Utah State University

# DigitalCommons@USU

5-1996

# The Development of an Electronic Newspaper at the Deseret News and a Survey of its Users

Marilyn L. Karras
*Utah State University*

Follow this and additional works at: https://digitalcommons.usu.edu/gradreports

Part of the Communication Commons

THE DEVELOPMENT OF AN ELECTRONIC NEWSPAPER

AT THE DESERET NEWS AND A SURVEY

OF ITS USERS

by

Marilyn L. Karras

A Plan B project submitted in partial fulfillment
of the requirements for the degree

of

MASTER OF SCIENCE

in

Communication

Approved:

_____            _____
Major Professor                     Committee Member


_____            _____
Committee Member                    Head of Department


UTAH STATE UNIVERSITY
Logan, Utah

1996

# ABSTRACT

The Development of an Electronic Newspaper

at the Deseret News and a Survey

of Its Users

by

Marilyn L. Karras, Master of Science

Utah State University, 1996

Major Professor: Dr. James Derry
Department: Communication

This thesis looks at the history of electronic newspaper delivery systems at several

newspapers and provides an in-depth study of how one Utah daily newspaper, the Deseret

News in Salt Lake City, developed its own electronic newspaper over a period of years

and convinced its board of directors to support it. It outlines the process of defining

goals, policies and processes for creating and managing the system. It contains results of

a survey conducted of subscribers to the electronic edition, called Crossroads. The survey

provides demographic profiles of Crossroads users, shows how often the electronic

edition is used in their homes by users in various age groups and for what purposes. The

survey results indicate which services of Crossroads are most and least popular among

users and allows respondents to recommend changes and improvements in Crossroads.

The concluding chapter provides a look ahead at what electronic information systems are

currently emerging, particularly the World Wide Web. Indications are that the Web is

replacing earlier electronic newspaper editions as a simpler way to receive information.

The Deseret News plans to eliminate Crossroads and concentrate its efforts on its Web

page. The newspaper has plans to charge a fee for some information it currently makes

available on the page.

(76 pages)

# ACKNOWLEDGMENTS

CONTENTS

LIST OF TABLES

Table

# CHAPTER I

## NEWSPAPERS: IN THE INFORMATION BUSINESS

### Print Vs. Electronic

Newspapers are changing. The traditional printed newspaper is facing competition for readers from a host of electronic information media. During the decade of the '90s, information and communication have taken on a new look and voice. Personal computers at work and at home give their users almost unlimited access to information and possibilities for interpersonal communication that are limited only by the number of people logged on to the Internet, and that number is increasing every day. If newspapers are to survive and continue providing information to their readers, they must do much more than continue along the traditional road they paved centuries ago.

The information superhighway is a much-overused metaphor for the new media of various forms, especially involving the computer but increasingly including cable television and telephone, but the metaphor works when applied to newspapers. The printed newspaper created its own highway many years ago with traffic consisting of the daily news, entertainment and some in-depth analysis and commentary to make readers aware of their world and to help them understand it. It was easy to jump onto the relatively slow-moving road: Simply pick up a newspaper, sit down in a chair and read. Plugging into the superhighway of electronic information is not so easy, but once the techniques are mastered, it offers unlimited information and communication, moving, changing and being updated as quickly as electricity travels along wires or impulses move

along fiber optic threads. Printed newspapers have to change, keeping in mind that they are in the information business, not the newspaper business.

What is the role of a newspaper today and what will it be in the 21st century? How can newspapers compete with electronic media and should they? What opportunities does the electronic era present for newspaper owners? What is the potential for increasing revenue and how can newspapers take advantage of new ways to communicate with and influence readers? What is the best vehicle for carrying a newspaper's messages electronically? How have newspapers already responded to the challenge and what products and services have been created in the past decade to help newspapers remain viable competitors as the information superhighway becomes more crowded and the race for acceptance among consumers heats up.

This study will attempt to present an overview of the challenges and some answers to those questions. It will provide a close-up look at how one daily newspaper, the Deseret News in Salt Lake City, has tried to turn its roadway of information into more of a superhighway by developing an electronic version of the newspaper, the Crossroads online service. A survey of Crossroads users provides some useful information about how the electronic "newspaper" is being accepted, its limitations and its possibilities. The survey also describes Crossroads users -- their age, gender, levels of income and education, where they live and how they make a living.

Some conclusions will be drawn from the data, and some predictions will be made about the future of electronic newspapers in general and of the Crossroads system in particular.

Things Are Moving Fast

Dealing with the topic of change in such a dynamic field as communication as it relates to newspapers is similar to describing a comet as it streaks across the night sky. Things are moving so fast it is difficult to see what is happening and where the components are likely to end up or how they will look. It is a lightning-quick evolution, and what is written about it today is outdated tomorrow and ancient history next week. Still, it is useful to look at what has so far evolved and how newspapers are attempting to snatch a piece of the comet as it zooms along.

At the beginning of the 1990s, after decades of predictions by publishing executives and futurists, electronic newspapers were finally arriving on personal computer screens across the country. On-line editions of major papers blinked into existence in St. Louis, Chicago, San Jose, New York, Atlanta, Los Angeles, Austin and many other cities. In 1992 two of the country's biggest newspaper chains, Times Mirror Co. and Cox Enterprises, launched electronic services at their newspapers, including Times Mirror's Los Angeles Times and its New York newspaper, Newsday. Those announcements followed decisions by three other major chains, Tribune Co., Knight-Ridder Inc. and Gannett Co. [1]

Clearly, the traditional role of the newspaper is undergoing some changes in philosophy while it attempts to expand its products beyond the printed paper. The mission to provide news about events on a daily basis, to entertain and to analyze and

---

[1] William Glaberson, "A Chance to Read More About It: Newspapers Move to Electronic Editions," New York Times News Service, August, 1993, p. 1.

comment on the world and its people has been jump-started to add more of everything, especially speed.

The conventional newspaper still has a number of traits that make it appealing to some groups of readers, most notably the older generation. It is familiar, foldable, lightweight, fully portable, inexpensive enough to lose or misplace without concern and ideal for wrapping garbage or lining the birdcage or cat box. And it offers an outlet for our favorite leisure-time activity -- browsing through an assortment of items (in this case, information) to find those worthy of more time or attention. The newspaper is a great excuse to relax, put up the feet and let the mind wander.

The electronic newspaper is geared more toward work -- going after specific information with some particular goal in mind. It can make browsing more efficient by personalizing information for particular needs and interests, saving time by making updated information available for any individual schedule, 24 hours a day. The role of a newspaper, both the traditional type and the new electronic versions, is to provide information in an organized way that makes it easy to get what is wanted and to determine what is most important and to provide readers with thoughtful and analytical writing. Print newspapers are organized into sections with headlines and other labels to identify types of information and order of priority. Computer-delivered newspapers can offer much more in quantity but must also provide the order if they are to be as useful as their parent products. So far, both delivery systems are viable because they attract audiences from different groups.

Many users of on-line services spend most of their time not with news but chatting with "neighbors" over the electronic backyard fence of cyberspace, browsing through a huge variety of electronic bulletin boards or engaging in other stimulating person-to-computer activities. Many of these on-line users seek a technologically driven experience, not necessarily a news-oriented experience. Users of on-line services with specific information needs -- sports scores, stock quotes or articles comparing different brands of consumer items -- can find what they want. But they re not using these services in the browsing mode characteristic of newspaper and magazine readers.[2]

## The Role of a Newspaper

If the role of a newspaper continues to be providing information about current events and people in an organized and timely manner, electronic delivery systems will probably fill a niche among computer-oriented consumers, because they can be organized while delivering even more information faster than ever. The content -- the thoughtful and analytical stories written by skilled journalists -- can be included on the "pages" of the electronic newspaper as well as the printed page.

The question of whether newspapers can and should compete with other electronic media, including television and telephone, depends for its answer on the continuing role of the newspaper staff to write, organize and analyze the news.

---

[2]Mark Thalhimer, "High-Tech News or Just 'Shovelware'"?, Media Studies Journal, Winter, 1994, pp. 43-44.

Newspapers can disseminate the information themselves via their own electronic services or provide their products for other media to sell or both.

Cable companies and the telephone companies see great opportunities for moving news and information over their lines. But their expertise is in carrying information, not in gathering it and preparing it. The phone company and the cable company are not likely to assemble their own news saffs. They will turn to newspapers for the stuff that goes out along their lines.

Thus, it is the limitless potential of our newsgathering capacity that will be a critical component in the fresh thinking and invention that create new distribution systems.[3]

Why An Electronic Edition?

The argument that newspapers should produce their own electronic services has two components, according to David E. Carlson. First is that they need to act quickly to protect their local franchises from "electronic encroachment." The rules of the newspaper game are changing. They used to say it would cost $300 million to go in to Philly and compete with The Inquirer; now it costs $50,000. That $50,000 electronic service may be only a knat on the T-bone that is the Inquirer's revenue stream today, but in 10 years who knows? The second point is that newspapers should learn from railroads that thought they were in the railroad business instead of the transportation business. Remember at all times that WE are in the information business, not the newspaper business. While you're

---

[3]Robert H. Giles, "It's All About Content," speech given at Bradley University, Peoria, IL., April 21, 1994.

at it, think about this, too: It's a whole lot cheaper to deliver that information to computers than to doorsteps.[4]

Randy Bennett, director of new media for the Newspaper Association of America and formerly director of services development at America Online and developer of Knight-Ridder's Viewtron videotex effort, says "Newspapers must be prepared to deliver information in any form the consumer wants it, whenever he/she wants it. Many will continue to want the traditional print product. Others may choose to supplement tht with a voice-based service or an on-line service. Many may choose a "news-on-demand" option through their TV." Newspapers have always been involved in emerging news delivery systems, from radio to TV to the early days of on-line services and audiotex. Many newspapers, representing all circulation categories, are beginning to position themselves for the future by developing and experimenting with new forms of delivery, both print (e.g. targeted publications) and electronic (voice, on-line, fax, interactive TV, CD-ROM).[5]

Clearly, the way consumers retrieve information will change as new delivery mechanisms, driven by advances in technology, provide readers with more choice and convenience. Traditional newspaper advantages -- portability, browsability, high

---

[4]David E. Carlson, "Ask the Online Experts," ASNE/SND Technology Survey, 1995, p. 15

[5]Randy Bennett, "Ask the Online Experts," ASNE/SND Technology Survey, 1995, p. 15.

bandwidth -- are being eroded by new technologies which, as costs continue to decline,

will open up competition from small entrepreneurs to major media companies.[6]

The opportunities available to newspapers by getting involved in electronic

services so far lie mostly in maintaining a presence among computer-literate readers.

Most have not been substantial revenue-producers.

Early Online Editions

One of the earliest online services started by a relatively small

independent newspaper is StarText, a product of the Dallas/Fort Worth (Texas) Star-

Telegram. StarText got started in 1982 as a complement to the Star-Telegram, offering

the daily newspaper's content online to computer users. The original subscription fee for

the service was 49.95 per month for unlimited connect time, and that price is the same

today. In addition to the daily newspaper, subscribers had access to games, community

news targeted to specific neighborhoods, an online encyclopedia and other information

focused on families. After starting out, StarText oprators developed some special

packages for additional fees, such as expanded business information and continuously

updated stock reports.[7]

"The idea behind StarText was rooted in this simple notion: Provide a friendly,

affordable service, focusing on quality products and personal attention. Its creators

---

[6]Ibid., p. 15.

[7]Joe Donth, "The Importance of Doing It Right," <u>StarText Ink,</u> October, 1989, p. 1.

wanted the service to make money, but they were also influenced by environmental concerns and a desire to be at the forefront of technological innovation. When the industry first learned we were going to offer a locally based, no-connect-charge, unlimited-use service, they said we were crazy. But, in retrospect, that turned out to be a shot heard 'round the online world. Today StarText has become a full-fledged electronic community now serving more than 10,000 customers with more information and services than any of us envisioned in the beginning."[8]

The service has continued to grow, both in subscribers and content. One of its distinguishing traits is its emphasis on community journalism. Unpaid "correspondents" are allowed to input all types of community news including school events, senior citizen center lunch menues and even who is visiting around town. The electronic delivery eliminates the restrictions of space that limit the ink-on-paper newspaper.

In 1991 StarText moved to a more efficient format, eliminating the necessity of searching through 3,000-plus keywords. In 1993 it separated from the newspaper and is now operated as a separate company under the umbrella of the Star-Telegram electronic Information Service. StarText has developed an electronic publishing software package for sale to newspapers trying to develop their own online systems. In 1990 the service netted just over $100,000 from subscriptions which jumped more than 30 percent in 1993. It still does not include advertising.[9]

Making Money Electronically

---

[8]Ibid., p. 2.

[9]Sandra J. Hodson, StarText sales and marketing supervisor (personal communication, August, 1992).

David E. Carlson, founding editor of an electronic newspaper launched

by The Albuquerque Tribune and now director of the Interactive Media Lab at the

Unviersity of Florida, believes newspapers can make money through online services.

> "We broke even in Albuquerque without advertising or classifieds. Of
> course, it's do-able, but I don't believe newspapers should look at these
> services as near-term profit centers. They should look at them as a means
> of protecting their core business at low cost. I believe online services will
> become profit centers in the next few years, but the market is not yet large
> enough for us to view them as some sort of revenue 'tap' that we just turn
> on and watch money flow out of like water. But that market is growing
> every day, and now is the time for us to get the experience necessary to tap
> the market as it grows. We must realize that we're in the information
> business, not the newspaper business and that how we deliver the
> information we gather does not matter ultimately."[10]

Bennett notes that, while few are making money at online services, except for the

platform companies themselves or the Internet access providers, "The profits will come

over time as the market grows and awareness about online services increases. As more

consumers hook up to online services, advertisers will begin to take notice and begin

subsidizing these products."[11]

Current Trends in Online Services

Given the proliferation of newspaper online services and the growing

involvement of newspapers in electronic delivery systems, it seems most newspapers

should consider some form of electronic service. Bennett and Carlson both recommend

---

[10]Carlson, p. 15.

[11]Bennett, p. 15.

it. Most of the early online newspapers are still in operation, including StarText, Electronic Trib (Albuquerque Tribune), Post-Link (St. Louis Post-Dispatch), S-R Minerva (Spokesman Review), Connect\Observer (Charlotte Observer), CompuSpec (Hamilton (Ontario) Spectator), Fred the Computer (Middlesex News), Digital Link (Washington Post), Access Atlanta (Atlanta Journal/Constitution), the News-Times BBS (Danbury (Conn.) News-Times), StarView (Kansas City Star), the Poughkeepsei Journal bulletin board service, and NandO.net (Raleigh News & Observer). An electronic version of the Wall Street Journal started up in 1994; other news and information producers undoubtedly also will experiment with electronic distribution of their products. But surely there will be a considerable amount of churn in the market in the coming years as both products and delivery systems develop.[12]

## Nationwide Technology Survey

The conclusion of a survey of online newspapers completed in 1995 is that newspapers of all sizes should be involved in electronic media in some form. "Given the range of options, newspapers don't have to make major investments to be players. From modest audiotex systems to sites on the World Wide Web, these inexpensive approaches will provide valuable lessons to smaller market newspapers on what their market wants electronically and what they're willing to pay for. The services they offer will largely be dictated by the consumers. There's no magic bullet. Newspapers will have to experiment with a variety of information to seehow the market responds. Online services have

---

[12]Thalhimer, p. 51.

generally been driven by communications. A smaller market newspaper could simply set up an online site that fostered communication between the newspaper and the public and among the citizens themselves, driving discussion on hot local issues. Many small-market newspapers are now out there (offering online services) and could offer some insights. They include The Pottsville (Pa) Republican, the Star Tribune (Casper, Wyo.), Capital Gazette (Annapolis, Md.), Colorado Springs Gazette-Telegraph.[13]

The survey conducted by the American Society of Newspaper Editors' Small Newspapers Committee and the Society of Newspaper Design's Technology Committee was answered by 245 newspapers. Answering yes to the question, "Is your newspaper exploring or has it launched any projects using online services?" were 58 with circulation of 0-50,000, 50 with circulation 50,000-150,000, and 44 with circulation over 150,000. Answering no were 56 in the below-50,000 circulation category, 24 in the midside category and only four among those with circulation over 150,000. A total of 236 answered that question. The survey editors asked newspapers who are "leading the way" in online services to share their experiences. The information about current online systems gleaned from the survey and published interviews provides a look at what is currently happening in the field of newspaper online services.[14]

---

[13]Joy Franklin and Olivia Casey, "From the Editors," ASNE/SND Technology Survey, 1995.

[14]ASNE/SND Technology Survey, p. 20.

The five newspapers providing additional insights into their operations were: The Tampa Tribune, Gainesville Sun (both Florida), Raleigh News & Observer (N.C.), The Albuquerque Tribune (N.M.), and the Deseret News (Salt Lake City).

Only one is operating its service under partnership with another company. The Tampa Tribune system is carried on Prodigy Online Service network. Two had agreements with schools and universities, but the others had their own independent systems. All offer their complete daily newspaper and additional news from wire services, updated sports and business statistics and community news, weather and entertainment listings. Most offered a "chat" line and several had archives to let users search back issues of the newspaper. Three provide a gateway to the Internet.[15]

---

[15]Ibid., pp. 16-19.

CHAPTER II

HISTORY OF THE DESERET NEWS ONLINE EDITION

Genesis of an Electronic Idea

The concept of an online system at the Deseret News, an afternoon daily in Salt Lake City with a daily circulation of about 65,000 and about 68,000 on Sunday, began to form in the minds of three staff members in 1988 and 1989. What the Deseret News eventually launched as the Deseret News Crossroads edition in January 1995 was at first envisioned as a bulletin-board system that would help staffers tap into other existing data and eventually would be offered to the public for a subscription fee.

Steve Schowengerdt, the newspaper's pagination chief, and Dave Croft, the Deseret News operations manager, began discussing various options for the role of the online system or BBS, which they saw as: an electronic newspaper, a supplement to the printed newspaper, a replacement for the printed newspaper, a limited Wasatch Front or Utah information service, a national electronic newspaper, a general-interest national information service, a worldwide network for members of The Church of Jesus Christ of Latter-day Saints (LDS), which owns the Deseret News, or a window to the world for the newspaper and its staff.

The BBS formulated by Schowengerdt over the space of a year or two was too user-unfriendly to be very popular, even among other staff members. A bulletin board, which is still the type of electronic service offered by many newspapers, including the Salt Lake Tribune, the chief competitor of the Deseret News, is capable of offering only

limited services. It is a place on the user's computer to exchange mail, upload and download files, but its capabilities for searching, storing and accessing information. A BBS requires much computer familiarity and is not designed for inexperienced users.

After Schowengerdt left the News in 1991, Croft and a new player, Stewart Shelline, a paginator with a programming background, transformed the concept of a public-access BBS into a true online system, or what is commonly called an electronic newspaper. An online system caters to the typical consumer and allows them to access information and use it with a minimum of computer expertise.

## Enticing the Public and the Board of Directors

While Shelline was writing software, Croft was talking to members of the Utah Library Association about the newspaper's online library system that had been operating since 1988, electronically storing all articles published in the newspaper since its inception. The library was initially used by Deseret News staffers but became a forerunner of Crossroads when it was made available on line to public, university and secondary-school libraries. The expansion of the library on line helped Croft and Shelline as they discussed the routes they might take in creating and offering a true online newspaper.

As Croft and Shelline began eyeing a public outlet for the newspaper's electronic services, the newspaper's board of directors voiced a different motivation for the project. The board included five members who were leaders of the LDS Church and two lay members. While the online project may have been a sort of "toy" of the computer

experts, the board mandated that all public online services eventually produced by the newspaper produce a "revenue stream," however small. A newspaper is in the information business, and as is true of any business, the bottom line IS the bottom line.

Croft described his motivation for promoting an online service: "I have two reasons, one of them selfish and the other unselfish. The selfish reason is if we don't keep up, have a viable and interesting newspaper, the Deseret News might not last long enough for me to retire. The unselfish reason is I've got access to all this stuff -- I can go digging around for all the information I want, and I just think everybody out to have that."[16]

Croft realized that, as emerging electronic information-delivery systems were becoming more numerous and popular, the Deseret News would have to offer some type of electronic edition or the competition would snap up those consumers and probably eventually take subscribers from the printed newspaper. To keep current subscribers and perhaps add to the newspaper's subscriber base by offering an electronically delivered product, newspaper officials would have to take some action soon. The mood of business and consumers was being set by what computers could do at home, at work and anywhere people travel.

Reasons to Start an Online Edition

Discussions with the board of directors led to debates over the purposes, goals and motivations for creating an online system. Croft sifted through the concerns voiced in

---

[16]Dave Croft (personal communication, January, 1994).

these meetings and in 1993 came up with the following outline of how an online system

would benefit the Deseret News:

1.  It would help the company compete with the Salt Lake Tribune and other

media.  For  more than 20 years, organizational planning at the Deseret News has

included talk about a morning edition, primarily to compete with the morning Tribune.

An online newspaper would be nearly a 24-hour newspaper, decreasing the edge held by

the morning competition.

2.  It has the potential to increase circulation of the newspaper without increasing

printing or circulation costs, the largest expenses of the newspaper.

The cost of distributing newspapers door to door is increasing much faster than

the cost of a subscription and the revenues from advertising.  Printing costs also are

escalating.  The rising cost of newsprint, which is likely to increase even further, was the

chief motivation for the two most recent subscription-price increases at the Deseret News.

It has reached the point -- as Publisher Jim Mortimer has pointed out -- that increasing the

circulation of the Deseret News actually results in a loss of revenue, because it costs more

to deliver the newspaper to the doorsteps of subscribers than a subscription or any

increase in advertising generates.

That raised interesting questions relating to an online system that had the potential

to take subscribers away from the printed newspaper:  How much circulation could the

printed Deseret News lose without affecting advertising rates? Would modest circulation

decreases in the printed paper actually increase total revenue because of savings in

newsprint? The advertising rates for both the Deseret News and Salt Lake Tribune are set

by the Newspaper Agency Corporation (NAC), a company formed so the morning and afternoon newspapers could share -- among other things -- expensive press equipment, composing-room and advertising facilities and staffs. Advertising rates for the two newspapers are said to be artifically low, based on current circulation figures of the two newspapers combined, because of the joint operating agreement (JOA). An exception to anti-trust laws granted by Congress to help maintain competing newspapers in large markets allows the JOA to exist. Increasing circulation of the printed newspaper could work against revenue increases, because of printing and distribution costs and because raising rates paid by advertisers could encourage them to place their ads with competing media, notably direct mail.

3. It would allow newspapers to compete with broadcast media by making the news available 24 hours a day and by giving more background information on many subjects.

Though the effect of radio news on the newspaper industry was limited, television and its immediacy of news and an apparent depth of reports have taught people they may not need a newspaper the way the used to. This is especially damaging to an afternoon newspaper because the major newscasts are also in the evening.

4. An online system would compete better with direct-mail and total-market-coverage publications that successfully sell classified-type advertising and tailor their distribution to target markets.

Besides printed publications, phone companies now have the opportunity to provide classified advertising on line. If newspapers do not keep up, they could find

themselves in the same predicament they created for themselves when they failed to recognize the competition of direct-mail and TMC products.

5. The Deseret News must compete with other information providers, including existing online services like Prodigy, CompuServe, Genie, America Online, Mercury Center, DataTimes and others. Also, the Salt Lake Tribune had launched its electronic information distribution service, an unwieldy BBS system but also the first local newspaper service in the Salt Lake Valley.

6. The Deseret News had an edge with the current sales of subscriptions to its online library. A full-blown online service seemed a natural outgrowth of that successful project.

7. The Deseret News was believed to have a niche that no other newspaper had -- an almost built-in subscriber base of members of the LDS Church who were interested in the Church News, a weekly publication of the Deseret News, and other LDS-related materials. These subscribers live in many areas of the world and often have an interest in Brigham Young University sports and other subjects that would be covered more thoroughly in the Deseret News online service than in any competing medium.[17]

In meetings of the Deseret News technology committee, organizational planning committees and the board of directors, other reasons for setting up an online system emerged. Committee members said they believed an electronic newspaper could recruit and retain younger readers, offer a more complete news product than is possible in the

---

[17]Dave Croft, <u>Deseret News Online Origin,</u> January 22, 1994.

shrinking newshole of the printed newspaper, to add value to the printed product and to tap a potential revenue stream.

## Initial Plans Take Shape

Croft and Shelline convinced the board eventually that considerations other than revenue were the primary motivators at this point. Croft said the directors "want it not to be a money-loser. They probably wouldn't have minded if we'd broken even after two or three years and then had only a modest increase."[18]

With the official go-ahead from the board of directors, early in 1994 the technology committee, headed by Managing Editor Don Woodward, began making plans to launch the online service. The committee formed a panel of editors to decide content, the marketing director took on promotional assignments, and Shelline was moved from his part-time pagination duties to work full time on designing the software. Croft handled hardware, including phone hookups for PC modems of subscribers.

Shelline describes, in lay terms, the process of designing software:

"We developed software that controls all the communications, all the behind-the-scenes work that a bulletin board forces the usere to deal with. We wanted to eliminate that whole interface (needed with a bulletin board) and provide software that runs with the Windows environment and controls the interface between the computer that resides at the newspaper and the end users, you and me. You can dial a published number at home and request a subscription online. Then we'd send out an agreement and some disks of software with instructions on how to load it.

Part of what the software will do is determine what kind of modem you have or even if you have one, will determine what kind of hard-disk space and memory you have -- everything it needs to know to run itself. If there are problems, it will ask you a question and if you're not familiar with the question or

---

[18]Croft (personal communication, 1994).

how to answer it, you can call our service here at the Deseret News. Once you've installed that, you log in and are provided with a password and user name. When you log back in, all you have to do is enter your password, your user name will be stored and even your password can be stored. The software will then instruct your computer to dial our computer, then it does all the hand-shaking and all that goes on to connect two computers over the phone line. After that, it's just a matter of pointing and clicking. You'll be presented with a set of buttons and a set of menus you can click on. You can use a mouse, and if you don't have a mouse, you'll be able to use a key and key combinations to get all the different functions. And then just point and click.

We keep the entire text of each day's newspaper plus additional wire and local stories the newspaper didn't have space to run for four days. Then, you can always go back on the library system to any previous issue, seamlessly search for a new keyword for past editions. It includes all the graphics, photos, maps -- everything that the original story had. You'll have all the news we didn't have room to print tied to the online service and to material printed in the newspaper. For example, you see BYU beats Notre Dame. At the end of the newspaper story, you see a box that says 'To see related stories online, type BYU/Notre Dame. So when you sit down at the computer, you can search for additional stories, from our writers or the wire or whatever. The service groups news into categories and allow the user to click on icons to get general categories and then click on headlines to get text and graphics."[19]

The content committee discussed how to get and provide on line the most thorough and up-to-the-minute news coverage possible. But the question kept being raised by the board of directors whether the Deseret News online service, now called Crossroads, should "scoop" the printed newspaper. The possibility of losing subscribers hovered over all discussions.

For months starting in January 1994, Croft, Shelline and members of the technology committee worked on a list of tasks and decisions that had to be completed before Crossroads was finally launched. A memo dated Jan. 11, 1994, from Croft to all technology committee members outlined them as follows: get approval of the board of directors, reorganize the Deseret News staff, make content and philosophy decisions,

---

[19]Stewart Shelline (personal communication, February 15, 1995).

obtain contracts for additional information from wire news services and the LDS Church, decide marketing campaign strategy, set up billing procedures, order and install necessary equipment, find a place to put the new Information Services Department, hire more staff, establish security provisions and complete online software.[20]

The committee was hoping all those decisions could be made and tasks accomplished by June 1994, the initial target launch date. It didn't happen. The board of directors wanted to get and study results of focus groups conducted by the Wirthlin Group on a Crossroads prototype. In the meantime, software would continue to be fine-tuned by Shelline, working nearly single-handedly, and committee members did what they could to get things rolling without the final approval of the board.

<div align="center">Wirthlin Group Research</div>

The results of the Wirthlin Group research were positive. The report said participants were definitely interested in the product when it was merely described to them. When they had a chance to actually view and use the prototype system, interest levels increased further, and there was considerable enthusiasm among most participants. The software was, for the most part, considered to be user friendly, something the reader can work with intuitively. The focus group participants responded especially well to the archive and research capabilities, based on a keyword search function, the capability to retrieve more information about a topic than there is room to print in the actual newspaper, the unique access to material with an LDS Church slant, instant access to

---

[20]Dave Croft, memo dated January 11, 1994.

news information and the ability to access that information at any time most convenient to the reader, potential time savings, the ability to download and print material on the reader's own PC, the graphics and photo capabilities, the e-mail feature, and the potential for using the online newspaper as an educational and research tool for families. The focus groups were held in Utah and California, and participants' attitudes varied according to their location, with Utah participants excited about receiving their newspaper electronically but not especially interested in the Church News material. Those in California, however, were less interested in the news and more interested in the church information. Because of the church connection and the committee's view of church information as Crossroads's special niche, the focus groups were heavily weighted with church members. One aspect of the Wirthlin report that delayed board approval for Crossroads was a statement that an unexpectedly large number of participants said they would use the electronic paper as a replacement for the printed paper and anticipated dropping their subscription to the Deseret News when Crossroads was launched -- exactly what the board feared.[21]

## Cost and Content

The decision was made to make the software free to Deseret Newbscribers with 30 hours of free online time per month. Nonsubscribers would pay $9.95 per month; Sunday-only subscribers would be charged $2.25 per month, and Church News-only subscribers living outside Utah would pay $8.50 per month. Those who use the system

---

[21]Barbara Openshaw and Steve Bodhaine, memo from Wirthlin Group addressed to Deseret News, January 11, 1994.

more than 30 hours per month would be charged $2 per hour. Toll-free phone access would be available only in the Salt Lake metropolitan area. Users in other areas would have to pay their normal long-distance charges. This fee setup alleviated the fears of the directors but resulted in nearly all Crossroads subscribers being residents of the Salt Lake Valley and Davis County where no toll charges would apply. The vast majority of Crossroads users were also Deseret News subscribers.

A decision to put news online as soon as deadlines for the print newspaper were past also eliminated the fear of "scooping" the print product. The news would be updated throughout the day, but sports stories would not be carried by Crossroads until the newspaper deadlines were past. Only scores would be available as games were played. Both the subscription and deadline decisions were made primarily to alleviate fears of hurting Deseret News subscriptions, they hurt the success of Crossroads. The decision not to put all news on Crossroads as soon as stories were available simplified staffing problems. After Shelline was moved to online services full time, another full-time programmer and a part-time programmer/help-line operator were added, but editors were not required to change shifts in order to move stories to Crossroads.

Making wire service news available was relatively easy. Associated Press had already been approached by other online services and were willing for their material to be distributed online. Other wire services eventually agreed, also. The LDS Church was less cooperative. Only the Church Almanac and archived Church News material could be added to the content of the weekly Church News that was put online with the daily newspaper.

We Have Liftoff!

Little by little, decisions were made, and, with formal approval from the board of directors later in 1994, a new target launch date of Oct. 1 was set. But testing took longer than originally planned, and the launch date was postponed. Crossroads was finally made available to subscribers and non-subscribers of the Deseret News on Jan. 26, 1995. The only advertising to promote Crossroads consisted of several small news stories in the Deseret News and one three-page "News Extra" on the day it was launched. Some small "plugger ads" in the newspaper also promoted it, but nothing was done on a large scale, primarily because the committee and board of directors were unsure how the equipment would handle widespread use, and they wanted to try it out with a few users at first.

But the response was surprising. In only a few weeks, Crossroads disks had been sent to nearly 3,000 households and individuals. It appeared many people had purchased computers for Christmas and were eager to try every service they could. Most of the initial users were Deseret News subscribers, and that trend continued. Crossroads initially offered the complete text of the daily newspaper, the Deseret News archives, daily classified ads, LDS Church News weekly, the new Church Almanac, daily Fantasy Basketball updates for those involved in that NAC program, updated sports scores, stock market and weather reports and an e-mail feature that allows users to communicate with other Crossroads users.

Despite extensive testing by employees on their home PCs and others, Crossroads users at first experienced many problems with starting up the program, with operating

some functions and downloading material. The help desk was flooded with calls. What

was envisioned as a part-time job for two people became almost full time for both as

people called with all kinds of problems. Some problems were due to users being

inexperienced with computers in general, but some features of Crossroads simply didn't

work as well as they should. Over the course of the next year, more subscribers became

only occasional users or quit logging on at all. One factor that was unforeseen by the

creators of Crossroads was the advent of the World Wide Web on the Internet. When the

Deseret News initiated its own web page, many former Crossroads users -- especially

those hard-core computer users who also subscribed to an online service that offered

Internet access -- switched to using the web. From several thousand initial subscribers,

regular Crossroads use has dropped to only a few hundred regular users. A survey

conducted for this thesis with the help of Steve Hawkins, Crossroads editor, shows who

is using Crossroads and what features they enjoy.

# CHAPTER III

# SURVEY OF CROSSROADS USERS

## How the Survey Was Administered

To determine user response to the Deseret News' online edition, a survey was conducted during a two-month period in July and August, 1995. Surveys were mailed to 200 subscribers of Crossroads, randomly selected from a list of 1,010 subscribers who had logged onto the system in the previous 30 days. Each fifth subscriber after the third subscriber on the list was targeted. The surveys were mailed accompanied by stamped, self-addressed envelopes for returns. Confidentiality was assured respondents who were promised that no individual information would be published, only answer totals. Ninety-eight surveys were returned, with one additional one returned with no responses. The answers were entered into a computer database in ASCI format.

## Purposes of the Survey

The purposes of the survey of Crossroads users were: 1) to understand the demographics of the people who are using the system, 2) to learn which services and features of Crossroads are most popular and how often Crossroads is used by individuals and the household in general, 3) to discover which services are and are not working well, 4) to get suggestions from users about what services they would like to be offered in the future, 5) to determine the likelihood of continued use by current subscribers and how customers view the service compared with the printed newspaper.

Demographics of Users

The demographic information provided through the survey about respondents fit with expectations about computer owners and users. Income levels were high, with 24 of the 85 who answered this question indicating a household income, before taxes, of at least $65,000. Only nine were below $25,000, and 49 had income of at least $45,000. Nationally, computer users have incomes that are consistently above average. Crossroads users fit this profile.

The question asking respondents to designate their occupations was designed to provide a look at the type of people who are interested in subscribing to an online service. Their occupations also give some indication of their backgrounds, training and income and the amount of time they have to read either a printed newspaper

| Table 1: Income | | |
|---|---|---|
| Approximate total household income, before taxes, for 1995 | | |
| Income | Number of users | Percentage |
| Less than $15,000 | 0 | 0 |
| $15,000 to $24,999 | 9 | 10.6% |
| $25,000 to $34,999 | 14 | 16.5% |
| $35,000 to $44,999 | 13 | 15.3% |
| $45,000 to $54,999 | 16 | 18.8% |
| $55,000 to $64,999 | 9 | 10.6% |
| $65,000 and above | 24 | 28.2% |
| **Totals** | **85** | **100%** |

or an online edition.  Primary wage-earners and secondary wager-earners were

questioned in each household.

Each was asked to indicate whether he or she held a title that could be classified as

executive, manager or staff, and listed possible work categories as professional, technical,

service, clerical or labor.

Among the 82 primary wage-earners who answered the question, 34 were

professionals, 25 in service and 19 in technical occupations.  Asked to indicate their titles,

41 wrote they were managers, 19 executives and 22 in staff positions.  Of  32 secondary

wage-earners answering, 12 were professionals, 19 in service and one clerical.  Twenty-

| Table 2:  Occupations | | | | |
|---|---|---|---|---|
| | Primary wage-earner | | Secondary wage-earner | |
| | Actual Number | Percentage | Actual Number | Percentage |
| Job Titles | | | | |
| Executive | 19 | 23% | 2 | 6% |
| Manager | 41 | 50% | 21 | 68% |
| Staff | 22 | 37% | 8 | 26% |
| TOTAL | 82 | 100% | 31 | 100% |
| Type of Work | | | | |
| Professional | 34 | 41% | 12 | 38% |
| Technical | 19 | 23% | 0 | 0% |
| Service | 25 | 30% | 19 | 59% |
| Clerical | 1 | 1% | 1 | 3% |
| Labor | 4 | 5% | 0 | 0% |
| **TOTAL** | **83** | **100%** | **32** | **100%** |

one were managers, two executives and eight staff employees. The majority of primary

wage-earners have executive or managerial positions, primarily in professional or service

fields. These results fit with a profile of a user who is well-educated, makes a substantial

wage and has a job with opportunity for flexibility in hours. Many would likely work

with computers on the job, giving them familiarity with Crossroads technology.

Determining the levels of education of all adults in the household further

helps determine how education is reflected as computer interest and literacy.

Educational degrees held by males and females of various ages in the household

indicate a high level of education among all respondents. Of the 85 "oldest males" who

answered the survey question, 45 indicated they had graduate degrees, 31 college degrees

and nine high school diplomas.

| Table 3: Education | | | | | | |
|---|---|---|---|---|---|---|
| What educational degrees are held by adults 18 and older in your household? | | | | | | |
| | High school | | College | | Graduate | |
| | Users | % | Users | % | Users | % |
| Oldest male | 9 | 10.6% | 31 | 36.5% | 45 | 52.9 |
| Other males | 18 | 60% | 12 | 40% | 0 | 0 |
| Oldest females | 23 | 30% | 34 | 45% | 19 | 25 |
| Other females | 5 | 42% | 5 | 42% | 2 | 6 |
| **Totals** | **55** | **27%** | **82** | **40%** | **66** | **33%** |

| Table 4: Residence, Part I | | |
|---|---|---|
| Of those who reside in Utah, in what county is the household located | | |
| County | Number | Percentage |
| Salt Lake | 66 | 76% |
| Davis | 19 | 22% |
| Utah | 2 | 2% |
| **Total** | **87** | **100%** |

| Table 5: Residence, Part II | | |
|---|---|---|
| Of those who reside in Salt Lake County, in which part of the county is the household | | |
| Area of county | Number | Percentage |
| East | 32 | 49% |
| Central | 7 | 11% |
| West | 26 | 40% |
| **Total** | **65** | **100%** |

Of the 76 "oldest females" in the household, 19 hold graduate degrees, 34 college degrees and 23 high school diplomas. Among the younger males, 18 had high school diplomas and 12 college degrees. Among younger females, five had high school diplomas, five had college degrees and two had graduate degrees.

The household-location question provided another piece to the personality profile of users and helped determine whether the toll-free phone access was a factor in the number of subscribers from different areas.

All respondents indicated they live in Utah, with 66 in Salt Lake County, 19 in Davis County and two in Utah County. None were residents of other counties. The

access to toll-free service would tend to explain the preponderance of users living in Salt Lake and Davis counties. Of those living in Salt Lake County, 32 wrote they live on the east side of the valley, seven in the central area and 26 on the west side. Since there is a stereotype of west-side residents having lower incomes and less education, the numbers of Crossroads users who indicated they live on the west side is interesting. Nearly as many live there as on the east side of the county, traditionally viewed as the "upper-class" part of the county. This could indicate that middle- to lower-income people are interested in electronic information or it could mean the stereotype by area of residence is inaccurate. The extreme concentrations of lower-income people in the central areas of the county would more predictably result in a lower number of Crossroads users in that area. Also, there are fewer residential areas and more commercial areas in the central part

| Table 6: Crossroads vs. Deseret News | | | | |
|---|---|---|---|---|
| Rating Crossroads or the printed Deseret News better in five areas | | | | |
| | Deseret News best | | Crossroads best | |
| | Number users | Percentage | Number users | Percentage |
| Convenience | 63 | 0.73 | 23 | 0.27 |
| Usefulness | 52 | 0.6 | 35 | 0.4 |
| Amount of information | 50 | 60% | 34 | 40% |
| Appeal to all ages | 55 | 65% | 29 | 35% |
| Value compared to cost | 38 | 48% | 42 | 52% |
| **Totals** | **258** | **0.66** | **133** | **0.34** |

of the county, so there would be fewer people overall who would show up in the random sampling of the survey.

## Popularity of Crossroads Compared With the Printed Deseret News

One question that is uppermost in the minds of newspaper owners considering producing an electronic edition is whether the electronic version might become more popular than the printed edition, resulting in a drop in subscriptions to the printed newspaper. Deseret News owners are typically concerned, because advertising rates are based on subscriptions to the print newspaper, not the online edition. If subscriptions drop, so does revenue. Respondents were asked to compare Crossroads with the Deseret News in: convenience, usefulness, amount of information, overall appeal and value.

The newspaper got higher ratings in all categories except value vs. cost in which 42 respondents rated Crossroads higher and 38 percent indicated the newspaper was a better value. About 85 percent of Crossroads users are also Deseret News subscribers and pay nothing extra for the online service, so those answers are not surprising.

## How Often Do Subscribers Use Crossroads

Question 2 was designed to determine how often Crossroads is being used by people in a household, identified by gender and age, to gauge its popularity.

Of the 175 males of all ages included in responses, 81 had not used Crossroads at

all in the past week; 51 had used it 1-2 times; 21 had used it 3-4 times; 10 had used it 5-6

times; eight had used it 7-8 times and four had used it more often than eight times.

Of the 152 females of all ages included in responses, a large majority -- 109 -- had

not used the service at all; 27 had used it 1-2 times; nine had used it 3-4

times; three had used it 5-6 times; three had used it 7-8 times and only one had used it

more than eight times in the past week.

Of the 92 respondents identified as the "oldest male" in the household, 22 had not

| Table 7:  Frequency of Use, Part I | | | | | | |
|---|---|---|---|---|---|---|
| Number of times Crossroads used by members of household, classified by age | | | | | | |
| Number of times used in past week | | | | | | |
| | 0 | 1-2 | 3-4 | 5-6 | 7-8 | More | Totals |
| Males, by age: | | | | | | | |
| 20-39 | 6 | 4 | 5 | 0 | 3 | 0 | 18 |
| 40-59 | 5 | 15 | 3 | 2 | 0 | 1 | 26 |
| 60+ | 1 | 1 | 2 | 3 | 0 | 1 | 8 |
| Under 20 | 32 | 5 | 0 | 2 | 0 | 1 | 40 |
| Females, by age: | | | | | | | |
| 20-39 | 10 | 3 | 4 | 1 | 1 | 0 | 19 |
| 40-59 | 13 | 1 | 1 | 2 | 1 | 0 | 18 |
| 60+ | 4 | 2 | 0 | 0 | 0 | 0 | 6 |
| Under 20 | 34 | 6 | 2 | 0 | 0 | 0 | 42 |
| **Totals** | **105** | **37** | **17** | **10** | **5** | **3** | **177** |

| Table 8:  Frequency of Use, Part II | | | | |
|---|---|---|---|---|
| Number of times in the past week Crossroads was used by the household | | | | |
| 0 | 1-5 times | 6-10 times | 11-15 times | More often |
| 12 | 49 | 24 | 6 | 0 |

used Crossroads in the previous week; 35 had used it 1-2 times; 19 had used it 3-4

times; eight had used it 5-6 times; six had used it 7-8 times and two had used it more than

eight times.  Among the 71 "oldest females," 47 had not used it; 13 had used it 1-2 times;

six had used it 3-4 times; three had used Crossroads 5-6 times; two had used it 7-8 times

and none had used it more than eight times.  These numbers indicate more men of all ages

are using Crossroads than are women in the surveyed households.

Of the 97 household responses, there were a total of 177 people whose ages were

listed on Question 2.  Many of those who answered the question about frequency of use

did not indicate ages of household members.  The 177 who provided ages were grouped

into the following categories: males and females,  age 1-11, 12-19, 20-39, 40-59, and 60

and older.

There were 23 males age 1-11, and three had used Crossroads 1-2 times in the

previous week; none had used it more often.  Of 17 males age 12-19, two had used it 1-2

times, two had used it 5-6 times and one had used it more than eight times; the others had

not used it.  Of the 18 males age 20-39, 12 had used Crossroads; four had used it 1-2

times, five 3-4 times and three 7-8 times.  Use was more frequent in the 40-59 age group

for males than any other age group, with 15 of the 26 using it 1-2 times, three using it 3-4

times, two 5-6 times and one more than eight times.  There were only eight in the 60+ age

group, but only one of them had not used Crossroads, with five indicating they had used it 3-6 times and one more than eight times.

Use among women of all ages was lower than among the male respondents. In the youngest group, no females 1-11 years old had used Crossroads. Of the 19 females age 12-19, 11 had not used it, six had used it 1-2 times and two had used it 3-4 times. Among older females, lower frequency of use was also apparent. Of the 19 females age 20-39, 10 had not used Crossroads, seven had used it 1-4 times, and two had used it more than four times. Of the 18 women age 40-59, 13 had not used it, and among women 60 and older, only two had used it at all.

Question 3 asked how often did the household in general us Crossroads. Of the 91 respondents, 12 said not at all; 49 had used it 1-2 times; 24 had used the service 6-10 times and six had used it 11-15 times. None indicated Crossroads had been used more than 15 times in the previous week.

<p style="text-align:center">What are Crossroads' Best Features</p>

Question 4 was designed to determine which features of Crossroads are most popular with users. Respondents were asked to rank from 1 to 5 (1 being most popular and 5 least popular) the following features: daily paper, LDS Church information, expanded news, e-mail, and library.

The daily paper received the most "No. 1" rankings with 37 and the most "No. 2s" with 28; expanded news received the fewest top rankings with two. E-mail was next, with 23 "No. 1" rankings, but it also had the highest number of "No. 5" rankings with 33,

indicating the service was used either very often or very little -- users either love it or hate

it. Church information ranked in the middle, with 22 "No. 2" rankings, and 20 "No. 3s."

Among all "oldest men" in the household, the daily paper feature was used most

often, followed by e-mail and then church information, then the library. Among all other

males, the daily paper was far ahead in usage. Among "oldest females" in the household,

the daily paper feature was used more than twice as often as any other feature, with

church information and e-mail next and library services following. Younger females also

used the daily -newspaper feature most, with e-mail coming in second in usage.

Among the "oldest males" and "oldest females" in the household, both

men and women in the 20-39 and 40-59 age group gave the most "No. 1" rankings to the

daily paper. Church information was popular among the 40-59 age categories of both

men and women, ranking second to the daily paper among men and tied with the daily

| Table 9: Popularity of Crossroads Features, Part I | | | | | |
|---|---|---|---|---|---|
| Rankings, from 1 to 5, given to five Crossroads features by households | | | | | |
| | | | | | Popularity rankings |
| | 1 most popular | 2 | 3 | 4 | 5 least popular |
| Daily paper | 37 | 28 | 9 | 9 | 8 |
| Church info | 15 | 22 | 20 | 17 | 10 |
| Additional news | 2 | 15 | 29 | 22 | 15 |
| E-mail | 23 | 6 | 8 | 10 | 33 |
| Library | 13 | 19 | 13 | 20 | 19 |

| Table 10: Popularity of Crossroads Features, Part II | | | | | |
|---|---|---|---|---|---|
| Number of first-place (most popular) rankings given five features by age of respondent | | | | | |
| | Daily paper | Church info | Additional news | E-mail | Library |
| Males by age: | | | | | |
| 20-39 | 9 | 5 | 2 | 1 | 1 |
| 40-59 | 9 | 8 | 3 | 4 | 0 |
| 60+ | 1 | 3 | 0 | 2 | 2 |
| Females by age: | | | | | |
| 20-39 | 9 | 5 | 2 | 1 | 1 |
| 40-59 | 6 | 6 | 2 | 3 | 0 |
| 60+ | 0 | 4 | 0 | 1 | 1 |
| **Totals:** | **34** | **31** | **9** | **12** | **5** |

| Table 11: Frequency of Use of Five Features | | | | | |
|---|---|---|---|---|---|
| Which of the five services is used most often by household members | | | | | |
| | Daily paper | Church info | Additional news | E-mail | Library |
| Oldest male | 38 | 11 | 2 | 15 | 9 |
| Other males | 23 | 1 | 0 | 9 | 5 |
| Oldest female | 19 | 9 | 0 | 9 | 8 |
| Other females | 13 | 2 | 3 | 12 | 6 |
| **Totals** | **93** | **23** | **5** | **45** | **28** |

paper among women. Among both men and women 60+, church information received the most "No. 1" rankings.

The survey indicates that expanded news -- the additional wire-service reports with in-depth coverage of events, complete texts of speeches, etc. -- is the least-used and one of the least-popular features of Crossroads. It is somewhat surprising that many of the respondents indicated substantial interest in the daily newspaper on Crossroads and little interest in what Crossroads can provide that the printed newspaper cannot -- more thorough coverage of news. Yet, in Question 1, respondents rated the printed newspaper better than the Crossroads version of the daily paper in convenience, usefulness, amount of information and appeal to all ages.

The popularity of e-mail and the library files is understandable because these are features available only on Crossroads, not in the printed newspaper. So, though the familiar printed product is still preferable to Crossroads in many ways, users seem to enjoy getting their daily news online. This could indicate a changing attitude among computer-literate news consumers who are becoming accustomed to getting news online.

How Crossroads Information is Being Used

Question 6 was included to indicate how information gathered on Crossroads is being used. Respondents were asked to indicate how often they used the online service for the following purposes: recreation, business, school, home, personal and church. Responses indicated most frequent use for home and personal purposes, with 37

indicating they used Crossroads more than three times in the previous week for personal and home uses. Crossroads was used least often for school purposes.

Twenty-five respondents indicated they had used it for recreation purposes once in the previous week and 19 said they had used it for recreation 2-3 times in the previous week.

How Crossroads Can Be Improved

Questions 7, 8 and 9 were open-ended questions designed to allow users to indicate what they like and don't like about Crossroads and what they would like to see changed or added.

Question 7 allowed respondents to tell what they like best about Crossroads. The "search" feature that allows users to search the current edition of the newspaper or the library by using keywords taken from topics, dates or names was listed on 20 surveys, with e-mail included on 19 nd the library on 17. The cost of the service and church information were each listed on 15 surveys, and technical or ease of use, sports and

| Table 12: How Crossroads is Being Used | | | |
|---|---|---|---|
| How often Crossroads used by the household for five purposes in past week | | | |
| | Once | 2-3 times | More often |
| Business | 18 | 7 | 6 |
| Recreation | 25 | 19 | 5 |
| School | 17 | 7 | 4 |
| Home/personal | 37 | 40 | 27 |
| Church | 18 | 11 | 8 |

| Table 13:  The Good and the Bad | | | |
|---|---|---|---|
| Respondents tell what they like and don't like about using Crossroads | | | |
| Top 10 "Likes" | Times listed | Top 10 "Dislikes" | Times listed |
| Search features | 20 | Technical problems | 72 |
| E-mail | 19 | Slow speed | 13 |
| Library | 17 | Search feature | 11 |
| Cost, Church info | each 15 | Organization, e-mail | each 8 |
| Technical, sports, news | each 10 | Service | 7 |
| Continuous updates | 9 | Content | 6 |
| Classifieds | 7 | Library, graphics | each 4 |
| Organization | 5 | Updating, passwords | each 3 |

expanded news on 10 responses.  The continuous updating of news, classified ads and
organization of material were also included.  Other features mentioned, but on fewer
responses were: talk forums, content, business, web page, clipping feature, top stories
lists, print feature, fun and appeal to all.

In Question 8, respondents were asked to list things about Crossroads they did not
like.

Here, technical problems far surpassed any other feature, being listed on 72
responses.  Slow access and response was second with 13.  The technical problems
ranged from inability to access Crossroads to "freezing" of the system to inability to
retrieve information.  Many said the system is "slow" or does not always respond, others
wrote the news updates sometimes did not cross over.  Those who wrote they had
experienced such problems also indicated they gave up and quit trying when they had

problems. Part of the problem is that the Crossroads staff is small and there is no full-time, seven-days-per-week service person available to answer questions. Weekends appeared to be a time when many had problems accessing certain features, and there is no staffing of the service desk on weekends. Some had problems with accessing graphics and some of the more complicated features. There had been two software upgrades at the time the survey was mailed, and some respondents indicated they had not received the updated version. Another update was scheduled in March 1996. Crossroads was initially launched in January, 1995, and many users had purchased their first computers for Christmas, judging from the calls received at the service desk. Many users didn't yet know how to turn on their new computers, and had signed up for Crossroads as one of the first services they tried. A combination of "bugs" in the first versions of the software and the inexperience of the users probably contributed to the initial problems. Many survey respondents who used the system often wrote that they found it easy to use and had few major difficulties in operating it. This disparity indicates that there is probably some fault in both the users and the service.

The widespread dissatisfaction with at least some technical aspects of Crossroads is also demonstrated by the responses to Question 9, which asked respondents to give suggestions about ways the Deseret News could improve Crossroads.

Again, the majority dealt with technical problems. Sixty answers included suggestions for improving technical services -- making the programs faster, easier and more dependable, making access easier. The next highest number of suggestions was for

| Table 14:   Making Crossroads Better | |
|---|---|
| Most frequently mentioned suggestions for improvements and additions | |
| Top 5 suggestions for improvements | Top 5 most requested additions |
| Fix technical problems | Educational features |
| Provide World Wide Web site | Expanded library services |
| Organize information better | Business news |
| Make library access easier | Web access |
| Provide better "help" function | Weather map, more sports, TV listings |

a World Wide Web site.  Following that were answers about organization of material, providing better customer service.  Others wanted a chat service, quicker updates, more stock listings, print ads.

When asked what content should be added to Crossroads, 10 answered better educational features, seven said library, six said business news, and five wanted World Wide Web access.  Four wanted more weather and sports.

<div align="center">Who Will Stick With It</div>

Answers to Question 10 are interesting.  Asked how likely it is that their household will continue to subscribe to Crossroads, 68 of 89 who responded said it is "very likely" and 11 indicated it is "somewhat likely" with only six indicating it is either "somewhat unlikely" or "very unlikely" that they will continue subscribing.

Despite all the problems and complaints, the vast majority of respondents were quite sure to continue subscribing.  This may be because, as subscribers to the Deseret News, the online service is free or it may be that they are optimistic it will improve or

their ability to use it will increase. In either case, it appears most are willing to continue to have it in their homes, so improved versions could have a chance to succeed.

| Table 15: Subscribing in the Future | | | | |
|---|---|---|---|---|
| The likelihood that the household will continue to subscribe to Crossroads | | | | |
| Very likely | Somewhat likely | Uncertain | Somewhat unlikely | Very unlikely |
| 68 | 11 | 4 | 5 | 1 |

The results of the survey of Crossroads users presents a profile of regular users that closely reflects the demographics of users of electronic newspapers and online services such as America Online and CompuServe. The Crossroads survey indicates the highest percentage of users in the income bracket $65,000 and above. Managerial, professional and executive occupations dominate, and a very high percentage hold advanced degrees. The ratio of males to females among regular users is about 2 to 1, and most were younger than 40. The Graphic, Visualization and Usability (GVU) Center at George Tech ran its fourth WWW survey from October 1995 through November 1995. It indicates that, nationally, average income of all users of $63,000, a 2:1 ratio of male to female, and a dominant age range of 18 to 35 years old. An Angus Reid Poll found that almost half of users have a university degree and 20 percent a post-graduate degree.[22]

---

[22]Who We Are: Internet Facts, Parallax Homepage, January, 1996. [On-line]. Available World Wide Web: http://www.echonyc.com/~parallax/interfacts.htm/

CHAPTER IV

CONCLUSIONS

Crossroads Has Outlived Its Usefulness

The first full year in the life of Crossroads probably will be its last. The needs of subscribers and the interests of the Deseret News will be served best by eliminating Crossroads and providing information electronically on the Web page.

About 4,000 people continue to subscribe to the service, but fewer are using it now than were logging on immediately after its launch 14 months ago. In the first week after Crossroads was made available to subscribers and non-subscribers of the Deseret News in January 1995, some 3,000 people signed up for it and most logged in at least a few times per week in the early weeks. Over the next three months, the number of subscribers increased to about 4,000 and has stayed there ever since. But the usage has dropped. According to Steve Hawkins, who has been serving as Crossroads editor, the system has only about 100 "hits" per day or logins by individuals. That number increased to about 250 immediately after the latest updated version was sent to subscribers changing the way they access stories and send and receive mail to make those features easier to use. Hawkins used information from the survey completed for this thesis to upgrade the technical aspects of the system. Between 400 and 500 subscribers log on once a week or more.[23]

The most recent changes made to improve Crossroads were based the

---

[23] Steve Hawkins (personal communication, March 23, 1996)

survey of subscribers, which indicated users wanted easier access and simpler organization, and also on the increasing popularity of the latest electronic information-delivery system, the World Wide Web, a service of the Internet. Respondents to the survey referred frequently to the Web when asked what content or services should be added to Crossroads and how to improve the service. The changes made in the most recent Crossroads update were attempts to make Crossroads look and feel more like the Web.

So why not simply give readers what they want ON the Web? That question was answered in September 1995, only nine months into the life of Crossroads, when the Deseret News technology department created the first Deseret News Web page. It is interesting that the gestation period for Crossroads was two years following intellectual intercourse that took even longer, but the Web page came into being in a matter of months -- about six. In a way, Crossroads was the parent of the Web page. The experience, expertise and knowledge gained by Deseret News employees as they worked to create Crossroads was put to use immediately when the popularity of the Web became apparent.

## World Wide Web Replaces Crossroads

The Deseret News Web page has become the preferred vehicle for users to obtain information unique to the Deseret News -- LDS Church information and local news, commentary and analysis written and presented by Deseret News writers and editors.

The World Wide Web became an active part of the Internet in 1994. It was a way to consolidate and organize information that was flowing freely on the Net, and it had a commercial base that soon became popular with newspapers. The Internet itself dates back to the 1960s. It originally was a computer linkup of military command centers in the United States. It was created so that if one command center was destroyed during a nuclear attack, the military could communicate with other centers. It was turned over to the National Science Foundation in the 1970s and, as personal computers proliferated, so did the Net. Many computer services -- America OnLine, Prodigy, CompuServe are the largest -- offer linkups to the Internet for a monthly fee. Once you are hooked into the Net, communication with other user Net users is instantaneous, but digging through the information in the early years was like trying to gather buckshot after a shotgun blast -- it was everywhere. The World Wide Web provided the organization.

In early 1994, a group of college students started a service called Mosiac as a class project. It was a way to make the World Wide Web easier to use. They devised a point-and-click method of finding information. Netscape is a more recent adaptation of Mosiac with software that is now sold with computer packges. Newspapers began to see the possibilities of the Web in late 1994 and early 1995, during the time computer gurus were predicting its imminent collapse. But what happened instead was startling. Use of the Web increased nearly 200,000 percent in one year from about mid-1994 to mid-1995.[24]

The Deseret News Web page now offers everything that is available on

---

[24]Steve Hawkins (personal communication, March 23, 1996)

Crossroads -- and more. The Spring, an organization that tracks Web pages and their usage, has ranked the Deseret News page as high as seventh among the 50 newspaper pages it reviews. The Salt Lake Tribune, the primary competition the the Deseret News, has a Web page, but it has never received a ranking. The Deseret News page has received up to a million "hits" in one month. In one weekend in April -- the weekend of the LDS Church's general conference -- the Web page received more than 100,000 hits. News about conference and the Church News are some of the pages most popular features.

## Potential for Revenue

Newspapers must continue to provide what users want -- news and advertising -- in print and electronic forms. There is potential for a substantial revenue stream from electronic services. If newspapers offer value online -- for users and advertisers -- they can make money with electronic editions.

The Deseret News online managers believe the Web is another way to deliver news, not just a way to add value to the printed newspaper. Other newspapers with Web sites offer games, travel information, promotions -- but little actual news. Hawkins and his staff are putting news out on real time, meaning the news goes on the Web page at the same time it is typeset and is often read online before it appears in the newspaper. Not everyone is as enthusiastic about this aspect of online news as the technology department. It is disconcerting to the publisher, Jim Mortimer, when a politician calls him to complain about a story and it has not yet been printed. The concept of a newspaper "scooping"

itself with its online delivery of news is one that still causes a good deal of debate, both in the newsroom and in the board room.

But Hawkins counters with statistics that show most computer users also read newspapers -- and magazines and books and nearly anything they can get their hands on. They're information junkies, and they're not likely to quit subscribing to the newspaper because they can get news online. Indeed, there has been no decline in subscriptions since the Deseret News went online. Of course, there are some -- usually younger -- computer users who seldom get involved in anything that doesn't involve bits, bytes and mouses. For those people, the newspaper will only exist on a computer screen, and if the Deseret News wants to reach them, it must be there, too. The problem with that possible eventuality is the lack of ways to produce revenue online.

Revenue potential may one day provide the most convincing argument for continued emphasis on online distribution of the newspaper instead of a reason to avoid going online. Selling online is in the embryonic stages, but it is growing and developing, and where advertising goes, newspapers must follow -- or lead.

At the National Retail Federation's convention in January, sessions on retailing and the Internet were packed. At the National Automobile Dealers Association meeting in February, online pricing services took center stage. Yet actual sales through the Web are minuscule. Total volume last year was $200 million, estimated Vinton Cerf of MCI Telecommunication Corp. and a co-developer of the Internet. As of late last year, only 1

percent of American consumers had bought something through the Web, according to a

study commissioned by MasterCard International and the National Retail Federation.[25]

Some experts think the Internet mania is not warranted and say the Net won't be a

significant retail venue for at least five to 10 years. However, Cerf expects that the

growth of Internet use thus far will translate into considerable retail sales by 1997 or

1998. After only two years of widespread use, there are now about 38 million "hits" a

day on the Internet. It took 50 years after the production of the telephone before 38

million phone calls were made.[26]

The impact on newspapers of online advertising and sales must not be

underestimated. Direct mail advertising took newspapers by surprise in the early 1970s,

and they lost revenue because they were not prepared. The same thing could happen, in

an even bigger way, if newspapers are not prepared to compete for advertising online.

Anyone can sell just about anything online. Any individual or business can set up a Web

page. Newspapers have to offer something unique or offer something in a unique way.

Right now, fewer than 10 of 160 newspapers with online services similar to Crossroads

are making money. There are two ways for newspapers to get revenue online, according

to Hawkins: through advertising or subscriptions. With either option, the newspaper has

to offer something of value that isn't available somewhere else. The combination of news

and advertising has worked for centuries in printed newspapers. The same concept might

work online. Web sites that offer stock reports make money by including related

---

[25]Fred Faust, "Retailers Eager for the Internet, But Sales are Slow," St. Louis Post-Dispatch, March 25, 1996.

[26]Ibid.

advertising. Organizing advertising and placing it with related news is one way to make it worth a fee to advertisers. The Web offers a terrific opportunity to target specific groups. According to Cerf, "This is not a mass medium in the conventional sense of the word. It's a very peculiar medium because it allows you to find special audiences. So its strength may turn out to be its ability to pinpoint certain parts of the audience by drawing them to places in the Net."[27]

One of newspapers' strengths has always been packaging and organization. Potential buyers want to browse through a Web site that is attractive and informative. The Deseret News Web page has been ranked in the top 10 among newspaper pages because of its appearance, ease of use and easy availability of information.

So far, the Web is mostly free with Internet access, but that will soon change. The Deseret News will begin charging for some services, such as electronic archives and the weekly Church News, this year. Deseret News subscribers will continue to get limited access to the library of everything printed in the newspaper and the online edition dating back to 1987, but will be charged a fee for wider access. Deseret News non-subscribers will have to pay. The contract binding the Deseret News with the Salt Lake Tribune and the Newspaper Agency Corporation in a joint operating agreement (JOA) blocks the Deseret News from offering advertising on its own, but the contract was written long before the advent of online publishing, so the legality of selling advertising online is uncertain. Both newspapers currently provide access to classified advertising online but neither has tried selling "display" ads for electronic distribution.

---

[27]Ibid.

The implications for the print edition are many. Those who subscribe to the Deseret News get wider and less expensive access to the online services, both on Crossroads and on the Web. Readers of the print Deseret News are encouraged to search for additional information about printed news online. Space on paper is limited; cyberspace is unlimited. Costs to distribute the printed newspaper continue to rise. Newsprint costs rise several times each year on average; there are movements to deny "independent contractor" status to delivery people, which would cause huge increase in personnel costs; salaries must be raised each year; physical plants and equipment are expensive. Few of these costs are inherent with electronic distribution.

## Questions Remain

Hawkins expects Crossroads will die a natural death some time this year because of declining usage and increasing popularity of the Web. Its demise exemplifies the evolutionary process that keeps changing the electronic publishing scene. But the experience of creating it has provided an invaluable education for the newspaper staff and management. A separate department was set up to handle on-going changes and developments in electronic distribution of information. System managers have learned how to connect the newspaper's various computer systems and get information from one to another and tap into all eight computer systems at the Deseret News for any future service they might want to provide.

One of the biggest hurdles essentially eliminated through the process of developing Crossroads was convincing the newspapers directors and owners of the

importance of competing in the information business electronically. There are few
arguments now about the necessity of continuing to develop new methods and vehicles of
delivering the news. Experience has shown that electronic delivery of the newspaper has
not had a damaging effect on circulation numbers.

Still, there are many questions that must be addressed by newspapers that continue
to prosper in the electronic era: What is the best way to produce revenue online? Should
articles of a non-breaking news type from the wires be published online before they
appear in the newspaper? What services will people pay for?

The rapid changes that have taken place in the local world of electronic journalism
just during the writing of this thesis are startling. The Crossroads system was updated
twice while the survey was being conducted. The emergence of the Web as a site for
newspaper publishing happened as the survey was being tabulated. Over the time the
research for this study was being done, the decision was made to switch emphasis from
Crossroads and eventually to replace it with the Web page. But the information provided
by the survey and the experience of creating Crossroads will both be put to use as the
electronic Deseret News continues to evolve.

# REFERENCES

Bennett, Randy. "Ask the Online Experts." ASNE/SND Technology Survey. 1995, p. 15.

Carlson, David E. "Ask the Online Experts." ASNE/SND Technology Survey. 1995, p. 15.

Croft, Dave. Deseret News Online Origin. January 22, 1994.

Croft, Dave. Deseret News memo, dated January 11, 1994.

Donth, Joe. "The Importance of Doing It Right." StarText Ink. October, 1989, p. 1.

Faust, Fred. "Retailers Eager for the Internet, But Sales Are Slow." St. Louis Post-Dispatch, March 25, 1996.

Franklin, Joy, and Casey, Olivia. "From the Editors." ASNE/SND Technology Survey. 1995.

Giles, Robert H. "It's All About Content." Speech given at Bradley University, Peoria, IL. April 21, 1994.

Glaberson, William. "A Chance to Read More About It: Newspapers Move to Electronic Editions." New York Times News Service. August, 1993, p. 1.

Openshaw, Barbara, and Bodhaine, Steve. Memo from Wirthlin Group addressed to Deseret News, January 11, 1994.

Thalhimer, Mark. "High-Tech News or Just 'Shovelware'?" Media Studies Journal. Winter, 1994, pp. 43-44.

Who We Are: Internet Facts, Parallax Homepage, January, 1996. [On-line]. Available World Wide Web: http://www.echonyc.com/~parallax/interfacts.htm/

APPENDIX A.  SURVEY

# A SURVEY OF CROSSROADS USERS

This survey is designed to determine how Crossroads is being used and who is using it most in the households where it is being received. The Deseret News wants your input about which programs are most useful and what changes you would like to see. We need your ideas to guide future development of new services. We hope you will help us get to know you better so we can serve you better. To do this, we need to ask some personal questions about your family and individuals in the family. This information will remain confidential, and data gathered will be used only in summary form.

Please answer all the questions to the best of your knowledge. There are some items that apply to all members of your household individually. Please involve everyone who uses Crossroads in answering those questions, so that we may get a complete picture of Crossroads' usefulness in your household.

Please return the completed survey in the envelope provided as quickly as you can. Prompt replies will help us tabulate the information more efficiently. We appreciate your time and patience in helping us improve the Crossroads online service. Thanks and best wishes for continued computing with the Deseret News!

Q1.    Electronic or online newspapers are a relatively new technology. Some people say they will eventually replace traditional printed newspapers. How do you feel Crossroads compares with the printed Deseret News or another paper you read in the following areas:

Which is better (circle one)

1. Convenience . . . . . . . . . NEWSPAPER     CROSSROADS

2. Usefulness . . . . . . . . . . NEWSPAPER     CROSSROADS

3. Amount of information  . . . NEWSPAPER     CROSSROADS

4. Appeal to all ages  . . . . . . NEWSPAPER     CROSSROADS

5. Value compared to cost  . . . NEWSPAPER     CROSSROADS


Q2.     How many times in the past week did each person in the household use

Crossroads? Please circle one response for each person described until all people in the

household have been included. Please also indicate the age of each household member in

the space in parentheses.

Age                 Please circle one for each person

1. Oldest male (___) . . . . . . 0   1-2   3-4   5-6   7-8   MORE

2. Next oldest male (___). . . . 0   1-2   3-4   5-6   7-8   MORE

3. Next oldest male (___). . . . 0   1-2   3-4   5-6   7-8   MORE

4. Next oldest male (___). . . . 0   1-2   3-4   5-6   7-8   MORE

5. Next oldest male (___). . . . 0   1-2   3-4   5-6   7-8   MORE

6. Next oldest male (___). . . . 0   1-2   3-4   5-6   7-8   MORE

7. Oldest female (___) . . . . . 0   1-2   3-4   5-6   7-8   MORE

8. Next oldest female (___). . . 0   1-2   3-4   5-6   7-8   MORE

9. Next oldest female (___). . . 0   1-2   3-4   5-6   7-8   MORE

10.  Next oldest female (___) . . 0   1-2   3-4   5-6   7-8   MORE

11. Next oldest female (___) . . 0   1-2   3-4   5-6   7-8   MORE

12. Next oldest female (___) . . 0   1-2   3-4   5-6   7-8   MORE

Q3.    How many times in the past week was Crossroads used by the household generally?  Please circle the best response.

    1. 0

    2. 1-5 TIMES

    3. 6-10 TIMES

    4. 11-15 TIMES

    5. MORE OFTEN

Now we would like your help in determining which Crossroads features and services are most popular in your household. Please circle the best response for each item.

Q4.    Please rank the following Crossroads features from 1 to 5, with 1 being the most popular in your household overall and 5 being the least popular.  Please consider hours spent using each feature as your major criterion in making your determination.  Please place a number from 1 to 5 on the blank space preceding each item.

        _____ Daily newspaper

        _____ LDS Church information

        _____ Expanded news including news not  in daily paper

        _____ E-mail

Q5.　Please indicate for each member of your household which of the services listed above is used most often. Please include all household members listed for Question 2 above in the same order.

　　1. Oldest male _____

　　2. Next oldest male _____

　　3. Next oldest male _____

　　4. Next oldest male _____

　　5. Next oldest male _____

　　6. Next oldest male _____

　　7. Oldest female _____

　　8. Next oldest female _____

　　9. Next oldest female _____

　　10. Next oldest female _____

　　11. Next oldest female _____

　　12. Next oldest female _____

Next, we would like to determine how Crossroads services are being used.

Q6.　Please indicate how often your household used Crossroads for various purposes in the past week by circling one response for each category of use.

1. Business use . . . . . . . . ONCE    2-3 TIMES    MORE

2. Recreation use . . . . . . . ONCE    2-3 TIMES    MORE

3. School use . . . . . . . . . ONCE    2-3 TIMES    MORE

4. Home use  . . . . . . . . . ONCE    2-3 TIMES    MORE

5. Personal tasks . . . . . . . ONCE    2-3 TIMES    MORE

6. Church use . . . . . . . . . ONCE    2-3 TIMES    MORE


Next, we'd like to find out how you feel about Crossroads services and what suggestions you might have for changes as we continue to improve the system.


Q7.    What do you like BEST about Crossroads?  Please involve all household members in this question. Please consider such features as: ease of use, quick access to information, specific information such as sports or international news, information that is useful for school, church or personal tasks, access to help in running the programs, cost, or anything else you would like to mention.


_____

_____

_____

_____

What do you like LEAST about Crossroads?  Please outline briefly any problems you've had with service or programs, cost  or any features you don't find useful or have trouble running.

_____

_____

_____

_____

Q9.    Please suggest ways the Deseret News could improve Crossroads.

1. General  suggestions:

_____

_____

2. What content (news, educational, recreational) would you suggest we add?

_____

_____

_____

3. Is the cost fair? Is Crossroads affordable?

_____

_____

4. How can we make it easier to operate Crossroads?

_____

_____

Now, please let us know the likelihood of you continuing your subscription to

Crossroads.

Q10.    How likely is it that your household will continuing subscribing to Crossroads

during the coming year?  Please circle the response that best indicates your feelings.

VERY LIKELY

SOMEWHAT LIKELY

UNCERTAIN

SOMEWHAT UNLIKELY

VERY UNLIKELY

Now we would like to get some personal information about the members of your

household.  This information will help us in making decisions about future improvements

and changes in Crossroads.  It will be used only in summary form, and no information

will be used to identify a particular household. It will not be divulged to any other organization or in any way be connected to your particular household.

Q11.  Please indicate by circling the correct item number, the approximate total household income, before taxes, for 1994:

      1. Less than $15,000

      2. $15,000 to $24,999

      3. $25,000 to $34,999

      4. $35,000 to $44,999

      5. $45,000 to $54,999

      6. $55,000 to $64,999

      7. $65,000 or above

Q12.  Please describe the usual occupation of the principal wage earner or two principal wage earners in your household. (If retired, the usual occupation before retirement.)

TITLE _____

KIND OF WORK _____

KIND OF COMPANY _____

TITLE _____

KIND OF WORK _____

KIND OF COMPANY _____

Q.13    In what state and county is your household located?

STATE_____    COUNTY _____

If you live in the Wasatch Front area of Utah, please circle the area in which you

live:

EAST SIDE          CENTRAL VALLEY          WEST SIDE

Q14.    Please indicate the educational degrees held by adults 18 and older

in your household by circling one:

Please circle one

1. Oldest male . . . . . .HIGH SCHOOL      COLLEGE      GRADUATE

2. Next oldest male . . .HIGH SCHOOL      COLLEGE      GRADUATE

3. Next oldest male . . .HIGH SCHOOL      COLLEGE      GRADUATE

4. Oldest female . . . . .HIGH SCHOOL      COLLEGE      GRADUATE

5. Next oldest female . .HIGH SCHOOL      COLLEGE      GRADUATE

6. Next oldest female . .HIGH SCHOOL      COLLEGE      GRADUATE

APPENDIX B. TABULATION OF RESULTS

SURVEY RESULTS

Q1:

Which is better for:

|  | Newspaper | Crossroads |
|---|---|---|
| convenience: | 63 | 23 |
| usefulness: | 52 | 35 |
| amount of info | 50 | 34 |
| appeal to all ages | 55 | 29 |
| value vs. cost | 38 | 42 |

Q2:

How many times in the past week did each person in the household use Crossroads?

|  | 0 | 1-2 | 3-4 | 5-6 | 7-8 | MORE |
|---|---|---|---|---|---|---|
| Oldest male | 22 | 35 | 19 | 8 | 6 | 2 |
| Next oldest male | 28 | 11 | 2 | 2 | 1 | 2 |
| Next o.m. | 23 | 5 | 0 | 0 | 0 | 0 |
| Next o.m. | 5 | 0 | 0 | 0 | 1 | 0 |
| Next o.m. | 3 | 0 | 0 | 0 | 0 | 0 |
| Oldest female | 47 | 13 | 6 | 3 | 2 | 0 |
| Next o.f. | 28 | 10 | 1 | 0 | 1 | 1 |
| Next o.f. | 23 | 4 | 2 | 0 | 0 | 0 |
| Next o.f. | 8 | 0 | 0 | 0 | 0 | 0 |

| | | | | | |
|---|---|---|---|---|---|
| Next o.f. | 3 | 0 | 0 | 0 | 0 | 0 |

Oldest males:

| | | | | | |
|---|---|---|---|---|---|
| Age 20-39 | 6 | 4 | 5 | 0 | 3 | 0 |
| Age 40-59 | 5 | 15 | 3 | 2 | 0 | 1 |
| Age 60 + | 1 | 1 | 2 | 3 | 0 | 1 |

Oldest females:

| | | | | | |
|---|---|---|---|---|---|
| Age 22-39 | 10 | 3 | 4 | 1 | 1 | 0 |
| Age 40-59 | 13 | 1 | 1 | 2 | 1 | 0 |
| Age 60+ | 4 | 2 | 0 | 0 | 0 | 0 |

Other males:

| | | | | | |
|---|---|---|---|---|---|
| Age 1-11 | 20 | 3 | 0 | 0 | 0 | 0 |
| Age 12-19 | 12 | 2 | 0 | 2 | 0 | 1 |

Other females:

| | | | | | |
|---|---|---|---|---|---|
| Age 1-11 | 23 | 0 | 0 | 0 | 0 | 0 |
| Age 12-19 | 11 | 6 | 2 | 0 | 0 | 0 |

Q3:

How many times in the past week was Crossroads used by the household generally?

| 0 | 1-5 times | 6-10 times | 11-15 times | MORE OFTEN |
|---|-----------|------------|-------------|------------|
| 12 | 49 | 24 | 6 | 0 |

Q4:

Rank the following Crossroads features from 1 to 5, with No. 1 being the most popular in your household and 5 being the least popular.

| | No. 1 | No. 2 | No. 3 | No. 4 | No. 5 |
|-------------|-------|-------|-------|-------|-------|
| Daily paper | 37 | 28 | 9 | 9 | 8 |
| LDS info. | 15 | 22 | 20 | 17 | 10 |
| More news | 2 | 15 | 29 | 22 | 15 |
| E-mail | 23 | 6 | 8 | 10 | 33 |
| Library | 13 | 19 | 13 | 20 | 19 |

How many in each age group gave 1st-place ranking (5) to the following features:

| | Daily paper | Church info | News | E-mail | Library |
|-------|-------------|-------------|------|--------|---------|
| Males: | | | | | |
| 20-39 | 9 | 5 | 2 | 1 | 1 |
| 40-59 | 9 | 8 | 3 | 4 | 0 |

| 60+ | 1 | 3 | 0 | 2 | 2 |

Females:

| 20-39 | 9 | 5 | 2 | 1 | 1 |
| 40-59 | 6 | 6 | 2 | 3 | 0 |
| 60+ | 0 | 4 | 0 | 1 | 1 |

Q5:

Please indicate for each member of your household which of the services listed above is used most often. Please include all household members listed for Q2 above in same order.

| | Daily paper | Church info | News | E-mail | Library |
|---|---|---|---|---|---|
| O.M. | 38 | 11 | 2 | 15 | 9 |
| NOM | 13 | 0 | 0 | 7 | 3 |
| NOM | 6 | 1 | 0 | 2 | 2 |
| NOM | 3 | 0 | 0 | 0 | 0 |
| NOM | 1 | 0 | 0 | 0 | 0 |
| O.F. | 19 | 9 | 0 | 9 | 8 |
| NOF | 8 | 2 | 1 | 8 | 4 |
| NOF | 3 | 0 | 2 | 4 | 1 |
| NOF | 2 | 0 | 0 | 0 | 1 |

Q6:

Please indicate how often your household used Crossroads for various purposes in the past week.

|  | Once | 2-3 times | More |
|---|---|---|---|
| Business | 18 | 7 | 6 |
| Recreation | 25 | 19 | 5 |
| School | 17 | 7 | 4 |
| Home | 21 | 23 | 13 |
| Personal | 16 | 17 | 14 |
| Church | 18 | 11 | 8 |

Q7:

What do you like best about Crossroads?

| | | | |
|---|---|---|---|
| E-mail | 19 | Organization | 5 |
| Search | 20 | Talk forums | 4 |
| Library | 17 | Content | 4 |
| Cost | 15 | Business | 3 |
| Church | 15 | Web page | 2 |
| Technical | 10 | Clipping | 2 |
| Sports | 10 | Top stories | 1 |
| News | 10 | Print | 1 |
| Cont. updates | 9 | Fun | 1 |

| Classified | 7 | All use | 1 |
|---|---|---|---|

Q8:

What do you like least about Crossroads or have the most trouble with?

| Technical | 72 | Liv | 3 |
|---|---|---|---|
| Slow | 13 | Passwords | 3 |
| Search | 11 | Toll charges | 1 |
| Organization | 8 | Photos | 1 |
| E-mail | 8 | Help | 1 |
| Service | 7 | Forums | 1 |
| Content | 6 | Crossword | 1 |
| Library | 4 | Access | 1 |
| Graphics | 4 | Updating | 3 |

Q9a:

Please give general suggestions about ways the Deseret News could improve Crossroads:

| Technical | 42 | More stocks | 3 |
|---|---|---|---|
| Provide Web site | 14 | More servers | 3 |
| Organize info | 8 | Print ads | 3 |
| Library access easier | 7 | Design better | 3 |
| Better help function | 7 | Improve weather | 1 |
| Improve service | 7 | Eliminate phone toll | 1 |

| | | | | |
|---|---|---|---|---|
| Provide chat service | 5 | Obits | 1 |
| Make searches easier | 4 | More news | 1 |
| Make it faster | 4 | Mail list | 1 |
| Update more often | 3 | E-mail add | 1 |
| Improve content | 1 | | |

Q9b:

What content should we add?

| | |
|---|---|
| Educational features | 10 |
| Library | 7 |
| Business news | 6 |
| Web access | 5 |
| Weather, sports | 4 each |
| TV, Sunday TV,  local news,  more news, E-mail, games, movies | 3 each |
| TSN, stocks, recreation, movie reviews, graphics, games, chat | 2 each |
| Wires, traffic, prep sports, letters to the editor | 1 each |

Q9c:

Is the cost fair?

Yes     77

No       2

Q10:

How likely is it that your household will continue to subscribe the Crossroads?

| | |
|---|---|
| Very likely | 68 |
| Somewhat likely | 11 |
| Uncertain | 4 |
| Somewhat unlikely | 5 |
| Very unlikely | 1 |

Q11:

Approximate total household income, before taxes, for 1995:

| | |
|---|---|
| Less than $15,000 | 0 |
| $15,000 to $24,999 | 9 |
| $25,000 to 34,999 | 14 |
| $35,000 to $44,999 | 13 |
| $45,000 to $54,999 | 16 |
| $55,000 to $64,999 | 9 |
| $65,000 and above | 24 |

Q12:

Describe the usual occupation of the principal wage-earner or two principal wage-earners in your household.

Primary wage-earner:

Title:

| Manager | Executive | Labor |
|---------|-----------|-------|
| 41 | 19 | 22 |

Kind of work:

| Professional | Blue-collar | Clerical | Technical | Service |
|--------------|-------------|----------|-----------|---------|
| 34 | 4 | 1 | 19 | 25 |

Secondary wage-earner:

Title:

| Manager | Executive | Labor |
|---------|-----------|-------|
| 21 | 2 | 8 |

Kind of work:

| Professional | Blue-collar | Clerical | Technical | Service |
|--------------|-------------|----------|-----------|---------|
| 12 | 0 | 1 | 0 | 19 |

Q13:

In what state do you reside? 89 in Utah (all respondents)

If you live in Utah, in what county do you reside?

| Salt Lake | 66 |
|-----------|----|
| Davis | 19 |
| Utah | 2 |
| Other | 0 |

If you live in Salt Lake County, what part of the county?

East side       32

Central         7

West side       26

Q14:

What educational degrees held by adults 18 and older in your household?

|  | High school diploma | College | Graduate |
|---|---|---|---|
| Oldest male | 9 | 31 | 45 |
| NOM | 11 | 10 | 0 |
| NOM | 7 | 2 | 0 |
| Oldest female | 23 | 34 | 19 |
| NOF | 4 | 4 | 1 |
| NOF | 1 | 1 | 1 |

191 respondents listed an age in response to question 2; of those who listed an age the following is true:

Males:

Age 1-11        5

12-19           17

20-39           18

40-59           26

Age 60+          8

Females:

1-11             23

12-19            19

20-39            19

40-59            18

60+               6