend.com is poised to benefit financially from this growth.

5.1.2 Build User Base for Question-and-Answer Service

WirelessFriend.com should continue to support its question-and-answer features, whereby website visitors log on and provide free format answers. By doing so, problems and costs inherent with competitor services, such as inaccurate search engine results and costs for hiring expert research contract staff, would be avoided.

In addition, since a user's profile provides non-personal information such as gender, location, age and cultural background, this information can be passed to online internet

advertisers when a user clicks-through to their advertisement link. Advertisers benefit since they can tailor advertisements to a visitor's demographic information thereby increasing the probability of converting the visitor to a buyer. Advertisers can also provide "hints" to users when they are answering questions by positioning advertisements as information sources and not just as keyword-related product and service links.

Since questions are sent via a mobile phone carrier's SMS-to-email gateway, instead of to an SMS phone number (which are limited to certain countries), worldwide coverage is supported by WirelessFriend.com. No other competitors provide the benefits of targeted, tailored advertising and worldwide coverage today.

5.2 Target Young Adult Market Segment

Young adults are currently underserved by information services which provide question-and-answer services. In addition, online internet advertisers are unable to identify and provide products/services of specific interest to young adults with the current competitor offerings. The external analysis shows eleven competitors target all ages with their service and as a result do not provide either a differentiated service or age-appropriate advertising to their website visitors. Five competitors have adopted the pay-per-question revenue model; however, young adults are averse to paying for internet services. With only one indirect competitor, there is greater likelihood of higher profits for Fawkes Technologies.

By targeting young adults, Fawkes Technologies can provide content specifically designed for this age group and create age-appropriate branding and marketing messages. The company can expend time and effort to establish business partnership with advertisers interested in reaching this segment, and partner with companies with technology complementary to WirelessFriend.com. With positive growth predicted in young adult's usage of SMS, WirelessFriend.com will benefit by leveraging the use of this technology for its target market.

5.3 Enhance Internal Capabilities

The company should enhance its internal capabilities specifically in the area of resources. It should begin to hire the right staff and build the right team structure to execute its strategy. Partnerships with complementary technology vendors should be established to add brand credibility. The company should continue to meet its milestones and seek financing from the investment community, and should complete development of its application to begin generating revenue from advertisers. By following the recommended strategy, Fawkes Technologies can minimize resource costs while still targeting a growing user market segment.

5.3.1 Enhance Human Resources

Staff should be hired in the following order: software development engineers, business marketing experts and salespeople. Software engineers are required to complete the application (specifically the online internet advertising modules) and bring the application to market. Business experts are required to define and refine the WirelessFriend.com features and conduct branding and marketing activities. Sales staff is required to actively solicit online internet advertisers and communicate the following benefits companies can receive as customers: keyword-sponsored advertising based on user's interests, and personal (gender, age, location, cultural details) information passed on click-throughs.

5.3.2 Establish Partnerships

Fawkes Technologies should pursue partnerships with mobile phone manufacturers and SMS text messaging carriers. Manufacturers of QWERTY keyboard mobile phones target products at SMS text messaging users. Since these users are typically young adults, WirelessFriend.com can leverage mobile phone manufacturers' industry influence while at the same time manufacturers can sell more phones. SMS text messaging mobile carriers benefit from the increased messaging traffic on their networks. Unlike competitors, Fawkes Technologies

targets only the young adult market and can provide focused marketing efforts also complementary to partner's efforts.

5.3.3 Build Financial Resources

Fawkes Technologies must ensure it gains the financial resources needed to grow through investment and sales. Early investment capital should be used to hire staff, complete commercialization of the WirelessFriend.com service, market the service and build the brand in the online internet advertising industry. Based on the industry analysis, the company should build core competencies in sales to actively solicit companies for advertising. A strong sales team will also create a competitive advantage for the company based on the industry analysis. As revenue generation occurs, both projected revenue and customer usage statistics can help the company gain credibility with future investors. The company will continue to present at various investment events in the Vancouver area (Angel Forum, Vancouver Enterprise Forum) to solicit interest from angel investors.

5.4 Establish Barriers to Entry

Based on the industry analysis, Fawkes Technologies should exploit its core competencies in R&D to create innovations with patent potential or trade secrets and use them to reduce the threat of entry from competitor question-and-answer information services. Competitor information services are focusing their research in the areas of search engine technology for their question-and-answer service and do not currently pose a threat.

5.4.1 Patent Intellectual Property

The WirelessFriend.com system has patentable technologies in the areas of its method and process for question credits and authority rating technology, and its use of a translation engine to translate textspeak to readable English words. The use of question credits and authority

rating will promote the adoption of the WirelessFriend.com system among young adults and provide advertisers with a growing number of click-throughs to their sites. The WirelessFriend.com translation engine utilizes proprietary algorithms to translate misspelled words (or textspeak) to readable English words and is unique among competitors. Advertisers benefit since they can accurately target customers based on keywords they choose to sponsor. Fawkes Technologies should seek patents for its technology and use them to competitive advantage.

5.4.2 Create High Switching Costs

The authority rating feature in the WirelessFriend.com system creates high switching costs for users. Users with high authority ratings will be unwilling to switch to a similar competitive service and lose their rating. This feature provides WirelessFriend.com with a sustainable competitive advantage – as a first mover, it can build up a large base of users who both ask questions and provide expert answers. Fawkes Technologies should promote this feature to prospective advertisers and provide them with reports of the most popular saved searches. Prospective advertisers can then tailor their advertisements with advance knowledge of what keywords will be selected by users.

5.5 Promote Company and WirelessFriend.com Brand in Market

Fawkes Technologies should promote its WirelessFriend.com brand, domain name and unique service features to the market. Based on the industry analysis, the company should build and utilize core competencies in marketing to establish itself as the leading question-and-answer service for young adults. By branding itself as an industry leader, the WirelessFriend.com service can attract both users interested in young adult content (for example age-specific questions) and companies who advertise online and wish to target these users.

The company's branding strategy should be to target young adults where they are accessible – in the educational environment. Since students frequently require answers to their ad-hoc research questions, the WirelessFriend.com brand can be positioned as a reliable tool for information gathering. Since branding and marketing are typically very high costs for a company, by targeting the education environment, Fawkes Technologies can control costs while still building its brand within an environment where young adults are prevalent.

5.6 Summary

Fawkes Technologies can successfully position itself with a strategy to be the leader in the online internet advertising industry with its unique question-and-answer information service targeted at the young adult market segment. To do so, it must address a number of issues. The company must create unique and differentiated content valuable to young adults. It should focus its revenue model on keyword-sponsored advertising and communicate the benefits to companies. The WirelessFriend.com system should continue to provide a free question-and-answer service to users and leverage the non-personal information provided by website visitors for companies to tailor their advertisements.

The young adult market segment should be the target of all development, marketing and sales activities. As there are few competitors addressing this market, Fawkes Technologies can focus its efforts with the least cost. To create barriers to entry, the company should utilize its core competencies in R&D to innovate and evolve its intellectual property. Its authority rating technology, usage model and translation engine can be used to prevent competitors from achieving market share.

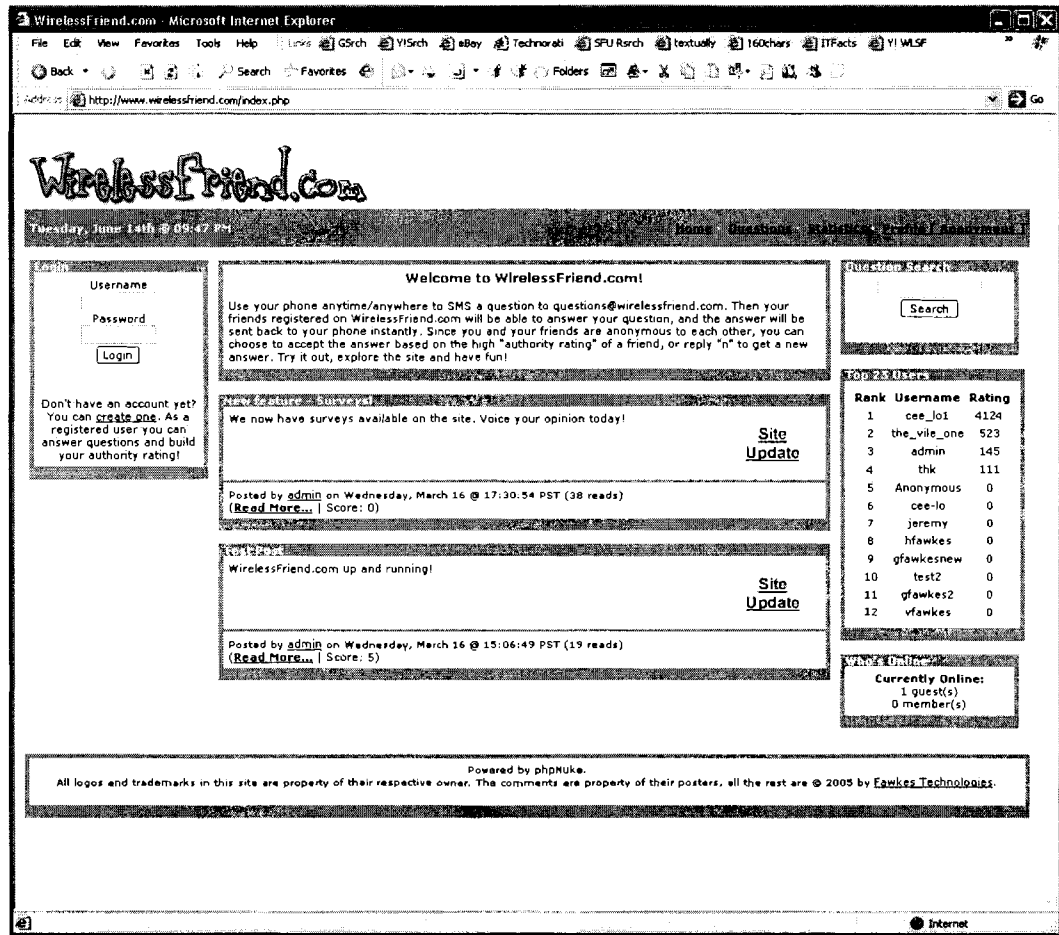
By promoting the WirelessFriend.com brand and features in the market, Fawkes Technologies will become the leader in providing question-and-answer services to young adults. A key early strategy will be to market to young adults where they are accessible – in the

education environment. Finally, the company should enhance its internal capabilities in the area of resources. By hiring in the areas of software development, marketing and sales, the company will begin to build core competencies in the areas where a software company can provide the most value. By establishing partnerships with complementary technology vendors, the company can associate its technology with other technologies and services favoured by young adults. And, by building its financial resources through investment and revenue generation, the company can grow successfully and gain credibility with future investors.

APPENDICES

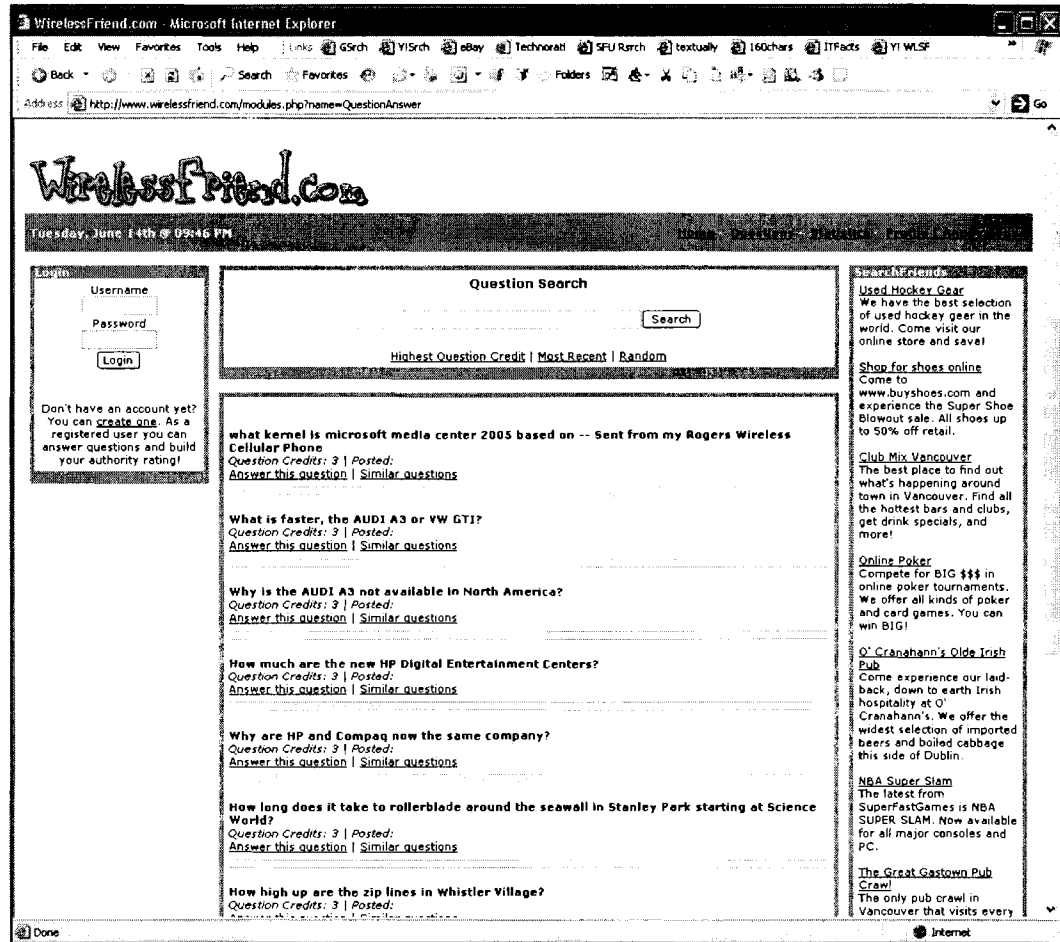
Appendix A

Screen shot of the WirelessFriend.com Information Service – Home Page.



Source: Fawkes Technologies WirelessFriend.com, May 2005, by permission. Microsoft Internet Explorer product screen shot reprinted with permission from Microsoft Corporation.

Screen shot of the WirelessFriend.com Information Service – Search Page.



Source: Fawkes Technologies WirelessFriend.com, May 2005, by permission. Microsoft Internet Explorer product screen shot reprinted with permission from Microsoft Corporation.

Appendix B

Screen shot of the WirelessFriend.com Information Service – Results Poll Page.

The screenshot shows a web browser window titled "WirelessFriend.com - Surveys - Microsoft Internet Explorer". The address bar displays "http://www.wirelessfriend.com/modules.php?name=Surveys". The page features the WirelessFriend.com logo and a date/time stamp: "Saturday, June 25th @ 12:17 PM".

On the left side, there are several user-related sections:

- Admin:** "You're currently logged in. Logout"
- Authority Rating:** "0. Your mobile phone is not linked!"
- Saved Searches:** Hockey, Programming, Beer
- Survey:** "Would you use your expertise to answer questions?" with radio buttons for "Yes" and "No", a "Vote" button, and "Results Polls Votes 30".

The main content area is titled "Post Surveys" and lists the following surveys with their results:

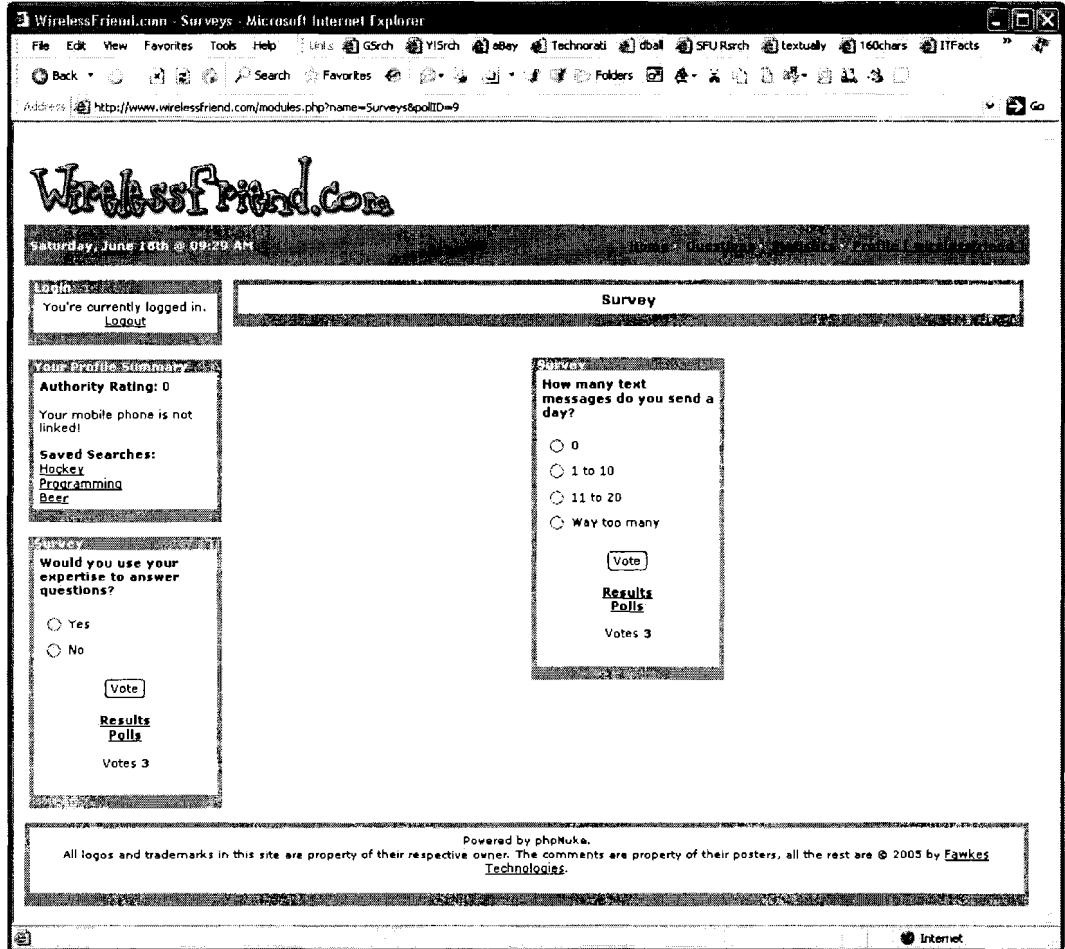
- [Would you use your expertise to answer questions?](#) (Results - 30 votes)
- [Would you click ad links related to questions?](#) (Results - 26 votes)
- [Would you pay for this service?](#) (Results - 29 votes)
- [Is this question-and-answer service useful?](#) (Results - 29 votes)
- [Have you upgraded your phone in the past year?](#) (Results - 29 votes)
- [Do you have a QWERTY keyboard phone?](#) (Results - 29 votes)
- [Do you find it difficult to type text messages?](#) (Results - 29 votes)
- [Are voice calls too expensive?](#) (Results - 29 votes)
- [Do you prefer text messaging to voice calls?](#) (Results - 29 votes)
- [How many text messages do you send a day?](#) (Results - 28 votes)
- [Do you go to school?](#) (Results - 29 votes)
- [How old are you?](#) (Results - 28 votes)
- [Where are you from?](#) (Results - 29 votes)
- [Favorite Day of the Week](#) (Results - 24 votes)
- [Favorite Color?](#) (Results - 24 votes)
- [What's your favorite soft drink?](#) (Results - 25 votes)

Below the list is a section titled "Surveys Attached to Articles".

At the bottom, a footer contains the text: "Powered by phpNuke. Copyright © 2002-2005 Fawkes Technologies. All Rights Reserved. Designated trademarks and brands are the property of their respective owners. The comments are the property of their posters. For further information contact Fawkes Technologies."

Source: Fawkes Technologies WirelessFriend.com, May 2005, by permission. Microsoft Internet Explorer product screen shot reprinted with permission from Microsoft Corporation.

Screen shot of the WirelessFriend.com Information Service – Survey Question Page.



Source: Fawkes Technologies WirelessFriend.com, May 2005, by permission. Microsoft Internet Explorer product screen shot reprinted with permission from Microsoft Corporation.

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