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Telecommuting and its impact on business and personal relationships

Margaret G. Dreher
San Jose State University

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TELECOMMUTING
AND ITS IMPACT ON
BUSINESS AND PERSONAL RELATIONSHIPS

A Thesis
Presented to
The Faculty of the Department of Social Sciences
San Jose State University

In Partial Fulfillment
of the Requirements for the Degree
Master of Arts

by
Margaret G. Dreher

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APPROVED FOR THE DEPARTMENT OF
SOCIAL SCIENCES

Dr. Charles N. Darrah

Dr. Jan English-Lueck

Dr. Carol Axtell Ray

APPROVED FOR THE UNIVERSITY

ABSTRACT

TELECOMMUTING AND ITS IMPACT ON BUSINESS AND PERSONAL RELATIONSHIPS

by Margaret G. Dreher

This thesis explores the emerging workstyle known as telecommuting and the effect it is having on the business and personal relationships of current telecommuters in California's Silicon Valley. Through the use of in-depth interviews, the study focuses on what workers have to say about the way telecommuting affects their communication with others, their social interaction, their families, and the overall quality of their lives.

The study found that even when telecommuters are quite different from one another in terms of their motivation and objectives, their telecommuting experiences exhibit many similarities. Among the most pronounced differences identified by the study were those between men and women, both in the reasons they gave for choosing to telecommute and the way they allocate their time. Telecommuters felt they were making some sacrifices in terms of close involvement with coworkers and that the success of telecommuting depended on the cooperation of their entire household.

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Introduction

This study takes a close look at telecommuting — an emerging workstyle which allows people to work at home instead of at their employer's main work site. Like other changes overtaking today's workplace, the continuing shift of many workers to this new way of structuring their jobs is likely to result in significant realignments of business, social and family relationships. In order to better understand how these changes in the workplace are affecting workers' lives, this study explores what current telecommuters have to say about the impact of telecommuting on their relationships with their coworkers and families.

Through the use of in-depth interviews, this study shows that telecommuters are not the homogenous group that many people imagine them to be, but instead can be quite diverse in terms of their background, environment, and motivations. The study also shows, that despite their diversity, telecommuters report experiencing many similar challenges and rewards as a result of the way they work. The consistency with which these telecommuters find themselves dealing with the same concerns allows us to better frame the issues that future telecommuters are likely to encounter.

The aspects of telecommuting which are singled out for inspection in this study are its impact on effective communication, social interaction, family life, and overall quality of life. In looking at the interactions of telecommuters with their coworkers, specific questions are raised about communication practices, social support systems, and career opportunities. In examining what happens within a worker's family when the office is brought home, the focus is on the separation of work and personal life; the

motivational, organizational and emotional challenges of working at home; and the effects of telecommuting on the rest of the household.

The participants for this study were selected to equally represent several groups that might be expected to differ from one another in the way telecommuting affects their lives. This facilitated comparisons between these groups. For instance, in view of the well-documented differences between the roles and experiences of men and women in our society, male telecommuters are compared to their female counterparts to isolate issues and behavior that may be gender specific. A comparison is also made between telecommuters who work primarily from their home office and those who work primarily at their main work site. Again, the purpose for doing this is to identify those issues that are more typical of one group than the other. Social and communication issues, for instance, might be expected to play out quite differently between these two groups, given the differences in the degree of their separation from coworkers.

The following chapters begin by laying down the basis for the questions being explored in this study and continue by presenting the study's findings and a discussion of the ways in which these findings contribute to the ongoing investigation of emerging workstyles. Chapter I outlines the historical underpinnings of the current workplace and reviews recent literature on telecommuting and related issues. It explains the basis for the recent public interest in telecommuting and clarifies the issues that are explored by this study. Chapter II then details the research methodology that has been used to explore these issues. Participants are described, including the parameters and process used in their selection. The development and implementation of the interview procedure

used to gather data is also outlined and the procedure used to analyze the interview data is reviewed in detail.

The results of this study are presented in Chapters III and IV. The focus of Chapter III is on the diversity within the sample group of telecommuters. The chapter explores contrasts in their backgrounds, needs, working patterns and environment. Chapter IV then goes on to explore the similarities in the experiences of these telecommuters in their relationships with their coworkers and families. The discussion in Chapter V ties together the issues raised in the telecommuting literature with the results presented in Chapters III and IV. It highlights the major issues that telecommuters raise about the way they interact with others and discusses the ways in which these findings shed light on the problems and possibilities inherent in the telecommuting workstyle. Chapter VI summarizes the findings and their contribution to current research efforts and identifies those areas that this study points to as being in need of further investigation.

As the technology that enables workers to free themselves from the constraints of office space and office hours becomes cheaper, faster and more robust, and as workers become more comfortable and familiar with its use, telecommuting is likely to spread into the lives of many more workers. It is important, therefore, to take a hard look at telecommuting and the impact it has on people's lives. The insight provided by the telecommuters taking part in this study is meant to help in the effort to guide change in directions that offer the most promising possibilities and potential for future workers.

Chapter I

Literature Review

The press of new technology has been transforming the way people live their lives and relate to their world since humans first walked the earth. What is new to those who are walking the earth today is the rapid pace with which these changes have been overtaking them, often becoming inextricably entwined with their lives before anyone has had the time to fully understand their impact. This study examines a rapidly changing segment of today's workplace, an area where technology has had a significant impact in recent years, sending repercussions into every corner of workers' lives.

The focus of this study is telecommuting, a workstyle that has been growing in popularity and has been made possible by recent advances in communication technology. Telecommuting is the practice of working from home rather than commuting to a main office location. This study explores telecommuting from the perspective of current telecommuters, paying particular attention to what they have to say about the way telecommuting is affecting their relationships with their coworkers and families. By illustrating the ability of telecommuting to meet many different individuals' needs and identifying issues that commonly confront today's telecommuters, this study will hopefully add to our understanding of the changes that are reshaping our lives today and that promise to continue to have a significant impact on future workers, their families, and their communities.

This chapter begins with a discussion of the historical underpinnings of the workplace issues that are explored in this study. This is followed by a review of current

literature that relates specifically to telecommuting and the impact it is having on workers' lives.

The Workplace of Yesterday

The stresses and uncertainties of the modern workplace have made many Americans yearn for the life of those who lived in simpler times when people seem to have coexisted more comfortably with their world than we do today. It is images of times such as these that were evoked by Alvin Toffler in his popular 1981 book, *The Third Wave*. The pictures he painted of a home-centered society with everyone nestled in their own electronic cottages focused the attention of the book's many readers on the potentials of telecommuting. Modern communications technology, the book suggested, would enable tomorrow's workers to once again be masters of their domains and would draw them closer to their families and communities.

Many workers in today's economically advanced societies are hoping, in much the way suggested by Toffler, that they can use the new power that technological innovation has put in their hands to rearrange their lives more to their liking. Over the course of human evolution, their capacity for technological innovation has set them apart by enabling them to master and adapt to their environment. The irony is that this mastery, while it has ushered in prosperity for many, has not always provided health and happiness (Kipnis, 1984; Stavrianos, 1991). The new social and economic structures on which people have come to depend have pulled them further and further from their natural roots and pressed them into relinquishing, step by gradual step, much of the freedom and control over their lives that people hold dear (Neff, 1985). A brief look at

the history of the modern worker will help to throw light on the dilemmas that face today's working men and women.

Lest we over-romanticize the past, since people abandoned nomadic life for the confines of villages and the regimen of farming, people have worked long, hard hours and suffered routinely from famine, epidemics and malnutrition (Herlihy, 1997). Despite all of its shortcomings, however, agrarian life usually did provide some degree of freedom and security for even the poorest serf (Rowling, 1968).

Workers were primarily agrarian and self-sufficient well into the eighteenth century when their world was transformed by the industrial revolution. Large-scale factories and specialization gradually became the norm, requiring that workers be brought together at the specific times and places of the factory owners' choosing (Doyle, 1978). Nineteenth century scholars reflected on the way in which individuals were increasingly becoming isolated from one another as impersonal cities replaced closely knit villages, leading to insecurity, decay of moral codes and the breakup of the family. Industrialization created wealth and prosperity for many wherever it went, however, and the change it brought to the lives of workers, often including poverty and despair, was the price they were asked to pay for this progress (Neff, 1985).

In the early twentieth century, management refined still further the way it used workers to improve productivity. Scientific management came into vogue. It was popularized by Frederick Taylor who used elaborate time and motion studies to establish the most efficient way of using workers' time and energy. The result was that the freedom to make decisions and choices was stripped from many workers (Carvell, 1970). Efficiency became an obsession as management looked for ways to make men

resemble ever more closely the machines with which they worked (Robinson & Godbey, 1997).

With thoughts of efficiency still very much the center of attention, management theory took an interesting twist in the late 1920s. By stumbling quite accidentally onto the conclusion that the attitudes of workers had a significant impact on their productivity, the landmark Hawthorne studies marked the beginning of the human relations movement. This movement focused attention on issues such as job satisfaction and morale and their relationship to productivity (Neff, 1985). Even though the connection between employee morale and productivity has never been conclusively proven, it was the focus of much attention during the prosperity following World War II, as employers, often under the pressure brought on by massive union activity, looked for ways to create happy workers. A pattern was established that was characterized by workers who saw their employer as their source of financial security and employers who saw their workers as needing care and guidance (Carvell, 1970). The implicit contracts between employers and their employees called for hard work and loyalty in exchange for job security. These contracts were based on trust and cemented by a mutual interest in seeing business prosper (For Now, 1993).

As postwar prosperity waned, however, the business climate changed. The information revolution had begun, bringing with it a shift from labor-intensive to knowledge-based business (Handy, 1989). At the same time, the rapid pace of technological change and the new challenges of a global economy put pressure on businesses to increase their productivity and flexibility. In the process, many workers became much less secure. With increasing frequency they were being replaced by

computers and watching their skills become obsolete (Handy, 1994). Corporate downsizing and restructuring also had the effect of shattering the bond of trust between workers and their employers. Workers no longer had reason to see their long-term interests as being tied to a company and began looking as much to themselves as to their employers for security (D'Aprix, 1996; Gibson, 1994).

The Workplace of Today

Workers may feel like they are on shaky ground amidst the uncertainties of today's workplace, but it is undeniable that they have come a long way since the agrarian days of yore. Many of them now take for granted a fairyland of technological wonders that would have been unimaginable just a few short generations ago. The new information workers no longer earn their wages through physical labor but work instead sitting at desks sifting through ideas. It is these workers who are turning in increasing numbers toward telecommuting.

Several features of the workplace which have been important in the past, remain so today and play an important role in telling the story of telecommuting and its significance. Efficiency, for example, remains an obsession which has now spread from the workplace into the home. Technological innovations also continue to play a significant role in reshaping the way people work, continually changing workers' requirements, goals and options. The workplace also continues to play an important part in meeting the social needs of many workers. Finally, a shift in relationships between workers and their employers from ones of loyalty and permanence to ones increasingly governed by self-preservation and flexibility are reflected directly in the types of career choices being made by many of today's workers.

Efficiency. The economic value of efficiency was the concept at the core of the scientific management movement. Today it is not just the province of management theorists, but is at the core of the way Americans run their daily lives. Sociologist Arlie Hochschild (1997) writes that the "cult of efficiency" has jumped the fence and come home. She talks about today's "Taylorized Family," characterized by its store bought goods and take-out meals, where efficiency has become both a means to an end and an end in itself. Barry Schwartz, a professor of social theory at Swarthmore College, warns that today's economic insecurity can lead people to measure activities shared with their family and community in terms of the time they take, and by extension, their economic cost. "The decision to be sociable," he says, "becomes an economic decision" (Fischer, 1997, p. 19A).

Even though Americans have been focusing on using technology to make their lives more efficient, they still cannot seem to create enough time. Studies show people feeling increasingly harried over the past few decades as they attempt to fit everything into their lives that they feel needs to be there. Her recent study of working families led Hochschild (1997) to note that conscientious parents often find that doing a quality job at work leaves too little time for doing a quality job at home. A 1993 Roper poll found that sixty-three percent of the women surveyed would trade a raise for more free time if they felt their job was secure (Boyett & Boyett, 1995).

Some feel this time crunch is largely a problem brought on by a constant upward ratcheting of expectations in a society focused on adding to their accumulation of material goods. That may be true, but regardless of the reasons, studies do tend to show that Americans are working longer hours every year. Time seems to have

become the "ultimate scarcity," at least partly because people have less and less of it to call their own (Robinson & Godbey, 1997; Schor, 1992).

Technology and communication. Central to today's efforts to save time is the computer. The rapid development of computer technology has given social scientists little lead time in which to study its implications for the workplace. As technology has been introduced into the workplace, behavioral and organizational questions have typically been eclipsed by the more familiar and measurable technological ones. Hardware has often been treated as the sum total of change rather than as its agent (Bikson & Eveland, 1986).

While technological innovation has solved some problems, new concerns are surfacing. One concern is that the accelerated pace that computers impose on our interactions may be warping our expectations and sensitivities. In an article featured in the San Jose Mercury News, a local psychotherapist talked about how Silicon Valley workers often expect their lives, and the people in them, to run like the efficient machines with which they work. When that does not happen, she says, they are likely to get a panicky feeling. (Donnelly, 1998).

Closely related to the accelerated pace that computers have brought to people's lives is the change they are making in the way they communicate with one another. Today's communication technology emphasizes speed, timeliness and volume. These are not, however, necessarily features that support clear thinking and effective communication (D'Aprix, 1996). The growing use of electronic mail (e-mail) has in many ways streamlined the exchange of information, but the absence of audio and visual cues

or meaningful dialogues can easily result in misunderstandings or the over-simplification of complex issues (Perry, 1992; Straus & McGrath, 1994; Walther, 1996).

The growing use of e-mail (and its close cousin, voicemail) for the purpose of avoiding dialogues or social amenities is especially striking (Dobrzynski, 1996; Perry, 1992). In his book, Silicon Snake Oil, Clifford Stoll (1995) warned about the tendency of computers to "isolate us from one another" and devalue "aspects of human interaction in the name of progress" (p. 3).

The workplace as a social setting. In a workplace where time is very valuable and communication is in sound bites, socializing is often dismissed as a waste of precious time. Yet, over the course of this century the workplace has become the central community in many lives, with people's workplace peers becoming an important part of their extended families (Handy, 1994; Pelletier, 1984). Long hours of work, fragmented friendship networks and isolation from neighbors have left many workers with few alternatives to the workplace as their primary site for social connections (Zimmermann & Applegate, 1994). In the case of workers whose families no longer offer them emotional support, Arlie Hochschild (1997) observes that " 'work' may become their rock" (p. 45).

Studies have also shown many ways in which the social interactions of the workplace enhance job performance. When there is a need for teamwork, for instance, friendships encourage cooperation and compromise. When innovation is important, strong personal ties provide a safe context for frank discussions and risk taking (Albrecht & Hall, 1991; DeWine, 1994; Kramer, 1993).

Management/worker relationship. As mentioned earlier, the workplace transformations of the past few decades have had a significant impact on the ties that bind workers and their managers. Employers who can no longer promise stability or security, are searching for new ways to motivate their employees and maximize their productivity (Death, 1993; Gibson, 1994). Employees are being “empowered,” – meaning that they are being encouraged to figure out for themselves how to work more efficiently (For Now, 1993; Hochschild, 1997). The current shortage of skilled workers has put pressure on employers to find better ways to attract and retain key employees. Flexible hours, child care, subsidized education, job-sharing and stock options are but a few of the incentives being paraded in front of workers. Telecommuting is another (Boyett & Boyett, 1995).

The bargaining power of skilled workers that stems from their scarcity has emboldened many workers to experiment with shaping their working conditions to better meet their needs. One condition that workers would like to see improved is the high level of stress they are experiencing in today's workplace (Robinson & Godbey, 1997). Stress is not anything new—it is the same physiological “fight or flight” reaction people have always felt when faced with change and overload (Donnelly, 1998). Many of today's workers are having a hard time coping, however. One survey, for instance, shows that one in three Americans had seriously considered quitting his or her job during the previous year because of job stress (Boyett & Boyett, 1995).

Not only are many workers reaching some limits in terms of the stress they can handle, they no longer see their long-term interests as being tied to any one company. Their security now lies primarily in the enhancement of their marketable credentials.

The old definition of success, based on salary and title, now seem hollow and irrelevant (Boyett & Boyett, 1995; Death, 1993). Closely related to people's shifts in attitudes toward their jobs are some reported shifts in their values. Survey data identifies a recent shift in American attitudes, with the self-centered and materialistic concerns of the 1970s and 1980s giving way to a search for meaning, authenticity and quality of life (Handy, 1996). A closer look at telecommuting will make clear what it offers in the context of today's workplace and worker.

Telecommuting

There is no real consensus on a precise definition for the term "telecommuting," but a useful starting point defines it as the "substitution of working at home, or at an office close to home, for commuting to a usual work site" (Handy & Mokhtarian, 1996, p. 227). The line between telecommuting and simply taking work home is often blurred. The important distinction is that telecommuting is done on a regular basis as a substitute for traveling to the office, not in addition to it (Gordon & Kelley, 1986). Credit for inventing the term is usually given to Jack Nilles, a NASA rocket scientist, who recognized the potential of telecommunications technology and began using the term "telecommuting" in 1974 (Langhoff, 1996). Other terms that are used interchangeably with telecommuting include telework, flexiplace, work-at-home, virtual office and mobile office. Of all of these, the term telecommuter seems to be the most commonly used today. Charles Handy (1989) notes how a change in language signaled a change "from freak to fashion" as the term homeworker was out and the term telecommuter was in (p. 107).

Key features of telecommuting such as working at home and using telecommunications to do a job remotely, are certainly not new. It was not until the industrial revolution, after all, that workers were pulled out of their homes in the first place. Groups such as writers, artists and self-employed entrepreneurs have continued to work from their homes as have legions of low-paid piece workers (Handy, 1989; Christensen, 1988a). Telecommunications were used to connect far-flung workers as long ago as 1857 when the Penn Railroad used the telegraph to keep tabs on remote divisions. The telephone has helped scores of wandering salesmen and managers stay connected over the years (Kugelmass, 1995). Home work and telecommunications technology, then, are not new to the workplace, but they have both taken on a radically new look in recent years.

One recent change has been the appearance of white-collar office work in the home (Christensen, 1988b). At first, most of this took the form of clerical or data entry work. It was joined later by more flexible, and significantly better paid, professional work (Gordon, 1988; Tomaskovic-Devey & Risman, 1993). Enabling this change has been new computer technology that has made it possible and practical to bring the resources of the office into the home. This partnership of information work with technology has freed workers from the rigid boundaries of time and place that had been set by the industrial model (Kugelmass, 1995).

Estimates of the number of telecommuters vary widely, largely because of the inconsistent definitions used and the reliance on surveys which use small, and often non-representative, samples (Handy & Mokhtarian, 1996). A review of many sources comes up with estimates that anywhere from 1% to 10% of the American workforce is

telecommuting an average of one to two days a week (Strategic Decisions, 1996; Telecommute America, 1997; Langhoff, 1996). A survey of California's Bay Area found that in 1996 approximately 4.5% of the workforce was telecommuting an average of 1.85 days a week (Strategic Decisions, 1996).

The appeal of telecommuting. The main reason that workers give for wanting to telecommute is their desire to "increase overall productivity through autonomy" (Wright & Oldford, 1995, p. 7). There are several parts to the telecommuting experience that offer this possibility. To begin with, commuting can consume an enormous amount of time and energy. This seems pointless if workers feel that the work they do when they get to the office could just as well be done from their home. Thus, avoiding a commute is a major objective for telecommuters (Ditlea, 1995). It was while he was trapped in gridlocked traffic on the Santa Monica freeway that Jack Nilles, the man who coined the word telecommuting, is said to have become convinced of the potential for telecommuting (Langhoff, 1996). It is interesting to note, however, that while some surveys have found that avoidance of the commute is a primary motivation for telecommuting, other studies find no correlation between either the distance or time of a person's commute and their desire to telecommute (Strategic Decisions, 1996).

At least part of the explanation for this may be that there are other features of telecommuting besides the elimination of the time spent commuting that workers find valuable. It turns out that the office is often not a very good place to get work done (Langhoff, 1996). Most information work has two aspects: a social part and a solitary part. The social allows exposure to more ideas, but the solitary offers the opportunity to develop those ideas more fully. Offices can be hotbeds for the social part, but often

offer nothing but constant distraction for those wanting the solitude they need to think or to just get their own work done (Rognes, Rogberg, Forslund & Virtanen, 1996).

Workers also have varying attitudes toward the workplace as a site for social interaction. Common are those who see the cost of socializing and getting involved in office "politics" as being too high, diverting them from attending to their job (Nye, 1988; Zimmermann & Applegate, 1994). Others are just uncomfortable with social interactions, preferring to avoid the stress of dealing with people whenever possible (Colborn, 1994). Research has shown that the most frequently reported stressor in the workplace is "interpersonal and inter-unit relationships" (Pelletier, 1984, p. 73). The peace and quiet of working at home, then, may be attractive for different reasons to different people. It may be a better place to be creative and thoughtful or a place to escape from uncomfortable social pressures (Gordon & Kelley, 1986; Transportation, 1993).

The opportunity telecommuting provides for freeing up more time gives hope to many that it may help tip the scales back in the direction of more quality time with family and the community (Overview, 1995). One of the early hopes for telecommuting was that it would offer parents (primarily mothers) a way to earn a living while caring for their children at home. It quickly became evident to researchers, however, that working at home and child care do not mix. Telecommuting can be helpful to busy parents, however, by simply reducing commute time and providing additional flexibility for sick care and transportation logistics (Betts, 1995). One study found that while most telecommuters planned to devote their additional time to work rather than their families, they ended up becoming more involved with family life (Rognes, et al., 1996).

The results of pilot telecommuting projects support the impression that telecommuting seems to lower stress levels and increase people's feelings of control over their lives (Price, 1991). Often telecommuters are able to adjust their work patterns to their own biological clocks and shift work to evenings and weekends if they prefer (Transportation, 1993). One long-time telecommuter spoke of the "delicious" knowledge that the work is there, but you can do it whenever you want (Van Gelder, 1995).

To the extent that the objectives of workers and their employers overlap, so do their feelings about telecommuting. The main attraction telecommuting holds for management is its potential for increasing individual productivity (Ditlea, 1995; Hannon, 1995). Productivity is difficult to measure, especially in the case of professionals, but subjective assessments of the performance of telecommuters consistently show productivity gains (Kugelmass, 1995; Transportation, 1993). These gains are primarily attributed to there being more time available for work and fewer distractions than in the workplace (Gordon & Kelley, 1986).

Some concerns. All this makes it easy to appreciate the appeal of telecommuting. Telecommuting involves some significant changes, however—changes in the meaning and significance of the workplace, in the way people work with one another and in the blend or interaction of the work and personal parts of life. Any change of this scope is bound to raise questions and concerns. Concerns about telecommuting include its dampening effect on social interaction and effective communication, the motivational and organizational difficulties of home work and the potential for the exploitation of home-based workers.

It is hardly surprising that days spent working alone have been shown to result in feelings of isolation for some workers (Transportation, 1993). In her study of women home workers, Kathleen Christensen (1988b) found that one of the most frequently cited complaints was isolation. Given the history of their role in the workforce, this problem takes on particular relevance for women. Feminist literature of the 1950s and 1960s familiarized readers with "the problem that has no name," identifying the home as the site of women's oppression—a place where they often experienced loneliness, low self-esteem and boredom. Early talk about telecommuting "rang alarm-bells" for many women who had finally broken away from the isolation of the home by entering the workforce (Huws, 1991, p. 20).

Some researchers feel that when loneliness becomes a problem for telecommuters it can be easily resolved by more frequent trips to the office or by finding other ways to meet social needs (Benhamou, et al., 1997). Many telecommuters, however, find it hard to leave their homes or to find social outlets within their communities. The consensus of researchers seems to be that "telecommuting is still evolving and that the isolation factor may or may not be a valid concern" (Wright & Oldford, 1995, p. 6).

While there may be substitutes for the social support systems workers have found in their workplace, other aspects of social interaction among coworkers may not be so easy to duplicate. Many potential telecommuters have reported passing up the opportunity to work at home because of the widely held belief that time away from the office will result in their dropping "out of the loop," losing touch with vital survival information and being passed up when key assignments are handed out (Wright &

Oldford, 1995; Connelly, 1995). The key to promotion, many feel, is not performance but rather a person's visibility and demonstrated conformity to norms (Olson, 1988). A recent study showed that 57% of the executives surveyed felt that "working parents who spend one or more days a week at home are at a career disadvantage" (Quintanilla, 1998). In many work environments, workers who telecommute continue to be seen as "less committed, less loyal and less hardworking" (Sheley, 1996, p. 2). Despite all the studies that seem to confirm their productivity, the image of the telecommuter at home baking cookies or taking in a talk show on company time is pervasive (Van Gelder, 1995). There may also be resentment on the part of office workers who do not telecommute and see telecommuting as a special privilege, or those who feel they are having to take on extra responsibilities or spend more time getting things done as a result of a telecommuter's absence (Belanger & Collins, 1996; Kugelmass, 1995). None of this bodes well for the career aspirations of telecommuters.

A key feature of telecommuting—being linked by telecommunications—may be accentuating these potential problems of sociability and integration. Although cell phones, pagers, fax machines and e-mail are often touted as the very tools that enable people to stay in touch and to be included wherever they happen to be, they can be used—and are used—to avoid dialogue, social amenities, and the richness and subtlety of face-to-face interaction (Dobrzynski, 1996; Perry, 1992). Many proponents of telecommuting, however, are quick to point out that these problems are more a matter of work process than work place, as even workers at the office are increasingly depending on these tools to interact with one another (Kugelmass, 1995).

Another thing that more people are beginning to understand about telecommuting is that it is very difficult to work at home (Forester, 1988). One of the first hurdles that must be faced by a would-be telecommuter is finding a suitable place to work, outfitting it with the appropriate tools and keeping everything in running order. Any one of these requirements can be enough to discourage many workers from taking the plunge into telecommuting (Belanger & Collins, 1996; Reid, 1995). Working at home not only requires the maintenance of a suitable physical environment, but it requires someone who knows how to handle working independently (Forester, 1988). Telecommuters need to depend on themselves to supply the motivation and stimulation that they no longer get from the interactions of the workplace (Connelly, 1995). Others miss the structure and rules that take much of the burden of decisionmaking off their shoulders. The flexibility to set one's own schedule that is a joy to some, for instance, may be a source of stress for others (Benhamou, et al., 1997). Another down side that many see for telecommuters who are in charge of their own schedule is that they may end up "working too much" (Ewell, 1997). Those with a tendency to overwork anyway would seem to be at risk in a telecommuting situation where it is easy to work long, intense hours (Kugelmass, 1995; Langhoff, 1996).

Consideration also needs to be given to a Pandora's box full of problems that can arise when the home becomes the site for both work and personal life. Without the boundaries of time and place to separate work from home, they may easily get in each other's way (Decisive Technology, 1997; Kraut, 1988). Christensen (1988b) reported that the home workers in her study often complained that they never could leave work. An article in the Wall Street Journal voiced concerns that when work and personal life

blur, the moments can lose their integrity leaving none of them to be savored as something personal (Shellenbarger, 1997).

Those who have looked into the matter agree that successful telecommuting requires tolerance and cooperation on the part of all family members. Some issues such as the use of space, household responsibilities and working hours may appear trivial on the surface, but they are the kind of thing that can lead to catastrophe if they are not discussed and resolved (Reid, 1995). For these and many other reasons, home is not always a pleasant place for a worker to be. In fact, many of today's workers—especially women—find their home environment more demanding and constricting than the workplace (Handy & Mokhtarian, 1996; Hochschild, 1997). It has even been suggested that the commute to work may be welcomed by some workers. It may actually relieve stress by acting as a buffer between work and home – the only time when some people can be entirely by themselves (Handy & Mokhtarian, 1996).

One further area of concern is the potential for exploitation inherent in telecommuting. Workaholics are not the only ones who may be working too much. Information workers are equipped with technology that enables them to work at any time and from any place and often that is what they are expected to do (D'Aprix, 1996). Telecommuters who otherwise would not be prone toward putting in long hours may feel that they have to make it obvious that they are really working in order to retain the privilege of working at home (Benhamou et al., 1997). This results in their putting in extra hours and ensuring that they are always available (Betts, 1995; Boris, 1988). Some home workers are also asked to be on standby, but are paid only for the hours that they actually work (DiMartino & Wirth, 1990).

Telecommuting is also arranged differently for professionals and clerical workers. Professionals generally have a great deal of flexibility and can go into the office when they like. Clerical workers, on the other hand, usually do closely monitored piece-rate work which is done totally at home. Not surprisingly, surveys show employee satisfaction as being much higher for professionals than for clerical workers (Tomaskovic-Devey & Risman, 1993). There are those who warn that technology in the home, first welcomed as an opportunity, has the potential for becoming a virtual "ball and chain" (Huws, 1991; Stoll, 1995).

Projections. Telecommuting has not developed nearly as rapidly as Alvin Toffler suggested it might. It currently involves a small percentage of the total workforce. It is attracting a great deal of attention anyway, largely because it seems indicative of larger trends affecting Americans (Christensen, 1988b). Contributing to telecommuting's slow growth is the possibility that implementing telecommuting programs has turned out to be much more complex than many of its early promoters had foreseen (Forester, 1988). Unfortunately, due to the difficulty of implementing and evaluating telecommuting programs, their fragmented and undocumented nature, and the brief time span of most experience, the current body of information on telecommuting is very limited (Ewell, 1997; Handy & Mokhtarian, 1996). Most of the data that is being collected concerns itself with computer technology, but there is agreement among some experts that the future of telecommuting hinges more on conditions in the economy and the family than on developments in computer technology (Christensen, 1988b; Strategic Decisions, 1996).

All projections are, however, that the practice of telecommuting will continue to grow at a steady rate (Handy & Mokhtarian, 1995; Langhoff, 1996; Telecommute America, 1997). This belief is based on predictions that the workforce will continue to become better educated and more computer-literate, that there will be a growing number of information workers with tasks that can be performed away from the office, and that more experience with telecommuting will lead to its more effective use (Nye, 1988). The hope remains that the bridge which telecommuting lays down between a worker's job and personal life will offer an ideal way to get the best out of both worlds (Huws, 1991).

This review of the past and present workplace has focused on trends that have left today's workers insecure and short on time. Telecommuting is seen as a way for many information workers to accommodate the demands that are being placed on their time by offering them efficiency, flexibility and control. Telecommuting also represents major changes in workers' relationships to their coworkers and families and as such raises many questions about the effect of telecommuting on social relationships, careers, home life and the over-all quality of life. There are an abundance of theories about the impact of telecommuting on people's personal lives and relationships, but the inadequacies of current information on the subject leave many unanswered questions about telecommuting's actual, as opposed to assumed, impact. It is these questions that this study explores.

Chapter II

Research Methodology

In order to explore the issues raised by the recent literature on the workplace and telecommuting, this study relies on input from current telecommuters which was assembled through the use of in-depth interviews. The following sections describe the participants and the procedures used to gather and analyze the data.

Participants

The participants in this study are sixteen telecommuters from California's Silicon Valley. Since the objective of this study is to explore an emerging workstyle which is made possible by new developments in communication technology, the Silicon Valley is an appropriate place to explore telecommuting. The valley has an international reputation for technological leadership and is full of entrepreneurs looking for the latest and best tools to use to help them to stay at the head of the pack. The area is home to a relatively large number of high-tech workers and to many companies that are promoting telecommuting tools. All of this makes it a locale that is especially well suited for an exploration of a workstyle that is tied to emerging technology.

Selection criteria. For the purpose of selection as participants, telecommuters are defined as workers who, on a regular basis, work all or part of the time from their homes instead of commuting to their employer's work site. Excluded are self-employed people as well as workers who, on an occasional weekend or evening, take work home that they did not manage to finish at the office that day. Included are contract workers who may be working for more than one employer at the same time and mobile workers

such as salesmen and managers who may spend much of their time traveling or at customer sites. The type of technology that participants use to work from home was something left to be discovered, rather than something specified as a criteria for selection.

In order to make it possible to identify issues that may be related to a telecommuter's gender or to the frequency of their telecommuting, these two factors were taken into account in selecting participants. Of the sixteen telecommuters, there are eight men and eight women. In order to differentiate according to frequency of telecommuting, participants were classified as being either "part-time" or "full-time." Part-time telecommuters work primarily from their main office location, usually staying at home between one and three days a week. Full-time telecommuters work primarily from their home office, rarely going into their main office location more than once a week. Four men and four women were selected to represent each of these frequency classifications. The result was a sample that gave equal representation to each of the four possible combinations of gender and frequency.

Within the parameters set by gender and frequency, a varied sample of telecommuters was selected. An effort was made to avoid repetition of employers and job types. As a result, the sample represents a wide range of job types, levels of responsibility and company characteristics with no employer being included more than once. Telecommuters include contractors as well as regular employees. Although not all of the jobs represented are necessarily professional (programmers and documentation writers, for instance, may not typically be classified as professionals), they are all non-clerical, with none of them under close supervision or doing what could

be classified as piecework. Since the study looks into the effect of telecommuting on the household, the telecommuters' living situations were also a consideration in selection. All but one of the participants are married, many with children in the home.

The participants were located through a process of referrals and networking with people who work or live in the Silicon Valley. They were originally approached by intermediaries who determined their willingness to participate in the study and did their best to establish whether the telecommuter met the requirement of working at home on a regular basis. The next step was a telephone conversation between the prospective participant and the researcher. The latter asked the telecommuters to describe their telecommuting situation and to answer other questions to determine whether they would fit into the study. If they met the requirements, the researcher described the study and outlined what would be required in the way of time and information from the telecommuters. It was then left up to them to decide whether they were willing to participate in the study.

Profiles. The following sketches of the participants and their telecommuting environments will clarify the characteristics of the people who were selected to represent Silicon Valley telecommuters.

Many of the women participants are mothers who are juggling their careers and families. One mother of a newborn is a technology consultant who began telecommuting when her daughter was born about six months prior to the interview. What she saw in telecommuting was "a way to structure a career around my family." She trades baby-sitting time with a neighbor once or twice a week to give herself some free time to get into the office. On other days her mother-in-law baby-sits or she takes

her baby to work with her. This is possible because at work she has an office with a door that she can close and an assistant who is willing to double as a baby-sitter should a client come by. At home she depends on her husband to watch the baby in the evenings when she is catching up with everything she did not get done during the day. She depends on her assistant at the office to keep her up on anything important that is going on there. "It's hard," was the simple way she summarized the busy life she was leading.

Another mother had recently returned to work after taking a few months off to care for her newborn son. She had accepted a new position as a project manager specifically because, unlike the position she had had prior to her leave of absence, it enabled her to telecommute several days a week. The transition to telecommuting was not a difficult one for her. "What happened," she explained, "was that the group I was working with [prior to her leave of absence], a lot of us were traveling a great deal and we weren't in the office anyway. So many of us were working off site – from hotel rooms or customer sites – so that was a gradual transition from going to the office every day to working from home."

A software analyst has been trying to telecommute by fits and starts for several years. She has read a lot about telecommuting and it makes sense to her as a way to stay closer to her four-year-old, her husband and her home. She had toyed with the idea of just quitting work, but that was not realistic and she settled for telecommuting instead. The inconsistent nature of her telecommuting experience has been because her employer is having trouble piecing together a telecommuting policy. She has been trying to help that process along, but meanwhile it is up to her and a very supportive

manager to work out the details between themselves. She is currently averaging about one day a week at home and is aiming at increasing that to two or three days in the near future.

Another female telecommuter who is currently working as a contractor described what happened when she got pregnant four years ago: "I had had this one life. It was like totally fast track. I had energy to do anything. Whatever it was, I could do it. Then when I got pregnant I had this experience that was like the plug being pulled. My body just quit. That was a watershed event in my life." Now what she is looking for more than anything else is balance. "I kind of piecemeal a day of work together with a day with my kids," she said. "So I'm able to have a life and work. It's much less stressful."

The remaining telecommuting mother has been working from home for about twenty years, with a few breaks here and there. She had been newly divorced with two small children when she first entered the work force. "When I was a kid," she explained, "there was never anyone home for me and that was really important to me. I wanted to be there for the kids." She had pleaded with her boss to let her work at home. "That's how it started," she said. "I worked at home so that I could be here with the kids. I used that excuse for the next twenty years, even when they grew up and moved out." She likes working alone. "I'm just not a social creature," she says. "Over the years I've tried to work on my people skills," she added, "but the more I'm away from that environment, the worse my people skills get."

The only unmarried person in this group is a female graphic designer who has been telecommuting for about seven years and has been working on a contract basis with her current employer for about two years. When she first broke into graphic design

the only assignments she could find were on a contract basis and many employers had just expected her to do her work at home. She grew to prefer working that way and has since set up a comfortable home office for herself looking out over a garden that she tends during her breaks. She goes to the work site on an as-necessary basis about once a week and enjoys those opportunities for a break in her routine.

The two other women participants are married, but have no children. One had been reluctant to begin telecommuting. She is a management consultant and has been surrounded by telecommuters for years, but she likes being around people and the isolation of a home office held no appeal for her – that is, until she married a man who was a telecommuter himself and lived far from anyone who wanted to give her a job. He helped her get set up for telecommuting. It was “something he liked doing for me,” she said. “Anyway, I think I felt obligated to work at home because he had gone to all that trouble.” Not only is her husband at home with her, but she still manages the long commute to her office several times a week, spends much of the rest of her time either on the phone or traveling and stays in touch with an extensive network of friends. As a result, isolation has not been that much of a problem for her.

The other woman with a husband but no children works on documentation for a large computer manufacturer. She had been with the company for many years and had worked her way up to a management position when she and her husband decided three years ago that they had had quite enough of the stressful Silicon Valley life and bought a home out in the Sierra foothills. Her employer’s policy was to support anyone who wanted to telecommute as long as it would not detract from their productivity. She submitted a telecommuting proposal that included a shift into a non-management

position and was overjoyed when it was accepted. Her experience thus far has been rocky. She is enjoying her freedom and her new home, but is not happy with the support she receives from her management and gets very frustrated with persistent software and hardware problems.

Two of the male participants are in sales and need to spend much of their time out in the field with their customers. Telecommuting began very differently for each of them. One lives very near his main office and did all of his office work from there when he first started with his company. Gradually things changed, however. First, the last of his children moved out of the house. "Then there was an extra room available," he said. "I got an office." Meanwhile things were changing at his main office. "We were growing too fast and there weren't enough desks or computers," he explained. "A lot of the other guys stayed in all day so since I started going out more and more I started losing my desk. It was like, 'you have to share this desk with this guy but he's here all the time.' " Since he had the office at home he started using that instead of the one at the main office and, as he put it, "it just evolved from there." His skyrocketing sales are a testament to the results.

The other salesman had sold his own business and signed on with a computer peripherals firm whose main office was hundreds of miles away and whose local office provided little in the way of resources. While he was not offered much in the way of an office facility, he was provided with a laptop computer, modem, fax machine and cellular phone. He felt he was able to process orders and e-mail just as easily from his laptop as he could from the local office site. He soon decided that the most efficient thing to do was to set up shop in his home. No one told him that was what he should do, but "in

this kind of industry," he said, "they expect you to work out of your house." He still stops by the local office to take care of paperwork and to use its demonstration facilities, and he goes to corporate headquarters once or twice a month for meetings and education, but other than that, work is at home or on the road.

A technical consultant also found that a new job landed him in the middle of telecommuting. For most of his life he had worked just down the road from his home and had thought nothing of going to the office every day. That job had disintegrated, however, and for the past year he had been working with a group of people who rarely went to the office. What had first struck him about the cubicle that they had given him was that there was no computer there. What there was, instead, was a place for him to plug in the laptop they had given him. "Many of the people I deal with are somewhere else," he said, "so it doesn't matter whether I'm sitting here [at home] or in my office in many cases. There are some local teams that I work with there [at the office], though. That's why I go to work every so often. . . If I couldn't contact them personally it wouldn't be worth the commute time. That's basically the thing."

Another man had worked for seventeen years for a small company with thirteen employees who were divided between Denver, Houston and San Jose. It was founded by two men who preferred working from their homes and have never put any restrictions on where others work. The home that this engineer shares with his wife is one that most people would be reluctant to leave. It is in the mountains and overlooks miles of forest and valleys that end at the Pacific Ocean. He does not spend his working hours gazing at the view, however. There are huge windows that stretch along two sides of

his office, but it seems that they let in a glare that gives him splitting headaches. So he keeps the blinds tightly shut, giving his office all the charm of an underground bunker.

One of the other male participants has slowly shifted his center of operation to his home over the years, as have many of his coworkers. He is a technical support representative for a computer equipment resale business and deals primarily with a team of sales people and their customers who do not really care where he is as long as he is at the other end of a telephone. "It was the only way to get everything done and to avoid all the time that got wasted at the office," he said of his shift to working at home. His wife is a student who is often at home. "I'm around a lot during the day when she needs peace and quiet," he said. This is a problem from time to time, but since she is not going to be going to school forever he is not too concerned.

A quality control analyst related how for six years he has been staying home two days a week, and spending three days a week getting on the road by 5:00 a.m. and getting home around 8:00 p.m. "I started it [telecommuting] before there was even an official telecommuting policy at my company," he said. "So it was all informal and I'm still operating that way today. . . I couldn't tell you if I'm violating it [official telecommuting policy] or not. In a sense I sort of grandfathered into it." Some of his work requires "a lot of concentration." He does that at home. He feels everything else is best done at the office with other people. Most of his time at the office is spent in meetings. He shares his home office with both his wife and teenage sons, but they manage to stay out of each other's way. "We pretty much negotiate," he said of their sharing space. "It's not really an issue."

A software specialist has also been telecommuting for about six years. It is one of those things he had wanted to do since he first tasted independence doing extra contract work at home in the evening. He has worked for several different companies over the past six years and each one has been different in terms of the amount of time he needed to actually be at their site. He is currently spending most of his time at home where his wife also works. They have separate offices. His is in the converted master bedroom that features easy access to the patio and pool. Hers is on the other side of the house in a small room between the kitchen and the garage.

The final telecommuter is a programmer who works for a company that actively supports telecommuting as part of its recruiting effort. Even his manager works at home a day or two each week. The only thing fixed about this telecommuter's schedule is that he always goes into the office on Wednesdays for the weekly unit meeting. He usually works from home on two or three of the other days. He often carools with some coworkers when he does go in because it is a long and tortuous commute. Home is a small apartment he shares with his wife and teenage son. "One thing is fortunate," he said, "and that's that in general I'm here by myself. They leave. Then when [my son] comes home," he added, "I just have to make sure that the TV stays turned down."

These, then, are the sixteen telecommuters who took part in this study. A summary chart showing the distribution of various characteristics among the participants is included in Appendix A.

Procedure

Since the objective of this study is to explore the complexities of relationships, motivations and values experienced by people currently practicing telecommuting, the

type of instrument that was chosen was the in-depth interview. The researcher interviewed each participant in two separate sessions lasting approximately one hour each. The first interview took place in the telecommuter's home and the second took place either there or at the employer's work site. Other family members were also interviewed briefly when possible. There were several reasons for using two interview sessions. The main objective was to avoid tiring the participants. In order to spend enough time with each person to allow them to develop their stories thoroughly, at least several hours were required. This is a long time for anyone to talk about themselves without losing interest and running out of enthusiasm. Moreover, most of the questions that would require a lot of thought would be late in the interview after a sound groundwork had been laid. The quality of responses and the overall time that the respondents were willing to spend relating stories and details would both be enhanced if they were not exhausted from a long interview. A break between sessions also gave participants time to reflect on their experiences and come up with additional insights as they thought about the areas that were covered in the first interview.

An interview guide was developed to ensure that each interview covered those aspects of telecommuting that were being explored by this study and did it in a way that would encourage the respondents to express their opinions and share their experiences in a great deal of depth. The use of this guide also ensured uniformity in the subject matter covered in each of the interviews. The objective of the first interview session was to gather demographic data and a work history and to build a description of the telecommuter's work environment. To do this, the interview began with factual questions that were relatively easy to answer – things such as job title and

responsibilities. After the basic features of the telecommuters' jobs had been established, questions turned to work history, first in overview and then specifics about any experiences that may have influenced their telecommuting.

The next step was to build a detailed picture of the telecommuter's work environment. To help add clarity and interest to the discussion, the researcher drew a rough diagram of the work locations and links between them as the discussion proceeded. This diagram provided a useful visual tool that helped keep the respondent involved in relating descriptive information. It was in this part of the interview that the telecommuter described each work location, including such things as resources that were there and any associated patterns or routines. The next step was to talk about the ways in which these locations were linked together. It was here that questions were asked that established patterns and practices of social interaction and communication. This completed the description of the work environment and the first interview.

The objective of the second interview session was to discuss the effects of telecommuting on professional and personal relationships and assess the telecommuter's opinions and feelings about telecommuting. The aim was to elicit examples and stories which would bring out complexity and detail. The session was started with a quick recap of the first interview by reviewing the workplace diagram. This linked the second interview to the first and set the stage for beginning where the first had left off. First the interview was directed toward the telecommuter's job and coworkers. Telecommuters were asked about specific aspects of their relationships with coworkers. Other areas that were covered were informal communication channels,

social relationships with coworkers, career implications, and telecommuting's effect on productivity.

The effect of telecommuting on the household and personal life of telecommuters was the other area that was covered. Respondents were asked about the reactions and opinions of others in their household and about guidelines that they followed in the process of making it possible to do work at home. Telecommuters' overall feelings about telecommuting were assessed by means of some final questions asking about whether telecommuting had turned out as expected and what kind of work environment they would like in the future. A copy of the interview guide is included as Appendix B.

Analysis

All sessions were recorded and later transcribed and entered into a word processing program. The interviews were then formatted so that codes could be entered in the margins alongside the text. The questions in the interview guide had been numbered, so each piece of interview text was associated with a specific interview question by entering the number of the question in the margin alongside the text. Coding the text in this way made it easy to use the search tools of the computer software to locate all the text that related to a specific question, significantly accelerating the process of bringing together related pieces of text for the purpose of comparison.

As the interview data was reviewed using this coding to focus on one issue at a time, a working outline of the data was pieced together. Many themes were identified which needed further analysis but were not isolated or identified well using the interview guide coding scheme. Since it would be much easier to analyze these themes if

supporting text could be located easily, a second coding scheme was created. This scheme was based on the organization of the working outline. In addition to isolating some issues that had not been addressed directly by interview questions, this scheme separated some issues into more detail and combined others where that seemed appropriate. These codes were then added alongside the first ones. What this accomplished was to make it easy to get the interview text organized along the lines of the working outline, rather than the interview guide. Using a combination of both coding schemes facilitated the whole process of analyzing the data and writing the report by furnishing the researcher with a way to search for relevant data when it was needed and avoid the continual rereading of long pieces of dialogue.

In order to do a thorough analysis, the coding was used to assemble separate documents each of which consisted of all of the text that could be found relating to each specific area being explored. Each interview participant had been assigned a number and every piece of dialogue was always kept associated with this number so that it could be further evaluated according to characteristics of its source such as gender or years of telecommuting. Key dialogue was highlighted in these documents and a brief synopsis was written for those issues that had a lot of associated text or were fairly complex.

In order to identify and verify contrasts and consistencies within the sample group of telecommuters, visual representations were created by arranging items along continuums or in matrices. In the case of characteristics such as the need for social interaction or the number of hours worked, for instance, a judgment was made as to where each participant fell along a continuum which ran from one extreme to another.

In this way, a visual representation of the distribution of characteristics was created and it was easy to identify those areas where there was a lot of diversity or similarity.

Matrices were used as visual tools when comparisons were being made between different groups of telecommuters or where the objective was to compare descriptions or pieces of dialogue. One of the objectives of this study, for instance, was to identify differences among telecommuters that might relate to their gender or frequency of telecommuting. By creating a grid containing a section for each of the four possible combinations of gender and frequency and filling each section in with data representing the telecommuters who belong in that group, characteristics such as motivation, career aspirations, and household rules could be compared to see if the groups differed and in what ways.

The results of this analysis are reported in the following two chapters. Chapter III takes a look at the diversity within the sample group and the following chapter identifies areas where there is a great deal of similarity among all the telecommuters, regardless of their differences.

Chapter III

Telecommuters: Their Diversity

As discussed in Chapter II, an effort was made to select participants for this study that represent a mix of characteristics, including employers, jobs, gender and frequency of telecommuting. The participants differed in other ways too. They had different lifestyles, working patterns, social needs and attitudes. The experiences that they related made it clear, that far from conforming to a precisely defined purpose or process, telecommuting can turn into many different things for different people.

The Ways Work Gets Done

Two of the features most frequently associated with telecommuting are the extra time it creates through the elimination of the commute, and the way technology is used to make it possible in the first place. This makes an exploration of the ways that telecommuters use time and technology to do their jobs an appropriate place to begin.

Working hours. One of the most obvious ways the telecommuters in this study differ from one another is in the number of hours they work and when they work. Typical working weeks range from around sixty hours to a reduced schedule of thirty hours. In many cases the amount of work varied a great deal from one day to the next or one week to the next. Working schedules also differed from one another in that some never varied, others were laid out differently each week and still others were quite spontaneous. There was no relationship between the number of hours worked or the patterns of work and the telecommuters' gender. Part-time telecommuters, however, did conform to more standard working patterns than the full-time telecommuters.

Longer than normal hours were typically reported by those in sales or in the process of building a reputation or business. The wife of one salesman described her husband's schedule. "There's no end to his working," she said. "The phone starts ringing at six in the morning and at ten or eleven at night he's still working." Another seasoned salesman said that he was putting in more hours now than he did when he had his own business. "On Monday mornings before 8:30 a.m., I have to have a report faxed to my boss," he said, in giving an example of why his work spread into the evenings and weekends. "That's usually done Sunday night." When asked whether the report could be completed prior to the weekend, he replied that it could not "because the report that comes to us via the computer usually doesn't come to us until about 3:00 a.m. Saturday morning. You need those figures [to complete his report]." He just accepted this intrusion on his weekend as a part of the job.

Most of those who reported that their work frequently spread into the evenings and weekends seemed to have accepted the inevitability of their long hours. "We just get the work done," said one entrepreneur. "Usually that means working longer hours than most people work – but that's the way it is with most people who are building their own business." Another telecommuter thought the hours that he and his colleagues needed to put in each day were very reasonable. "You're not expected to work beyond six or seven at night," he said, "and you start at seven or eight the next morning."

Not all of the study's participants put in long working hours, however. Among those who work forty-hour weeks is a man whose main reason for telecommuting is to avoid a two-hour commute. With the help of the time he saves, he manages to fit in a daily workout as well as work a shortened day on most Fridays. One full-time

telecommuter has even cut back to thirty hours a week to give herself time to devote to remodeling her new home.

Some of the telecommuters' schedules are fairly rigid, following a regular pattern of days which are spent at home and at the office. Others are quite spontaneous or scheduled ahead one week or several days in advance. "I pretty much schedule my work from week to week," explained one woman. "What I try to do is, if not by the end of one week, definitely by Monday, I have a feel for where I'm going to be when. Then I let everyone know about that." One man has no fixed schedule other than going into the office for the weekly team meeting. Another only has infrequent meetings to attend and says she just goes into the office when "I've done everything they've given me and I have to go back for more."

Some of those who work evenings or weekends are not necessarily working longer hours than others. Days and weeks often just become fragmented. Several mothers spend time with their children during the day and then work in the evening after their children are tucked in bed. There were many examples of adjusting work to fit with the body's natural peaks and valleys of productivity. One worker said that he frequently takes a short nap in the afternoon to "get my second wind." Another explained, "If I'm up against problems I can't solve, I quit working. I go do something else. I go work out. I go do laundry or wash dishes. [The head of the company] doesn't care when you work or how much you work so long as the job gets done," he added. "We end up working nights and late and all that kind of stuff because we usually have the pressure of the deadlines." "One of the advantages of working at home," said a long-time telecommuter, "is that sometimes I can say that I don't really have to work today. I have

some work to do, but I can do that at night. The only regularity . . . is that I get up at the same time every day and I get to bed at the same time which is about midnight."

Not everyone, however, feels they have much flexibility. Those who have to work closely with others often find they have little choice but to mirror their coworkers' hours. One telecommuter talked about her disappointment along these lines. "I had thought that more of my work could be done at my leisure or whatever hours were best for my family," she said, "but things still had to be done during normal time most of the time." Other restrictions on flexibility come from family and friends. The one single telecommuter, for example, explained why she chooses to work fairly normal hours. "I don't like working evenings," she said, "because then in my free time I don't have anyone to spend it with — you need to be in synch with your friends' schedules."

The commute. The time saved by eliminating a commute to the office figured into each telecommuter's decision to work at home. It was not always the length of the commute that was significant, however. For over half of the study group, commutes to their main office take less than half an hour. The other feature of commuting that matters, regardless of the length of commute, is the fact that even short commutes take extra time and require extra steps — like putting on makeup or shining shoes. As a programmer with a fairly short commute put it: "Another thing making it [telecommuting] easy is that I can jump in the shower, put on my clothes and be here [at her desk] in three seconds. I don't have to curl the hair, put on the eyebrows and then drive twenty minutes." A consultant ended a list of reasons he likes staying home by adding, "and I don't even have to take a shower if I don't want to."

When the commute involved is long, however, it becomes the significant, if not the sole reason for telecommuting. There were examples of telecommuters who are quite sure that the only reason they even considered telecommuting was that it was the only alternative to finding another job when their personal lives required a long-distance move. "I requested to be able to live somewhere out in the central valley," explained a long-distance telecommuter. "Another option was to quit and find a job with another company. Those were the two alternatives," he said. Others would not have accepted their current positions had they not been able to reduce their commute time by telecommuting. One telecommuter, for example, explained why he had decided to switch to his present employer. His previous job had been what he felt was typical of many where "they tell you that you can work at home but you know you're not getting as much done so you end up going in anyway." He sees his current employer as being much different. They are located in an area that calls for a difficult commute from the Silicon Valley where he lives. "They hit you right up front with their generous work at home policy," he explained. "It's part of their recruiting. And they've done everything to make it easy and not hard," he added. "The hardware, the software connections, everything has been set up right."

Using technology. Participants differ in the technology they use and how they use it. As far as equipment is concerned, several telecommuters said they have just about everything they could want. Their offices include powerful computers, printers, fax machines, modems, cellular phones and multiple phone or ISDN lines. In at least one case, this was all provided and paid for by the employer. Companies varied a great deal in what they were willing to provide, however. Few companies provided much more

than a computer and phone line and some, especially in the case of contract workers, provided nothing at all. Thus the individual telecommuter's financial capabilities could have a lot to do with what computer equipment they had in their homes. "I think the only surprise for us," commented one salesman about putting together an office in his home, "was the original setup costs. We had to buy a fax machine and all the computer equipment. We didn't have any idea how much all of that would cost." One telecommuter felt she was fortunate that she could do most of her work from home with just the telephone. She keeps finding great ways to use the laptop that she rents from her employer, however, so she plans to purchase a printer and a better computer in order to do still more of her work at home. In another case, a telecommuter felt handicapped not having a printer and fax machine at home, but it had been all she could do to get a cast-off desktop computer from her employer, so she planned to just do without anything else for a while. "I'd like to have a printer and fax here," she said, "but I just haven't pushed it."

Not only were there vast differences in the equipment that telecommuters had in their homes, but there were equally significant differences in their mastery of that equipment. Some were quite technically proficient. In one case the telecommuter's job was technical support for computers. One consultant talked at length about the importance of understanding the computer system on which you depend:

A lot of my time is spent keeping my system up-to-date. We do have some technical support people, but maybe ten percent of my time is spent installing things, taking them out. You can get support, but you have to develop this independence – really learning the system you're working with. You're on your own basically. If my system crashes, I have to fix it. You have to develop those kinds of skills, otherwise you're really cooked. It does relate to not being in an office where you would have somebody that you call and they come up to your office and help you. I know I have to be independent. If all somebody does is e-mail, then

there may be no problem, but if you're going to do demos and experiment with the tools and develop new ways to use it and so on, you'll probably get into this additional complexity.

Despite their dependence on their computers, however, only a few of the telecommuters in this study describe themselves as being very competent when it comes to technical matters. More typical are those whose technical knowledge goes little further than knowing the number of their technical support. When their equipment stops running smoothly it can easily become more than they can handle on their own. One contractor, for example, would be at a loss without her husband. He calls himself her MIS department. "He buys and installs my equipment," the contractor explained. "I have about three or four computer problems a week. Sometimes I have quick deadlines so I have a code I leave him [on his pager] at work and, like last night I called him and he was on a conference call with Japan and he left that to come talk to me." Although several of the women telecommuters are comfortable with computer technology, it is most frequently the women who need help when anything goes amiss with their computers. The men claim to be able to at least get themselves through routine problems.

When it came to the home work space where all this equipment was put to use, telecommuters used everything from the kitchen table to a finely appointed office with a spectacular view. Other offices were in places like a functional and comfortable room off the garage and a bedroom that did double duty as the office during the day. For the most part, however, telecommuters used spare bedrooms or alcoves. For furnishings, offices were filled with everything from designer desks to boards set on the top of metal filing cabinets.

People to People Connections

Diversity is the rule once again when it comes to the way these telecommuters relate to their workplace. They each bring different social needs and skills to the table and their workplaces provide them with many different types of climates with which to interact.

Social needs. The roles that coworkers and the workplace play in the social lives of these telecommuters range widely and they have a lot to do with their social skills and personalities. In characterizing their social inclinations, these telecommuters described themselves as ranging everywhere from those who thrive on being with people to those who see themselves as loners. A woman who has been telecommuting for many years, for instance, talked about the "social stuff" being really hard for her. "I work best alone," she said. "Just put me in a corner and give me some work to do." Another telecommuter also spoke of preferring his solitude. "I'd rather not interact with the other people at the office," he said. "We talk to one another I guess, but it's not friends meeting friends, it's just business." When the subject was office social functions, one self-proclaimed loner expressed an attitude that was shared by several others. "I stay away from their picnics," he said. "The Christmas party we have to go to, but it's not a fun thing."

In contrast to these people are others who begin feeling isolated at home and often miss the camaraderie of the workplace. "I really miss the people," admitted a woman who was new to telecommuting. "I miss the interaction. I haven't ever stayed at home for a week and worked exclusively at home. I don't think I could do that." A consultant who had chosen to work at home full-time, said that when she began she had

felt as if she had been exiled to Siberia. "I felt so deprived of people contact," she said, "it drove me crazy." She quickly recognized that she needed to figure out how to get the contact that was missing in her life and threw herself into a dance class and book club. A man who telecommutes part-time admitted to being quite the extrovert when he is around his coworkers. "I tell all kinds of jokes and stuff," was the way he put it. "If someone said I never had to come in [to the office] again it would drive me crazy not having the interaction. I think I'd get depressed."

The preference for socializing versus solitude in this group does not correspond with either gender or the frequency of telecommuting. There are women and men at both extremes of sociability as there are both full-time and part-time telecommuters. A key element here, however, is that even though there is a large range of social needs and skills represented, all of these telecommuters have some tolerance for solitude — otherwise, as one man said, they probably would not be telecommuting.

Some type of social balance is what most of these telecommuters are looking for. A writer, for instance, described herself as a home body. "I enjoy being alone," she said. "I can entertain myself and forget about going out." But she described how she would work alone at home contentedly for long stretches and then suddenly get cabin fever. She would need someone to talk to — right now — even if it was just a grocery clerk. So she tries to balance her time alone with trips to the office. She has also joined a local writing club, meets coworkers for lunch, and meets friends at the local coffee shop from time to time to spice her life up with some social interaction.

Even the veteran telecommuter who said she felt uncomfortable around other people admitted that it would be nice to feel more comfortable in a "people environment"

and that if she were at the office more often she would probably get more comfortable. She is also an avid tennis player and gets out on the courts frequently to play with a group of local women in an environment where she feels more comfortable than at an office. A man who described himself as very social and as enjoying being with his friends at work also valued his days alone at home. "There are very few people in the world I want to see every day," he explained.

Working climate. Another important factor in people's telecommuting experience is the attitude of their coworkers and management. There are those in this study who work for companies where virtually everyone does some telecommuting. These telecommuters typically described their environment as supportive and encouraging. On the other hand, there are those who are in a small minority in offices where telecommuting is considered a privilege or a nuisance. These telecommuters spoke of working under the shadow of skeptical and unsupportive attitudes that they saw as coming primarily from people either unfamiliar with the telecommuter's work or unfamiliar with telecommuting.

A part-time telecommuter whose company provides excellent support for telecommuters and whose manager not only supports telecommuting but practices it himself, described the "biggest negative" about telecommuting as coming from a department he deals with frequently that contains no telecommuters:

They don't completely understand why [our department] works from home. It's kind of seen, I think, on some level that we're not working. In fact even the terminology that sometimes [they] will use is "Are you working today?" That means, "Are you in the office?" And you know how humor is sometimes very close to the truth. They'll say "Oh, you came in today" or "You found your way in" or something, so I really don't like that, but after a while, since there's really no way to be a good guy and get along I would tell them I'm semi-retired or I was at the beach. I go back that way 'cause that's better than saying "What do you mean by that?"

But I must say it does bother me and I think it's perceived that way because they're there and they work a lot of hours. They come over and they see only half the people there and they think 'oh sure, they're working.' There's still that perception that telecommuting is goofing off.

Another part-time telecommuter works for a company that actively encourages telecommuting, but he has few coworkers who ever work from home. That very day, he noted, one of the people sitting near him had called out, "Well, you finally showed up!" when the telecommuter arrived at his desk after a meeting at another building. The telecommuter was philosophical about this kind of attitude:

I think that it's a carry-over from an era that's in our past. A lot of the old stereotypes are falling by the wayside, but they still kind of exist and I hear it from people who are tied to their desk and their structure. I laugh at some of these reactions that I still hear. When I first started telecommuting, though, I would worry about what kind of impression I was making. It was crazy. But I still hear some of these comments. There are also unspoken implications. I think there are always going to be some people who say 'Well, I don't know what you do,' and there's this subtle implication that you're doing nothing.

Two telecommuters spoke of how the negative attitudes they once had about telecommuters had carried over into their current telecommuting behavior. In one case, a manager had suspected many telecommuters of abusing the system in the days before she became a telecommuter herself. She remembers wondering to herself "What is she really doing?" when thinking about another manager who was working at home. Now that she is telecommuting, she does everything she can to make sure no one suspects her of slacking off. "I work extra hard," she says, "to make sure that people realize that even though I'm not on site, I'm accessible and it's very clear that I'm around. I make it a point every day to leave a verbal schedule on my voicemail box on where I'm going to be and how to reach me."

Another woman had once looked on coworkers who worked from home as slackers. Now she is very concerned about her clients learning that she works from home and does everything she can to make sure they do not find out. "Many of my clients are unclear as to how many hours I'm in the office," she explained, "and I do that on purpose. I don't want them to have the impression that I'm working part time and might not be doing a good enough job. I want to give the clients the impression that I'm accessible. I'm concerned that if I was seen as working the majority of the time from home, they wouldn't take me seriously."

In addition to attitudes of coworkers and clients that make telecommuters uncomfortable, there are also examples of unenthusiastic support from management, even within companies that in principle support telecommuting. In one case, a telecommuter feels she is "perceived as extra trouble" in an atmosphere where "they think of teleworking as a privilege." Another said "there are a lot of managers in the company that are still of the old school. . . and believe people have to be on site." She feels that much of this resistance is because "it's a lot more difficult to manage people when they're working at home."

In contrast to all these situations are several where telecommuters are encouraged to telecommute. Two of these are in companies that have been run from their inception on the basis that everyone can work from wherever it suits them best. "From day one," one man explained, "they decided that wherever people were, that's where they worked. They geared the whole company towards that." Telecommuting had had nothing to do with this man's decision to join his company, but after going into his office cubicle for a while, he started wondering "why should I come here and plug

into that wire instead of my wire at home?" He tried telecommuting and liked it. A consultant spoke of similar circumstances. "I have the same tools that I would use at the office here at home on my system," he said, "so to the company it doesn't make any difference where I do the work. So in that case, of course, I would prefer to do it here [at home]." A woman who had been through both friendly and unfriendly telecommuting environments had concluded that "if the norm hasn't been established around telecommuting I think that's when you have problems. If you're in a culture where it's highly normative, it just seems to be the way."

Perspective

Not only do these telecommuters differ in the way they get their jobs done and interact with others, but they also view telecommuting from different perspectives. Just because they are all telecommuters does not mean that they all understand telecommuting to mean the same thing or see it as having the same significance.

Length of experience. Part of the explanation for their different points of view stems from the nature and extent of the experience they have accumulated with telecommuting. Some of these telecommuters have worked at home much longer than others. Telecommuting experience spans everywhere from twenty years to six months, with both full-time and part-time telecommuters equally distributed along this spectrum. These differences in the length of their experience seemed to have an influence on the way these workers view telecommuting. Many of those whose telecommuting experience spans less than a year have a pioneering attitude — as if they are exploring new ground. "I kind of feel like I'm this new kind of manager that's coming up and

taking advantage of the flexibility” was the way one relatively new telecommuter expressed her enthusiasm. “It’s the new way!” said another.

The more seasoned veterans understandably see things a little differently. A programmer with twenty years of home work behind her described how she started working at home with the aid of an “old acoustic coupler modem and chemically treated paper — really antique stuff.” After all these years of working at home, she seems a bit bemused by the recent attention being directed toward telecommuting. “It’s not really new,” she said, echoing several others. One man had originally introduced himself to the researcher by saying that he had been working from home for many years and “it was never a big deal until lately.” Another smiled as he talked about how he suddenly became “sort of a popular interview subject” for taskforces after his company “discovered” telecommuting and his experience became valuable to them.

Terminology. Each of the participants expressed their opinions about how they related personally to the term “telecommuter.” Their responses frequently reflected uncertainty or disagreement about the meaning of the term. “I consider myself a true telecommuter,” said one woman who worked exclusively from her home, “not one of those once a week types.” A contrasting interpretation of “true” telecommuting was expressed by another full-time telecommuter. “I think of a telecommuter as someone who works some of the time at an office and some of the time stays home,” he said. “I work most of the time at home. I use telecommunications to work and to connect to the office, so that might make me a telecommuter, but I don’t think of it that way.” Many felt that computers and networking needed to be involved somehow to qualify home work as telecommuting.

Only a few participants, it turned out, are entirely comfortable with calling themselves telecommuters. Most of those who expressed discomfort with the term just do not see themselves as being part of what one of them described as “this big telecommuting group.” They typically either started working from home long before the term “telecommuter” was being used or just do not see themselves as the technical kind of people usually associated with telecommuting. A woman who has a great deal of experience with telecommuting said that she considers herself and others that she works with as telecommuters but never uses the term except when referring to official company policy. The overwhelming preference for describing the way they work is simply to say that they “work at home.”

As this discussion makes clear, telecommuters are a long way from being a homogenous group of people. They have been shown to have very different ways of getting their job done and interacting with others in their work environment as well as possessing backgrounds that have given each of them a unique perspective on their telecommuting experience. The many ways they are able to shape telecommuting to meet their needs illustrates its flexibility and potential as a workstyle that can bend with the changing needs of tomorrow’s workers. Despite the diversity of this group of telecommuters, however, the tales they told about telecommuting as it touches their relationships with coworkers and family often share many similarities. These similarities are the subject of the next chapter.

Chapter IV

Telecommuters: What They Have in Common

As different as they are, the participants in this study are in agreement about many of the challenges and rewards of telecommuting. They use similar tools and need to solve many of the same problems that stem from being further from their coworkers and closer to their homes. This chapter first explores the similarities that were found in the way these telecommuters interact with others in their work environment. Then it will look at the personal side of telecommuters' lives, and the way they mix with their households and view the future.

Communication and Separation

Telecommuting touches many parts of a telecommuter's life, but at its foundation it is a way to go about getting a job done. The challenge faced by each telecommuter is to establish ways to effectively communicate and interact with coworkers despite the distance between them. A good place to start, then, in this exploration of the experiences that are shared by most telecommuters, is with the links that enable telecommuters to remain a part of their office place despite their separation.

Sending Messages. Central to each of the telecommuting experiences reported by the study group are the communication links that they use in working from home. All telecommuters need to remain accessible to their coworkers, management and sometimes customers or clients as well. Telecommuters do not necessarily differ from their office-bound coworkers in the types of communication technology they use, but they do differ in their relative dependence on this technology.

There are a few types of communication technology that play a much larger role in the telecommuters' daily routines than others. Probably more than any one tool, e-mail is having a tremendous impact on the ease with which these telecommuters are able to work from their homes. As evidenced by those who began to work from home before e-mail was even available and those who still use it little or not at all, e-mail is not a prerequisite for working at home. Its impact, however, is unmistakable.

Most of those interviewed use e-mail primarily to exchange files, distribute information or to ask and answer specific questions. Brevity is the rule. In explaining why he and his manager tended to keep their e-mail correspondence very brief, one home worker admitted that neither of them was a great typist. A consultant who seemed to have given the subject a lot of thought had concluded that e-mail continues to grow in popularity because "people feel comfortable with the quick and anonymous." She explained further. "You don't have to be nice," she said. "I think it makes for technology people to communicate a little better — they're not that verbal anyway." A programmer explained why e-mail removes the stress she feels when dealing with people in person:

I can sit back with e-mail and compose and recompose and think about it. I just like the facts. Sometimes people start out by sending messages with all sorts of additional stuff, but eventually they get the idea and just limit it to the facts. There was only one gal I worked with who would send e-mail and then add the little personal stuff like 'I'm off to Hawaii' or 'How's your tennis game?' All the rest of my communication has been just the facts.

E-mail is not only typically brief, but, unlike other types of interchanges with coworkers, it rarely strays from business. Employers in this study discouraged non-business e-mail exchanges using company time and resources. There were

examples, however, of times when business and personal worlds did overlap on e-mail. One man, for instance, spoke of a coworker who had just become a first-time father and in his enthusiasm had e-mailed pictures of his baby to everyone in his small company. In this case, however, e-mail was exchanged over the Internet rather than through an employer's network, so there were no employer-imposed restrictions on personal use.

As important as it has become, however, e-mail has still not eclipsed the telephone. Telephones remain indispensable. Their most frequent use, however, seems to be not so much to actually have conversations as to exchange messages. One very busy software analyst said she would describe the way she uses voicemail as more like audio e-mail. She uses the express messaging system available to her to go directly to people's voicemail when calling them. "I kind of don't want to talk to them," she explained. "It just takes too long." Another telecommuter explained the way he uses voicemail:

With voicemail you don't have to initiate a lot of calls. You leave messages and receive messages. You can have a lot of indirect communication, so I probably check voicemail a half a dozen times a day and maybe have twenty minute periods where I'm listening, replying, forwarding. Most likely if you call someone they'll be doing their voicemail so you'll get their voicemail.

Another home worker thought that he was different from most people in that he feels no strong urge to answer the phone when it rings. "I always return messages in a timely way," he added. "I don't get so many phone calls that it's a problem in general, but if I were getting a lot I would have no problem just letting them get grabbed by the answering machine." Judging by the reports of other telecommuters this man is not so different. Many admitted to just letting the phone go unanswered when at home —

usually hastening to add that they check their voicemail frequently and return their calls with little delay.

When they are working at home, most telecommuters reported that they receive communications from coworkers via e-mail and voicemail messages rather than direct phone calls. Several mentioned what they felt was a reluctance on the part of coworkers to call them directly when they are at home. "There's something still about the person's home that is not quite like work," explained one telecommuter, "and because we allow a lot of flexibility in our time, we may be catching them at a bad time. When you call them you don't know what you're interrupting." One telecommuter who had worked at home for many years tells the story of how he was startled one afternoon when the business phone in his home office rang. It was his manager whose first words were "Oh! This works!" The telecommuter had apparently not picked up an urgent voicemail message on his work number, so his manager decided to do what she had never done before — call him directly on his business line at home.

Another bit of technology that many telecommuters seem to be working into their communication routines is the pager. In many of the ways it is used, it is a variation on voicemail or e-mail. Pagers, for instance, are often set to notify telecommuters when there is a message on their voicemail recorder. Another variation is an alpha-numeric pager that lets users receive a short message directly on the pager's display screen — a sort of short-hand e-mail. "All of us have alpha-numeric pagers," explained a software analyst, "so from our system we can send messages to their display. So lots of times problem notification will be done via pagers — that way they don't have to call back, they can start investigating immediately."

There are times, however, when all of this messaging breaks down — when people need to actually talk to each other. One consultant commented on how it was “so nice to be having a conversation with someone and be able to tell them you don’t understand what they just said.” An avid e-mail user admitted that there were times when even he found it was better to call and talk. “For instance,” he said, “in cases where you’re using a lot of words to explain judgment calls . . . it would be helpful for someone to hear the tone of your voice.” A contractor who had been trying to save time by using e-mail to deal with a remote office, found things going much more smoothly once she switched to using phone conversations. “I underestimated how much information is communicated verbally,” she acknowledged.

Talking to a real person, though, is not always easy to do. Phone conversations often have to be scheduled just like meetings. When asked what he did if he really wanted to talk with someone, one telecommuter replied that he left a message saying something like “I really need to talk to you. How does 10 a.m. work?” “We go back and forth on voicemail,” complained one manager. “It can get to the point where it just becomes comical — tag you’re it. If that’s the case and I need to talk to someone I just schedule a time. I ask them to call me at a specific time and number.”

Choices regarding which modes of communication telecommuters use in different situations were usually based on combinations of criteria such as urgency, efficiency, nature of the information, familiarity with recipient and the recipient’s work habits. Several rambling explanations that telecommuters offered to explain their use of various modes of communications suggest that making the choice of how best to proceed is far from an exact science. A writer described his approach like this:

It depends on the style of the person you're dealing with. If you know the person, you maybe know what their preference is and that's what you do. Also, usually the phone is an escalation. It's a step up and you're actually trying to break their concentration wherever they are. e-mail is less invasive – it let's them pick the time they reply so you better not be hanging on it. The phone is saying 'I want this now.' It's like standing on their desk. Or you do both if it's that urgent. Or give them a call saying you're sending a note to them.

A more complex approach was described by a consultant who works almost exclusively with people who are on the road or working at home:

The phone is just messages. I've found, though, that I'm much luckier with e-mail than voicemail. I can count on everyone reading their e-mail over night. Sometimes I give a voicemail and e-mail both. I think sometimes the phone is more personal, so if I'm contacting a person that I've never contacted before I would probably use the phone. If it doesn't work it depends. If they're at a customer they can't really respond – you have to page them. The thing about paging someone is that if they don't know your number, they probably won't answer very fast because they're busy. Then there are some who carry cellular phones so wherever they are they answer. Well, they may turn it off, but then it goes to their voicemail. It's really sort of a mess.

Another telecommuter expressed his preference for trying voicemail before e-mail (depending on the person, of course). If no response is forthcoming from either, he adds an urgent marker. "If none of that works," he concluded, "I'd call other people that sit near them I guess. It's hard to know sometimes." There was obviously an element of guesswork or trial and error involved in many communication decisions.

Tools such as e-mail and voicemail help telecommuters remain connected, but they also put filters in place that give telecommuters the ability to control their accessibility. Most telecommuters accept this type of control as a tool that allows good time management. What is important to them is not that people be instantly accessible, but that they be responsive and not use telecommuting to hide or disappear. "When you have a company with people in such different places and on such different

schedules,” said a designer, “if they use it [e-mail or voicemail] to be noncommunicative, it defeats the whole purpose of the team.” “Everyone is very responsive in our group,” commented a consultant, “so it just works. If you had a lot of people who were blasé about answering calls, it probably would break down.”

Face-to-face interaction. When some real interaction is called for, face-to-face interaction remains the favored mode of communication. There are undeniably times when it is best to get everyone together in the same place if that is possible. For a telecommuter this translates into a trek to the office — usually for a meeting. “In being with people,” one telecommuter commented, “there’s just something that goes better. There’s a rapport and trust and camaraderie.” One manager who is responsible for a group of telecommuters talked about some of the limitations of telecommuting that she had decided to address by bringing her troops in from the field for regular meetings:

They’re all working at home, and that’s fine, but what tends to happen at the beginning of a project is that . . . they tend to be working in silos and they’re off doing their own thing and then we end up playing voicemail tag. They have a question and then you don’t get right back to them and we cross paths and right now it’s really important that we move ahead quickly. I’ve asked everyone to meet at least three times a week. Because the project is just starting it’s really important that we have regular team meetings where everyone’s together and we can really figure out what the rules are.

Meetings do not always mean a large group of people. One-on-one get-togethers consisting of things such as walking a coworker through some code or reviewing performance with a manager are included in the type of activities that telecommuters feel can benefit from eyes, ears and a lot of direct interaction. A consultant, for instance, explained why he had frequent meetings with a coworker:

The last time I went there he had sent me several e-mail messages. I couldn’t understand what his issue was. He wasn’t hearing back from me wondering if I had even looked at the stuff. Once we got in the same

room we made a lot of progress. What he thought he was asking wasn't quite what he was asking and it wasn't what I thought he was asking either and that was something different than what he thought it was. You get messed up with e-mail and you're going to get nowhere in a hurry.

The chances that telecommuters will just happen to run into one of their coworkers are often slim — especially if coworkers also telecommute and schedules are irregular. Therefore, most telecommuters reported that they rarely count on running into someone or catching them at their desk, but instead rely heavily on scheduled encounters. Meetings are by far the most common reason that telecommuters report for going into the office and they often consumed most of their time when they were there. In the case of full-time telecommuters, meetings were usually the only reason they went to the office.

Experience with meetings that they viewed as a waste of time had left a bad taste with some telecommuters. "I hate meetings," was the way one telecommuter expressed her feelings before qualifying them a bit. "Some meetings are OK," she continued "if it's just one or two people trying to get something done, but I don't like status meetings and project meetings — they just sit and gab." The twenty-year veteran of telecommuting talked about how she was just plain uncomfortable at meetings. "I was so nervous," she said of meetings that were required by a former employer, "having to be there in person, in a dress, having to be sharp and attentive, remember everything." Even she acknowledged the need to attend an occasional face-to-face meeting, however. "There are people who feel that they can't do it via e-mail," she said. "They want to have a meeting. I'll hop in the car and go down there."

Connecting with coworkers. Apart from the value of meeting with people to accomplish specific tasks, telecommuters also saw value in spending time with

coworkers in order to build relationships. As one woman put it: "If they know you and trust you it allows you to still have inside ties while doing outside work. I also think people try to take care of each other." One part-time telecommuter said that he made sure he spent a lot of time interacting with his coworkers when he was with them. "One thing is that I really just like people," he explained, "but the other thing is I don't want to be just asking people for things — I want to connect with people so that we have some kind of a bond." An employee of a company where almost everyone is a telecommuter observed that people in his company are very good about sharing information and helping each other. "It's probably part of the need to be connected," he concluded. An analyst described why she tried to stay close to her colleagues:

What I've always tried to do is maintain a friendly position and to help others because you never know when they may decide to leave the business and then because you were nice to them they may give you some of their clients or you never know if they're going to come upon an opportunity and want to pull in someone to help them. And it's a hard business and there's not always a lot of help because in a sense everybody is their own boss, trying to climb to the top, so there's not a lot of helping each other, so I've always tried to help. We are almost an island by ourselves and we really need to reach out to help other people and have other people help us.

Others went on to talk about it being easier to work with people when you know them. "I think it's always good to know the human side of your coworkers," said one man. "That makes it easier to empathize with people's situations." If you have not established a relationship, maintained one woman, "you can't do all this e-mail — you don't even know each other." Another felt strongly that "you have to establish a personal rapport with someone before you're as effective when you call on the phone. When I pretty much know everyone," he continued, "then the people I know, we can talk on the phone and send each other e-mail — a ten-word e-mail and you're done because

you already know what's cooking. This whole affair of building personal relationships," he said, "is why I go in [to the office] most of the time."

Telecommuters agreed, however, that as important as they could prove to be, their ties to coworkers are not what they would be if they were around one another every day. "You really get to know the people that you work with when you're with them every day, all day," said a mother who had switched to telecommuting after the birth of her daughter. "Then all of a sudden," she continued, "when you're not around, it changes the whole dynamic of your working relationship." A veteran telecommuter agreed. "Personal relationships are different than they would be if I were there," she said. "I don't know them very well. I feel embarrassed that I don't know much about them. I don't know how many children they have or whether they're boys or girls, so I can't do the idle conversation."

Telecommuters are also busy people. Weighed against other priorities in their lives, the informal communications that build bonds with coworkers often just are not important enough to stake much of a claim on their valuable time. This is seen clearly in the examples of two women whose priorities changed as their lives became more demanding. One of these women is the analyst quoted above who prided herself on reaching out to help her colleagues:

Before, I was very generous with my time and I would help people if they had questions. Once [my daughter] was born and I started working more from home I just didn't have that time. Most of what would happen would be that I would see people in the hallway and it would be 'Hi, how are you, I haven't seen you in a long time,' and I'd say 'I know, I know' and keep running. I needed to worry about my daughter and my business first before I could worry about helping other people; so that's kind of the change that ended up happening.

Another woman said that her behavior had changed so much that it had provoked some "constructive criticism" from her coworkers. She explained the changes like this:

The workload is quite a bit heavier, plus I just don't have a lot of time to be going back and forth and dealing with these kinds of extra issues. So when I call and request something I'm even shorter than I used to be. It's probably due both to the telecommuting separation and to the added demands of the job – the stress. I think that there is a big separation when you're not there every day. There's some kind of a big sign hanging over your head. It's something different from when you are there. In general they feel they aren't getting any warm fuzzies from me.

There are definitely some benefits that telecommuters attribute to distancing themselves from coworkers, however. Face-to-face interaction is fine, but excessive gossip and office politics are quite another thing. A consultant talked about appreciating her ability to avoid the pettiness and politics of the office:

The more you're there [at the office] the more you get into the feeling of urgency about things that really aren't important. The tension builds and you can't see it after a while, but if you get away from it and go back into it you can see it. If you're outside looking in it appears very ridiculous. Sometimes you do ridiculous things because of politics. Like this isn't our department, so I won't do this or you'd do something in a round-about way just to keep somebody happy, but it's not the straightest route between two points and it doesn't get the job done faster.

A fairly new convert to telecommuting feels that she probably is not as privy to office politics as she was when she was always at the office, but like others, she likes getting away from "all that petty stuff." She explained: "When people are there [at the office] all the time, they tend to go off on tangents. Something very small mushrooms into something much larger. For me personally, because I'm working off site, I have a different perspective and a different set of priorities. I just don't want to waste that kind of time."

For the telecommuters in this study, even the connections that there are with coworkers are primarily restricted to the workplace. They reported spending little time with their coworkers on their own time or in their own homes. This made sense to most. Many had rarely socialized with coworkers even prior to telecommuting. A woman related how she had rarely joined the others who got together after work. "I just felt," she said, "that I had spent so much time at work that I wanted to go home to my husband versus a smoky bar." Echoing the sentiments of others was the telecommuter who said: "I've always tended to keep my personal life separate from my business life. I don't have the same interests as anyone else." "I consider a lot of the people I work with good friends," said another man, "but it's a work-based thing and I guess there are not real common interests outside of that that would bring us together outside of working hours." Another man talked about the "great folks" he and his wife had worked with on a previous job. "As much as we liked them," he said, "they weren't really the kind of folks that we would socialize with." What telecommuting adds to this lukewarm enthusiasm for socializing is geographical challenges. As one man put it, "the fact that everyone lives so far apart doesn't encourage starting out relationships."

Career? What career? One of the potential consequences of not being as well connected at the office as their office-bound counterparts is that it might put telecommuters at a disadvantage when career opportunities arise. During their interviews, telecommuters were asked to assess the effect that telecommuting was having on their career. One man spoke for most of the others when he answered, "What career?" Many of these telecommuters equated the word "career" with corporate ladder climbing and they had each chosen a very different kind of path. If they were

looking for promotions and management opportunities along the corporate model, there was agreement that telecommuting is not the way to get there.

Several telecommuters told of actually taking a few steps down the ladder, or at least sideways, in order assume duties appropriate to working on the outside. One had moved from management into staff work and then into consulting as she tried to find a good fit for working at home. She said that she had realized early on when she tried to telecommute as a manager that she was on a termination course. "Work got done in the hallways," she said. "If you're not in the hallway you're not going to get anywhere."

As to what these telecommuters do want to attain professionally and whether telecommuting is helping them to get there, most claimed to be very happy right where they are. "I just like what I'm doing and want to continue doing it," was the way one woman put it. "This is about as good as it gets," said another. Beyond just hanging on to their jobs, professional goals are simple things such as boosting sales and getting better at what they do to ensure continued employment. For the most part, they feel their modest goals are attainable within the telecommuting framework. Telecommuting had definitely limited their career options, but as one satisfied worker put it, "It works given what I've chosen to do."

What telecommuters get done at home. Out of all the areas where the participants in this study are in agreement, probably none shows as much consistency as their accounts of the kind of work that they prefer doing at home and the reasons for this preference. What they like to do at home are those tasks requiring concentration in combination with large blocks of time. Examples included writing and studying of all kinds, the preparation and practice of presentations or more technical tasks like

programming or math modeling. "Any part of my job that requires me to be very focused," was the way an analyst described what she saved to do at home. "Something that I can really just dig into," was the way another telecommuter put it. "Obviously I'm working at home because there are no time-sensitive things that I need to do, so it's something that I can just concentrate on and not put down for a while." There are other types of tasks routinely performed at home, such as periodic checking and responding to voicemail and e-mail, but those things can be done equally well, if not better, at the office.

As to the reasons telecommuters gave for being able to work better at home, the absence of interruptions was most common. "My time in an office," said one long-time telecommuter, "has been limited, but it seems like it's a constant series of interruptions. Working here [in his home], I can be as interrupt-free as I want." Many spoke of the difficulty they had in getting work done efficiently or comfortably in the typical office environment where, as one man put it, "you know when someone else's dog is sick." One woman told of trying ear plugs and a Walkman at the office to give her the peace she needed. "When I need quiet, though," she explained, "the Walkman doesn't help and even if it's quiet for a moment, they're about to bother me, I know they are." As another woman put it, "If you end up going to a conference room so you can have some private time to get things done, that doesn't make any sense. It's like why – when you can just wake up and do the same thing from home?"

For some telecommuters, one of the consequences of working without interruptions is their spending long hours getting lost in their work. A programmer admitted to working "two hours, six hours, maybe fourteen hours . . . through the night if

I need to." "It's pretty confusing," said a writer in commenting on the ease of working long hours. "I get started a lot earlier because I don't have to go in and I can end when I want because I don't have to come home." "I work from 7 a.m. until 6 p.m. straight through," reported a busy salesman. "I maybe stop for fifteen minutes for lunch — that's about it." His wife agreed that he did not let much break his concentration. "He doesn't even realize what time it is," she said. "He just gets lost in his world in there [his home office]." Several people reported that they frequently got so engrossed in their work that they forgot to eat. "Sometimes it will be three [o'clock] in the afternoon and I'll remember that I haven't eaten lunch yet," reported one young man who looked like he had a healthy appetite. The only real whinger of a complaint from those who become engrossed in their work was from one woman who was upset because she is not eating properly.

Several telecommuters found that the solitude at home let them work in ways that may seem a bit eccentric in the office place. More than one telecommuter reported that it was easier to focus on the topic at hand if they talked out loud or walked around, especially when it came to practicing presentations or speeches. "This is the nutty part," commented one man, "sometimes I just walk around and talk out loud. It helps me concentrate in a way you can't do at work. Things become clear when I can verbalize them. At work," he added, "you wouldn't walk back and forth talking to yourself." A consultant described another type of idiosyncrasy that made him more comfortable when he worked at home. "When I'm reading and things I'm usually not sitting down," he said, "I don't like to read sitting down for some reason. I either lay on the floor or walk around."

Shortcomings of working at home. In addition to conditions that made it easier for telecommuters to work at home than at the office, there were ones that could make it more difficult. Lest anyone put too much emphasis on the advantages of staying home to work, the first feature of telecommuting that one woman said she always hastens to point out is that "you still have to work." In her case, she feels she works even harder than she would if she were in the office because her status as one of her department's few full-time telecommuters means that her output is being watched closely. "There's always that pressure to show that you're working because they can't see you," she said.

Not only do you have to work, but you have to depend on yourself to come up with the motivation and discipline needed to start the work process and keep it going. "It's just not as stimulating [at home]," admitted a full-time telecommuter who, nonetheless, was enthusiastic about the way she had chosen to work. "Probably the most interesting things in our environment are other people," she added, "even though they can be annoying or obnoxious, they're stimulating." A part-time telecommuter talked of the adrenaline rush he gets when he goes into the office from the whole process of dressing, driving in, trying to look good and meeting people. When he stays home, he says, "there's no force, except for internal, to get that high." A woman who says it took her many years to train herself to work productively at home really appreciates the difficulty of what she has done as she watches her husband try his hand at telecommuting. "He has tried to sit here," she says, "and he hasn't a clue how to discipline himself. He may get an hour and a half of work in – if he's lucky."

Telecommuters usually complain of distractions at the office, but there are other distractions that may take their place in the home. Telecommuters mentioned dogs that

wanted attention, solicitors at the door, unfinished housework or, in one case, a friendly handyman who did not seem to appreciate that time spent chatting with him was extra time that the telecommuter would have to work that evening. A woman who is fairly new to telecommuting told of how she had to fight off the temptation to do household chores. "It was more of a retraining in my mind," she said, "that I don't have to tend to the kitchen. If I had gone to work I would have just left things and gotten into the office and done my work, so from a self-discipline point of view that was harder than I had expected."

Since telecommuters are at home during the day, it often makes sense for them to handle those home-related tasks that can best be done during regular working hours. In the households covered by this study, for instance, it often falls to the telecommuter to do things like take the car into the shop, wait around for a repairman or supervise the gardener. A woman who telecommutes once or twice a week was enthusiastic about the extra things she is able to do on her days at home. "Usually I get to see my son to school," she said, "which he likes 'cause it's always been my husband's responsibility to do that." Another telecommuter ran through a list of things it makes sense to her to get done during the day: "Going to the bank, going to the grocery store, running errands. All these things," she said, "are easier for me to do during the time that everyone else is working. It saves you so much time in the long run."

There need to be limits to this kind of activity, however. After all, telecommuters still have paychecks to earn. One woman told of trying to come to an understanding with her husband that would balance her needs with his expectations. "He just feels that since I'm at home I can take care of this and that when in fact I've got things scheduled,"

she complained. By way of contrast, a long-time telecommuter explained how he had learned to handle this type of conflict. He would do one or two household-related tasks each day he was at home. "But if it starts to stack up," he said, "I just have to tell the family that I'm working and we need to schedule this out."

Another kind of household distraction was reported by those who worked while others were also at home. They were often torn between tending to their work or joining the company of others. "Part of the job that I don't enjoy that much," said a new mother, "is when my husband is out playing with our daughter and I would rather be playing with them." These types of distractions are things that telecommuters found they had to learn to handle. A programmer who felt she had learned early on in her telecommuting experience how to ignore household distractions talked about her family's continuing amazement with how she can "turn off house and turn on work."

Not only does the home have its own set of distractions, but in terms of the quality and availability of resources, it is very hard for it to compete with the main office. The superior performance of the office network over that of phone lines is an important factor for workers who transfer a lot of data. "I downloaded something here [at home] the other day and it took me five hours to do it," reported a writer, "so the difference is the faster connection to the master computer at the office." Several telecommuters mentioned feeling at a disadvantage not having administrative help nearby when they are at home. "This is like the first time in my life I haven't had an administrative assistant and it's killing me," said a woman who is still adjusting to full-time telecommuting. In assessing overall productivity, one telecommuter came right out and said that he did not see that working at home was any better than working at the office

“because the system [computer network] is faster and everyone's around and stuff like that.”

In discussing resources that they missed not having at home, several telecommuters mentioned their needs for special equipment to help alleviate back, neck and wrist problems. When it comes to providing ergonomically sound setups in the home, none of the employers reviewed in this study get involved. “I have repetitive strain in my wrist,” reported one man, “and when that came up, they [employer] were only willing to ergonomically evaluate my work situation. They had talked to their insurance people and there are a lot of extra issues to getting into the home. So they would only improve my workstation at work.” This illustrates that there are some definite limits to what employers are willing or able to do as far as providing a comfortable work environment for workers in their homes.

There is the problem, too, of what to keep where and what to carry back and forth. “I carry too much stuff back and forth,” said a man who tries to work at home two days a week. “There are physical files, pendaflex folders and a separate briefcase that holds the laptop. So way too much stuff.” One woman joked that she needs a filing cabinet in her car trunk. “Lugging things from the office to home was one thing I hadn't counted on,” she said. “With this new project I'm working on now I'm lugging more and more stuff home.” Add to these inconveniences the availability at the office of small but important things that telecommuters mentioned missing like copy machines, supplies, manuals, mail rooms, good lighting, a cleaning service, and a decent cafeteria and a home office can start looking very deficient.

The Household

The most obvious way that the professional and personal lives of telecommuters overlap is in their joint use of the home as a center of operations. Under these conditions, there is a fluidity, as one telecommuter put it, that can make it difficult to differentiate between home and office life. When this is the case, it may be difficult for people to find ways to ever experience time as their own. The following section takes a look at this problem by focusing on the way telecommuters' households are affected when they bring the workplace home.

Are you working now? All the telecommuters in this study reported setting up some boundaries between the work and personal parts of their life at home. When asked to talk about how people in the household knew when they were working and when they were not, telecommuters most often described understandings about their working space, sometimes in combination with working hours. Each telecommuter, for instance, had established a primary work area. Laptop computers and cell phones enabled a lot of roaming or temporary changes of scenery, but the vast majority of work was done at one location in the home. Often these locations were dedicated solely to telecommuters and their work, but in a few cases they were also used by others and for other things such as family finances, video games, eating or sleeping. When this was the case, the time of the day or week was frequently a factor in helping to define the workplace. The spare room in one home, for instance, was given over to the family's teenagers on the weekends, but was strictly an office on telecommuting days.

Setting aside designated work areas in this way is the primary method used by telecommuters to signal to themselves and others in their household when their working

time begins and ends. If they are in that place, they are working; once they walk away, they are not. "It just depends whether I'm in here [home office] or not," said a man who uses a former guest room as his office. "That's pretty much it." One man had chosen to set his office up in a utility room behind the garage rather than in one of several rooms in his main home that would have made very comfortable offices. "I chose to have my office out here," he said, "because this room is actually separated from the living area of the house. There's a psychological distance as you walk out the door, walk through the garage and then through this door. I like that." Most of those interviewed also maintained some kind of schedule of hours or days when they normally worked. The combination of time and place, then, served as telecommuters' signals of their working status much as it would have had they been commuting to their offices. One woman described the process in her home as being as simple as an on/off switch.

For most it was not that simple, however. Work could not always be locked up and put away as easily as walking out of a room. As a long-time consultant put it, "Ideally, if I'm done with work I leave this office and go somewhere else and that's the official sign that I'm not working — and sometimes it actually works that way." Telecommuters have the same problem as their office-bound counterparts when it comes to leaving the job at the office: no matter how much distance or how many doors you put between you and your workplace, your work can manage to hang around inside your head.

"Physically separating from work isn't that difficult," claimed a writer who did most of her work sitting in front of her computer, "but mentally it's difficult. I spend too much time worrying about it, falling asleep thinking about what I did or didn't do or what I

forgot to do or what I should do the next day. A lot of things stay there in my head after I turn off the computer." She did not attribute this to telecommuting, however. "I did that a lot when I was working on site too," she said. "I'd come home and couldn't forget it." Reflecting back over the years prior to her telecommuting, a busy analyst admitted that putting work aside has always been a problem for her. She has always brought work home to do in the evenings and on the weekends. "I'm someone who works too much," she said, "and I'm always thinking about it whether I'm doing it or not. It's during your down time that you get the best ideas." Even the man who had tried to put psychological distance between his work and home by putting the garage in the middle, admitted that he and his wife still talk about work all the time. None of these telecommuters felt that this kind of intrusion of work into the rest of their lives could be solely attributed to telecommuting. "I think it's just this valley [Silicon Valley]," said a writer, "and the pressures that you have to get things done."

Even without telecommuting, then, it is not always easy to separate work life from home life. What telecommuting appears to do, however, is to make it even more difficult to keep the two apart. It becomes easier for colleagues, customers or clients to find telecommuters and instantly put them back to work. A consultant who works primarily from home said that he continually shifts back and forth between his work and personal life. "Typically you're really on call 24 hours a day," he said. "Quite often you're working with companies in different time zones or there are customers in Japan or Korea. Then you're on the phone a lot of times outside your regular working hours. That's unavoidable. You just have to be flexible about it." A new mother found herself jumping back and forth between work and family. "For example," she said, "if there was

an emergency — a client that was panicked — I would talk to that client. If something needs to be taken care of, I take care of it. It doesn't matter if it's Saturday or Sunday."

Telecommuters gave numerous examples of how hard it is for them to get away from work. One salesman gets away in his motor home as often as he can manage. Of course his pager and cell phone go along. "I try to at least do my lunch somewhere else," said a consultant in talking about long days that he spent in his home office. "I'll try to find other activities away from here." A woman reported that "there have been times that I have had a lot of internal stress knowing that I've had work to do that was sitting in the next room, but needing to spend time with [my husband] in order to maintain the relationship." For many telecommuters, then, their jobs seemed to be a hard thing to escape.

It is so easy to go back. Not only did telecommuters report it being hard to get away from their work, but they saw going back to it as too easy. This was not always seen as a bad thing. There were frequent tales of e-mail beckoning telecommuters to check it one more time. "It's really easy to check e-mail right before you go to sleep," reported the man whose bedroom doubled as his office, "and I think that's a negative thing and I wish I could deal with it a little better." Another example of e-mail's temptation came from a consultant. "Maybe before I go to bed at night I will look for messages," he said. "Sometimes that has a little bit of an effect, you know. If you respond to a message at midnight, people say 'boy, this guy is really on the ball.' These are the games you have to play. They're part of the environment. I don't do a lot of that, but I know it looks good to send a message on Sunday or Saturday or late at night. It doesn't hurt."

For the telecommuters who are mothers, one of the best things about telecommuting is having their work in a place that makes it possible for them to jump back and forth between their parenting role and wage-earner role. "I've always been available to stop what I was doing to be with or help or do whatever anyone else needed," one mother explained. "I can respond to the kids now, and then I can work from five until nine at night. If there was something involving the kids, that was always the priority," she said. Another mother welcomes her ability to do things "in chunks of time" until she is able to get her infant into day care for the whole day. "So if I get up at seven," she explained, "I'll come over here and work for maybe thirty minutes until he gets up. Then I'll play with him, deal with him, feed him. Then I put him down for his nap and come in here and put in some time."

Other telecommuters truly welcome the accessibility of their workplace because they enjoy doing what they do for a living. A consultant, for instance, agreed with his wife that in many ways his job was his hobby. "If it's a must-do thing it's work," he said. "The problem is that the things you must do are not necessarily enough. You want to learn new things. I'm not a fanatic about it, I don't go crazy, but some of my time goes to that. And I like it, otherwise I'd probably be doing something else." A salesman talked enthusiastically about using his spare time to learn to use his computer at least as well as his boss. "My boss learned how to do it all by himself," the salesman said. "He can address, he can label, mail merge and I don't know half of that. I've taken a couple computer classes but I don't think I've ever finished everything that I've had to do on the computer. There's always more I want to learn to do." For many telecommuters, then, the easy accessibility of the home office is one of the things they like about

telecommuting. For those who need to get away from work, however, it can be a problem.

Working through the rough spots. The overlapping of the job and the home is bound to create problems that need to be addressed by everyone involved. Rather than giving much thought to potential conflicts or complications prior to trying out telecommuting, the participants in this study typically jumped right in and worked things out as they went along. The wife of one telecommuter, for instance, talked about how things have gradually changed during the years that her husband has been telecommuting. "I think when he first started," she said, "I thought of it like he was at home. So I was telling him I needed things done or asking for his help and I just kind of learned with time that he's working and I really just leave him alone now."

Three main issues that each telecommuting household must address are the use of space, working hours, and noise and interruptions. As for the use of space, problems sometimes arose because the designated working area had to be shared. A teleworker who lives with his wife and son in a small apartment selected the master bedroom as his workplace. His only other option was the dining room. "We figured the bedroom was the better slot," he said, "because at least I'm out of the way. If someone's trying to cook dinner there's not food under the computer." He found, however, that he had to develop a sensitivity to the fact that the bedroom was still also his wife's space. "So usually, before she comes home," he said, "I pick all my things up into a neater pile. If I have things all over the place like I've taken over the room it's upsetting and insulting to her."

Another problem was related by telecommuters who had one office that was used by several family members. Of those who had shared their office with their spouse at one time or another, none of them spoke highly of the arrangement. "I can't stand having him here," admitted one woman in referring to her husband who tried to work at home from time to time. Another telecommuter resolved some of the friction that grew out of sharing a room with his teenagers by getting his own laptop computer for his work. "It's nice to have the laptop," he said "because now I don't have to worry about some teenager downloading something off the Internet and crashing the computer and trashing my work files."

Another man can attest to the fact that life is more pleasant if everyone in the household buys into decisions on how space will be used. He had originally worked out of a large room that he shared with the washer and dryer, but later had decided to move his office into one of his home's three bedrooms. "It has a lot of windows that come down low," he explained, "so I moved in there because it was nice and light." When he moved, however, he reported that it was "much to my wife's disgust." The room, it seems, was one she had just redecorated to be their new guest room. His wife has since redecorated another room and he reports that peace has returned to the household.

In addition to their use of household space, another demand that telecommuters put on households is the need for a quiet, business-like environment. No one reported this as being a problem when there are only adults or older children in the home. In most of these cases telecommuters are home by themselves during regular working hours and their needs are respected when work overflows into evenings and weekends.

One woman, for instance, explained how simple it was for her when she needed to work and her husband was home. "I just tell my husband when I'm working," she said. "Like I tell him I need two hours of uninterrupted time." Uninterrupted time was more of a challenge in some of the homes with small children, however. All of the mothers interviewed agreed that, for this reason above all others, child care was a necessity for telecommuting mothers of small children. They had had, and some were still having, firsthand experience with doing things otherwise. One mother told this story:

I don't know why – even if someone tells you you don't want to, but I really thought I was going to be able to have my son home with me before he started school. I tried to bring him home once and it wasn't fun. I had a lot of work and the phone rang and I whispered to him 'don't say anything.' I'd have to carry the cordless phone upstairs, go in a room, shut the door so that in case he made a noise he wouldn't be heard. I didn't like that. It was like telling him to lie. So if I had children that weren't school age the rule would be that they couldn't be home – as much as I would hate it, it's just too hard. It's not fair and you're not playing with them either so they might as well go somewhere fun.

One woman found a balance that works for her by hiring a nanny to help her take care of her children during the day. That way she can have uninterrupted time and still feel as if she is at home with her children. Children will be children, however, and even this mother found that she needed to stay flexible. She told the interviewer that "it hasn't been hard to set boundaries for the kids. We have a clear set of rules though," she continued, "and they totally accept them. So if the door [to her office] is shut they don't come in." A few minutes later, as if on cue, her office door started squeaking and in popped the head of a curious two-year-old who had apparently evaded the nanny to come up and check out what her mother was doing.

As was mentioned earlier, it is relatively easy for telecommuters to put in long and irregular hours in their home offices. The examples offered by telecommuters in

this study reveal ways in which this can be a source of tension that needs resolution. One woman, for instance, could tolerate her husband working long hours, but not if it intruded on the dinner hour. "I could go on working forever," her husband said. "If it's getting over six o'clock she gets upset, so I get finished working. Dinner's on the table." "I figure it's time to kick him out of there," his wife explained, "because I think he could stay in there forever." A man who admitted that telecommuting has brought out his workaholic tendencies said that his wife "has more than once suggested that I put the computer away where I can't get to it." Another telecommuting husband admits to burying himself in his office with his laptop computer. "If you ask my wife," he said, "she'd say it [the computer] is the worst thing that ever happened at our house because I'm back there all the time." There are many ways, then, that jobs and homes may not fit together comfortably.

Telecommuters and the community. Another thing that one might expect as a result of telecommuters spending more time at home would be for them to become more involved with their neighborhood and community. That, after all, is the picture that was painted by Alvin Toffler and has inspired much of the current interest in telecommuting. What telecommuters reported, however, was that working at home had little impact on their involvement with their neighborhood. A few noted that they were more available to help their neighbors in emergencies when they were at home. "It's like a neighborhood watch," ventured one man. "If I saw something unusual I would report it." "I walk outside to adjust the hose or take out the garbage," said another man in an effort to think of some way he connected to his community. "If I see neighbors I'll talk to them a little bit." All one woman could think of that brought her closer to the community

was that she had bought Girl Scout cookies from a neighbor for the first time. As one telecommuter put it, "when I'm at home I work." Another was more direct. "I don't know my neighbors," she said, "I don't have time. They have no impact on my life."

There were ways, however, that telecommuting did account for some increase in interaction with the community. While telecommuters are primarily working when they are at home, they reported taking breaks to do things like buy groceries, walk the dog, go to the gym or attend a school function, all of which led to increased interactions in their community. Those who chafed at the social isolation of working at home also looked for social connections in the community. One woman, for instance, talked of how she dealt with her feelings of isolation by enrolling in an afternoon dance class. "I'm creating a community around something different," she said, "around dance, not around work." While telecommuters do not get pulled out into their world by a mandatory commute like most of their coworkers, it seems that their needs for stimulation and social interaction do at least get them out the door. This is still a long way, however, from an active involvement in community affairs.

Feelings and the Future

Telecommuters experience telecommuting not only as workers and members of a household, but as individuals. There was a great deal of similarity in what they had to say about the part telecommuting plays in their lives and about their expectations for the future.

Putting more time in the right place. What telecommuting meant for everyone in this study was that they had stolen back some time from the jaws of commuting and had

put that time where they wanted it. Not all telecommuters had the same things in mind, however, concerning where to put their time.

Foremost in the mind of telecommuters was their desire to find the best way, within available time constraints, to do their job well. Despite the similarity of telecommuters in this regard, however, job performance was higher on the list of priorities with some than with others. It was very high on the list of many telecommuters who took their extra time and turned it into longer working hours. Examples of this kind of telecommuter were covered earlier. There were examples of consultants who felt they needed time to keep up with developments in their field, salesman who converted new-found time into new-found sales, and entrepreneurs who were very busy building their businesses.

In addition to wanting extra time to spend on earning a living, however, telecommuters also want more time to spend on the rest of their lives. This includes everything from hobbies and recreation to family and the home. Most of the telecommuters interviewed reported setting aside some time during the day for exercise or a hobby. One woman tended her garden each day, another looked after her horses and a third routinely took a few hours during the day for tennis, making the time up by working that evening. Several telecommuters took time to walk each day. Others got out to the local gym. "A big thing for me is exercise," reported one woman who is fairly typical. "I also have time to read journals," she added, "and it offers me flexibility just for everyday household things that need to be done."

Some striking contrasts, however, can be seen in the ways extra time is used when comparing men to women. These contrasts reflect the differing roles that men

and women play in our society and the resulting differences in the demands on their time. Women have much more on their agendas than men. They talked about telecommuting as a way to do it all — family, home, job, and if there was any time left, their personal needs. Men more frequently wanted more time to spend on their job or personal needs — family and home chores were not weighing heavily on their minds.

Some examples of these two different mind sets are in order. A female project manager, for example, had switched to telecommuting because her time had suddenly become much more valuable after she gave birth to her first child. She did not want to give up doing all the things she had enjoyed doing before the baby arrived, but realized that being a mother took a lot of time. “I needed to find a way to fit it all into a day without burning myself out,” she explained. Another mother with two small children had seen herself as being split before she began telecommuting. “I was the professional and I was the mom,” she said, “and I’m not really either one of those. I’m a mom that is really serious about working. So it’s more this concept of pulling it together and integration and looking for a life where I can do both in a way that doesn’t kill me.” For another mother, the straw that broke the camel’s back and turned her into a telecommuter had been Halloween. “I think it was three or four years in a row that I didn’t get to go to my daughter’s Halloween party,” she lamented. “I thought, gosh, it’s just a Halloween parade and I can’t even go!” Now she goes.

The women in this study who had children had all chosen to telecommute to get a better handle on their responsibilities as mothers. One woman, however, made it clear that it was not just her child she had in mind when it came to telecommuting. “I’m able to spend more time with my family,” she said, “and there is a little more time for my

husband and I because there's not a lot of commute." Even women who were not mothers spoke of the importance of home and family in their decision to telecommute. One woman, for instance, spoke of her original misgivings about telecommuting because she so dislikes the isolation of being at home. She has no children, but she does have a husband. "The offices where I worked were a long way away," she began. "The commute was really an issue time-wise. I was working long hours and looking for ways to save time so I could see something of my husband. I probably wouldn't have done it as soon or as often if it hadn't been for him — wanting to have more time with him." None of the men in this study said anything remotely like this about their wives or family. Instead, they spoke of having more time to work out at the gym, to dig up more sales leads, or to master a new computer program.

This is not to say that the husbands and fathers in the study group do not value time with their families. They usually could think of ways that telecommuting had allowed them more family involvement and they certainly appreciated those opportunities. They mentioned, for instance, things like being around for dinner, shooting hoops with a teenage son after school, or the added ease of getting away for a long weekend with their wife. "I can do more for my daughter," commented the father of a teenager. "Not things that are significant, significant, but I can pick her up if it's raining or if she has a lot of things to carry. I can contribute a little more when it comes to things like bringing her to a doctor's appointment or being home if there's a call from school." Family time, however, is not the central focus of the telecommuting experience for these men in the way it clearly is for the women. Nor is carving out time for those chores that come with the maintenance of a family and home. The traditional role of

men, after all, is that of breadwinner, not homemaker, and none of the men in this study was looking to telecommuting as a way to break with that tradition. All of the mothers in the study (five in all) took up telecommuting shortly after giving birth and returning to work. By way of contrast, four of the seven fathers interviewed did not take up telecommuting until after their children had left home and none of the others had children younger than teenagers in the home.

Several mothers who are enthusiastic about telecommuting have trouble understanding why their husbands, whose jobs would easily allow some work from home, show no interest in telecommuting. "He isn't interested in working at home," said one new mother in referring to her husband. "He says there are too many things he sees to do around the house." A mother of a four-year-old sounded frustrated when she talked about her husband. "He's the one that could telecommute more often than I can," she said. "His schedule would allow it — he just doesn't."

Being in control. The main reason that telecommuters are able to mold telecommuting to meet their differing needs and priorities is the freedom and flexibility that it offers. The study group reported few restrictions placed on the way they worked at home and they found they had control over matters that would have otherwise been decided by others. They clearly appreciated their freedom. "It's letting you create your own environment," commented one man, "one that suits you." A woman said of her typical exhausting day: "This may be a long day, but it's on my own terms." Still another telecommuter expressed his appreciation of telecommuting like this:

I had never been comfortable with working regular hours and reporting to an office each day. One of my early goals was to continue to expand personal freedom and what I defined that to be at that time was working as much as I wanted to and when I wanted to and how I wanted to.

Having control of my time means that I can adjust my activities to the most productive way of being.

It is not just the basic things like control over working hours that telecommuters appreciate. "I dress as comfortably as I can get," said one woman about one of her favorite parts of working at home. "I would say I'm a happier person," commented another woman, "because there's less restrictions on things like what I wear, where I work. There's more personal freedom." Over and over again the word "control" popped up. "The main thing is having control of my time," said one man. "Being able to be my own person, feeling like I'm in control," said another. "I'm in more control at home than I am at the office," concluded a woman in explaining why she likes working at home. "I just feel – for that day anyway – like I'm more in control, not so fragmented, like I've really accomplished something," said another.

In addition to reporting a welcome sense of control over their lives, telecommuters made frequent references to being less stressed and much happier. One wife, for instance, said of the days her husband worked at home: "He seems a little more relaxed. He's more calm. He's not under the pressure that he can get under some days." There was also the telecommuting mother who appreciated how much easier it was for her to be pleasant around her family after having a good day (by this she meant a telecommuting day). "When I'm happy," she said, "it's much easier to be giving and unselfish and wanting to make others happy." A woman who had had health problems while trying to maintain a grueling schedule and take care of a child prior to telecommuting, said that her husband was at ease now because "I'm healthy and I'm happy."

The future. These workers had found in telecommuting something they thought was having a positive effect on their lives. All but one of them (a woman who preferred the stimulation of an office environment) said they would prefer to continue to telecommute far into the future. "I've gotten used to a degree of freedom and the ability to decide for myself how to get a job done," explained one man. "I would hesitate taking another job that didn't offer that kind of freedom." Others echoed the same kind of feelings, but this did not mean everyone wanted to be a full-time telecommuter. "Telecommuting would be two or three days a week and going in to get my stack or get direction or confirmation" was how one woman described the way she would like to be set up ten years down the road. "Two days is plenty," said another.

No one expressed any doubt that telecommuting would continue to be available to them as long as they continued to do the same kind of work. Rather than seeing telecommuting as an option that might fade away, they saw it only as becoming more widespread. "I think that telecommuting is a growing trend," said a woman who had worked with telecommuters for many years. "[Companies] have to be flexible to retain the really good people, otherwise they'll go somewhere else." "I would think that telecommuting would be the norm [in the future]," added another long-time telecommuter. One man talked about the changes he would make in the way he telecommuted in the future:

I'd be in the mountains, by a lake. I would travel as needed to different work sites, so the ideal home would have to be near the Reno airport. I should have asked for that setup originally. It never occurred to me then. I would think of it now though, especially when I'm sitting in a meeting and the person asking me questions is in Hawaii. That makes me feel like I'm the one who's become old-fashioned.

Despite all of their diversity, these telecommuters ended up telling very similar stories about how telecommuting was affecting their relationships to others at work and in their home. In the work arena, they described an environment where communication is becoming increasingly dependent on the exchange of abbreviated messages rather than face-to-face interaction or dialogues. Separation from their colleagues in the office is seen as making it more difficult to establish important connections but it also is welcomed as a way to avoid the petty politics and gossip that are judged to be a waste of valuable time. As to telecommuting's effect on careers, it may be a good way to establish independence, but these telecommuters did not recommend it as the way to climb corporate ladders.

In focusing on the results of mixing work with home, telecommuters agreed that the feature of the home workplace that is most valuable is its freedom from interruptions. They saw problems that must be overcome in order to work from home, however. These include the need to generate their own motivation and discipline. Also, regardless of the boundaries that telecommuters usually establish to separate work life from home life, some overlap seems unavoidable. The mental parts of work recognize no boundaries and the home workplace is where it can easily reach out to telecommuters and they can easily jump back in. Finally, despite the fact that they were spending more time at home, telecommuting did not appear to be bringing telecommuters much closer to their communities and neighborhoods.

A comparison of the way that men and women use the extra time that is created by telecommuting reveals similar patterns within each gender, but differences between genders. The men in this study gravitated toward their traditional role as a breadwinner

while women spoke of struggling in their efforts to combine their traditional role as homemaker with their newer role as the other breadwinner. All participants seem to appreciate the control telecommuting has added to their lives and have little doubt that it is the way of the future.

Chapter V

Discussion

The literature review in Chapter I examined why experts are predicting that telecommuting will become more commonplace in the future and the ways they see it as addressing many of the problems of today's harried workers. Also covered in the review were some of the concerns that social scientists have about the less desirable effects that telecommuting might have on the workers and homes of the future. The following discussion reviews the research findings reported in Chapters III and IV in light of what they have to say about many of these issues.

The study findings make it clear that telecommuters are far from a homogenous group and that despite their differences there are many ways in which their experiences with telecommuting are similar. The following discussion begins by focusing on the diversity of the study group and reflects on what this tells us about the flexibility of telecommuting and the choices it offers to workers in arranging the way they put their lives together. Then the discussion will turn to the consistencies that were found in the experiences of the study's participants with the aim of identifying issues that are likely to need our attention should we continue to see the workplace break free of its traditional boundaries of time and place.

Flexibility

In allowing workers to use time to best meet the demands of their jobs and personal lives, telecommuting demonstrates its great versatility. In its failure to meet the

needs of many workers, however, it reveals its limitations. The following discussion will take a look at both of these sides of telecommuting.

Making time. Telecommuters in this study consistently named time as the most valuable tool provided by telecommuting. There are several ways they find this time. The factor that receives the most attention in the literature on telecommuting is avoiding the commute to the office. There were several examples of telecommuters in the study who said they would never have considered telecommuting were they not faced with a horrible commuting situation. Both the results of this study and other research findings show, however, that the decision to telecommute does not necessarily have anything to do with the length of a person's commute. For many telecommuters in the study, their commute was relatively short and the only time they saved by avoiding the trip to work was the time it takes to upgrade their personal appearance to office standards.

The elimination of the commute, however, is not the only way telecommuters have found to give themselves more time. Time can also be appropriated by avoiding the inefficiencies of the office and better integrating the personal and professional parts of life. The attitudes of the study respondents supported the belief that many workers find it difficult to do their work in today's open, noisy and distracting office environments and can get much more done at home where there are no interruptions. Many telecommuters also recognize the natural rhythms of their bodies and feel it is unrealistic to expect things like creativity to happen on schedule or for productive juices to peak at a predetermined time each day. For workers such as this, a flexible schedule means they can avoid wasting a lot of time trying to be productive when they are in an unproductive state of mind. Telecommuters also have found personal parts of life that

need attention and that make a lot of sense for them to do during the day. Less time is lost competing for scarce resources such as bank tellers and gasoline pumps when most other users of these services are busy working. Shopping during the day (especially around the holidays) was the most frequently mentioned activity in this category of time savers.

Controlling time. When they are given some flexibility, then, telecommuters believe that they can “find” or “create” time. The way they allocate their extra time is as different as their responsibilities and priorities, with some working harder, some playing harder, and others feeling better about their role as a parent, spouse or human being.

There are those, for instance, who simply take their new found time and plow it right back into their jobs. Telecommuting literature stresses the belief that telecommuters tend to put in extra hours when they work at home, thereby enhancing their productivity. The examples in this study support this assertion. The reasons telecommuters give for working longer hours vary a great deal, depending on factors like their goals, relationships to employers and the nature of their work. It is not surprising that telecommuters whose compensation is closely tied to their production (e.g., sales people and contractors) said they like telecommuting because it gives them more hours of productivity. Others spoke of trying to catch up with work that never seemed to get done or of having the time they needed to do their job the way it should be done. Still other telecommuters referred to guilt or insecurity as factors that led them to working longer hours. Researchers also have warned that workers with workaholic tendencies run the risk of working too much when telecommuting. Even though only one worker in this study thought that he worked more than he needed to (he readily

referred to himself as a workaholic), the examples in this study make it clear that telecommuting does offer those who want to put in longer hours of work an avenue for doing so.

An in-depth analysis of the factors that motivate these workers to work the way they do is beyond the scope of this study. The factors that compel some telecommuters to use their extra time on work rather than on their families or play, however, seem to be tightly linked to the pressures to produce that are playing on most workers in today's competitive and insecure workplace. It appears that for some workers telecommuting is not succeeding very well in lightening their workload. Indeed, for some it may be just increasing the demands they are putting on themselves or that are being put on them (intentionally or not) by their employers. More research is needed to determine whether this is indeed the case.

Working longer hours, however, is the last thing that some of the telecommuters in this study have in mind. Instead, they focus on using telecommuting to improve the quality of their lives in many other ways. For some this means devoting more time to their families. For others what is important is their health, a hobby, or being able to live where they are happy. Most frequently it is a combination of several of these quality-of-life factors, together with the desire to maintain a high level of job performance, that determines how telecommuters prioritize their time.

Some of the best examples of how telecommuting can meet the needs of different people were supplied by the comparisons this study made between male and female telecommuters. As was discussed Chapter IV, the men in this study tend to see telecommuting as a way to manage their jobs more efficiently. The women, however,

see telecommuting in much broader terms. They, too, want to excel professionally, but of equal or greater importance are their home and family responsibilities. The mothers interviewed, for instance, made it clear that their primary reason for telecommuting was to be good mothers without letting their job performance suffer as a consequence. For every man who glowed over how his sales had increased since he started telecommuting, there was a woman who glowed over being able to play with her children after school, make dinner for her husband and still take on new clients. There is enough flexibility to keep many different kinds of people happy.

While telecommuters talked enthusiastically about the time that telecommuting had given them, they were not talking about time in an absolute sense: no one had figured out how to put more than twenty-four hours in the day. What telecommuters have been able to do is bring more time under what they perceive as their control. There is a feeling of "making" time because less of it seems to get wasted and more of value seems to get done. Many telecommuters pointed to this feeling of control as the best part of telecommuting. The value placed on control over their time by the people in this study indicates that it is an important factor to be considered in the implementation of telecommuting programs.

Control over their time, for instance, is something that could easily be lost by telecommuters who are monitored via their computers. There is concern over the ease with which workers can be monitored, leaving open possibilities for close regulation of working methods and schedules and limiting much of the flexibility that telecommuters value so highly. Also possible is the repetition of instances such as those documented in the insurance industry when clerical workers were pressed to continually increase

their productivity through close monitoring of their output. None of the telecommuters in this study were doing the type of low-skill clerical work that has been the focus of this type of concern, but there were frequent examples of their making visible displays of being conspicuously productive and responsive when working at home. There is, then, the possibility of telecommuters being required to relinquish a great deal of their control over the times and ways they work so that they can meet the requirements of managers who want to be able to measure and evaluate them easily from a distance. To the extent that this happens, telecommuting will lose much of the appeal that is making it a popular workstyle option today. Ironically, monitoring employees in this way may ultimately result in reduced productivity.

Jobs. In addition to giving telecommuters many choices about the way they make and use time, telecommuting also demonstrates its flexibility in the many types of jobs that can be fit under its umbrella. Telecommuting literature suggests that most information-based tasks could potentially be done just as well at home as at the office and a growing number of jobs include this type of task. This study illustrates by way of specific examples that telecommuting can accommodate jobs as different as documentation, sales, technical support and project management. In terms of their output, some study participants deliver a specific product such as graphic design or program code whereas others do less concrete things such as analyze, consult and manage. Some positions are supervisory and some non-supervisory and several of the study's participants had managers who are also telecommuters. What each of these workers has done is identify at least a part of their job that they can do well without office resources or direct contact with coworkers, a task that keeps becoming less

formidable in today's information-centered and electronically-connected office. This supports the belief of experts that telecommuting is a possible alternative for increasing numbers of today's information workers.

The prognosis for telecommuting, however, needs to take into account much more than the number of jobs that could potentially be done at home. Even if workers have what may look like the appropriate kind of job, there are many facets of the workplace that might discourage or prevent them from telecommuting. Research findings, for instance, have shown a reluctance on the part of career-motivated employees to stay home for fear of missing out on contacts, information and opportunities. These findings are supported by the telecommuters in this study. They all feel that corporate ladder climbers would be ill-advised to telecommute because it takes them too far afield from the personalities and interactions that shape decisions in the workplace. The telecommuters in this study are not people who are looking to be the next CEO of a company. They have different objectives that are based on their interpretation of self-sufficiency and independence.

Another situation reported by the telecommuters in this study that could certainly discourage some people from telecommuting is the attitude of their coworkers. It seems that even in the relatively progressive atmosphere of the Silicon Valley, whether it is out of ignorance, misunderstanding or envy, negative stereotypes about telecommuting are still alive and well. Telecommuting in these environments is often seen as a privilege, with the telecommuters involved feeling defensive and uncomfortable around their coworkers. Some telecommuters feel, however, that these attitudes will be less pervasive as people's experience with telecommuting increases. The positive

experiences of those who work in environments where telecommuting is the norm suggest that this is what we can expect to happen. This study did not include any interviews with the office-bound coworkers of telecommuters, but relied solely on the impressions of telecommuters themselves. A study of the attitudes and impressions of telecommuters' coworkers would add an important dimension to our understanding of emerging workstyles.

Social life. In addition to affecting the way workers get their jobs done, telecommuting can significantly affect telecommuters' lives by changing the circumstances under which they interact with friends, family and community. This is one more area where telecommuting seems to offer the flexibility that telecommuters need. It can work for people who are very different from one another in their need for social interaction.

This study found some telecommuters who are glad to be able to get away from the social aspects of the workplace and others who are not. In the former group are some who are uncomfortable with office socializing and others who are annoyed by it. Even telecommuters who enjoy their office friendships admit to being thankful they are able to avoid much of the time that is wasted by office gossip and politics. Given the history of women's efforts to free themselves from the isolation of the home, it would be reasonable to expect that women would miss the social aspects of the workplace more than men. As far as the people in this study were concerned, however, no noticeable differences showed up between men and women in this regard. Most of the women interviewed, however, are caring for young children and while the office might have been central to their lives earlier in their careers, new family responsibilities have given them a

different set of priorities. These women are not obsessed with getting away from the home, possibly because they have already established their right to do that. Instead, their focus is on trying to maintain both a quality home and a quality career. They often simply find no time left over for other things like keeping up with the personal lives of their coworkers that they might otherwise have enjoyed.

A lot has been made of the importance of the office as a significant social site for today's workers who have little time for much of a separate social life after spending long hours with coworkers at the office. The concern is that telecommuters who value this source of social support may be cutting it off as they retreat to the solitude of their homes, leaving themselves with nothing to take its place. The workplace, however, may very well become less of a factor as a social setting for telecommuters if they are able to find the time to include more activities outside of the workplace in their lives. Even if the study's telecommuters missed the stimulation and camaraderie of the office when they were at home, they reported that when they need some social contact they are able to find it on the phone, at the coffee shop or at the gym. Telecommuters talked of having the time to round out their lives with social and athletic activities as well as having extra time to spend with their families. Ultimately, if loneliness ever becomes a real problem they can usually go back to the office or spend more time with customers. They had chosen to telecommute and, in the case of everyone in this study, they can always choose not to telecommute if they grow uncomfortable or unhappy.

There are telecommuters, however, who do not have this choice. Some people are confined to their homes by disabilities or lack of transportation. In other cases, employers are giving workers laptop computers instead of permanent office space and

by so doing are nudging them into using homes as offices. As telecommuting becomes more widespread, the number of workers who have no choice but to telecommute is likely to increase. This study does not include any cases where telecommuting is not voluntary and therefore it is of little help in exploring the possible consequences of involuntary isolation. What this study does show, however, is that workers have different social needs and that telecommuting has an impact on how those needs are met. Even though the telecommuters in this study seemed to be able to find ways to tend to their social needs, there is a real possibility that there are some people who would always be happier leaving home every morning and joining the gang at the office.

Looking ahead. This study found that workers of many makes and models have discovered that telecommuting is much more than simply a way to avoid traffic congestion. The telecommuting they practice is not a set process or technique, but rather it is a working arrangement that they feel has set them free from many of the restrictions of the traditional workplace at the same time as it has introduced new restrictions and changed family life in complex ways. That telecommuting can be different things to different people is illustrated by how workers whose orientations and priorities differ considerably can adapt it to their lives. In the process of being molded into many different shapes by a diverse workforce, telecommuting addresses many of the concerns shared by both workers and their employers about the efficient use of time, enhanced productivity and job satisfaction. It is telecommuting's flexibility, along with its ability to solve many of the problems facing information age workers and employers, which gives it great promise as a workstyle which will remain a viable option well into the future.

At the same time, however, this study helps to make it clear that despite its flexibility, telecommuting does not solve every problem and is not right for everyone. Because of people's differing needs, it seems most likely that telecommuting will be successful to the extent that it is left both flexible and voluntary.

Making It All Work

There are some areas that will have to be carefully tended if telecommuting is to be judged a success by everyone it touches. Social scientists have warned of several different ways that telecommuting could lead workers and society to places they would rather not go. Telecommuting's flexibility allows workers and employers to choose between many options, but there are no guarantees that their choices will be good ones. There are concerns, for instance, about the effects of telecommuting on the interactions of workers with their coworkers and community and about its effects on the home and family. The telecommuters in this study have helped to throw light on several of these areas of concern.

Splendid solitude. In regard to interactions with others, telecommuting is like many other things in life – it gives and it also takes away. While it gives workers some welcome solitude and independence, it takes away many of their connections to the people in their lives. Solitude is a feature of an increasing number of jobs as it becomes easier for workers to work independently. More and more of the work that people do can be accessed, manipulated and shared via their computers, with the result being that workers increasingly are able to get along just fine with only their computer as a companion.

The computerized tools available to today's workers often make it seem more efficient and less complex to deal with other people if that can be done indirectly. It also may seem easier to get thinking work done if others can be avoided. As discussed in Chapter IV, what the telecommuters in this study appreciate more than anything else about working at home is their ability to work without any interruptions from coworkers. They choose the ease of sitting uninterrupted in a quiet place with only an occasional computer glitch or data transmission error between them and efficient, methodical productivity, rather than the stress of trying to work amidst the unpredictability and distractions of today's noisy offices. They may also choose the ease of sending out a message to a distribution list when the alternative is the frustration of trying to arrange meetings at a time when everyone on that list is available. It frequently seems that the easiest way to get something done is the way that avoids other people. Care needs to be taken to make sure that what appear to be the benefits of working in solitude do not blind workers and their employers to what is being lost in the process.

Possible downsides for the workplace should increasing numbers of workers slip away to their homes include a reduction in the interplay of ideas and a deterioration in the quality of communication. As was brought out in the review of literature, information work usually has a solitary and a social side and benefits from both: the solitary develops ideas and the social allows exposure to new ones. There are concerns that in the enthusiasm over the productivity of telecommuters what could go unnoticed and unappreciated might be all that is being lost by separating the process of innovation from the input and stimulation of coworkers. Even the full-time telecommuters in this study, however, recognize the benefits of frequent communication and information

exchanges with coworkers. If the attitudes of these telecommuters are any indication, telecommuters will probably never want to work in complete solitude. As with so many other parts of telecommuting, the right balance just needs to be found.

The other effect that some believe the distancing of telecommuters from the workplace may have is a deterioration in the quality of workers' communication skills and practices. The telecommuters in this study reported relying heavily on e-mail and voicemail to abbreviate and streamline the business communication process. As has been mentioned in several different contexts, using time efficiently is important to these telecommuters and this is just what e-mail and voicemail do so well. E-mail, for instance, is an effective way to curtail socializing when a worker views socializing as a waste of time. Today's electronic communication does not short change only socializing, however. It often makes little allowance for clarity, subtlety or depth. Exchanging messages tries to substitute for conversation. The proliferation of new communication tools and strategies available to today's workers also present telecommuters with many unanswered questions regarding the best way for them to communicate effectively.

Many of the telecommuters interviewed reported, however, that they were aware of the shortcomings of putting too much reliance on the use of today's computer-based communication tools. They use alternatives to bridge many gaps. They can use the phone for a real conversation, for instance, or get in the car and go to the office for a show-and-tell session. There were examples, however, of people who communicated with coworkers almost exclusively via e-mail or voicemail. For jobs like programming or writing assembly manuals, little else might seem necessary. For people trying to avoid

the complications and demands of other people, little else is wanted. More than one telecommuter reported being able to go for days without having a conversation with anyone outside of their immediate family.

The increasing reliance on computer-mediated communication is not limited to telecommuters, however. Office-bound workers are following the same route. The concern for telecommuters, however, is that their growing dependence on antiseptic and impersonal information exchanges does not offer them the same opportunity for the use and refinement of their communication skills as they would have if they were around real people more frequently. This opens up possibilities for a deterioration in communication skills and an increase in the kinds of frustration and wasted time that result from poor communications.

It is not only the workplace that risks losing much that is valuable in the process of allowing workers to slip into solitude. Workers themselves and society as a whole stand to suffer losses as well. Workers who are comfortable and satisfied with their productivity at home may have nothing that is the equivalent of a daily commute to draw them out into the world – and they may like it that way. Long periods of time spent alone could put these people at a disadvantage socially if only because they have not had a lot of opportunity to develop their communication and social skills. Most of the participants in this study seemed to have excellent communication and social skills that they developed before they started telecommuting. One twenty-year veteran of telecommuting, however, feels that her social skills are sadly lacking because she has had so few chances to try them out in the workplace. She avoids socializing whenever she can.

Social skills and sensitivities are honed by way of encounters out in the real world, not inside the protected walls of our homes and homogenous communities. The telecommuting workstyle has the potential for encouraging some workers to remain behind those protected walls. The cause and effect relationships, if any, between the use of the computer and the development of communication skills or between telecommuting and the development of social skills and sensitivities will be hard to assess until there is much more long-term data available. But since the world hardly promises to be a better place if our ability to understand one another deteriorates, this is an issue that deserves a watchful eye.

Working at home. The challenges faced by telecommuters in working with their colleagues stem from the need to compensate for the distance between them. Another set of challenges involves working with the people at home. These challenges stem from their proximity. To work successfully at home, telecommuters need to be able to combine good self-management with the cooperation and support of the rest of their household.

Self-discipline and good time management are skills that are necessary for telecommuters who have no one watching them or telling them what to do at home. Problems with these skills may be hard for telecommuters to pinpoint and still harder for them to acknowledge. Once identified, they are also the kind of problem that defies an easy fix. Several of the companies that employ the telecommuters in this study screen potential telecommuting candidates according to whether they are able to work with little supervision and most of the participants have the kind of jobs that require a great deal of self-management regardless of whether they are working at the office or at home.

They are salesmen, consultants, programmers, analysts and managers – the kinds of people who are typically given a job and expected to go do it. They are very comfortable with managing their own time. For those accustomed to close regulation of their time or those who are uncomfortable with the responsibility of decision-making, however, telecommuting would probably not be the best choice.

In addition to managing themselves, telecommuters must set up a business-like atmosphere in part of their home. In doing so, they cannot help jostling things around a bit. There have been all kinds of documents written describing the physical requirements for a workable home office. Most include simple things like a door that can be closed and a space dedicated solely to office use. The reality is, however, that not everyone happens to have an extra room just sitting empty in their home or the resources to convert a corner of the garage to a place where someone would want to work. Unmistakably, there is a cost that is being absorbed by the families of telecommuters when a part of the home needs to be set aside to be used as a workplace. The telecommuter also has to establish a professional atmosphere in the part of the home where he does business and there need to be household understandings about interruptions, working hours and noise levels. If all the members of the household do not agree to provide the type of work environment that a telecommuter requires, a successful telecommuting outcome is in jeopardy.

The work/home blur. Another aspect of telecommuting that raises concerns is the way it contributes to the blurring of the boundaries between work and home. This kind of blurring can easily take place even in the absence of telecommuting. Issues such as limiting work hours and setting aside family time are being dealt with by many

non-telecommuting families as they were by several of the families in this study prior to their ventures into telecommuting. Even those office workers who are able to leave their workplace far behind them, may not always succeed at leaving their work behind with it. Problems and responsibilities can follow workers wherever they go.

While work and home do not need telecommuting to get in each other's way, the practice of telecommuting appears to make it more difficult to keep them apart. Some telecommuters reported problems with putting their job aside simply due to the visual and physical reminders of work that are always sitting nearby. Others spoke of daily routines that are similar on both work and non-working days. The feel of the environment does not change much in moving from an office alcove to the family room across the hall. These telecommuters have not left one world and entered another the same way that full-time office workers do when they get in their cars and put many miles between themselves and their in-baskets. In order to feel like they were getting away from work, many of the telecommuters in this study reported doing something that gets them out of their homes. While the intent of these telecommuters is to remove some of the stress from their busy lives, they may have just made it easier for that stress to follow them home where it can more easily cast a pall over the entire household and reduce the value of the home as a place where the family wants to be.

Another side to telecommuting's effect on the home is its use as a strategy to free up some time for workers who have too little time for their families. Most telecommuters did report being able to spend more time with their families as a consequence of bringing work home. Even if they work long hours, the feeling is that it is better to log them in at home than at the office.

Other telecommuters welcome the easy accessibility of office resources. Some, for instance, depend on being responsive to customers as an important part of building a business in the sales or service sectors. In these circumstances, occasional intrusions on their personal life can seem a small price to pay for what they get in return. Still another reason for welcoming the mix of home and work is the opportunity it gives people who genuinely like their work to have it at home where they can enjoy it in the same way that others enjoy a hobby. In instances such as these, the family may welcome telecommuting as a way of better integrating the work and personal parts of their lives.

One household, then, is likely to experience telecommuting much differently than another. What is not different is that every household is changed. One source of advice after another stresses that the decision to telecommute affects the whole family and that telecommuting success requires getting everyone in the home to buy into the arrangement. What this study shows is that some workers never run across this kind of advice and that there is a likelihood that those who do will ignore it. Real life for these telecommuters has not fallen together in the neat, logical patterns of a "how to" manual. Since telecommuting has been a new experience for them and there have been few examples available for them to follow, there were inevitably some issues that were not anticipated and others that had to be worked out by trial and error or one step at a time. Telecommuting often required a great deal of patience, persistence and creativity before workers found out whether they could manipulate it to meet not only the requirements of their employer, but those of their family as well.

The telecommuters who participated in this study furnished valuable insight into the issues raised in the telecommuting literature. This discussion of those issues has focused on the understanding of telecommuting's potential while at the same time pointing out some of its limitations and risks.

The growth that is forecast for telecommuting seems highly likely in light of its demonstrated ability to meet the needs of people with such a diversity of needs and objectives. Despite all of its versatility and potential, however, telecommuting has definite limitations. The traditional workplace which restricts workers to its time and place can concentrate resources and provide for creative and social interaction in ways that are not likely to ever be matched by the home office. There will probably always be people who will be happier or better off if they get out and share in the camaraderie or the discipline of the workplace. Also, telecommuting needs to fit the home. If everyone in the family does not support the telecommuting effort, success is unlikely. All of this supports the belief that in order to best meet with success for the greatest number of people telecommuting needs to remain not only flexible but voluntary.

There are also some possible ramifications of telecommuting that need to be recognized. The telecommuters participating in this study had been left free by their employers to determine how to meet their employers' expectations. In situations where workers are regarded as more expendable, however, there could be a very real temptation for employers to closely regulate telecommuters, making telecommuting look more like house arrest than independence. There are also concerns that the efficiency and ease of working alone and relying on computer-mediated interactions could begin to blind us to the value derived from social interaction and real conversation. The way in

which telecommuting compounds the difficulty of separating the home from the job also raises concerns about the ability of future workers to experience any of their time as truly their own. The challenge is to capitalize on telecommuting's potential while monitoring its progress carefully to make sure it is not taking us places we do not want to go.

Chapter VI

Summary

The objective of this study has been to enhance our understanding of telecommuting and its impact on workers' lives. Much about telecommuting is not new, but its potential for addressing many of the needs of today's workforce has brought it to center stage where it is being auditioned for a role in the workplace of the future. To find out what current telecommuters have to say about telecommuting's challenges and potential, sixteen Silicon Valley workers were interviewed at length about their telecommuting experiences. The results of those interviews form the basis of this report.

The telecommuters selected to participate in this study were very diverse in terms of their motivations and objectives. This diversity helped to explain telecommuting's popularity and potential by showcasing its flexibility and versatility. Despite their many differences, however, the interviewees told remarkably similar tales about the rewards and challenges telecommuting has brought into their lives. These similarities helped to identify issues that are likely to be encountered by other workers who choose to adopt the same type of workstyle.

Telecommuting involves interactions with both coworkers and families. This study explored both of these aspects of telecommuting from the vantage point of telecommuters. In their interactions with coworkers, telecommuters reported relying heavily on communication tools that encourage them to communicate impersonally and efficiently. They agreed that while this type of communication has its advantages, it also

has many shortcomings. There was also a high level of agreement that telecommuting means missing out on some of the office interaction and information that could help advance a career or improve performance. Telecommuters said they liked working at home primarily because it is relatively quiet and free of interruptions, but they also pointed out that the home rarely has all the resources that they need to do their job. Chief among these resources are coworkers.

In looking at telecommuters' interactions with their families, it is clear that families are often a very important part of the telecommuting process. Telecommuters need to carve a workplace out of the home and come to understandings with the rest of their household about noise, interruptions and responsibilities. Telecommuters reported that this could be quite a challenge and often required a combination of experimentation, compromise and good family communications before the telecommuter was able to fit comfortably into the home.

Telecommuters also need to decide when and how they will work when they are at home and what they need to do to keep themselves focused and productive. They also may find themselves presented with pressures or temptations that keep them working longer hours than would be the case if they were a traditional office worker. One of their most difficult challenges is finding ways to separate work life from home life so that bringing work home does not end up eliminating ways to escape from the stresses and responsibilities of their jobs. Telecommuters, then, find that bringing work home creates a long laundry list of new problems that they often had not anticipated and are not always prepared to handle.

These interviews pointed to several factors in particular that may be very important to the future of telecommuting and the impact it has on workers and society. To begin with, telecommuting appears to draw its vitality from its versatility, which allows it to conform to the needs of many different kinds of people. It is also celebrated for the added control telecommuters feel it gives them over their lives. Much of telecommuting's success as a future workstyle, then, would seem to depend on it remaining a flexible tool that workers can use as they feel best suits their own circumstances. Efforts to draw up specific guidelines and rules may be deemed necessary by growing numbers of managers and lawyers, but every new condition they lay down will lessen the appeal of telecommuting as an attractive alternative for some workers. Similarly, making telecommuting a requirement rather than an option cannot help but penalize some workers since telecommuting is not a good fit for many kinds of personalities and lifestyles. For these reasons, telecommuting appears to stand the best chance of offering a healthy and satisfying alternative for tomorrow's workers if it remains not only flexible, but voluntary.

Another concern about telecommuting, stemming from the fact that one of its most notable features is working alone, is its effect on the social life and social skills of workers. Since they have fewer opportunities to experience social interaction, there is the possibility that telecommuters would tend to feel more uncomfortable than other workers in social settings. This discomfort could lead to their avoidance of socializing, something which many of the telecommuters in this study felt they could do quite easily when they wished. This raises concerns about there being growing numbers of workers with poor social skills who are kept that way since there is little to pull them out into the

world where they can learn to deal with other people. Similar concerns are raised about people whose communication skills have been limited by the heavy use of today's quick and efficient communication tools. There may be little to motivate these people to expose themselves to an environment where they could enhance their skills. To the extent that telecommuting becomes mandatory or confines workers to their homes, these concerns may become more pressing. A great deal of additional study of the long-term effect of telecommuting is needed to determine whether or not these are valid concerns.

Another feature of telecommuting that needs attention is the importance of the home to its success or failure. Telecommuting is usually an imposition on the household and may signal a significant shift in telecommuters' relationships with their families. Telecommuting calls on the home to meet some basic physical requirements and on the family to make significant adjustments. Usually this means there is a need for compromise, communication and understanding among members of the household. All of the telecommuters interviewed in this study spoke of obstacles that had been overcome or were still being dealt with in this regard. The home is an important place in most people's lives and it would be a shame if homes were to become tense or unhappy places due to the sacrifices family member are asked to make for a telecommuting member. If a household is being asked to pay a high price, telecommuting may not be the right solution. More study which focuses on how telecommuting is experienced by members of the household will be very helpful in enhancing our understanding of telecommuting's impact on the home.

The jury is still very much out on one last concern: whether telecommuting represents a release of workers from the shackles of the workplace or is a new kind of ominous ball and chain. The truth is likely to lie somewhere in between and to be different for some workers than others. Telecommuting, for instance, can take many forms and is likely to be experienced very differently by a skilled professional or manager than by a low-skilled clerical worker. Imposition of conditions such as quotas or work schedules would be much more prevalent in some situations than others. Regardless of the degree of control telecommuters have over the way they work, however, computers have given employers a way to reach out and touch them wherever they may be. The historic struggle for control between workers and management promises to continue to play itself out even as our workplaces, tools and the nature of our work take on the new shapes of the information age.

The input from the participants in this study was very helpful in exploring the potential of telecommuting as a way for many workers to improve the quality of their lives. More studies of telecommuting, not only from the perspective of telecommuters, but from that of their coworkers, their families, and those who have tried telecommuting and decided it was not right for them, would be valuable in enhancing our understanding of the full scope of relationships involved in the telecommuting process. Hopefully this understanding will help workers make workstyle choices that end up taking them where they really want to go.

Demographics of Sample

#	Sex		Frequency		Employ Type		In Home Now		Parent	Job Description	Experience
	M	F	Full-Time	Part-Time	Reg.	Contr.	Spouse	Children			
1	X		X		X		X			Documentation	2 yrs
2	X		X		X		X		X	Equipment Design Eng.	17 yrs
3		X	X			X	X	X	X	Technical Writer	20 yrs
4		X		X	X		X	X	X	Software Analyst	2 yrs
5	X			X	X		X	X	X	Programmer	2 yrs
6		X	X			X				Graphic Designer	7 yrs
7	X			X	X		X		X	Technical Consultant	1 yr.
8	X		X		X		X		X	Sales Rep	3 yrs
9	X			X	X		X			Technical Support	2 yrs
10		X		X		X	X	X	X	Technology Consultant	6 mos.
11		X	X			X	X	X	X	Financial Analyst	6 mos.
12	X		X		X		X		X	Sales Manager	4 yrs
13	X			X	X		X	X	X	Quality Analyst	6 yrs
14		X		X	X		X			Mgmt. Consultant	1 yr.
15		X		X	X		X	X	X	Project Manager	3 mos
16	X		X			X	X	X	X	Software Specialist	6 yrs
Tot	8	8	8	8	11	5	15	7	12		

Appendix B

Interview Guide

Workstyles of Telecommuters in the Silicon Valley: Impact on Business and Personal Relationships

Interview #1

Objective: Gather demographic data and work history

Build description of work environment: What, where, how, why

Overview of interview/preliminaries

Today is the first of two times I'd like to spend approximately 1 to 1½ hours talking with you about your work.

These interviews are part of a study I'm doing of the workstyles of telecommuters in the Silicon Valley to complete my requirements for a Master's Degree from SJSU.

[Review consent form and answer any questions.]

If you have no objections, I'd like to use a tape recorder to record our session and take some notes as we go along. Do you have any questions before we begin?

Demographic data:

1. Let me start by asking you for a few specific details about you and your job.
 - a. Your name? (correct spelling, what you prefer being called)
 - b. Are you a regular employee or contractor?
 - c. What is name and type of business of your employer(s)?
 - d. How long have you been with your present employer(s)?
 - e. What is your job title(s)?

Job description:

2. As you know, this interview is part of a study I'm doing on telecommuters.
 - a. Do you think of yourself as a telecommuter? Why (or why not)?

- b. How long have you been telecommuting in connection with your current job?
- 3. Please tell me about your job responsibilities.
- 4. What kind of guidelines, understandings or contractual arrangements do you have with your employer regarding your work off-site?

Work history:

- 5. Tell me about the jobs you have held prior to your current one - your employer, type of work done, length of time you were there and anything else you consider interesting.
- 6. Did you telecommute in connection with any of these jobs? [If yes: For how long? How many days a week?]
- 7. a. Can you tell me about any particular work experiences with a former or current employer that have had an influence on your becoming a telecommuter?
b. What were the steps that led to your becoming a telecommuter?

Work Environment

- 8. Let's begin to build a map that represents your working environment.
What are the places where you spend time working?
- 9. Let's talk about each of the places you work, one at a time. [*For each workplace, prompt for the following:*]
 - a. Describe the physical characteristics of this workplace in detail - its location, size, arrangement, furnishings, equipment and anything else you think is interesting.
 - b. Who is responsible for the setup of the equipment you use and insuring that it all functions adequately?
 - c. Who else is at this location? What connection do their jobs have with yours?
[When talking about home: Who are the other members of the household? (prompt for relationships and children's ages) What kind of work do they do? Do they do any of their work at home?]
 - d. Describe what you do when you're at this location.
 - e. With whom do you interact when you're at this location? What equipment do you use?

- f. Do you share any of your work resources or space with anyone else or are they used for any other purposes? [If yes: Tell me about how and why this is done.]
 - g. Are there any particular times of the day or week you usually work here?
 - h. During a typical work week, how many hours do you spend working at this location?
 - i. Are there any patterns, schedules or routines you usually follow when you're here? Tell me about them.
 - j. Are there any things that that keep you from getting done what you want to do in this environment? What are those reasons? Tell me a story about a time when this happened.
10. So far we've talked about places you actually go to to do your work. Now let's add any other locations or people to our map that are a part of your working environment even though you may never go where they are (examples: remote coworkers, professional groups, reference sources, support groups, etc.).
[For each of these locations, prompt for the following:]
- a. Who is there?
 - b. What resources are there?
 - c. When and how often do you interact with this location? [frequency, duration]
 - d. What is the purpose of these interactions?
11. Now let's connect each of these places on our map and talk about the ways in which you link them together.
- a. How far (in miles and commute time) is it between these locations?
 - b. What methods do you use to communicate and interact between these locations?
 - c. Let's look at each of these methods of interaction, one at a time:
 - i. With who or what do you exchange information using this method? What types of information do you exchange?
 - ii. Give me an example of an interaction you have had recently using this method of communicating between these two locations.

- iii. When does this activity usually take place? Is there any schedule you follow? How much of your time during a typical work week is spent communicating in this way?

Transition to Interview #2:

12. Imagine yourself at a family reunion, talking with a relative from another part of the country who knows nothing about telecommuting. How would you describe telecommuting?
13. I wanted us to build a description of your working environment today, and we've done that. The next time we meet we'll be taking a closer look at your telecommuting relationships and exploring your opinions and feelings about what you are doing.

Interview #2

Objective: Discuss the effects of telecommuting on relationships
Assess telecommuter's opinions and feelings.

Introduction

The last time we met, we built a description of the way you work.

Effect of telecommuting on work-related relationships

14. Let's talk about how your telecommuting experience affects some of your work-related relationships. Think about one of your coworkers and the work you do with him or her.
- a. Describe how the two of you communicate and coordinate your work.
 - b. How does telecommuting influence the way you work together? Give me an example.
15. Does telecommuting affect the way you are treated by any of your coworkers? Can you give me some examples? How do you feel about this?
16. How does telecommuting affect the way you work with your manager(s)? Can you give me some examples?

17. In what ways do you keep informed about company events, policies, organization, etc.? How is this affected by telecommuting?
18. Do you participate in the flow of information through any informal office grapevines? When, where and how?
19. Do you maintain any social contacts with coworkers? Is this type of contact affected by telecommuting? Can you give me an example?
20. In what ways does telecommuting affect your feelings about the company you work for?
21. How is telecommuting affecting your career? Why do you feel this way?
22. How does telecommuting enhance your work experience? How important is this to you?
23. Is there anything about telecommuting that detracts from your work experience? How important is this to you?

Effect of telecommuting on household and personal life

24. Let's broaden our focus to the effect of telecommuting on other parts of your life. From your point of view, how does your telecommuting affect the other members of your household?
25. What have other members of your household said about how telecommuting is affecting the household?
26. What rules, understandings or guidelines are there in your home that play a role in managing the use of your home for both work and family life? [Prompt for understandings about use of space, interruptions, working hours and help with work tasks.]
 - a. Which of these guidelines are working well? Which are not?
 - b. Can you tell me about a time when these guidelines were violated? What happened?
27. Does telecommuting significantly affect the total amount of time you spend on work-related activity? [If yes: Increase? Decrease? Why?]
28. Are there any valuable personal experiences that you are able to participate in as a result of telecommuting that you would miss out on otherwise? Can you give me examples?

29. Are there any valuable personal experiences that you are not able to participate in as a result of telecommuting? Can you give me examples?
30. What effect does your telecommuting have on how you interact in your neighborhood? How about in your wider community? Can you give me any examples?

Summary

31. How has telecommuting changed your life from what it was like before you telecommuted?
32. In what ways has telecommuting turned out differently than what you had expected?
33. I'd like you to think about the work environment you'd like in the future. What would you ideally like your work environment to be like ten years from now?
34. Is there anything else you'd like to add?

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APPLIED IMAGE, Inc
1653 East Main Street
Rochester, NY 14609 USA
Phone: 716/482-0300
Fax: 716/288-5989

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