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TELECOMMUTING

Donna Marie Cunningham Baringer

B.S. in Business Management

**A Abstract Presented to the Faculty of the Graduate
School of Lindenwood College in Partial
Fulfillment of the Requirement for the
Degree of Master of Science**

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ABSTRACT

Telecommuting is a form of working from a remote location that relies on telecommunications. Technological progress has resulted in an increasing number of personnel who are now able to telecommute from home. The rising numbers of telecommuters has resulted in an increase of published studies on this topic. This project relies on these and on interviews with several people actively involved in the field.

A telecenter is a type of telecommuting which offers companies the opportunity to lease workspace for their employees. The midwest region is not familiar with telecenters which are more prominent in the state of California. The first telecenter of its kind will be opened by the City of St. Peters, Missouri, by the Fall of 1996. This study explores this new field of telecommuting, and focuses on the St. Peters center, developing a marketing strategy based on current knowledge about the field.

→ Since telecommuting is such a new concept, an in-depth look at the advantages and disadvantages must be explored. The tremendous advantage of telecommuting is the opportunities it offers the telecommuter. People who telecommute have a potentiality better quality of life. Company's benefit because happy employees productivity level increases by 20%.

The biggest disadvantage in telecommuting is the cultural mind set which believes that if you can not see the worker, then they must not be working. Because telecommuting is such a new concept, many managers are uncomfortable with the idea. But this is a concern which can be addressed and solved. Telecommuting is new and will be a long range benefit for both the employers as well as the employees.

The availability of case studies from previous telecenters enables one to establish the important elements required for a successful telecenter. The most vital element for a telecenter to be successful is the implementation of a strong marketing plan. It is difficult to market a telecenter because most companies do not see an immediate benefit. Therefore, to be successful, their perspective and commitment need to be long range. Overall, telecommuting will benefit companies in acquiring or retaining premium employees.

Although telecommuting can not as yet be directly associated with solving social problems, it can provide the means for people to acquire more personal time. With this supplementary accessibility of time, many telecommuters will be able to attend to their children's needs and become more involved within their own communities. With the current economical need of two incomes, parents lack the time for active participation in their children's lives. Many parents want an option to assist them in obtaining more time at home with their families, and telecommuting is one option.

TELECOMMUTING

Donna Marie Cunningham Baringer

B.S. in Business Management

**A Culminating Project Presented to the Faculty of the Graduate
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Degree of Master of Science**

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In Memory of
Edward D. Cunningham
Extraordinary Father and Teacher of Life

and for my husband David,
and sons, Brennan and Connor,
Thank you for your patience.

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TELECOMMUTING

CHAPTER I

INTRODUCTION

Supermom is a take on Superman, but Superman had superhuman powers and was a fictional comic strip character. To assume one human being can be all things to all people at all times, is living in Superman's fictional land of Metropolis. Let's refrain from using this term and properly call mothers what they are, Mothers. While we are saying this, let's simultaneously agree that those who want to go to work, those who must and those who choose to stay at home will not attack the other's working status.

Many women believe having children will impact their chances for climbing the corporate ladder, and they are right. If they calculate the time needed and percentage of women who accomplish this feat they will understand. Only 3% of Fortune 500 CEO's are headed by women with or without children. As of a 1987 Wall Street Journal survey, the typical CEO was an older male, still married, 80% had children and 90% had non-working wives. One must remember that it takes years, up to 20 years, for the average CEO to accomplish this feat (Debenport). This means that in order for more women to stay in their professions and still raise their children, telecommuting may be an option they have not yet considered.

In many cases the current CEO's now have daughters and these daughters, now in the work force, are having children, who are these CEO's grandchildren. These male CEO's are now first hand through their own families, feeling the stresses on women with children in the work force. This personal awareness of the difficulty of balancing family and career has helped spur the evolving change in corporate policy to support families trying to cope with childcare issues (Debenport). Such companies take the position that addressing the issues of families and how it affects their employee is not only good human relations, but also in the best interest of today's company's bottom line.

Part of today's change in the family is that more parents want to be the primary nurturer in their children's early years. They feel that being there for their children is the most important gift they can give them. However, many parents can not swing it financially to have one or the other stay home full time to

raise the children. One way of addressing this problem is telecommuting: to take one's job and bring it full or part-time into the home. This gives time to the children from the parent who is not otherwise available when they are required to be physically in an office 40 - 50 hours a week.

Although both parents want to be a larger part of their children's lives than what has been in the past 20 years, it is still the women who are the main caregivers. Where are all the mothers? To no ones surprise 61% of the women currently in the work force consists of mothers with children between the ages of 6 and 17. Of that 61%, 70% of these women have children who are in day care and half of those are children under the age of one (Brown p. 194).

Both men and women are also working longer hours, with an average work week being 48.8 hours (Brown p. 7). According to the Bush Center in Child Development and Social Policy at Yale University, by the year 2000, 75% of families will have both parents working full time (p. 223). We would be lying to ourselves if we were to deny that children do not feel the pressures their parents are under. Because business organizations demand so much of both parents' lives, the issue of making adequate time for parenting is reaching a crisis level.

With less time for the family, many mothers feel the guilt of working full time, a course usually prompted more by necessity than by choice. Most families make a decision due to economic pressures, and mothers are usually left with no alternative but to return to work. It should then be no surprise that this lack of parenting time is putting a stress on the family. No one is available to attend their children's after school activities, no adult is available to supervise children after school, and children are handling adult chores that they are not yet old enough to manage. With lack of time availability being remarkably noticeable, we must all be committed to enhancing a healthy child development lifestyle (Brown p. 186).

So if parents need more time, and noted experts recognize that parents need more time, then the business world, which benefits from women's presence in the work force, bears some responsibility in helping this family time crisis. Corporations must recognize and support those who choose to make family a

priority (Brown p. 89). Businesses are beginning to recognize the effects of the parenting time issue and are now understanding the effects. The loss of above average employees and the turnover costs associated with this when a business ignores the family is the blunder of employers who can only blame themselves for overlooking their employees needs.

With parents at work worrying about their children at home or at daycare, there is a direct correlation between stress and the resulting lower productivity, less concentration and higher turnover in the work force. For all employees, but most notably for women, these strains translate into lost profits for the company. Because of all the pressures on employees, companies have begun to look at family supported child care projects (Brown p. 195). Some companies have gone so far as to have on site daycare facilities.

Studies by The National Employer Supported Child Care Project revealed some astonishing findings: 85% of employees said family-support policies were their number one benefit; those companies with these benefits had 65% less absenteeism, 53% more productivity, 49% less turnover, and 85% of the employees expressed that they felt the sensitivity to childcare needs enhanced the company's image. Merck & Company, a pharmaceutical firm, found that the cost of replacing an employee was \$50,000, but to give a generous child care leave policy gave them a saving of over \$12,000 per employee and increased productivity among the employees 20%. Companies who avoid employee turnover enjoy an excellent pay back (Brown p. 195).

Many studies directly point out that both employee and employer benefit from family supported policies. What the studies do not show is how accepting society is to these policies. Companies are not the only ones that must change their way of thinking. As a whole we as a society must change to allow one to slow down in his or her career and devote more time to family (Brown p. 89). Those who are single or childless should understand that a family friendly company can benefit everyone in the long run. They may not need it now, but like insurance, it will be there if they ever need it (Neely p. 38). Usually a

company that commits to family also makes accessible to their employees other generous benefits.

Africans say that, "It takes a village to raise a child." This proverb means that everyone serves a purpose in society in being a part of raising a child. As Sheila Kamerman, Professor of Social Policy and Planning at the Columbia University School of Social Work writes, "In our society many see children as not their problem but the problem of the parents" (Brown p. 219). While I believe parents should be responsible, we must recognize that society is allowing parents less time to be parents. We have to remember that children are our nation's future, without them we would not continue, so we have to find the means in which to enrich our young people (Brown p. 219).

Psychologist Mihaly Csikszentmihalyi, Ph.D., observes that if we put time into perspective, and look at the work day in a more reality oriented view we would find that we only spend 30 hours a week truly working. The rest of the time is squandered with employees taking care of personal problems on the phone, daydreaming, and coffee breaks. A person who works at home could spend these 10 hours with their children (Brown p. 89). This is why a major solution to society's problem of time crisis parenting is to make telecommuting accepted and more available.

First we have to know what telecommuting is: telecommuters work from their homes on a full or part-time basis using computers or some form of telecommunications equipment to communicate with the office (Weaver p.19). New York-based LINK Resources in August of 1990 reported that 34.8 million workers are working full time or part time from their homes with computers. Editorialist, Peter Scisco, found that the telecommuters' reasons for doing so were that they all wanted to increase the quality of their lives (p. 6)

Traditional telecommuters were data entry specialists, salespeople, and computer programmers as telecommuting began emerging (Cooper p.22). As technology has become more widespread in employee's jobs, more non-traditional positions have become telecommutable. The most notable industry currently

enhancing its work flexibility with telecommuting is the service industry.

Whether it be reservations or help desks, more and more employees are taking on the task of reinventing their positions to be telecommutable.

How does Telecommuting enhance one's quality of life? Being able to telecommute enables the employee to balance the needs of the family and job from home. Telecommuting is a way work and personal-life can balance out and boost employees' morale (Neely p. 38). Telecommuting employees also find they produce more because they are away from the everyday distraction of the office.

Telecommuting also benefits the business organization as well. More work is accomplished at home than in the office. The state of Colorado did a six month pilot project where they allowed certain employees to work from home(telecommute). What they found were two primary benefits as an employer: flexibility and productivity. Because the program was so successful for both employer and employee, they are recommending it to continue (Steers p. 19).

Employees working from home makes good business sense. The Florida Telecommuting Project found that a company saves on overhead, lowers absenteeism, and retains employees who might have quit otherwise (Telecommuting p. 9). The Families and Work Institute in New York Survey found that the retention of female employees after childbirth was one of the greatest concerns of companies (Neely p. 38). The cost to the employer to replace this person was much greater than agreeing to a telecommuting arrangement.

Allowing employees to work out an arrangement to telecommute helps companies to obtain and retain top notch people. This opens the door for more employers to hire qualified women with daycare or family issues. The overall advantages of lower rent, no parking costs, improved worker morale, no tardiness, less demand on an overtaxed transportation system and increased job satisfaction can benefit both the employer and employees (Weaver p. 19).

From personal experience, I had the opportunity in my job to be a telecommuter from April to August of 1993. Like many companies, our company had a six week maternity leave, and, like most women, I did not feel this

was long enough. What can a company do for the six weeks in your absence? In my case, I was middle management, specifically a Merchandise Manager, and having a temporary employee would not work for my position.

My job entailed buying, warehousing and shipping. The majority of my time was spent with contracts, vendors, storage and shipping availability with warehouse foreman, and delivery deadlines to department stores. I had spent over two years in the position and felt that most of the work could be computerized from the current manual processes and procedures. In the two years in this position, I had put all the necessary paper work possible (80%) on to the computer.

With the help of the Management Information Systems department, I wrote a focus program that printed all my reports from files on the data base which specifically applied to my needs. I also set up my vendors, warehouses and store buyers on the electronic mail system called, "SYSTEM". I designed two electronic forms in sysm, one being a quality inspection for the warehouse and the other being a shipping update to speed up communication with the traffic department. I accomplished what no other area of this Fortune 500 company had done before. I made my job viable through a computer with only a small amount of time needed to physically be sitting in the office.

After telling my supervisor I was expecting, her first reaction was "Oh no. What are we going to do while you are on maternity leave?" Of course I had been planning my course of action for quite sometime. So I proposed to my supervisor to have a computer installed in my home. She loved the idea, but the company had not taken this course of action with any other non-traditional computer employee.

The computer installed in my home was not a personal computer but a dummy terminal. All of my work came from the company mainframe applications. The computer also had the ability to be in more than one application at a time, thus saving time. Since I had all my reports in the main frame focus program, I also had the ability to view them on line. Communication with all

departments, vendors, and warehouses was done through sysm, and all I needed in my home was a phone line for the modem. Communication was the key and I had access to everyone as they did with me.

After writing up my proposal, and giving the cost breakdown, the company concluded that they would save money by installing a computer in my home. The expense to my division in the company would be only \$125 a month. The expense to the company if one missed shipment in my absence occurred would cost the company thousands of dollars. After evaluating the pro's and the con's, a proposal was drawn up by the company and we both signed off on it.

Of course I could have never accomplished this telecommuting project had it not been for the support of my supervisor. She personally came to my home each week to drop off reports, and to pick up work that needed to be returned to the office. Because of the lack of interruptions at home versus the office, I could accomplish a day's work in 3-4 hours. The benefit to the company was that I only interrupted working for 2 weeks, and my benefit was that I was able to stay home for over 3 months instead of the company policy of 6 weeks.

My ultimate goal was to work part time from home when I returned to work. Unfortunately my company was laying off, and even though my supervisor proposed this idea and projected how much money it would save the company, my division was still closed. The bottom line was that even though my line of work is not considered to be a typical telecommuting prototype, I had thought ahead and designed it to be.

If I had the opportunity to telecommute again, going into the office on Monday and working from home Tuesday through Thursday would be an ideal situation. My decision to have a child and my employer's decision to work with that change in my lifestyle made a win-win situation for both.

Everyone may make their own choices to have children or not, but in making the decision to have children, people must realize they have a responsibility to their children and to society. The lack of time for family is a disruption and must be viewed as a serious problem that impacts society in a

much broader sense. Family disruption is one of our many distressing social problems (Brown p. 51). I believe that finding an alternative solution that might improve the quality of life for both children and parents - ultimately society itself - is worth looking in to.

In the book, When the Bough Breaks, Sylvia Ann Hewlett writes, "Every child in America has felt the impact of time deficit". She used this term to describe how families spend less time together and the longer this trend continues, the more a tragic it will become (Brown p. 183). So who's responsible for society's problems? Are we to continue blindly ignoring that there are problems or are we going to say, "Yes there is a problem and today we will begin to contribute in solving them." With the evolution of computers the opportunity of telecommuting can be one solution that can benefit all parties involved: The employer, the parent, the child.

My personal desire to take an initiative to confront the parenting time issue and contribute to changing corporate policies to address these issues lead me directly to an article printed in the Business Plan section of the St. Louis Post Dispatch which headline was, "Citing Traffic Problems, St. Peters Supports Work-At-Home Program." The article was about the City learning of a program that would enable them to help more of their city residents stay at home and work. The city was applying for a federal grant that would enable them to start such a program (Sonderegger). This would be a first time venture not only for the City of St. Peters, but also for Missouri.

After meeting with the City of St. Peters personnel who are in charge of starting this program, I was informed about their overall goals. The main goal was to set up a telecommuting center in St. Peters and use it as a launching pad to eventually move employees, mainly local residents into their home. The idea is to have employers rent space in the telecommuting center for their employees to work from. Then maybe a year down the line, the employer would be comfortable enough with the telecommuting idea that they would let their employer shift their jobs into their home. Then the process would begin again for

another employer venturing out for the first time with an employee with the City's hope that they too would eventually allow this employee to work from his home.

The over all intention of telecommuting is that it will benefit all involved. The City of St. Peters will use it as an economic development tool when selling their city and its advantages over other municipalities in the St. Louis area. The federal government will use it to help clean up the air and save wear and tear on the federally funded highways. Of course the Employer will get a break from the federal government for utilizing the center. The source that would benefit the most is, of course, the employee.

To recognize that we do have a crisis for time and family is to accept the responsibility of the problem. Most people do not want or believe in taking any responsibility for any of society's problems. Luckily we have parents who do know their part in the responsibility of bringing a child into this world. Part of that responsibility is making time for being a responsible parent. We now have the advancement of technology to benefit parents who want more time at home.

With computer evolution came the potential of telecommuting, and with telecommuting came the opportunity for people to work from home. The opportunity to work from home has not only benefited business and organizations, it can and has improved parenting. Women are now able to work from home during maternity leaves, parents can now spend less time at their office and more time with their children.

Telecommuting is only a small contribution to the parent time crisis. But we now know from the expert psychologists and studies conducted that allowing parents as employees to telecommute benefits families, companies and society simultaneously.

For companies to link telecommuting with parenting is crucial. It makes a major contribution to society in their role of corporate citizens. Giving parents an opportunity to have more time to be with their children can be directly correlated to how our society as a whole will be affected with our future generation. Today's society is beginning to recognize a problem with the present parenting dilemma:

basically, the lack of time for it. If more parents were given the opportunity to stay at home to work, then there would be more time for parents to be the primary nurturer to their children and give them the guidance and supervision they need.

My goal with this paper is to take a telecommuting project, such as the City of St. Peters, and give it a marketing angle that would be a grass roots effort for the citizens while simultaneously targeting the employers. The opportunity to guide this project to target employees who want and need to telecommute to fulfill family issues is my ultimate goal. A successful marketing plan would not only benefit the City of St. Peters, the government, the employer, the employee, the parents, the children, but society as a whole.

TELECOMMUTING

CHAPTER II

RESEARCH

Telecommuting is a buzz word for the 90's. A search of articles published from January of 1995 to the present uncovers an abundance of material reflecting the intense public interest in this topic. To understand Telecommuting, one must also understand the distinction implied by two terms that are sometimes used interchangeably: "telework" and "telecommute". Telework emphasizes the work performed at a computer station outside the office, while telecommute emphasizes the impact of that work on travel (Chaudron p.1).

In "Planning for Telecommuting", the authors, Susan L. Handy and Patricia L. Mokhtarian, give us their definition of telecommuting. A telecommuter does not necessarily have to be using a computer or be at home, a telecommuter eliminates or reduces their commute. A defining element for a telecommuter is the reduction of a commute because the work is done in a place other than their standard location (Handy p.101). For this project we are concentrating on the elimination or reduction of the commute.

The two types of telecommuting involve *those who work from their home* or *those who work from a telecenter*. Both accomplish the goal of decreasing the commute of a worker. Since we define a telecommute as a decrease or elimination of a commute, it is important to look at the commute of a worker:

Daily one-way minutes	Daily one-way minutes	Hours per year	Equivalent number 40-hours week
10	20	80	2
20	40	160	4
30	60	240	6
40	80	320	8
50	100	400	10
60	120	480	12

* Time table from "The One Minute Commuter": Lis Fleming, LTD; Davis, CA; 1989.

The author of "Flexible Workplaces are Key", Richard Cooper, feels that commuters are frustrated with rush hour traffic; putting on corporate attire; and looking at

polluted skies. Along with the time table, he feels these are just a few of the factors motivating corporate America to telecommute (22).

There are many factors that motivate corporate America to take a good hard look at telecommuting. Researching the subject, one discovers that there are many general categories of periodical literature. This project breaks down the research into these categories; Technology, Management, Human Resources, Labor Relations, Government (Clean Air Act or Legislation), Rural Economics, Disadvantages, and Societal Benefits. Since telecommuting is such a new and changing topic, what few books are out there have outdated information by the time they reach publication.

As Michael Friedman, author of "Telecommuting: The Essential Link", expressed so eloquently in his Los Angeles Business Journal article, "To implement telecommuting solutions we do not need the next Holy Grail of technology to be uncovered." Phone companies' existing ISDN and switch 56 can be used as mediums for information to travel (3A). What is important to know from a technical standpoint, is **ISDN**, which is Integrated Service Digital Network. This is a telecommunications process for sending both voice and data over a single line. It makes it possible for two users to simultaneously share, transmit, or update data (Gangemi p. 120).

Computerworld's, Neal Weinberg, points out in his article, "Win 95 Support May Boost ISDN Fortunes" that ISDN is endorsed by the Microsoft corporation by supporting it in their Windows 95 software (6). The importance of this literature is to understand that ISDN makes for a higher speed of transmission capable of multiple tasks in data output, and a basic phone line may be all one needs technically. Author, Morris Edwards, in his Communications News article, "LAN evolution's third phase", reminds us that until ISDN, terminal emulation was the most common form of a remote access for telecommuting. This is where a telecommuter would dial into the main office's dedicated microcomputer or server (57). This form of transmitting is slower, can only handle one task, and does not update data on-line. At the time it was all the technology that was accessible.

After reviewing the technical literature, the next step is understanding the obstacles created by management and human resources. Management must overcome a

cultural mind set while human resources needs to create a step by step processes and procedures so fewer shades of gray exist in managing telecommuting.

Author Michael Friedman, also writes that "Management's review of telecommuting is a paradigm shift." Managers will have to change their management style on evaluating their employees. Managers must look at time and motion, not quality and volume. Managers will need retraining to effectively evaluate a worker based on their performance. The fear of managers is that if they can not see their employee, then the employee must not be working (3A).

Management's fears are not unwarranted, there are workers who are not suited to telecommute. Management must know who the best employees are for telecommuting. In *HR Focus*, "Tips for Managing", author Kathleen Barnes defines the best employees for telecommuting as mature, responsible, well disciplined, self starting, reliable, computer literate, and deadline oriented. Barnes also considered it important that they be independent problem solvers who can nurture client and coworker relationships from afar (9).

Along with defining the personality traits of individuals well suited for telecommuting, it is significant to identify the best suited career choices. In author David Chaudron's article, "The Far Out Success of Teleworking", he lists the best suited careers from the studies as sales, customer service, writing, or research. Work that involves individual, not group contributions are considered the ideal job for telecommuting (6).

Another question managers have regarding telecommuting is why should I as the manager, change. Sandra A. Sullivan author of, "Flexibility as a Management Tool", answers this question from a survey by the American Management Association from 1992. Of the 5,000 employees surveyed, 87% indicated that flexibility in the work day was the number one issue. Sullivan also points out that management must look at the "flexibility life cycle." Management underestimates their workers needs and feels they can be satisfied with more money. Some may, but what if the company is not able to give raises. Considering telecommuting as a benefit would be a logical step towards more flexibility for the employees from management (Sullivan p. 393).

Sullivan's article goes on to explain that flexibility is a low-cost employee benefit that will improve productivity and motivate the workforce. The Childcare Action Campaign reported that businesses lose 3 billion dollars annually as a direct result of child care absences. But telecommuting is more than a women's issue, as some managers assume, it is a social issue. Companies must address this workforce issue and managers must adapt, because it impacts their bottom line (Sullivan p.393). This article makes it clear that telecommuting does not solve the childcare issue, but it is a stepping stone in the process.

As the author, Cooper, points out, there are other benefits management can bring to the companies' by offering telecommuting. Not providing a work space in prime real estate could save a minimum of \$2,000 per employee per year. Telecommuting also reduces the amount of parking needed in costly downtown areas, decreases absenteeism, and reduces overall facility costs. Telecommuting would also increase the company's recruitment pool as well as retain prime employees. The image of being a cutting edge employer is free public relations that accompanies the shift to telecommuting as a side benefit (Cooper p.22).

From the researched literature relating to examples of telecommuting working effectively for management, there are three noteworthy examples. IBM, Xerox, and Yellow Freight Systems, embraced and ran with the telecommuting concept. The Xerox corporation calls their telecommuting program, "Work from Anywhere" and the common term for IBM's program is, "The Road Warriors".

According to the article in Forbes, IBM refers to their salesforce as "The Wandering Tribe". IBM has taken their sales force out of the office and sales management is no longer assigned to an office. The sales force works from anywhere with any equipment needed to fulfill their jobs at IBM's expense. "We've saved the corporation 12 million a year in reduced physical space costs," John Frank, a manager with IBM says. "Coming back to a desk with a brass plate on it is a lot less important than keeping a customer satisfied," says Susan Whitney, General Manager for IBM, North America Midwest region (Forbes p. 93).

Richard B. Cooper, Jr., CFM is the facility manager at Yellow Freight Systems in Overland Kansas. He wrote an article for *Managing Office Technology* in which he describes telecommuting as a great way to accommodate employees, advance the organization, and abide by the law where it applies. Yellow Freight Systems also sent their sales force on the road. Cooper says he has encouraged and witnessed the results of an experiment in virtual officing at his facility (Cooper Jr. p. 45).

Author Cooper Jr. goes on to report that Yellow Freight Systems equipped their sales force of more than 700 people so they could perform their jobs outside the confines of an office. Cooper personally challenges every facility professional to attempt telecommuting today. Cooper found that telecommuting kept both the organizational goals and the employees desires in mind and challenged him to use managerial skills and ingenuity to take his employees' productivity and satisfaction to a new level (Cooper Jr. p. 46).

As Alice LaPlante reports in her telecommuting article, "Telecommuting: Round Two: Voluntary No More", the Xerox corporation also took the telecommuting challenge. Xerox called their program, "Work from Anywhere". Xerox provided their reps with the most up-to-date information on all their products. Xerox also found that their reps were more productive and no longer needed an office. Xerox's goal is to eliminate the remaining offices and go to what Wendy Starr, manager of the life cycle program for Xerox, calls the "airport red carpet room concept". The district offices will act as centers for roving reps to drop into, which would eliminate the one-person-one-office concept (LaPlante p. 134).

The conclusion due to the research of literature exemplified how management of all three corporations embraced telecommuting and ran with the concept. The company's management saw direct results in their sales that directly and positively affected the company's bottom line.

Another topic that is new to telecommuting is that of Labor laws. Trade unions are now trying to develop effective strategies to resolve the issues arising from teleworking (Horner p.333). Some of these are explored in an unsigned article in Nations Business entitled "The Legal Aspects of Telecommuting". Patrick J. McCarthy, a labor

and employment attorney with Pitney, Hardin, Kipp, and Szuch, in Morristown, New Jersey, says, "You are bound by the same safety and wage-and-hour laws that you must adhere to for those who spend each workday in the company's facilities." He goes on to say that just because businesses have employees working at home does not relieve them from the application of traditional labor laws (Nations Business p. 12).

Telecommuting's newness would explain labor's interest in the labor and law issues. The labor union's concern is how to work their way into this new sector of labor. Telecommuting has the potential to exploit workers and the labor unions could possibly protect these workers.

Just as telecommuting raises issues for organized labor, it similarly challenges the management and personnel areas of companies. The human resource perspective is explained in an unidentified article in HR Focus entitled "A Sample Policy, Managing Telecommuters". Human Resources basically is the department that sets up and enforces employee rules and guidelines. For telecommuting this is an essential function. Human Resources must know how to guide the employer and employee through what can be a human resources nightmare. Outlined in chapter 3 is a sample policy, but here are some common issues and solutions for the concerned employer:

ISSUE	SOLUTION
Need telecommuter in a crisis	Agree on policy with telecommuter
Security of materials	Require a locked file
How do I know he or she is working	Use performance measures
Spouse or children answer telephone	Ask telecommuter to set a policy during work hours

** Source: Commuter Transportation Services Inc.*

This is just an overview of a few common concerns raised by managers of telecommuters and suggestions on how to handle them (15). From the readings and personal experience I have determined that policies and issues will continue to arise and must be dealt with at that time. No two jobs are identical, so implementation of one telecommuting procedure is impossible. This is why it is important to remember that these are guidelines, not rules.

From the literature we understand that technology for telecommuting can be simplified, management's fears overcome, and human resources' questions answered. Up to this point we have not discussed the significance of the EPA (Environmental Protection Agency). In further research we discover that the EPA can provide a boost for telecommuting because it assists companies' compliance with the Clean Air Act.

Yellow Freight Systems manager, Richard Cooper, Jr. says, "The Federal Government has already written the excuse for you." The excuse is the implementation of the Clean Air Act in 1990 and it is written for management. This act requires businesses with more than 100 employees in one location, to decrease the air pollution created by their employees' commute by 25%. The Clean Air Act of 1990 is a mandate for 11 states with the possibility of becoming a requirement for all 50. The Clean Air Act of 1990 forces companies to look at alternatives in their employees transportation needs (Cooper Jr. p. 45).

Although government mandates are not necessarily the route one would want to take, it is the push companies need to consider an alternate method, such as telecommuting. The best overall method would be for companies to want to be on the forefront of change with a proactive attitude. But to change a complete business culture overnight will not happen. The Clean Air Act may be just the push companies need.

According to the Kansas City Business Journal, as of 1995 there were more than 2,000 Missouri companies required to comply with the Clean Air Act. Companies must obtain a permit when they have the potential to emit above the threshold levels. The article explains that most companies affected are those with equipment or manufacturing plants that emit exceedingly at this time (Kansas City Business Journal p. 22).

In the course of researching the literature on air pollution, I was helped in my research by a state librarian with a phone call to the Air Pollution & Control for the State of Missouri. The phone conversation with Peter Goode of the Air Pollution & Control for the state of Missouri, confirmed to me that there is only one area in the state of Missouri that has non-attainment for ozone. Emissions that pollute the air directly because of commuting only occurs in St. Louis. St. Louis and its surrounding areas are classified as a *moderate* ozone level (Goode).

Under the EPA, the Congestion, Mitigation and Air Quality improvement Program, there are 5 classification of ozone levels, they are: *Marginal, Moderate, Serious, Severe, Extreme*. These classifications were the creation of a program called The Congestion Mitigation & Air Quality Improvement Program. (Public Law Stat.1933). Each year, beginning in 1992, the government has set aside money for this program and the amount increases each year. By the fiscal year 1997, the funds will be up to \$1,029,000,000. These funds will be dispersed by the Highway Transportation Commission to help each state comply with the Congestion Mitigation & Air Quality Improvement Program(Public Law 105 Stat.1919).

It is significant to know that grant money exists to fund a telecenter. As in all government programs, knowing where and how to find the funds is the key. In the case of Missouri, only those areas that are classified ozone contributors qualify. If I understand the laws correctly, St. Louis and its surrounding areas are the only ones who qualify for this money under the Congestion Mitigation and Air Quality Control program. This means any and all programs that promote clean air qualify for money to launch a program. A company could open their own telecenter with the help of this program as well as the one the City of St. Peters is opening.

When it comes to government advocacy, it does not end there. After reading the article, "Employers Tax Breaks", from Home Office Computing, August 1994, on telecommuting, I found that Representative Bill Baker of California was trying to pass telecommuting tax credit legislation. I phoned the Representative's office and his staff sent literature containing the following information. Right now in the Congress of the

United States House of Representatives, Representative Bill Baker of California is trying to pass a bill, H.R. 1316. This bill explained in laymen's terms is:

THE TELECOMMUTING TAX CREDIT ACT OF 1995

- ◆ Provide employers with a \$500 tax credit for each employee who telecommutes 40 hours per week from home. The credit is pro-rated according to the percentage of time spent telecommuting, i.e., 20 hours per week of telecommuting qualifies an employer for a \$250 annual tax credit.
- ◆ Provide employers with a \$250 tax credit for each employee who telecommutes 40 hrs. Per week at a telecommuting center. (The same pro-rating applies.
 - a) Being closer to the employees residence than the central worksite of the employer;
 - b) A facility where employees of two or more employers or separate business units of the same employer perform services;
 - c) The telecommuting center is separate from the central worksites of the respective employers.
- ◆ The bill caps the tax credits any one employer may receive to no more than 50% of normal tax liability.

** Information provided by the office of Representative Bill Baker (R) California.*

This bill rewards companies for proactively pursuing telecommuting, as opposed to the EPA fining of companies for not complying. As of February 1996, the bill had not passed, but if it does, it will have an impact on telecommuting. Not only would companies be complying with the Clean Air Act, they would also be getting a tax credit.

This newest category of controversial articles written about the concerns of telecommuting, is the affects on the rural areas. Kenna R. Seal and Robert L. Harmon wrote, "Realities of Rural School Reform", and took in in-depth look at how technology has made it possible to bring education, training and employee opportunities to rural areas. A pilot program done in the Appalachians found that because of the dwindling

student enrollment more schools were going to have to be merged. This meant a burden would be put on students, and an increased chance of High School dropouts (Seal p.119).

With the technology to set up telecenters, a college education or technical training was now available to the Appalachian communities that previously saw poverty as a continuum in their circle of life. With the local residents educated and trained, more outside businesses and industry were willing to relocate to the area (Seal p. 123). Technology also made it possible for the schools to link up to an unlimited network of information (p.124).

A complete opposite view of telecommuting and its effect on rural areas came from James H. Snider, in the article, "Information Superhighway". Snider claims the environmentalists are worried that telecommuters are going to pillage the scenic lands and streams. With 80% of Americans living in metropolitan areas, the environmentalists are worried about telecommuting redefining rural life (Snider p.18). Specific concerns are the loss of forests and open lands due to an invasion of populace from the urban areas. Their answer to this concern is to strengthen land conservation incentive laws now, before the infiltration happens (p.21).

To deny that telecommuting has a downside is like wearing your left shoe on your right foot, you are ignoring the obvious. In researching the literature I found for every 5 articles on the advantages of telecommuting, there was one on the disadvantages. Telecommuting is not for every employee or every company. Some employees overwork because they do not know when to quit, while others overeat due to the increased access to food when working out of the home (Bredin p. 9).

Another telecommuting dark side for companies pointed out by Betts, is the cost to equip an employee with the technology needed to telecommute. The cost to equip a telecommuter can exceed \$4,000 for start up and \$2,100 annually (Betts p.55). These costs were based on setting up an office to be the telecommuters home from the road.

David Bjerklie points out another disadvantage in his article, "Telecommuting: Preparing for Round Two", that the most common way a telecommuting project is sabotaged, is by the other co-workers. Bjerklie walks us through a hypothetical scenario. A company has an employee who wants to set up office at home. The employee is

productive and the boss and the company agree to try a telecommuting situation. The other employees catch wind of the situation and become jealous and make chaos among co-workers. The company sees this and ends the project. This happens every day, and to avoid it a company can set up guidelines and make telecommuting an opportunity for all the employees (Bjerklie p. 20).

What doesn't come through fully in the literature to date is how advantageous telecommuting can be to society as a whole, this is the most current topic in telecommuting. Robert Maynard in his article, "The Growing Appeal of Telecommuting", interviewed Warren Masters and Faith Wohl both with the Office of Workplace Initiatives, United States Government Service Administration. Faith Wohl thinks that telecommuting will have a place in solving some of society's problems. (Maynard p.61). This is significant in the research of the literature because they were the first to admit that telecommuting was more than just an increase in worker productivity.

Warren Masters goes on to tell us that he feels telecommuting benefits go beyond the employee and the employer. Masters feels telecommuting can improve the family function and increase civic involvement. He goes on to say that Telework is a timely response to today's pressing problems. The article also pointed out that the government plans to put 2% of their employees into telecommuting (Maynard p.62).

I was so impressed by this information in my literature review that I called Mr. Masters office in Washington DC. From the phone call I was transferred to a Mr. Wendell Joice, Research Psychologist with the Office of Workplace Initiatives, United States Government Services Administration. Mr. Joice told me that the federal government passed a bill called the National Telecommuting Initiative sponsored by the President's Management Council. The goal of this National Initiative is to have 3% of the federal employees telecommuting by fiscal year ending 1998 (Wendell Joice). This is significant because the government is backing what they believe to be an important issue.

Telecommuting is an issue that is evolving as we speak. It needs to be categorized to effectively address the different concerns or issues of each division. The technology for telecommuting is there and is user friendly. Management is becoming more aware of telecommuting benefits and is addressing a new style of effective

management for it. Human Resources also must address telecommuting issues with guidelines that work for the employee and the employer.

The government is also part of the telecommuting evolution. Because of pollution, the EPA and its enforcement of strict codes is giving telecommuting a boost. The boost is also helping rural communities who now have access to training and better employment because of telecommuting. There are companies implementing telecommuting that are at the forefront of technology. In most cases, companies' experiences with telecommuting is showing positive effects on their bottom line profits. The literature suggests that there are disadvantages to telecommuting, but if addressed now these can easily be redirected or overcome. The bottom line.....Society overall is, can, and will directly benefit from telecommuting.

TELECOMMUTING

CHAPTER III

CASE STUDIES & TRAINING

After researching the expansive range of topics on telecommuting, there is a fundamental bond that unites them. With telecommuting there are 3 benefactors: the planners, the businesses, and the workers. Developing a successful telecenter can satisfactorily meet all their needs. With the help of the research studies, "The Telecommuting Center and Related Concepts" and "Telecommuting: Moving the Work to the Workers", we will take an in-depth look at setting up a telecenter. All the information for this chapter is from research reports specifically compiled by the University of California and Commuter Transportation Services, Inc., and the Federal Highway Administration and the State of California Department of Transportation.

At the conception of a telecommuting project, it is crucial a decision is made as to which type of telecommuting is best. The authors, Michael Bagley, Jill Mannering, and Patricia Mokhtarian, of "Telecommuting Centers and Related Concepts: A Review of Practice," give us an in-depth look at the choices available for telecommuting. There are 2 types of telecommuting, home based or center based. Within the center based category exists single or multiple employers (ES-1). It is important to know and understand the advantages and disadvantages of all options for telecommuting.

The advantage of home based telecommuting is that it is pollution free (ES-1). Since the employee has no commute, the environment is spared and the employer complies with the EPA guidelines (ES-1). Another advantage for the employers is that they do not pay rent in a home based office (S-1). Disadvantages that the employee has is no face-to-face contact with their co-workers. Another disadvantage is lack of boundaries between home and work with no transition time. Home also may not be a desirable place to work and there may be small distractions such as overeating, smoking, or substance abuse (S-3).

Experts agree that full-time work at home will be the least popular form of telecommuting (S-4). It seems clear from the research on home based telecommuting that the advantages lie with the employer with the employee burdened with most of the disadvantages.

The advantage of a telecenter versus a home is that there is a distinct set of boundaries that separate home from work. There is also the interaction with others that

helps employees in socialization and makes for a professional atmosphere. The actual commute to the center provides a transition time to or from work (S-3). Center based telecenters also offer increased security for companies' materials and equipment as well as the ability to share equipment (ES-1).

The advantage of a multi-employer center begins with the marketability of the idea to small and medium sized businesses' economically, it helps the employer. A multi-employer center decreases the risk for large employers to test the concept on their own, because the employers do not have to commit, and if they want to end it they can with little trouble or loss of investment. If the telecommuting concept works for them, they can develop their own center (S-7). Other advantages are: the availability of conference rooms and availability and opportunity to share equipment. While worker and property liability are a tricky issue in home-office telecommuting, a telecenter offers more defined and controlled atmosphere. Supervisors also tend to feel more confident that the employee is working at a telecenter rather than at home, simultaneously the center provides a professional image(S-4).

The disadvantage to a multi-employer telecenter is the cost of rent (ES-3), and the distinction on the part of the tenant employers to pay rents of fair market value or any at all (ES-4). If a telecommuter maintains a desk at the office (ES-3), then the manager bears the task of reorganizing how office space shall be utilized (ES-4). It is also difficult to prove increased productivity to management that would offset the cost of renting more space for the employee (ES-3). Another disadvantage for the employer is the task of training their management in supervisory techniques appropriate for working with telecommuters (ES-4).

Because single employer centers were usually implemented without any public subsidy or run by large corporations, there is no documented research and few examples.(S-6). Because of these factors, there were no case studies of these centers available to use for this project. Both home and center based telecommuting may continue in the future, but each will serve a different market segment (S-4).

After reviewing all of the case studies in, "Telecommuting Centers and Related Concepts: A Review of Practice", 12 key areas emerge as important to any future

telecenter inception.(S9). The key areas are: Goals & Objectives, Time Required, Training, Marketing, Location, Management, Features, Security, Financing, Telecommuter Description, Center Utilization, and Transportation.

In the case study findings there are three key areas of goals and objectives set by the telecenters. The first goal is transportation; this would reduce air pollution, conserve energy and decrease traffic commutes. The second goal is increased cost-effectiveness; the telecenter promotes the surrounding businesses and produces economic development for city planners. The last goal is research; unfortunately, however, although it was important to keep records for future centers' success, many did not (S-9).

The time required to set up a telecenter, the studies report, is 6 weeks to 3 years; the average telecenter took 6 months. The study felt that 12 months was needed to do it properly because it allowed for finding the right site, doing the necessary marketing research, developing and implementing a marketing plan, and creating sound telecenter policy to serve as guidelines for users and staff. Two factors that directly influence the length of time needed, are the time spent on site location and marketing goals. The studies show that more time is essential for marketing than choosing site facility(S-10).

The studies stress that training is one of the key elements that need to be solidly in place in order to prepare telecommuters for successful participation. Training needs to cover house rules and use of equipment, as well as seminars on how to work a successful telecenter (S-10). The studies conclude that informational packets provided guidelines for appropriate work and allowed for fewer misunderstandings (S-11). Training is detailed at end of this chapter.

Marketing and promotion in all the case studies stand out as **the key element** of a successful telecenter. This element is to be taken seriously, handled by professionals, done early and continued as long as the telecenter exists. Since it is the key factor, chapter 4 details a marketing and promotions plan for this project's telecenter.

Location is the fifth element uncovered by the case studies. A tenant ready location is considered the best. The other important considerations are accessibility, elimination of commute, and proximity to restaurants, post office, banks, dry cleaners,

etc.(S-12). Site location was important for its convenience and further reduction of any use of air polluting transportation (ES-2).

Another key element acknowledged in the case studies is center management. A full time manager with on-site technical support is considered a requirement. The actual duties of the manager could include service to workers, monitoring equipment, creating reports and financial records, hosting tours, overseeing site security, technical support, public relations, and center evaluation (S-12).

Center features is another key area defined by the studies. Features needed in a well planned center are an equipment room, reception desk, administrative office, lunch room and most importantly a conference room. For the actual work space a desk, chair, phone, computer, file cabinets, and a LAN are all desirable. Anytime the software, printers or files can be shared is considered a cost saver to the employer and thus, an advantage (S-13).

Security, the studies report, is often an afterthought of employees, but is in fact a very key element. Security is, of course, of great importance to the employers and to date the studies report, no problems have been reported at any of the telecenters reviewed. It was key for a telecenter to avoid leasing space on the same premises as the competitors, to assist in noncomplication of security for the companies. The availability of private offices with a lock and key can also help employers with the security issue (S-14).

Finance, is a key element to those considering opening a telecenter. Start up cost of a telecenter, the studies estimate at between \$120,000 dollars up to \$425,000 (ES-3). A Breakdown of income and costs was seldom available, but 30% to 100% of start up costs is reported as provided by the public sector. Of that amount, 30% to 40% were funds supplied by the government (S-16). The actual employers who participated paid a lease fee of anywhere from \$0 to \$850 a month with \$100 being the average (ES-3). The actual cost is proportionate to the number of occupants (S-16) but estimated monthly operating expenses came out to be between \$6,600 to \$18,900. To date there are no financially self-supporting telecenters (ES-3).

Another area cited in the studies, participants description gives a demographic breakdown of a typical telecommuter. The description broke this composite person down

as; 2/3 male, highly skilled field (ES-3), professional, with programmer being the most descriptor (S-16). Clerical applications are rare because management tends to be against it; what few there were, were commonly part-time (S-16). A need to reach other types of users, than those currently involved in telecommuting center programs is cited in the research (ES-3).

The next area of discussion, center utilization, is basically the mathematical breakdown of workspace representing the percentage of workday space occupied (S-17). To reach this number, one must divide the average number of spaces used per day by the average number of spaces available (ES-3). Identifying the optimum occupancy level is an important consideration (S-17). The average mean utilization from the case studies was 34% and varied from 13% up to 90%. An important related factor is the amount of rental income needed to offset the overhead costs (ES-3).

The final key element brought out in the case studies is transportation. Reducing commutes was the objective, because of the lack of record keeping, there are no studies yet that evaluate the impact of telecenters on transportation (ES-3). The only key conclusions available from the transportation standpoint reveal that 93.4 were the average commute miles, 2.8 hours the average commute time, 35 mph the average commute speed, and the commute was not so much long, but slow (S-17).

All of the preceding key areas identified by the research report "Telecommuting Centers And Related Concepts: A Review of Practice" are fundamentally indispensable to cover if one is to consider opening a telecenter. This is why, for this project it was necessary to identify, list and explain each one.

The concluding discussion of this chapter comes directly from the Commuter Transportation Services, Inc., prepared handbook on how to set up a telecommuting program. The report was prepared through grants from the United States Department of Transportation, Federal Highway Administration, with the cooperation of the State of California Department of Transportation. The handbook specifically deals with companies putting employees in their homes to work. For this project, however, we are going to focus on the handbooks guidelines on selection, policies, and training of the supervisor and the employee for telecommuting.

Before a company implements telecommuting, it is important to carefully choose the potential telecommuters. Of all the literature I reviewed for this project, these selection surveys were an indispensable tool for anyone considering telecommuting. Appendix A is the "Complete Selection Survey for Employers" put together by the authors, Elham Shirazi, Jeffrey Fink, and Joanne Pratt. The survey is found from pages 59 through 62 of the Commuter Transportation Handbook, "Telecommuting: Moving the Work to the Workers". (See Appendix A)

In Appendix B we have the "Selection Survey for Supervisors" which is found on pages 63 through 66 of the Commuter Transportation handbook. This is for supervisors to fill out for the potential candidate who wants to telecommute (Commuter Transportation Handbook p. 59). (See Appendix B)

The training session designed by the authors for the Commuter Transportation Services, Inc., is a masterfully designed program that gives the training, monitoring and evaluating of telecommuting. For this project, we will only focus on the sections for the program that would directly relate to a telecenter.

The authors point out that a well-designed telecommuting program will not work if the people telecommuting do not know how to use it. Training is one of the key preparations for a successful telecommuting project. To begin one must know how to schedule the telecommuter (21). The following steps on evaluating employees jobs was prepared by Commuter Transportation Services:

What to do:

1. Hand out copies of the *Calendar* worksheet. (See Appendix C)
2. Ask employees to think back to the week prior and list on the calendar each specific task that they performed during the week.
3. Evaluate the number of days per week they could telecommute at home by instructing them to:
 - Circle tasks that could be done at a site other than the main office.

- Circle face-to-face meetings that could have been handled by phone from their office at home.
 - Group together the tasks they can do at home onto days they did not have to be on-site.
 - Cluster the on-site tasks onto the remaining days.
 - Ask them: How many days last week could you have telecommuted by rearranging your schedule? Was last week typical?
4. Ask employee the number of days per week they think they could telecommute on a routine basis.
 5. Employees should also check off any equipment that they used while working (22).

Not only is it key to evaluate the employees jobs, it is also important to evaluate the managers perception of the employees job. The difference between what the manager versus the employees perceives to be telecommutable work can be cleared up through these two worksheets.

The next step for our project would be the managers' view of a workable telecommuting schedule (25).

What to Do:

1. Hand out copies of the *Calendar* worksheet. (See Appendix C)
2. Instruct managers to fill out a separate calendar for each telecommuter.
3. Evaluate the number of days their employees could work at home by instructing them to:
 - Write in each face-to-face meeting.
 - Circle any face-to-face meetings that could have been handled by phone or memo.

- Group together the tasks that employees could do at home on the days that the employee did not have to be on-site.
 - Write in any tasks that the telecommuter could only have performed in the central office.
 - Ask them: How many days last week could the employee have telecommuted by rescheduling? Was last week typical?
4. It may be appropriate with some people to discuss the pros and cons of telephone or conference calls versus face-to-face meetings (25).

The goal of the first worksheet is to determine how many days per week a candidate can feasibly telecommute (21). The goal of the second worksheet is for the supervisor to determine what telecommuting schedule is most feasible for this employee (25). Both will give the employee and the employer a better understanding of what work and how much time is practical when telecommuting.

The next step is equipping the telecommuter. A telecommuter makes a checklist to decide what equipment is required, such as reference materials and supplies. It must be determined who will provide the equipment, and what on-site support is required for access to the office automation system. The goal is to determine what the telecommuter's needs are from the company's standpoint (28).

The next step outlined by the Commuter Transportation Handbook is Communication and Evaluation. The Goal is to help telecommuters and their managers learn how to communicate daily without face-to-face contact. (30).

What to Do:

1. Establish through discussions with the telecommuter or telecommuters that their manager has a responsibility.
 - The manager should give detailed instructions.
 - The telecommuter should ask questions to get feedback from the job that they are expected to do (30).
2. Use the MBO management approach, Management By Objectives. (31)

The Commuter Transportation Handbook does not detail why MBO is the best approach. But if we refer to Peter Drucker's definition from his book, An Introductory View of Management, Management By Objectives means that every job within an organization is working towards the objective of the organization as a whole (351). In order for this to occur, managers must have policy and structure which leads to an organized purpose (352). MBO integrates individuals' efforts into the common performance (364).

With the Commuter Transportation guidelines, it will help the manager define to employees what the expectations are while the employee in turn will know what is expected of them. MBO is a sophisticated approach found difficult for many managers to achieve but will contribute to the success of the company. With telecommuting being a new approach to enhance the employee's life, it too is an enhancement to the common performance.

Another implementation outlined by the Commuter Transportation Handbook is Addressing Concerns. The purpose for acknowledging this issue is to assist the telecommuter and the manager to better understand each other's concerns (31). The following is from the Commuter Transportation Handbook on what to do when addressing the concerns of managers.

What to Do:

1. Ask telecommuters and their managers to compare their lists of concerns. They should:
 - Try to resolve or dispel each item.
 - Try lateral thinking, that is, new ways to handling issues in this new situation.

Example: How to handle others in the home answering the telephone during business hours. *Solution:* install a separate business line in the home off limits to other household members.

- Decide what procedures will best serve the clients, customer, employer and employee (31).

The last step of training is Monitoring and Evaluating. It is important to get an idea if telecommuting is working for your company. By monitoring and evaluating you are able to fine-tune your telecommuting program. There are two types of evaluation, informal and formal. The informal is asking around while formal sets up interviews, focus groups, surveys and research data (33). Either way one chooses to go, it is important to monitor and evaluate your telecommuting program.

Although step by step training was set up for home telecommuting, in this handbook, a telecenter can adapt to this program. In reviewing the literature, there has been no other writing so complete to walk both the telecommuter and the supervisor through training. Appendix D is a Sample Telecommuter Assignment designed for supervisors (54-55). **(See Appendix D)**

The last section covered is the Sample Telecommuting Policy. Appendix E has the sample Telecommuting Policy put together by the authors. The sample policy will outline all information needed by any person or company needing to set up policies. The policy outlines any agreements or expectations of employee and employer. As the case studies on training pointed out, set rules (policies) are a key part of the training element (S-10). **(See Appendix E)**

This chapter covers specific studies from current telecenters and the Appendixes are surveys, training guidelines, and policies created by experts in the growing field of telecommuting. Since it is a new and developing field, many individuals who are currently considering telecommuting are unaware that this information exists. Utilizing the outlined information in this chapter will keep other telecommuting projects from reinventing the wheel. This chapter will clarify any questions' planners, businesses or workers have of telecommuting and if it would work for them.

TELECOMMUTING

CHAPTER IV

MARKETING PLAN

The following outline is going to be the point of reference for Chapter 4 that is the telecenters marketing plan for our project. Each question in the outline will be answered in this chapter based on the St. Peters telecenter.

OUTLINE OF MARKETING PLAN

MARKET OVERVIEW:

- What is your business?
- Who is your market?
- What is your budget?
- What are your goals?
- What are the problems in achieving these goals?

PRODUCT OR SERVICE:

- What is the benefit of your service?
- What is the Unique Selling Proposition?
- What product or service is best contributor to overhead & profits?

CUSTOMERS AND PROSPECTS:

- Who are your current customers?
- Why do they buy your services?
- Who are your best prospects?
- What is your market share?

COMPETITIVE ANALYSIS:

- Who is your competition?

PRICE AND PLACE:

- How do you establish price?
- How does location affect you?

STRENGTHS AND WEAKNESSES:

- What are your strengths?
- What are your weaknesses?
- What are your opportunities?
- What are your threats?

ADVERTISING AND PROMOTION:

- What are your promotional and advertising objectives?
- How do you promote business?

REVIEW AND EVALUATION

The difficulty in devising a marketing plan for a telecenter lies within the knowledge that to date there are no financially successful government subsidized telecenters. So we have to look at why the City of St. Peters would attempt to open one. The telecenter will enhance the City of St. Peters image as a progressive community. The telecenter also offers the economic benefits of attracting and maintaining a middle-class, working, stable population to their city.

With the knowledge gained from the case studies, the number one element needed for any telecenter was a strong marketing plan. In order to begin the process, we have to present a market overview that begins with asking, What is our business? The telecenter's business is leasing workstations to companies for their employees.

The actual consumers of the telecenter are the companies who will be paying for the workstations. But the major influence in the buying process will be the worker who wants to telecommute. Both groups need to be approached simultaneously while emphasizing the benefits to the company.

Who is the target market? I feel the target market for the St. Peters telecenter is both the workers who live in and around the St. Peters area and the companies that employ them. The latter of the two markets can be segmented into three classifications: small to mid-sized companies, large corporations, and the federal government.

For the workers, a telecenter offers a shorter commute which results in more free time. For the small to mid-sized companies it can mean increasing the amount of employees without the adding office space. For the large corporations and the federal government, a telecenter offers them an opportunity to comply with the Clean Air Act

The marketing strategy is to simultaneously reach the target markets. The target markets are the workers and the companies. By simultaneously running a promotional campaign the two separate markets may become one in the same. The workers may be working for the companies we are contacting to participate in the telecenter project. Both may be willing participants without the knowledge of the other's interest.

What is the budget? At this point the budget for the telecenter is partially based on a grant from the Congestion Mitigation Act that allows up to \$250,000 for a 2 year period but funds must be matched dollar for dollar. The St. Peters telecenter is eligible to

reapply for grants for the telecenter from the government as long as they comply with the grants stipulation that they must keep accurate records for future reference. In most cases, the amount contributed by the private entity far outweighs the original \$250,000 grant from the government.

Since the City of St. Peters currently has proposed 30 workstations, a 34% utilization goal would be 11 workstations. To recoup their minimum \$250,000 investment, St. Peters would need to charge at least \$23,000 per year per workstation. If this cost is too high then the city of St. Peters would be forced to increase their center utilization percentage or consume the loss.

What are the goals? The goal of this marketing plan is to provide a telecenter that reduces the commute of workers residing in and around the St. Peters area. Chapter 4 is my personal marketing plan for the telecenter being set up in St. Peters, Missouri. Although this marketing plan is specifically set up for St. Peters, a few modifications would allow this marketing plan to work for any telecenter.

The city of St. Peter's goal is to start and maintain a telecenter without losing money. In order to achieve this goal, the center's average mean utilization has to be, as outlined in chapter 3, at least 34%. In order to obtain both the goals of the marketing plan and the telecenter, the center utilization must be obtained. Achieving this is an important factor because it would help offset overhead costs. Once this is realized, then we can create a strategic marketing plan that takes advantage of the strengths and minimizes the weaknesses of these goals.

What problems are faced in achieving these goals? The importance of a strong marketing plan is further emphasized if the City of St. Peters needs to increase their mean utilization. It would also create overall problems if the overhead costs are too high because the City of St. Peters would not be able to reach a financially stabilizing point. These are problems faced by reaching our goals, but not ones that can be addressed and solved.

What is the benefit of this service? When we look at the services, we have to look at the benefits of them. Our service is a telecenter. How does the telecenter benefit our customers? Lets begin with the worker market which benefits by obtaining a better

quality of life. Workers are given the opportunity to be closer to home and reduce or eliminate the commute to work. This opportunity gives them more time to do other things that are more important in their lives. We know from our research that happy employees are more productive.

The next market, the employer, can be divided into three segments. The first of this segment is the small to mid-sized companies. We would target the growing companies who need to expand and would benefit by leasing inexpensive office space. The telecenter would offer them a lease that includes the use of shared equipment so they can perform their jobs without being in the main office.

The second segment, the large corporations, would not necessarily be attracted by the inexpensive office facilities. They would however benefit from the telecenter because it gives them the opportunity to increase their compliance with the Clean Air Act. And for both the large and small employers it opens the opportunity to retain top notch employees who want less time spent in the office.

The third segment, the federal government, would be able to use the telecenter to help achieve their goal. Their goal is to have 3% of the federal employees telecommuting by fiscal year ending 1998. This currently adds up to 60,000 federal employees. But for all three segments of this market, the ability to offer this to employees will help attract and retain the level of professionals they want working for them.

What is the Unique Selling Proposition? The telecenter is attractive because it provides the companies with a selling tool to keep and retain top notch employees. Another Unique Selling Proposition to our customers, is that there is no other telecenter like this in the St. Louis area. Workers might ideally prefer to work from home but may not have the facilities in their homes to accommodate a separate office. They also may not be able to persuade management to let them try it. The telecenter would provide a median between workers wanting to work from home and management not yet receptive to this work arrangement. The telecenter enables the worker to be closer to home, while making management comfortable that they are still working because they know they are in a professional environment.

What contributes most to overhead and profits? As established in the case studies there are no telecenters that have made a profit and few have been able to keep their heads above water. The goal is to run the telecenter with basic technology capabilities and the ability to upgrade or downgrade while simultaneously obtaining an occupancy rate which offsets the cost to the City of St. Peters. To achieve this goal it is necessary to know who the customers are and only give them what they need. If you offer state of the art technology and they only need a simple dummy terminal, you will have to charge them based on the expense of the technology. If you have to compensate for your overhead that is over investment, you will have to charge high lease prices even if you are at full capacity. Do not give them what you think they need, give them what they need.

Who are the current customers? Because there are no other telecenters in the St. Louis area like this one, we have to seek out the customer. Two approaches must be taken. First, the workers who want to be a part of the telecenter project must be sought out. Identifying such individuals is vital information, because the research confirms that if the employee is not a willing participant the telecommuting project will not work.

The second customer, the companies, are leery but can be swayed to try this type of arrangement and will continue if it works. Once the companies have accepted this idea then they must decide which employees qualify that live in and around the St. Peters area. For either size company the benefits of telecommuting, as the research indicates, has key selling points. Telecommuting attracts and retains top notch employees, and can be used as an employee benefit.

Why does our customer want our services? The first of our customers, the worker, will be the driving force of the success or failure of a telecenter. Without the telecommuters need for this service that would reduce or eliminate their commute, a company would be unwise to force it upon them. These people may have already approached their employers about other alternative work schedules, but may have been turned down.

The next customer, the companies, wants our services for two separate reasons. The large corporations would consider this an alternative transportation idea that would help them comply with the Clean Air Act. And as stated in Chapter 2, the Clean Air Act

forces businesses with more than 100 employees in one location, to decrease the air pollution created by an employees' commute by 25%. For the federal government, it would assist them in obtaining their goal from chapter 2. The goal of the federal government is to place 3% of the federal workforce that is 60,000 employees in some form of telecommuting project by fiscal year ending 1998.

Small and medium sized companies can be approached with the appeal that leasing this office space can save them money. They can be shown a cost saving factor if they are growing and do not want to rent more office space and equipment. Whether small or large, we know from our research and case studies, management is not likely to be comfortable with telecommuting. They can be influenced, however, and two people will be key in doing so: the worker who wants it and the telecenter manager who sells it.

Who are the best prospects? There are two prospects: those who telecommute from home and those companies that already have telecommuting programs. The first, telecommuters currently working from their homes, may find the telecenter to better fit their needs. From the research we discovered that not all personalities are suited to work from home. The professional atmosphere and socialization may be what the current home telecommuter needs in order to be more productive. Current distractions in their homes and the cost to set up an adequate work space can also factor in as negatives.

The second prospect may be the companies who are currently operating a program for telecommuting in their companies. The most common are the insurance agencies. General American, for instance, actually hires people who want to telecommute, trains them and then puts them in their homes. The telecenter could serve companies as a transition medium before putting their new employees in the home.

What is the market share? Since telecommuting is a relatively new concept, achieving a market share number is almost impossible. As we reviewed in Chapter 2, people who run their own business from home, workers who work from home and telecenters have all been lumped together. Because their needs as markets are distinctively different, it would be misleading to go by any current numbers in the readings. The extent of the misleading numbers is expanded upon in the next paragraph.

After a phone call to the most well known telecommuting marketing company, Link Resources, I discovered that the numbers of telecommuters from 1994 to 1995 that were so high, have actually dropped. This was due to the fact that California is the leading telecommuting area in the United States and many people were telecommuting due to floods, fires, and earthquakes. Now that these national disasters have subsided and life is running normally, many of these people have returned to the office. Such unpredictable fluctuations like this in such a new activity is another obstacle in obtaining accurate telecommuting market numbers (Link Resources).

Who is the competition? A direct competitor to the St. Peters telecenter is Kinkos. They offer conference rooms, teleconferencing, and any equipment and services a person could ever need. Someone who wanted to work from home but did not have all the equipment can run to Kinkos. But the biggest difference between Kinkos and the telecenter is cost. If someone is in sales, and only need's use of an office or computer sporadically, then Kinkos would be the answer. If someone needs an office with shared costs of equipment they would save considerable money by utilizing a well-equipped telecenter.

In the future, when other telecenters open, there will be more competition so the market will demand competitive prices from the telecenters with above average service. Right now, the St. Peters telecenter is in a unique position of being the first in this area. St. Peters must also be aware that as the cost of technology decreases, Kinkos could also be a threat if they reduce their rates.

How do you establish price? If the center is operating at a utilization of 34% then the leasing income could offset the overhead costs. Competitive rates would attract the companies and the telecenter could foreseeably break even. Too much expensive unneeded technology would raise the cost of overhead and lease rates would have to be charged accordingly. Workstations that supply advanced technology, and the private offices would command higher lease rates. It would be possible for the telecenter to break even once it is up and running by offering only the basic technologies with the option to upgrade or downgrade.

How does location affect the telecenter project? The location of the St. Peters telecenter is on Cave Springs Boulevard in St. Peters. This is relevant because most of the traffic problems exist because of the Missouri River. The Blanchette Bridge on Interstate Highway 70 is on the North End of St. Charles and the Daniel Boone bridge is located on Interstate Highway 40 that is the South side of St. Charles. These two bridges are almost exclusive for access to St. Louis for residents who live west of them. Ask anyone who lives west of the bridges the implication of an accident, there are traffic jams of up to 2 hours long. The telecenter's Cave Springs location will be of great interest to anyone living West of the bridges.

Other advantages of the telecenter location are that it is located in a high traffic area and is off of the frontage road for highway 70 between St. Charles and St. Peters. There are two daycare centers close by as well as many fast food chains. Within walking distance is a bank, retail shops and restaurants. The telecenter would increase sales of the surrounding St. Peters businesses as well as keep the telecenter workers from using their cars on breaks or lunch hours.

What are the strengths and weaknesses? In marketing a product or service it is very important to build on your services strengths and understand its weaknesses. You must look at the opportunities and address the threats. This is also known as SWOT Strengths/Weaknesses/Opportunities /Threats. (Bangs Jr. 3).

The **strengths** of the telecenter are that the workers want it, it helps corporations comply with the Clean Air Act, and small and medium size companies can save money. The telecenter also gives St. Peters a positive image of being a leader in forefront of technology. The government helps fund the program and the telecenter has the unique selling point of being the first of its kind in the St. Louis area. It also makes available the opportunity to be a median for companies not yet ready to put employees into their homes.

The **weaknesses** are that some companies may discover that it is costly and it would be more efficient for the employee to work out of their home. Large corporations already are downsizing and are paying top dollar for unused office space. Being a benefit

to the employee may not justify the cost to the company. Once companies find the project too expensive and burdensome they will discontinue when their lease expires.

The **opportunities** for a telecenter include the ability to gain additional usage of the space at nights or on weekends by offering classes or continued computer education training. The actual location of the center will help promote local St. Peters businesses. The City of St. Peters can also employ the telecenter as a selling tool to attract or retain residents to the community.

A **threat** to the project would be if Congress cuts federal funding opportunities for telecenter programs. If the federal funds supplementing the telecenter are a key element in keeping it afloat, then a politically governing body that does not back such programming would cut funding. To avoid this threat's impact, the telecenter needs to be able to operate without the assistance of the government. Another common threat from the research is the complications brought on by the sabotage of other employees. Jealousy among other co-workers will force a company to end the project.

What are the promotional and advertising objectives? The advertising and promotions of this telecenter will rely heavily on good Public Relations and Sales initiatives. Since most people are unaware of telecenters and lack a good understanding of telecommuting, the telecenter must be presented as a service that fulfills a need. The objective is to attract the workers in and around the St. Peters area and then have them contact the city for more information. At the same time an implementation of contacting small and medium sized companies with a rapidly expanding workforce, giving large corporations formal presentations, and contacting participating government agencies.

How do we promote our services? The first promotion would take place six months prior to opening of the center and would catch the attention of all interested parties. Newspaper and television stories would be at the center of the effort. Getting an article written and placed in the St. Louis Post Dispatch, preferably in the Sunday edition of the St. Louis/Region section, would be a priority.

Secondly, a public relations campaign would attempt to secure a place and we would try to get all the local news stations to run a news story about the telecenter. All video news stories produced about the telecenter would be rerun on the St. Peters cable

channel. This would allow for added exposure to the residents of St. Peters with minimal cost. The newspaper article and television news stories would detail the mission statement and goals of the telecenter.

Getting an article into the *St. Louis Post Dispatch* about the St. Peters telecenter is not a sure thing. But given the fact that the telecenter is cutting edge, technologically advanced and newsworthy, most media personnel could easily be persuaded to report this story. The key would be selling, persuasion, groveling, and using any and all networking connections to get the story printed. The same would hold true for television coverage. Whatever it takes to get the exposure, do it.

At the end of both the article and news stories would be a contact number for further information. All inquires stirred by the article would be followed up with a phone call and detailed information packets on telecommuting and the telecenter would be sent. After the general newspaper and television news stories are running, then our promotional plan will be broken down by our segmented markets. With an effective promotional plan targeting the motivated workers, less time and money is needed to spend on the companies.

The second step in our promotion will be to identify and reach our target market, which are the workers personally motivated by their own individual needs. The first promotion directed to this segmented market is to write an informative, motivating, and interesting article/news release that will be different from the first article and get it published on the cover of the St. Peters city and Rec Plex newsletter, The St. Peters and St. Charles Journal, and the Wentzville, Wright City and Warrenton Newspapers.

The idea is to target the individuals who live in the region West of the Daniel Boone and Blanchette bridges and those businesses East of the bridges. From the perspective of the Clean Air Act, it is the air emissions leaking into the ozone created by stagnant vehicles waiting to cross these bridges. Although this is not the only congested sector, the two bridges handle the bulk of St. Louis traffic in an area which is growing at a swift rate. Residents also have over a thirty minute commute in each direction.

The next step is to take all persons responding to the "grass roots" effort and send a letter announcing a meeting at St. Peters City Hall. The letter sent would include background on telecommuting and a survey designed to determine if their work would qualify. The meeting with the respondents will sell the telecenter and motivate the people. After answering all questions, the ones who are still interested would be given a detailed pamphlet to take home and fill out.

The pamphlet would contain survey questionnaires similar to the one in Chapter 3 but tailored more to the St. Peters telecenter. The detailed pamphlet would need to be returned within 2 weeks in order to keep information fresh and keep on track with our promotional plan. This stage in the promotion will give the marketing plan access to vital information; our target market respondents would be telling us where their office is located, whom they work for, and type of work they perform. This information would give the City of St. Peters an idea of how many interested candidates could utilize the center.

The next step the City of St. Peters would take would be to assist the interested candidates, based on the surveys, on a strategy for presenting the telecenter option to their companies. With the right training and informational packets as discussed in Chapter 3, the workers' presentation of the idea to their companies can be done with support and ease. The telecenter manager would also be needed to give the presentation to the companies.

For the segmented market of the large, small to mid sized companies, and the federal government, an article tailored to their interest about telecommuting would be targeted for publication in the *St. Louis Business Journal* and the Monday section of the Business plan in the *St. Louis Post Dispatch*. After the articles run, separate approaches would be taken for the two segmented markets of companies. We would break down the promotions of the small to medium and large corporations.

For the small to medium markets, we would consult the Sorkins business directory. This directory defines all the St. Louis metropolitan businesses by industry and size. Within this they break down to location, number of employees, growth, and other

miscellaneous information. With the assistance of Sorkins we would be able to target the fastest growing small to mid-sized companies and then contact them by direct mail.

The large corporations have large human resource departments that filter out what ideas are worth acknowledging to management or not. A letter would be sent to these large companies emphasizing the Clean Air Act compliance. It would be another alternative to the companies' needs to cut down on emissions. Currently, many of these companies participate in the ride share program and would likely want to hear an alternative. The letter would also ask to have the telecenter manager give them a presentation on telecommuting and the telecenter.

For the federal government we would need to contact the local metropolitan planning office. Here they would be able to direct us through the bureaucrat maze of the federal government. The significance here is endurance and tolerance. The exhaustive part of the federal process will be waiting for the correct contacts to be obtained.

Once all letters have been sent out and all presentations have been done, then the selection processes must begin. For the workers, the selection process is completed by the City of St. Peters. Now the workers need to present to their companies the telecenter project. After the companies have been given their presentation and have elected to participate, they too would be ready for training.

After deciding who is eligible based on the company's willingness to let them and the company's ability to identify and present qualified candidates, a very detailed training session begins. The last month of the promotional plan would end with training sessions for both the employees and their managers. With the assistance of Chapter 3's training manual, this step can run efficiently and smoothly as the worker and manager make the transition to the telecenter. This step can also weed out any participants who would not be suited for this type of work situation.

The following is a month-to-month promotional calendar that gives an overview of the promotional goals:

PROMOTIONAL CALENDAR

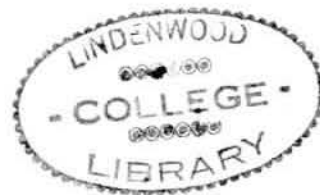
	<i>Month</i> <i>1</i>	<i>Month</i> <i>2</i>	<i>Month</i> <i>3</i>	<i>Month</i> <i>4</i>	<i>Month</i> <i>5</i>	<i>Month</i> <i>6</i>
Worker	Newspaper/ Television Promo	Newsletter / Press Release	City Hall Meeting	Selection of Candidates	Presentation to Candidates Employers	Training of Employees /Managers
Small - Med Companies	Newspaper/ Television Promo	Send Letter	Follow Up Phone Calls	Presentation	Selection of Candidates	Training of Employees /Managers
Large Corporation	Newspaper/ Television Promo	Send Letters	Follow Up Phone Calls	Presentation	Selection of Candidates	Training of Employees /Managers
Federal Government	Contact Metro Planning Office	Work with gov't agencies	Work with gov't agencies	Presentation	Selection of Candidates	Training of Employee /Manager

Based on the literature on the subject and confirmed by personal experience and interviews, telecommuting, especially in large companies, has been initiated by the worker. It is an innovation that is typically researched, presented and implemented by an individual worker. Right now in today's economy many large companies already feel they are doing enough for their employees. Small to medium size companies feel they cannot afford increased benefits for the employees without a loss in profits. With this kind of corporate mind set, one has to analyze the question that the employer is asking. What is in this for me? Right now, not a whole lot. And with this honest answer the companies are going to say, forget it.

I acknowledge the fact that the city of St. Peters has a difficult task before them. But in looking at the basic question an employer asks, "What is in this for me?" What is in it for them is that they may retain key employees that may otherwise have left. The strategy I have chosen which is based on my gut feelings and research, is a "grass roots" approach for the citizens of St. Peters. This will help them benefit from their own tax dollars. The motivations of the employee in conjunction with the companies' need to use the telecenter will drive this project. I feel this strategy offers the best chance for this telecenters success.

The following marketing plan is how I would market a telecenter. The city of St. Peters has their own marketing plan, which employs a different approach than I have chosen to take. They see their customer as any business that wants to decrease the commutes of their workers. The idea is to have large corporate sponsors who will lease a guaranteed number of spots as well as use the center to promote or advertise their product or company. They have also hired the marketing consulting firm for Ride Share to market their telecenter to the corporations currently participating in the Ride Share program.

The marketing plan approach I have taken is based on the research and case studies that show us that to date there are no financially successful government subsidized telecenters. What a telecenter offers can not be put in dollars. Although that would make most executives cringe, it is a fact. What a telecenter has to offer goes far beyond the realm of making the almighty dollar. A telecenter offers opportunity for a better quality of life for the worker. This better quality of life in turn benefits all the other components around them. Companies see happier employees, children see more of their parents, area businesses see increased sales, and the future of society overall benefits.



TELECOMMUTING

CHAPTER V

DISCUSSION

I began telecommuting out of a need to extend my maternity leave. Being a new mother brought to my attention the need for a parent to be involved in her child's life. Not wanting to quit my job at the time, I needed to find another solution. Since I had been successful at telecommuting during my maternity leave, I had hoped to do it part-time after my return into the office. This did not turn out to be an option since my company was downsizing, outsourcing, and rightsizing. I did not take it personally when management decided to shut my division down. I seized the opportunity of my lay off package and returned to school.

Although I was attending school full time in the evening, I was still a full time mother during the day. I gained and continue to obtain exposure to other mothers who yearn to spend more time with their children. Many work nights, weekends or baby-sit other people's children. Many, like myself, know that because of the economy, this part-time employment is only a temporary solution to a family's earning needs. Unless one of the wage earners is a highly paid individual, two incomes are needed, especially if parents intend to put children through college.

As I was attending school, the thought of how to help ease the burden of guilt for parents kept creeping into my schoolwork. Finally, a decision to explore telecommuting for my final project seemed to be an answer. Not only is it a cutting edge topic in the field of communications and as such an appropriate one for my Masters' study, it also has the virtue of having the potential to help other parents in finding more time to spend with their children.

My research for the introductory chapter confirmed that my concerns on the parenting time crisis were not unfounded. The literature repeatedly indicates and points to the fact that most households are dual income and career oriented. As a society we are continuing to raise families without addressing the problems caused by both parents working. This lack of available time for parenting is having and will continue to have a detrimental effect on everyone.

From my need to explore other work options to enable me to spend more time with my children emerged my interest in telecommuting. Completing this telecommuting project has taught me many things, among them the realization of how complicated it is

to define telecommuting. It must be understood that telecommuting has many different dimensions such as telecenters, home based, or home businesses and each one has advantages and disadvantages. This is why there are so many different reasons that people telecommute. This is also the same reason that there are so many different ways to approach this topic.

From a technical stand point, I learned that the technologically advanced connections and state of the art equipment is available and varied. For telecommuting however, what matters to the telecommuter is only the immediate availability of the basic technology in order to perform his or her job from a remote location. Some may only need a phone or a personal computer while others need a dummy main frame terminal. One can only determine the technical needs of a telecommuters workstation on a job to job basis.

In choosing people as viable candidates for telecommuting, chapter 2 defines the personality traits as mature, responsible, well disciplined, self starting, reliable, computer literate, and deadline oriented. An employee with these qualities is not a slacker, they are driven, and a driven employee can accomplish results. These very qualities can serve to legitimize and promote for the use of telecommuting.

There are many jobs that could and in the future even more will become telecommutable. As more and more companies become increasingly computer oriented, more positions will be eligible for telecommuting. At this point it will be up to the employee and how badly he or she wants to telecommute. This is especially true in non-traditional jobs. If employees want or need it badly enough, they can and have found ways to do it. The opposite is also true, if they do not want to telecommute, they can opt out or by indifferent performance, destroy the whole project.

I also learned about telecommuting's benefit to the worker with sick children. Telecommuting would enable an employee who has a sick child to dial up and work from home. No, the employee would not conduct an eight hour work day, but could attend to the pressing problems on their office desk without being there. The employee would win because he or she would not have the guilt of not being there. The company wins

because the employee does work that would have gone unattended. And the person who wins the most is the sick child.

I absolutely do not want to leave the reader with the impression that telecommuting only benefits employees with children. All employees at one time or another have to deal with a personal crisis. It could be a dying family member, broken leg, elder care or mental illness. The option to telecommute can ease the burden of any employee during a personal crisis in their life. So the option and flexibility to telecommute are a benefit to all employees.

An important lesson regarding management, is that managerial perceptions will only change if strong support for this change in the corporate culture comes from the top. How a company operates is a direct reflection on the mission or theory of the corporation's leaders. If the message of flexibility and acceptance of change does not come from the top, it will not work for those down the ladder. Once management is convinced of the benefits to the company and the employee, then they can join the ranks of progressively thinking companies such as Xerox or IBM.

The economic advantages from telecommuting have made it possible for people who live in big cities to move to the rural areas. This has already lead to a boom in some rural real estate markets, but it also has a down side. From the commuting standpoint, if a new worker telecommutes, but still must drive to the office periodically from rural area to city, he or she has not cut down a commute. Even if it is once a week, it defeats the whole purpose of utilizing telecommuting to help clean the air. Only a full time commuter who switches to telecommuting or a company that locates to a rural area is benefiting the environment.

I also learned from the environmentalists that there are negative concerns about telecommuting but they can be addressed. It may be that more people are heading for the hills with their computer, but to believe this shift in demographics is so widespread that it will do irreversible harm to the lands and streams would be an overstatement. People who telecommute will still need some physical contact with their bosses, offices, etc. in order to stay in touch with their industry or customers. Being way out in the rural lands with a

big house and large acreage is not what most telecommuters want. Being able to achieve a better quality of life is the average telecommuter's goal.

There is also a harsh reality to be learned from the indifferent or outright hostile attitude of employees without children about telecommuting. They tend to feel that allowing other co-workers to telecommute due to family issues in no way affects them. This is why they do not care or do not believe in letting telecommuting take place. So we need to view telecommuting as an overall concept. If more parents are more involved with their children, fewer children will be without parental supervision Monday through Friday. With more parents alert, present, and interacting there is less time for kids to get into trouble, and all people in the communities affected benefit. This is one of the major appeals of St. Peters efforts - promoting its city as a livable community for professionals to settle down.

Let's take this "overall concept" one step beyond. If a young child is influenced and surrounded by parents you can safely say they will be more likely ultimately to positively contribute to society. If a youngster has little to no parenting interaction they are more likely to be lead down the wrong path. Such a youngster contributes to society's current problems.

Parenting has an effect on society. This is not to demean parents who cannot financially afford more time with their children. Telecommuting would enhance the availability of more adults overall. Remember, "It Takes a Village to Raise a Child." But it takes parents at home for communities to re-evolve to this level of vitality and responsibility. Society as a whole would benefit directly or indirectly from telecommuting.

A phone conversation with David Kuppler, Crime Management Analyst with the city of St. Peters, backed up my thoughts with documented facts. The more people in sight and interacting within a neighborhood the more likely that cohesion is built. An active and cohesive neighborhood will see a decrease in crime. The more activity in residential areas, the less likely a criminal will stop. I conclude that more people at home telecommuting could potentially reduce crime, noticeably.

From the research I also learned that there are more organizations becoming involved in telecommuting. As it develops and spreads, their influence will bring about more awareness. Research will then become more readily available to help improve and enhance all existing programs.

One promising program that builds awareness through networking is the Nevada Telecommunity Project in Nevada, Missouri. This is an interorganization under the Missouri Department of Economic Development called MIIT, (Missouri Institute of Information Technology) which is run by the University of Missouri at Kansas City. The Project Director, Howard Jacks and Research Associate, Alan Goerner, characterized the program's central activity as gathering experts in all fields such as medicine, law, education, business to help the community thrive with telecommunity business opportunities.

The idea behind the Nevada Project is to establish a Telecommunity beyond anything discussed in this paper. This "telecottage" concept is already assisting a small community in keeping up with technological time. If they do not do this, the community will not thrive. As discussed in chapter 3, some environmentalists feared that telecommuting would overpopulate rural areas; more realistically, these types of projects may keep small communities from disappearing. This is an optimistic outlook on the effects telecommuting can have on rural communities.

Another area I was not aware of until I started inquiring on the World Wide Web was the extent of training that is available for telecommuter or organizations considering the shift to the telecommuting option. There are a multitude of conferences on telecommuting held every year around the country. Since the core of this project was to open a telecenter, my attention was centered on what was out there for large corporations. Specifically many of these seminars are set up to teach and train large companies on how to implement telecommuting for their employees.

As I mentioned before, the more I talked about this paper, the more information people were giving me on telecommuting. This was particularly handy two weeks ago. A manager of a large financial institution lent me the purchased cassette of a telecommuting seminar that she attended. The speaker was Ms. Judith C. Louthan, Worldwide Help

Desk Business and Planning Manager for Digital Corporation. Apart from the technical part of telecommuting in her seminar, most areas that she covered have been covered in this paper. The significance of her seminar is that a company or manager can now learn in one or two days what it has taken me months to accumulate. The individual experience Ms. Louthan discussed gave me reassurance in that our conclusions on telecommuting were the same.

Ms. Louthan's lecture overall was very informational, positive, and insightful. She has been telecommuting for eight years and finds that it gives her the opportunity to retain a career she enjoys while still having the time to be a mother. With four young children, her being a mother and working is no easy task. Telecommuting keeps her from having to choose between the two. This is one of the reasons she recommends telecommuting.

Ms. Louthan also discussed in length her job in a professional post as a telecommuter. One experience with a new company left the other employees resentful of her telecommuting position. She said she ended up quitting and learned a very keen lesson on telecommuting which has been reiterated throughout this paper - she was sabotaged by her co-workers. She also emphasized that most companies are not jumping up and down at the thought of being able to provide a telecommuting option for employees. One, they are hesitant because it is new; and two, they do not see any initial benefit in it for the company.

Companies and their employees must address all problems and concerns regarding telecommuting before it is implemented. There are no problems that are insurmountable. Telecommuting is new and with this newness comes fear of the unknown; as telecommunications has not been experienced previously in the workplace. Take it slow and learn as you go, seems to be the message, of Louthan and others. In the long run it will be worth the trouble.

An example of how concerned managers are was brought to my attention full force. The personal notes taken in the seminar by the manager mentioned previously, are as follows:

- An individual does not save money from home.
- Insurance? Usually insurance does not cover associates visiting the premises.
- A company will experience a 10% increase in costs over 5 years.
- Security? If employees store records or documents at home how do you get them back? (This would require a search warrant)
- By law, you can not force anyone to work from home.
- Co-workers are the worst nightmare. Others want to do it; experience jealousy.
- Pick a time frame to pilot, takes time to level out. Do not expect things to go well initially.
- Weight gain is common in telecommuters.
- Have mute button installed on phones; screaming kids, cats purring, dogs barking, etc.

After reading her notes, once again I felt my insight to how management feels towards telecommuting were on track. These notes came from a technologically progressive company that currently offers telecommuting to its employees. If these are the notes of her concerns as a telecommuting manager, then telecommuting must be handled in a manner that stresses its benefits to the company without denying the drawbacks.

Her concerns conveyed to me that she grasped telecommuting and all its positives and negatives. She had a realistic view as a manager and was addressing possible problems or conflicts. Managers who address concerns that might be a future problem are proactive not reactive managers. Despite these and other real concerns, this particular company supports telecommuting because they are aware of its overall benefits. The

support of telecommuting is a perfect example of the implementation of management by objectives.

After many months of researching telecommuting, I have observed and learned many things. Now that I feel I hold a significant amount of knowledge on telecommuting, I have established my own viewpoints. Telecommuting's most attractive quality, for me, is that it offers a better quality of life. If I were asked set up a program for a company that wants to offer telecommuting to its employees, I would recommend the following:

1. A strong training program for both the telecommuter and their telemanager.
2. If program is large enough one telemanager for all telecommuters.
3. Telecommuting is best done on a part-time basis. A Monday/Tuesday/Wednesday or Wednesday/Thursday/Friday is ideal.
4. Face-to-face interaction with home office is critical.
5. Utilize empty office space by alternating it with other telecommuters.
6. Strong policy that can eliminate an unproductive or otherwise problematic employee from program at any time.

Many variables exist in these recommendations including, the size of the company and the amount of employees involved in the project. What is most important is having someone who is knowledgeable about telecommuting initiate the program. Without some knowledge and careful thinking through, the project could fail before it begins.

For most companies and their workers, working out of the home may be the best approach. The worker's do not have to commute at all, they can work hours more convenient to their needs in most cases. The worker will also not need to spend money on items such as clothing, gas and lunch. These costs can add up quickly. For the companies, the cost is relatively inexpensive to set up and maintain an employee from home. With little overhead, the work space at the office can be utilized by others. In the end, the company has a happier employee who will most likely be more productive.

The edge the City of St. Peters has with the telecenter is that it serves as a median between the worker and their employer. Based upon my research, a cultural mindset exists that if you can not see the worker, they are not working. Changing this mindset is going to be a difficult task. But the City of St. Peters can help ease these fears with the telecenter because the employer will not worry as much if they know the employee is working there.

Although the City of St. Peters has chosen to approach large companies with the telecenter concept, I worry that this approach comes at a bad time. Right now there seems to be a hostility between employees and employers because of an unstable work environment. Most large companies are worried about the bottom line. With this knowledge, few employees are willing to approach their managers with the telecommuting concept.

The large corporations that are downsizing are burdened with empty offices in prime areas with high rent rates. Selling the large companies to lease more space may not be of any interest to them. The notion of approaching them to commit and also find the appropriate employees in their companies for this new enterprise also burdens them with more work. Under such conditions, between the lease agreement and increased work load from managing this project, the telecenter would be the first to go when companies are trying to cut their losses.

As referenced throughout this paper, to date there are no successful telecenters. I must clarify by stating that there are many telecenters out there, but none are showing a profit. There is one very successful telecenter in Washington, D.C., but the center is run and occupied by the federal government. It would be unfair to compare this fully funded government owned and operated center to any current telecenter.

A company may at first feel that the cost of implementing telecommuting is not cost effective. But how cost effective is it when you lose your best quality workers and have to replace them? As more progressive companies embrace the concept of telecommuting, they will be successful in retaining the best employees. Employees do not always want more money, sometimes it is just a better quality of life issue.

Since we know that co-workers tend to sabotage telecommuting projects, we need to look at the sabotagor. If the common goal of the company includes the acceptance and implementation of telecommuting, the sabotagor is a bad seed. I would take this as an opportunity for most companies to see which employees interests lie with the common good of the company. The company must take the position that if it is not the latter, the employee may need some motivational training or maybe they would be happier somewhere else.

I watched the news in shock today because a 6 year old boy almost beat to death a 33 day old infant. A child psychologist explained that this is just the beginning. In the next 10 years, many infants who lack adequate parental influence are going to become extremely violent. This cultural problem will cut across all class and race lines, leaving no one unaffected. It was stated that the key to preventing such a situation before it gets out of control is for more parents to spend time teaching their children right from wrong.

Crime is a societal problem resulting from inadequate parenting and telecommuting can be part of the formula in preventing it. As more people are aware of this growing problem they will become cognizant of the need to find time to be with their children. This will help change the cultural mind set that telecommuting is up against. With the incorporation of computer technology, more and more people will telecommute, and as more people telecommute, maybe the predicted violence will be defused.

School is about learning. A Masters degree is about taking a thought, concept or theory and researching, studying or exploring its every perspective. I feel I have achieved this with telecommuting. I am impassioned by the benefits society can derive from telecommuting. If I can take this learning experience and apply it to a career that helps change the business cultural mind set to be more accepting, I will have achieved my personal goal.

Telecommuting has so many new areas yet to be addressed and the future holds many promising and exciting discoveries. For telecenters, one possibility is serving large corporations to help employees in their transition from working in the office to working at home. Other possibilities include assisting companies with implementation and

training issues on their telecommuting programs or acting as a consultant or resource to companies unfamiliar with the telecommuting concept.

From this project we have learned that all types of telecommuting have been compiled together. Data on multiple and single employer telecenters, homebased telecommuters, and homebased businesses need to be reported independently. The needs, advantages and disadvantages of each classification of telecommuting are different. Grouping them together reduces the effectiveness of the available data. With increased awareness, future research on telecommuting will be more accurate.

APPENDIX A

SELECTION SURVEY FOR EMPLOYEES

Selection Survey for Employees

Telecommuting Screening Survey for Employees

Telecommuting or working at a location other than the conventional office, by itself, or used in conjunction with double shifting, can result in benefits for both the Company and its employees. These benefits can include: increased productivity, reduced overhead, improved morale, reduced stress and cost savings for employees and the Company.

The attached questionnaire must be completed by each person interested in participating in the Company telecommuting program. Every supervisor/manager must also fill out a similar questionnaire on their employees who are interested in telecommuting. The results of both the employee and supervisor questionnaires can be used for selecting the potential telecommuter.

Name _____

Supervisor _____ Classification _____ Department _____

1a. In five lines or less, describe what you currently do.

1b. In five lines or less, describe how your current job can be adapted to telecommuting to better meet the goals and mission of your department.

1c. The following four groups of characteristics relate respectively to your existing work, to your future work as it can be adapted to telecommuting, to you as an employee, and to your manager. Please rate each characteristic as either high (H), medium (M), or low (L) by checking the appropriate blank.

Existing Work Characteristics

Please rate the following according to your existing job requirements and characteristics.

- Amount of face-to-face contact required
- Ability to organize required face-to-face communications (e.g. meetings) into pre-determined time periods
- Degree of telephone communications required
- Clarity of objectives for a given work effort
- Autonomy of operation
- Ability to control and schedule work flow
- Amount of in-office reference material required

High	Med.	Low

Telecommuting Screening Survey for Employees
(continued)

Future Work as a Telecommuter

Please rate the following job characteristics in terms of their adaptability to telecommuting.

- Amount of face-to-face contact required
- Ability to organize required face-to-face communications (e.g. meetings) into pre-determined time periods
- Degree of telephone communications required
- Clarity of objectives for a given work effort
- Autonomy of operation
- Ability to control and schedule work flow
- Amount of in-office reference material required

High	Med.	Low

Employee Characteristics

Please rate the following according to your own characteristics as an employee, and as a telecommuter.

- Need for supervision, frequent feedback
- Quality of organization and planning skills
- Importance of co-workers' input to work function
- Discipline regarding work
- Reliability concerning work hours
- Computer literacy level
- Desire/need to be around people
- Desire for scheduling flexibility for any reason
- Potential friction at home if telecommuting (e.g., interruptions due to caring for sick child or spouse)
- Level of job knowledge
- Productivity
- Quality of Work

High	Med.	Low

Supervisor Characteristics

Based on your perceptions of your supervisor's attitude towards telecommuting, and his/her management style, please rate your supervisor according to the following.

- Positive attitude toward telecommuting
- Trust employee's ability to telecommute
- Organization and planning skills
- Ability to establish clear objectives
- Provide formal feedback regularly
- Flexibility
- Ability to communicate with employees
- Result and project-oriented rather than activity or process-oriented. (Manages by results, not by process)

High	Med.	Low

**Telecommuting Screening
Survey for Employees**
(continued)

2. What criteria are used by your manager to evaluate your work? (For example: quality of work, quantity of work, timeliness, etc. Please be specific.)

3. Do you need physical security of the information, data and materials they work with?

- (a) Yes (Answer question 4)
- (b) No (Go to question 5)
- (c) Not applicable (Go to question 5)

4. As telecommuters, how can you maintain the security of your information? (Please be specific.)

5. Considering the nature of your job, how much would you want to telecommute? (Circle one only)

- (a) About once every 2 weeks
- (b) About once a week
- (c) Two days a week
- (d) Three days a week
- (e) Occasionally for a special project

6. What kinds of work would you expect to do while telecommuting? (Circle as many as apply.)

- (a) Writing/typing
- (b) Word processing
- (c) Data management
- computer programming
- (d) Administrative
- (e) Reading
- (f) Research
- (g) Talking on the phone
- (h) Sending/receiving electronic mail
- (i) Field visits
- (j) Thinking/planning
- (k) Other (please specify)

7. Given the amount of telecommuting you want to do, and the kinds of work you would do while telecommuting, what equipment/services would you need, and which of those do you currently have? (Check appropriate box.)

	Need	Currently Have
Computer/terminal	☐	☐
Printer	☐	☐
Modem	☐	☐
Additional phone line	☐	☐
Software	☐	☐
Typewriter	☐	☐
Desk, filing space, other furniture	☐	☐
Facsimile machine	☐	☐
Voice Mail	☐	☐
Other (please specify)	☐	☐

**Telecommuting Screening
Survey for Employees**
(continued)

8. Do you work from home at all now, or have you done so regularly in the past (counting overtime)?
- (a) Yes (b) No (Go to question 11)
9. If so, approximately how much? (Circle one only.)
- (a) Less than one day/month (f) Three days a week
(b) One day/month (g) Four days a week
(c) About once every two weeks (h) All the time, with weekly office visits
(d) About once a week (i) Several hours a day
(e) Two days a week
10. How long have you worked from home?
- (a) More than a year (c) Three to six months
(b) Six months to a year (d) Less than three months
11. Do you have adequate space in your home to dedicate to working?
- (a) Yes (b) No
12. Are there any distractions/obligations that will make working at home difficult or impossible?
- (a) Yes (b) No
13. In your opinion, after reviewing the information provided, do you consider yourself a suitable candidate for telecommuting?
- (a) Yes (b) No
(c) Need more information (Please specify)



APPENDIX B

SELECTION SURVEY FOR SUPERVISORS

Selection Survey for Supervisors

Telecommuting Screening Survey for Supervisors

Telecommuting or working at a location other than the conventional office, by itself, or used in conjunction with double shifting, can result in benefits for both the Company and its employees. These benefits can include: increased productivity, reduced overhead, improved morale, reduced stress and cost savings for employees and the Company.

Every supervisor/manager must fill out a questionnaire on their employees who are interested in telecommuting. The results of both the employee and the supervisor questionnaires can be used for selecting the potential telecommuter.

Name _____

Names of employees under your direct supervision who are considered candidates for telecommuting:

1. Is the work done by any of your staff as it currently exists or with modifications suitable for telecommuting, at least part of the time?

(a) Yes

(b) No (This completes the survey for you—thanks!)

2. Do you want to participate in this program as a supervisor of telecommuters?

(a) Yes (Go to question 4a)

(b) No (Go to question 3)

3. If not, why not? (Please circle any that apply).

(a) I am not willing to meet the requirements for participating in the program. (For example, supervision of remote employees, evaluating employees on basis of work products, etc.)

(b) I am opposed to making telecommuting available for anyone.

(c) I believe the incentive to "goof off" while telecommuting would be too strong.

(d) I don't want to have to defend the decision that some of my staff are allowed to telecommute, while others are not.

(e) I believe there's no good way of assessing productivity changes due to telecommuting.

(f) It is not fair to the employees not permitted to telecommute.

(g) Other (please specify) _____

(This completes the survey for you—thanks!)

4a. In five lines or less, describe the kind of work your employee(s) do(es).

4b. In five lines or less, describe how the work of your employee(s) can be adapted to telecommuting to better meet the goals/mission of your department.

The rest of the survey should be completed for each of your employees who are interested in participating in the telecommuting program. Some questions, such as those dealing with your management style, will probably have the same answers for each employee. In this case, place a check in the most appropriate blank. Please rate each characteristic as either high (H), medium (M), or low (L).

Some questions, however, will inevitably have different answers for different employees. Please put the initials of each employee in the appropriate blanks, or duplicate this form for each employee.

For example, if you have three interested employees, with initials U.V., W.X., and Y.Z., your response to the first question below might look like this:

- Amount of face-to-face communications required

High	Med.	Low
	UV, WX	YZ

4c. The following four groups of characteristics relate respectively to the existing work, the type of work that can be done when telecommuting, to the employee, and to the supervisor. (Please rate each as either high, medium or low).

Work Characteristics

Please rate the following according to job requirements and characteristics of potential telecommuters.

- Amount of face-to-face contact required
- Ability to organize required face-to-face communications (e.g. meetings) into pre-determined time periods
- Degree of telephone communications required
- Clarity of objectives for a given work effort
- Autonomy of operation
- Ability to control and schedule work flow
- Amount of in-office reference material required

High	Med.	Low

Future Work as a Telecommuter

Please rate the following job characteristics in terms of their adaptability to telecommuting.

- Amount of face-to-face contact required
- Ability to organize required face-to-face communications (e.g. meetings) into pre-determined time periods
- Degree of telephone communications required
- Clarity of objectives for a given work effort
- Autonomy of operation
- Ability to control and schedule work flow
- Amount of in-office reference material required

High	Med.	Low

Telecommuting Screening Survey for Supervisors
(continued)

Employee Characteristics

Please rate the following according to the potential telecommuter's characteristics as an employee.

- Need for supervision, frequent feedback
- Quality of organization and planning skills
- Importance of co-workers' input to work function
- Discipline regarding work
- Computer literacy level
- Degree of experience in current assignment
- Level of job knowledge
- Productivity
- Quality of Work

High	Med.	Low

Supervisor Characteristics

Please rate the following according to your own characteristics as a supervisor.

- Positive attitude toward telecommuting
- Trust employee's ability to telecommute
- Organization and planning skills
- Ability to establish clear objectives
- Provide formal feedback regularly
- Flexibility
- Ability to communicate with employees
- Result and product-oriented rather than activity or process-oriented

High	Med.	Low

5. What criteria do you use to evaluate your staff's performance? (For example: quality of work, quantity of work, timeliness, etc. Please be specific.)

6. Do all or some of your staff need physical security of the information, data and materials they work with?

- (a) Yes
- (b) No (Go to question 8)
- (c) Not applicable (Go to question 8)

7. How can the physical security of the information your employees work with as telecommuters be maintained? (Please be specific.)

**Telecommuting Screening
Survey for Supervisors**
(continued)

8. Considering the nature of your staff's work, what is the maximum amount you would want each of them to telecommute? (Feel free to write initials of employees next to each category.)
- (a) About once every 2 weeks
 - (b) About once a week
 - (c) Two days a week
 - (d) Three days a week
 - (e) Occasionally for a special project
 - (f) Not at all
9. What kinds of work would you expect your staff to do while telecommuting?
- (a) Writing/typing
 - (b) Word processing
 - (c) Data management
 - (d) Administrative
 - (e) Reading
 - (f) Research
 - (g) Talking on the phone
 - (h) Sending/receiving electronic mail
 - (i) Field visits
 - (j) Thinking/planning
 - (k) Other (please specify)
10. Given the nature of your staff's work, what equipment would each one need in order to telecommute the amount you proposed for them in question 8?
- (a) Computer/terminal
 - (b) Printer
 - (c) Modem
 - (d) Additional phone line
 - (e) Software
 - (f) Typewriter
 - (g) Desk, filing space, other furniture
 - (h) Facsimile machine
 - (i) Voice mail
 - (j) Other (please specify)
11. Do any of your staff work from home at all now (counting overtime)?
- (a) Yes
 - (b) No (Go to question 13)
12. If so, how much?
- (a) Less than one day/month
 - (b) One day/month
 - (c) About once every two weeks
 - (d) About once a week
 - (e) Two days a week
 - (f) Three days a week
 - (g) Four days a week
 - (h) All the time, with weekly office visits
 - (i) Several hours a day
13. Please rate each of your interested staff in terms of your willingness to let them telecommute:
- (a) Not at all willing
 - (b) Have reservations, but willing on a trial basis
 - (c) Completely willing

Initials

--

Figure A.1

Sample Worksheet: Calendar

<i>On-Site</i>	<i>Home Office</i>	<i>On-Site</i>	<i>Home Office</i>	<i>On-Site</i>
Monday	Tuesday	Wednesday	Thursday	Friday
<i>Morning</i>	<i>Morning</i>	<i>Morning</i>	<i>Morning</i>	<i>Morning</i>
<i>staff meeting</i>	<i>budget</i>	<i>budget meeting</i>	<i>prepare presentation</i>	<i>finish invoices</i>
	<i>discussion with Mark</i>	<i>revise budget</i>		
<i>Afternoon</i>	<i>Afternoon</i>	<i>Afternoon</i>	<i>Afternoon</i>	<i>Afternoon</i>
<i>work on budget</i>	<i>phone suppliers</i>		<i>write letters</i>	<i>budget presentation to Exec. Comm.</i>
	<i>write letters</i>		<i>check invoices</i>	
Computer	Computer ✓	Computer	Computer ✓	Computer
Copier	Copier	Copier	Copier	Copier
Fax	Fax	Fax	Fax	Fax
Paper Files	Paper Files ✓	Paper Files	Paper Files ✓	Paper Files
Ref. Mat'l.	Ref. Mat'l.	Ref. Mat'l.	Ref. Mat'l.	Ref. Mat'l.
Other	Other	Other	Other	Other

APPENDIX D

SAMPLE

TELECOMMUTER'S ASSIGNMENT

**Sample
Telecommuter's
Assignment**

Telecommuting, or working from another location such as home or an office close to home, is an assignment that _____ may choose to make available to some employees when a mutually beneficial situation exists.

Telecommuting is not an employee benefit, but rather is an alternate method of meeting the needs of this Company. Employees do not have a "right" to telecommute; the arrangement can be terminated by either the employee or the Company at any time.

These are the conditions for telecommuting agreed upon by the telecommuter and his or her supervisor:

1. The employee agrees to work at the following location:

2. The employee will telecommute _____ days per week.

3. The employee's work hours will be as follows:

4. The following are the assignments to be worked on by the employee at the remote location with the expected delivery dates:

5. The following equipment will be used by the employee in the remote work location:

6. The following is the arrangement agreed upon for handling telephone calls made by the telecommuter from the remote work location for Company business:

7. The employee agrees to call the central office to obtain his or her messages at least _____ times per day.

8. The employee agrees to obtain from the central office all supplies needed for work at the alternate location; out-of-pocket expenses for supplies regularly available at the Company office will not normally be reimbursed.



**Sample Telecommuter's
Assignment**
(continued)

9. Additional conditions agreed upon by the telecommuter and the supervisor are as follows:

I have reviewed the above material with _____ prior to his or her participation in the Company's telecommuting program.

Date

Supervisor

The above material has been discussed with me.

Date

Employee

APPENDIX E

SAMPLE

TELECOMMUTING POLICY

1. The purpose of this policy is to provide a framework for the implementation of telecommuting arrangements for employees who are eligible to participate in the program.

2. The policy applies to all full-time employees who are currently working in a position that is eligible for telecommuting.

3. The policy is subject to the following conditions:

a. The employee must have a minimum of two years of experience in the position.

b. The employee must have a minimum of 10% of the position's duties performed remotely.

c. The employee must have a minimum of 10% of the position's duties performed remotely.

d. The employee must have a minimum of 10% of the position's duties performed remotely.

e. The employee must have a minimum of 10% of the position's duties performed remotely.

Sample Telecommuting Policy

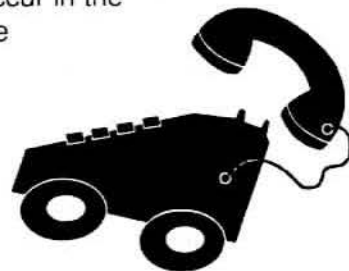
Telecommuting, the practice of working at home or at a site near the home instead of physically traveling to a central workplace, is a work alternative that this organization may offer to some employees when it would benefit both the organization and the employee.

Telecommuting is not a formal, universal employee benefit but an alternative method of meeting the needs of the company. Since telecommuting is a privilege, the organization has the right to refuse to make telecommuting available to an employee and to terminate a telecommuting arrangement at any time.

Employees are not required to telecommute. Employees have the right to refuse to telecommute if the option is made available to them. Employees who do choose to telecommute have the right to cease telecommuting and return to their former in-office work pattern at any time.

The responsibilities assumed by the organization under this agreement are as follows:

- The employee's compensation, benefits, work status and work responsibilities will not change due to participation in the telecommuting program.
- The amount of time the employee is expected to work per day or per pay period will not change due to participation in the telecommuting program.
- The employee's at-home work space will be considered an extension of the company work space. Therefore, the organization will continue to be liable for job-related accidents that occur in the employee's at-home work space during the employee's working hours.
- The organization will be liable for injuries or illnesses that occur during the employee's agreed-upon work hours. The employee's at-home work hours will conform to a schedule agreed upon by the employee and his or her supervisor. If such a schedule has not been agreed upon, the employee's work hours will be assumed to be the same as it was before the employee began telecommuting.
- The organization assumes no liability for injuries occurring in the employee's at-home work space outside the agreed-upon work hours.



The responsibilities assumed by the undersigned employee under this agreement are as follows:

- The employee agrees to maintain safe conditions in the at-home work space, and to practice the same safety habits in the designated at-home workplace as he or she would in his or her office on the organization's premises.

Sample Telecommuting Policy

(continued)

- In the case of an injury while working at home, the employee will immediately report the injury to his or her supervisor or to Employee Relations to get instructions for obtaining medical treatment.
- Restricted-access materials, such as payroll records, will not be taken home without the written consent of the employee's supervisor.
- The employee will not undertake to provide primary care for a child under 12 years of age during at-home working hours. If such children will be in the home during the employee's at-home working hours, some other individual must be present to provide primary care for those children. However, if a child under 12 is ill, the employee may on a temporary basis provide primary care for that child, subject to the approval of the employee's supervisor.

The employee will also not undertake to provide primary care for an elderly adult, who would otherwise require the care of a nurse, while working at home.

- The employee will work at home during the hours agreed upon by the employee and his or her supervisor. Changes to this schedule will be reviewed and approved in advance by the employee's supervisor.

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